

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

5 May 2016

Submitted by (provide individual and STWG contact information):

Peter Buchsbaum (STWG 1, 4, 6, 7)

### 1. Issue:

Recommendation to add the Principle of Equality before the Law

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

Additional principle suggested:

The Principle of Equality before the Law

The Principle of Equality before the law, that protection of the environment must mean that the law will apply equally to all citizens and non-citizens whose activities are covered by the Code, that consequences of failure to obey the law shall be based solely on conduct, and that no person, group of persons or entities shall be singled out for less favorable treatment or rewarded with more favorable treatment than their conduct would warrant.

### 5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

### 6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

### 7. Drafting Team Analysis/Response (to be included in public database):

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**Date of Submission: May 7, 2016**

**Submitted by (provide individual and STWG contact information): Dr. Nguon Pheakkdey,  
Department of International Studies, Royal University of Phnom Penh.**

### **1. Issue:**

- Some sections of the Code use US English, while others use UK English. There should be consistency in terms of style. Most of the existing government documents use UK English.
- It is still unclear in terms of the rationale for the design of the Code. Specifically, it is not clear how the books and chapters are selected? What are the linkages between them? How are they going to ensure sustainable development in Cambodia?
- There also seems to be inconsistency in how each of the Book and Chapter has been written. This probably will be resolved by the drafting team once the content for the entire Code is there.
- Most of the existing texts in the Code current draft seem to be a direct copy-n-paste from other existing laws – i.e. EIA, management of chemical substances

### **2. Reference to Code Book and Chapter (if applicable):**

**Book 1, Chapter 1, Article 4:** Some of the terms that should be defined are:

- Sustainable development
- Environmental protection
- Environmental conservation
- Environmental standards
- Best practices
- Natural resources
- Environmental disputes
- Environmental harm
- Ecosystem services
- Liability
- Jurisdictional organization
- Forest
- Climate change
- REDD+

**Book 2, Box 2** – there is a typo for MAFF.

**Book 2: Chapter #** - what does confirming mean?

**Book 8** – the focus seems to just be on endangered and invasive species. The focus on forest is very limited in comparison.

**Book 23 and Book 24** – these two books could be merged. We can just keep “Climate Change” as the title

3. Comparative Experience (including Cambodian and international examples and experience):

4. Recommendation:

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

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Date of Submission: 11 May 2016

Submitted by (provide individual and STWG contact information):

WWF-Cambodia

1. Issue:

Biodiversity conservation and management and protected areas.

2. Reference to Code Book and Chapter (if applicable):

(already referenced above)

3. Comparative Experience (including Cambodian and international examples and experience):

not known

4. Recommendation:

## **– BIODIVERSITY CONSERVATION AND MANAGEMENT**

- *This Book will examine the protection, conservation and management of biodiversity, and include different chapters on forests, wetlands, marine ecosystems, endangered species, invasive species and the management of protection areas.*
- *Specific Chapters could address key priority areas including Tonle Sap Lake and the Mekong River. Decidious dipterocarp forest, Cardomom Mountain range*

**Chapter # - Protection of endangered species** [as per IUCN listing? Obviously Cambodian species law needs up-grading. Would recommend use IUCN listing and all NT++ species covered under this law. Law needs to cover all use [killing, transportation, keeping, consuming, displaying, intent to hunt etc. etc.] any products from these species. With clear penalties involving jail time. This is where I would also put at least some of the wildlife farming issue - i.e. species here can not be farmed. This would be the over-arching critical chapter for effective legislation for protecting species



**Chapter # - Protection of animals** Non IUCN listed ones?

**Chapter # - Protection of plants and plant communities.** Why not include IUCN listed plant species e.g. *Dalbergia* under the EN species chapter

**Chapter # - Protection of native plant and wildlife habitat and important ecological communities (including “critical habitat” for endangered plant and animal species)** Link with proposed book on PAs

**Chapter # - Bioregional planning for biodiversity conservation** I think this chapter could also go under proposed PA book

**Chapter # - Prohibition of export or import of specified flora and fauna and products derived from plants and wildlife.**

**Chapter # - Prohibition of trafficking, possession or sale of endangered species**

**Chapter # - Enforcement of CITES and other international agreement obligations**  
Including trade, consumption, possession of CITES listed (IUCN threatened) NON NATIVE SPECIES - this is important.

**Chapter # - Scientific and educational uses Add commercial.** Put here the clear regulations on managing commercial farming of non-threatened species and use this chapter to regulate zoos.

**Chapter # - Establishing/classifying protected areas for biodiversity conservation**

**Chapter # - Restoration of damaged ecosystems**

**Chapter # - Endangered species protection and management plans (includes identifying key threatening processes and developing threat abatement plans and recovery plans)**

**Chapter # - Prohibition on damaging or destroying native vegetation and forest protected areas**

**Chapter - Active species management (reintroductions & assisted colonisation).**  
Important for specific chapter on active species management including reintroductions. Obviously tiger but other possibilities- hog deer etc etc Also assisted colonisation in face of climate change impacts. Including wild capture for stocking captive breeding under certain circumstances and management of zoo stock i.e. ensuring no inbreeding, studbooks kept etc. etc.

**Chapter # - Prohibition of hunting in certain areas**

**Chapter # - Prohibited activities in protected areas**

## **Chapter # - Management of invasive species**

## **Chapter # - Definition of genetically modified organisms**

## **Chapter # - Prohibition of use of genetically modified organisms, including seeds**

## **Chapter # - Management and approvals for use of genetically modified organisms**

## **Book x – PROTECTED AREAS**

*Protected areas are critical to biodiversity conservation and government commitments under CBD/Aichi targets [particularly target 11]. They are the cornerstone of biodiversity and particularly threatened species protection. Currently PAs are not given suitable prominence in the Environmental Code and a specific Book on PAs is recommended.*

### **Chapter x: PA coverage and desired coverage as per Aichi Target 11**

**Chapter x: Types of PAs** (community PAs, National Parks, Wildlife Sanctuaries) and different objectives of each e.g. Thai model – National Parks = conservation & recreation; WS = strict biodiversity conservation; community PAs – securing local resource tenure and non exploitive NTFP etc. collection].

**Chapter x: Legislation for zonation of PAs and enforcement inside PAs** [covering what can happen in certain zones, clear penalties for infringements, aligning forestry, PA, species laws ]

### **Chapter x: PAs and EIAs**

**Chapter x:** [some links to Book 5] **PA management plans and planning process**

**Chapter x: PA staffing and budgets** [including sustainable funding sources for PA management]

**Chapter x: PA network and climate change adaptation:** Role of PAs as CC adaptation; how PA network can be flexible to species movements etc. and possible change following CC.

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

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**Date of Submission: May 15, 2016**

**Submitted by (provide individual and STWG contact information):**

1. **Dr. Nguon Pheakkdey, Department of International Studies, Royal University of Phnom Penh.**
2. **Mr. Chhun Delux, Office of Forest Carbon Credits and Climate Change, Forestry Administration**

### **1. Issue:**

- Assessment of sustainable options for forest financing

### **2. Reference to Code Book and Chapter (if applicable):**

**Book 8: Biodiversity Conservation and Management**

**Book 23: Climate Change**

**Book 24: Reduction of Greenhouse Gas Emissions and Promotion of Green Growth**

**Book 26: Environmental Incentives, Fees and Charges**

### **3. Comparative Experience (including Cambodian and international examples and experience):**

**Please see attached policy brief and report**

### **4. Recommendation:**

**Please see attached policy brief and report**

**5. Proposed Language to be Inserted into the Draft Code (optional)** (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

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7. Drafting Team Analysis/Response (to be included in public database):

# SUSTAINABLE FINANCE MECHANISMS FOR CONSERVATION OF FORESTS AND PROTECTED AREAS IN CAMBODIA

PREPARED BY THE CAMBODIA FORESTRY ADMINISTRATION,  
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES WITH  
SUPPORT FROM THE WILDLIFE CONSERVATION SOCIETY



## FINANCE OPTIONS ASSESSMENT REPORT



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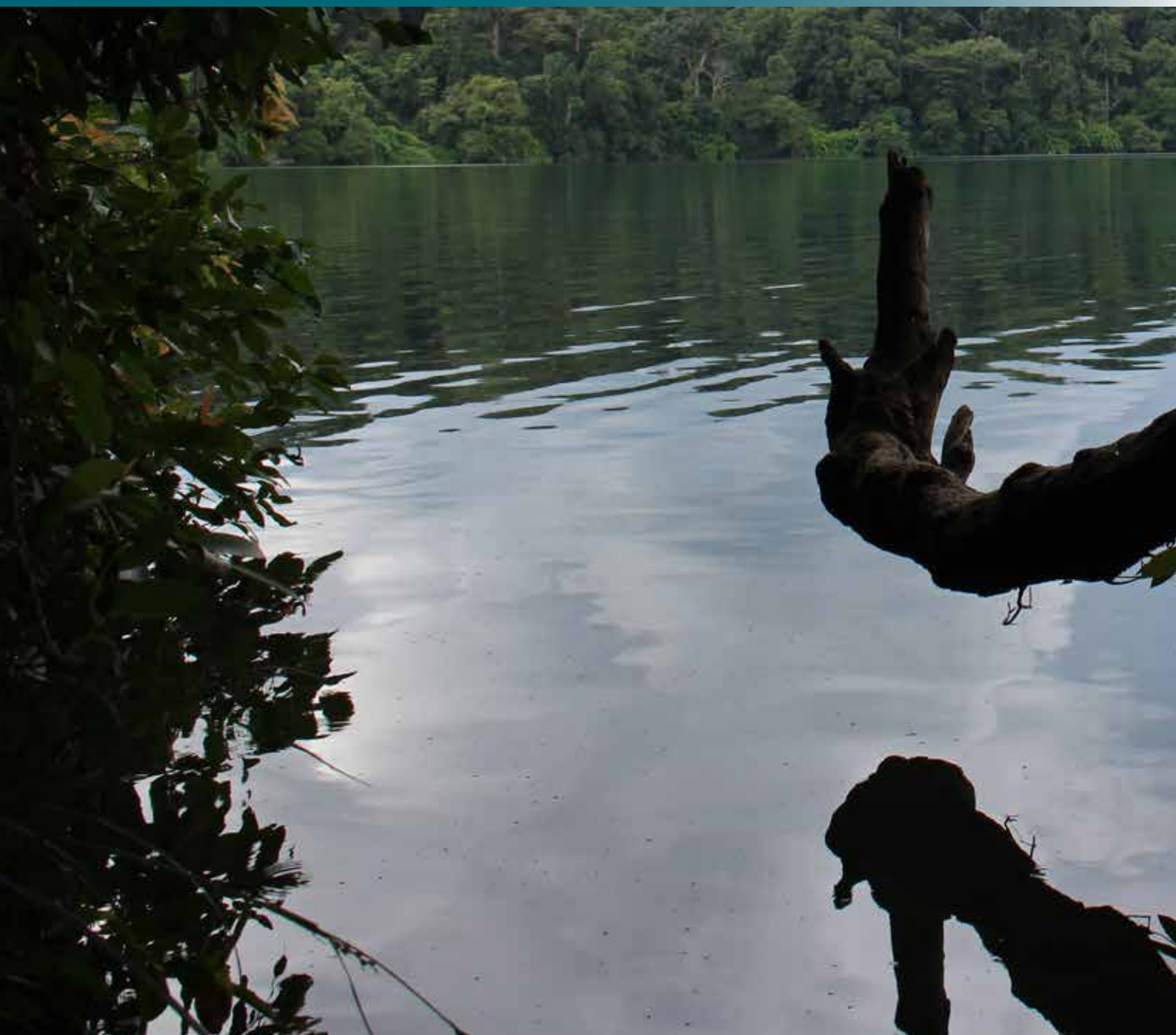


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# Foreword

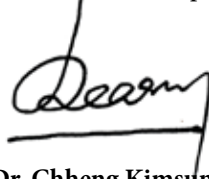
The Royal Government of Cambodia's National Forestry Program (NFP) for 2010-2029 has set six program areas for priority implementation, one of which is the development of sustainable financing mechanisms to support the management and administration of protected forests and other areas. Current levels of financial support, from government and donor budgets, are significantly below that needed to ensure successful implementation of the NFP. At the moment, there are very few policies or regulations that enable collection of revenues from the forestry sector, and the revenues that are collected are remitted to the national treasury, rather than allocated directly to support the implementation of the NFP. Private sector engagement in sustainable forest management is also very low. Consequently, Cambodia relies heavily on support from development partners, especially bilateral and multilateral donors and large NGOs, to fund the NFP. However, continued investments by donors and NGOs is not by itself a sustainable source of funding. As a result, the development of a long-term financial plan to secure sustainable financing for the forestry sector is essential in order to safeguard existing on-the ground achievements, and ensure the long-term integrity of standing forests.

The Technical Working Group on Forestry Reform (TWG-FR) is the government-donor coordination mechanism for the forestry sector. In 2014, it formed a Sustainable Forest Financing Sub-Group which is co-chaired by the Forestry Administration and Wildlife Conservation Society (WCS). The sub-group is comprised of representative from Forestry Administration, Ministry of Environment, Ministry of Economic and Finance, development partners, national and international NGOs and the private sector. It is tasked to lead a policy process and develop ideas for long-term forest financing mechanisms. The assessment of finance options for Cambodia's forests presented here was initiated to provide technical information that can be used by stakeholders to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the forests in Cambodia.

This report includes a concise description of the theory and intent of various financial mechanisms and an overview of how they are typically applied in practice in a country of similar social and environmental conditions to Cambodia. It also provides an overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia, and a description of any prior experience with the financial mechanism in Cambodia.

I would like to take this opportunity to acknowledge the work of the Sustainable Forest Financing Sub-Group, especially WCS who have prepared this assessment report. By acknowledging its comprehensive analysis and financial options for Cambodia's forests, I would also like to offer my thanks to all colleagues of the TWG-FR who have contributed to provide inputs for this report.

Phnom Penh, 07 April 2016



**Dr. Chheng Kimsun**  
Delegate of the Royal Government  
Head of the Forestry Administration  
Ministry of Agriculture, Forestry and Fisheries

# Acknowledgement

This report was designed and written by the Forestry Administration's Sustainable Finance Sub-group of the Technical Working Group on Forestry Reform (FA, TWG-FR) and the Wildlife Conservation Society (WCS), with contribution from Dr. James Tolisano (WCS), Dr. Nguon Pheakkdey (Royal University of Phnom Penh, RUPP) and Mr. Chhun Delux (FA). This assessment report also benefited from the insightful comments and supports from **H.E. Dr. Chheng Kimsun**, Delegate of the Royal Government of Cambodia, Head of the Forestry Administration, **H.E. Dr. Chea Sam Ang**, Deputy Director General of the Forestry Administration, and members of the TWG-FR. Financial contribution to complete this assessment report came from WCS.

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# Executive Summary

The Cambodia Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have led actions taken since the 1990s to establish new protected areas and secure protected forests in ecologically important landscapes. These actions have resulted in the stabilization, and, in some cases, recovery of populations of some threatened species. However, these accomplishments require on-going funding to insure payments for recurrent and new costs. Continued investments by donors and NGOs into the same landscapes may provide some of this funding, but is not expected to represent by itself a sustainable source for these funds. As a result, the development of a long-term financial plan to secure fund is essential in order to safeguard existing on-the-ground achievements, and ensure the long-term integrity of standing forests.

Cambodia can reduce the risks to its protected forests and enhance overall protection measures by diversifying the financing mechanisms used to produce the funds required for recurrent management costs. The principal task for Cambodia will be to ensure that funding for protected forests is not exclusively dependent on government budget allocations and external donor support, and that funding sources are sufficiently varied to allow conservation and sustainable management programs to continue even during market downturns (e.g., if, for example, tourism-based revenues decline or demand decreases for specific forest products). More effective revenue collection and cost reduction mechanisms are also important financing strategies to achieve financial sustainability.

The following report is intended to provide technical information that can be used by stakeholders in Cambodia to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the protected forests of Cambodia. The approach used here follows the lead provided by several other national conservation finance strategies being developed or applied worldwide, particularly the assessments developed for Mozambique and Belize.

The assessment of finance options for Cambodia's protection forests examined all mechanisms that were determined to be technically achievable by the Forestry Administration and its associates. The options considered were reviewed, verified, and prioritized at a consultative meeting held on Monday 26th May, 2014 at the Sunway Hotel in Phnom Penh, Cambodia, and attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The consultative meeting provided input on the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms.

The participants in the consultative meeting identified eight possible finance mechanisms to include in the assessment, including each of the following:

- Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
- Public-private partnerships, including leases, concession fees, and direct payment or profit sharing ventures in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
- Donor funding;
- Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
- Debt relief ('Debt-for-nature swaps');
- Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
- Biodiversity and Forestry offsets and compensation agreements with industry;
- Establishing a forest conservation trust fund, with revenues generated from multiple sources;

The assessment of each mechanism includes the following information:

- A concise description of the theory and intent of the mechanism;
- An overview of how the financial mechanism is typically applied in practice;
- An example of how the financial mechanisms has been applied in a country of similar social and environmental conditions, and a summary of any results to date;
- An overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia
- A description of any prior experience with the financial mechanism in Cambodia.

The review of the potential financial instruments included in this assessment report suggests that each may hold some potential for contributing to the financial resources needed to manage Cambodia's protection forests and secure their ecological integrity for future generations.

Further action on the forest finance assessment must occur in the context of existing and anticipated institutional policy. For the next five years, 2014-2018, the policy priorities for the RGC in terms of sustainable management of natural resources will focus on four areas.

1. Further managing forest and wildlife resources in a sustainable and equitable manner, in accordance with the "National Forest Programme 2010-2029";
2. Further strengthening of the management and conservation of fishery resources in a sustainable manner in line with the "Strategic Planning Framework for Fisheries Sector 2010-2019" and the "Declaration on the National Policy for Fisheries Sector";
3. Intensifying the implementation of measures to ensure ecosystem sustainability in the agricultural sector, particularly to protect soil productivity, and surface and underground water quality and supply;
4. Strengthening stakeholder cooperation under the framework of the "National Policy on Green Development" and the "National Strategic Plan on Green Development 2013-2030" through the development of regulatory frameworks and mechanisms.

Ultimately, it is expected that the Forestry Administration will work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;
- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

It is recommended that TWG-FA now establish a work plan to carry out each of these steps. The results from this work will help provide more precise answers to each of the following concerns:

- The "Mission" and "Vision" of the proposed finance strategy;
- The approximate amount of funding required to ensure long-term conservation of Cambodia's protection forest resources;
- The expected outputs and outcomes from the funding
- Identification of the institutional structure and responsibilities of the management authority
- Determination of the disbursement and accounting procedures for all leveraged funds.

The work plan should also establish the respective stakeholder roles and responsibilities in the design and implementation of a comprehensive Cambodia forest finance strategy. In turn, the completed strategy should determine the funding requirements necessary to achieve long-term forest management goals in Cambodia; the institutional and policy framework necessary to implement the strategy; and implementation, monitoring, and reporting procedures.







# 1. Introduction to Cambodia's Forest Finance Feasibility Study

Cambodia lies within one of the world's most significant biodiversity hotspots, and also one of the most threatened. Significant conservation investments have been made by external donors and the Cambodian government since the 1990s to establish new protected areas and secure protected forests in ecologically important landscapes. These actions have resulted in the stabilization, and, in some cases, the recovery of populations of some threatened species.

The Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have led this work, with technical and financial support from donors and international non-government organizations (NGOs), including the Wildlife Conservation Society (WCS), Conservation International (CI), World Wide Fund for Nature (WWF), Birdlife International, and Flora and Fauna International (FFI). Independent external reviews of many of these programs, such as the evaluation report from the United Nations Development Program (UNDP) – Global Environment Facility (GEF) project entitled “Establishing Conservation Areas through Landscape Management,” have emphasized the significant on-the-ground results that have been achieved in terms of forest areas placed under protection or improved management. However, these accomplishments require on-going funding to insure payments for recurrent and new costs. Continued investments by donors and NGO into the same landscapes may provide some of this funding. However, donor and NGO contributions are finite in scope and cannot serve as a sustainable financing source. As a result, the development of a long-term financial plan to secure fund through market-based mechanisms is essential in order to safeguard existing on-the-ground achievements, and ensure the long-term integrity of standing forests.

These financial pressures continue in parallel with on-going social and ecological pressures. As mentioned above, the forested landscapes in Cambodia are under significant and increasing levels of threat. Cambodia now has one of the world's highest rates of deforestation, driven by large-scale forest clearance for agriculture and in-migration to frontier regions. Deforestation rates increased significantly following changes in forest management policies in the mid-2000s that provided a basis to expropriate forestlands for agriculture, and the new Protected Areas Law in 2008 that permitted the de-gazettement of protected areas for economic development. Since 2008 more than 10% of Cambodia's protected area network has been allocated to investment firms. Assignment of large-scale concessions to corporations also removes options for local people to use land and resources for livelihoods and new enterprises. Securing the finances to sustain forest landscapes in Cambodia thus becomes important for the needs of local people and biodiversity.

Five particularly pervasive financial constraints to effective protected forest management are evident:

1. There is insufficient funding at the present time to cover core site-level costs and coordinate national-level forest management activities;
2. Funding is distributed unevenly across the protected forest network;
3. Staff costs dominate public budgets;
4. Protected forests rely on a very narrow funding base and limited range of financial sources;
5. Protected forests operate according to a short-term financial planning horizon.

Cambodia can reduce the risks to its protected forests and enhance overall protection measures by diversifying the financing mechanisms used to produce the funds required for recurrent management costs. The principal task for Cambodia will be to ensure that funding for protected forests continues to include, but is not fully dependent on government budget allocations and external donor support, and that funding sources are sufficiently varied to allow conservation and sustainable management programs to continue even during market downturns (e.g., if, for example, tourism-based revenues decline due to terrorism or natural disaster). More effective revenue collection and cost reduction are also important financing strategies to achieve financial sustainability.

The following report is not intended to serve as a finance strategy document. Instead, this assessment provides background information and options that can be used to support the development of a long-term finance strategy for Cambodia's protected forests. Preparation of this long-term forest finance strategy is expected to be a follow-on activity to the results provided in this report. Ultimately, the assessment is intended to provide technical information that can be used by stakeholders in Cambodia to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the protected forests of Cambodia.

The approach used here follows the lead provided by several other national conservation finance strategies being developed or applied worldwide. Mozambique and Belize are two countries that have recently completed similar conservation finance strategies, and each provides an appropriate model for Cambodia's forests. The Cambodia forest financing assessment has also relied on the important work and resources available through the Conservation Finance Alliance (<http://conservationfinance.org/>). Members of the Alliance at the global level include most of the development partners working in Cambodia, including donor agencies (AFD, EC, GIZ, KfW, UNDP, and USAID, among others) and NGOs (FFI, IUCN, Pact, WCS, and WWF). The organizations and experts in the Alliance have supported other countries to develop strategies for sustainable financing, including Mozambique.





## 1.1 Policy Framework for Innovative Forest Financing in Cambodia

The National Forest Programme (NFP), approved by the Royal Government of Cambodia in 2010, sets out the strategic framework for the forestry sector over the period 2010–2029, to be implemented by the Forestry Administration (FA). The NFP prioritizes six programmatic areas that will receive emphasis over the next two decades in order to achieve these objectives. One of the six programmatic areas is the development of sustainable financing mechanisms, including innovative mechanisms, such as conservation concessions or offsets. In addition, the recent National Strategic Development Plan for 2014–2018 similarly encourages the pursuit of sustainable finance measures to support forest conservation in Cambodia.

The implementation of the NFP Programme's sustainable finance objective has thus far focused on REDD+ (Reducing Emissions from Deforestation and forest Degradation) pilot projects and the National REDD+ Readiness Programme. The present report recognizes the importance of continuing this REDD+ work, and references other information sources that can ensure that this work is included in a broader forest finance strategy for Cambodia. The present report will include information on REDD+ opportunities while also highlighting the potential benefits from other innovative financing approaches. Some examples of these other, innovative approaches include:

- Development of Payments for Environmental Services (PES) mechanisms by WCS with the Forestry Administration and MoE in Preah Vihear province;
- Community-based ecotourism development by the Wildlife Alliance, WCS, and WWF; and
- The Community-based Production Forestry (CBPF) pilot led by FA/WCS in the Seima Protection Forest, and similar activities undertaken by the Regional Community Forestry Training Center funded by UNDP.

These initiatives have succeeded in generating significant revenue for conservation and local development at the village level. Scientific research conducted by WCS staff, which has been published in leading academic journals, has demonstrated that these models can protect biodiversity and ecosystem services and alleviate local poverty. However, the amount of funding provided by these village-level projects is not sufficient to fulfill the existing forest management financial targets. As a result, the present recommendations review options from a mix of potential revenue sources. Each section of this report provides an overview of a potential revenue source and evaluates its feasibility under existing conditions in Cambodia. The eventual Cambodia protected forest finance strategy will most likely achieve its greatest results through a combination of several of these potential sources implemented in a coordinated and unified process as a Cambodia Forest Fund.

Further, any funding mechanisms put into practice must be managed in a transparent way with clear oversight and engagement of development partners and potential investors. This is important if any fund is to ensure confidence from investors and contributors. Specifically, a comprehensive sustainable finance strategy for protected forests in Cambodia will require the establishment of a fund management system that is (a) consistent with national law, (b) has sufficient input by government, and (c) is structured to ensure transparency and effective management by financial experts.

# 2 Objectives of the Sustainable Finance Mechanisms for Conservation of Cambodia Protection Forests

On 28 February 2013 the Technical Working Group on Forestry Reform (TWG-FR) formed an informal taskforce to address the issues and needs of sustainable finance for Cambodia forests. The TWG-FR is the government-donor coordination mechanism for the forestry sector, chaired by the Director-General of the Forestry Administration (FA) and the European Union (EU). The TWG-FR determined that the taskforce is to be facilitated by the Deputy Director-General of the FA and WCS.

The assessment is designed to support the Forestry Administration (FA) of the Royal Government of Cambodia to develop an options assessment of innovative forest financing modalities for Cambodia's protection forests, and to understand and communicate the results of this assessment to key stakeholders. The assessment carried out the following 3 activities:

**Activity 1:** Consultations on appropriate innovative financing mechanisms. The FA has created an informal taskforce, chaired by the Deputy Director-General of the FA and WCS, and includes representatives from the FA, donors, and NGOs. This group will consider different innovative financing options, analyze ongoing initiatives, and identify priority modalities for further research. Particular effort has been made to engage the private sector in these discussions, including the European Chamber of Commerce in Cambodia.

**Activity 2 :** Development of the options assessment on forest financing modalities of Cambodia's Protection Forests. The assessment team has reviewed and identified a range of mechanisms that may provide opportunities for Cambodia to generate the revenues necessary to support long-term conservation of its protected forests. The assessment of each mechanism includes a summary of the theory by which the mechanism operates and generates revenue. The assessment also includes at least one example of how the mechanism has been used to generate revenues in Cambodia or in another country facing similar social and ecological challenges. Finally, the assessment examines existing policy and laws in Cambodia to identify possible constraints or opportunities that may facilitate the adoption of the finance mechanisms.

**Activity 3 :** Communication of the results to the Forestry Administration (FA) and interested stakeholders. The results of this study will be communicated to the FA and development partners through a national-level workshop, with results summarized and distributed to appropriate interests. The workshop will be held under the authority of the TWG-FR. The experts who contributed to the results included in the study will facilitate the workshop, the objectives of which are to:

1. Provide initial training to the Government on the various types of innovative forest financing mechanisms, and how they have been used in other countries.
2. Explore which mechanisms might be relevant for Cambodia, and select the ones that should be considered in more detail.

Research for the options assessment as conducted over a four-month period from June – September 2014, and included an extensive literature review and consultation with key stakeholders in Cambodia and outside of the country. The literature review for the assessment consisted of a review of recent guides and case studies on protected area financing; existing documents on sustainable financing and PES; and, conservation area business plans. The options considered were reviewed, verified, and prioritized at a consultative meeting held on Monday 26th May, 2014 at the Sunway Hotel in Phnom Penh, Cambodia, and attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The consultative meeting provided input on the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms.

The report is presented in three parts: Section 3 provides a review of possible financing mechanisms; Section 4 summarizes the overall findings and recommendations; and, Section 5 outlines the steps needed to prepare an action plan for the development of a long-term sustainable financing plan for Cambodia's protected forests.





# 3. Review of Financing Mechanisms

The assessment of finance options for Cambodia's protection forests examined all mechanisms that were determined to be technically achievable by the Forestry Administration and its associates, including the Ministry of the Environment. The finance mechanisms reviewed in the assessment include each of the following:

- Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
- Public-private partnerships, in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
- Donor funding;
- Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
- Debt relief ('Debt-for-nature swaps');
- Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
- Biodiversity and Forestry offsets and compensation agreements with industry;
- Forest conservation trust fund, with revenues generated from multiple sources;

The assessment of each mechanism includes the following information:

- A concise description of the theory and intent of the mechanism;
- An overview of how the financial mechanism is typically applied in practice;
- An example of how the financial mechanisms has been applied in a country of similar social and environmental conditions, and a summary of any results to date;
- An overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia
- A description of any prior experience with the financial mechanism in Cambodia.

Section 4 of the assessment concludes with suggestions for steps to be taken to develop an action plan that can support the development and implementation of a forest finance strategy.

## 3.1 Government Budget Support – Public Taxes, Fees, Fines, and other direct allocations from Government

Government revenue allocations are an important source of support for protected areas. A portion of the fees collected from public taxes, fines, and other payments from concessions and businesses using Cambodia's natural resources is typically reassigned to support costs for management of protection forests. Despite the importance of this finance mechanism, direct government budget support is often inadequate to meet all forest management costs, with financing gaps typically met by revenues from external donor assistance. However, new sources of public finance may be accessible through additional public taxes, fees or fines derived from natural resources exploitation or use, and other sources of public finance, such as debt relief. Effective financial management and revenue retention regulations, including revenue sharing with local communities, are also critical to ensure public support for protected forests.



### 3.1.1 How Does This Mechanism Work?

Taxes, fees and fines related to natural resource use are charged in sectors such as petroleum, mining, hydropower and other energy production, fisheries, forestry, land, water supply, and tourism. A percentage of the fees, taxes and fines for environmental licensing and environmental impact assessment (EIA) can also be assigned to a government or independently managed fund designated for forest conservation uses. It is important to ensure that the fees and taxes levied for the use of Cambodia's natural resources are charged at rates that reflect fair market value for the service and product being delivered. For example, the fee for leasing an ecotourism site in the Northern Plains of Cambodia should fully account for the cost of creating, maintaining, and managing these areas. Fee structures should include "willingness to pay" surveys that are further linked with market surveys to determine a fair market rate for each service offered to private businesses for the use of Cambodia's natural resources.

**Using Government Fees to Finance Conservation:** Government budget allocations are typically done on an annual basis, and protected forests typically are funded through a centralized revenue system. Thus revenues from taxes, fees or other charges within a specific protected forest are not retained at the local level, but are delivered to a central agency or the national Treasury. Protected forests typically receive only a small portion of these collected fees through one annual allocation. This can create significant difficulties for local managers who may not have reserves in place during times of new growth or need. Also, the separation of budget allocations from earnings reduces any incentives for protected forest managers to generate more revenue, and creates little responsibility or accountability for them to do so. The financial autonomy of protected forests can be enhanced by increasing the opportunity to generate and retain funds locally (Emerson, et al. 2006).

It is also essential to evaluate the way in which financial allocations from government budget support are distributed. In some cases the vast majority of funds are assigned to recurrent costs, and principally human resource costs. However, this usually occurs at the expense of essential investment needs in infrastructure, maintenance and new growth. For example, salaries for forest guards may be secure, but those same guards will have no funding available to cover transportation, community meeting, or facility maintenance costs. Providing competitive salaries for staff is unquestionably essential. However, these personnel must also have the resources and capital they need to carry out the management functions expected to ensure long-term sustainability of the forest ecosystems. Thus funds must also be in place to cover the costs of building maintenance and essential new construction, vehicle purchases and maintenance, community consultations, and social and environmental fieldwork.

Most protected forests operate on an annual budget cycle. Yet cash flow requirements for conservation finance rarely conform neatly to an annual budget or project calendar. Similarly, donor-funded projects may involve very irregular or delayed transfers of funds. When combined with uncertainty about the level of funding that can be expected in the future, this means that it is often difficult to match cash availability to actual needs, or to undertake long-term planning and investment (Emerson et al., 2006).

### 3.1.2 Institutional and Policy Factors in Cambodia

The Royal Government of Cambodia (RGC) has evolved a 'Rectangular Strategy' (RS), which has been the hallmark of development since about 2004. The National Strategic Development Plan (NSDP) for 2006-2010 carried forward the agenda laid out in the first RS, and the NSDP Update 2009-2013 on the RS Phase II. The NSDP 2014-2018 carries forward the agenda laid out in RS Phase III, and it was enacted in September 2013. The NSDP 2014-2018 states that the national budget revenue collection target should increase revenues by an average of 0.5 percent (half of one percent) of the GDP per year in order to achieve one of Cambodia's development priorities – environmental sustainability. Thus the target was 13.2% of GDP in 2011 and rose to approximately 14.9 in 2013, and 15.4% in 2014. At the end of the plan, the minimum expectation is to target budget revenue at 16.9% of the GDP, although the goal should be closer to 18% as stated in Step 2 of the Public Financial Management Reform Program.

In order to generate revenues for environmental sustainability, the RGC will continue formulating and increasing the effectiveness of enforcement of laws (and legal letters) related to non-tax revenue mobilization and enforcement of contracts (or agreement on state property management), especially Economic Land Concession Contracts, public property-leasing, petroleum and mine concessions, and other concessions.

The RGC has in place many laws, regulations, and policies that enable relevant ministries to collect revenues for natural resources conservation from environmental taxes, fines, fees, and/or royalties (see Annex 4 for the complete list of enabling legal provisions under Cambodian law). As stipulated in Article 51 of the Law on Forestry, FA shall collect both a Wildlife Conservation Fee and Wildlife Royalty. The exact amount of Fee and Royalty shall be determined by Joint-Prakas between MAFF, and MEF. The Law on Forestry also specifies that: (i) any individual or legal entity harvesting

Forest Products and By-products for commercial purposes within the Permanent Forest Reserve shall pay royalties and premiums to the national budget through FA (Article 52); (ii) anyone with legal possession of a permit to harvest Forest Products and By-products shall pay all applicable royalties and premiums prior to transferring or selling any of these rights to a third party (Article 56); and (iii) any individual who has committed a forestry offense harming the forest ecosystem shall be liable for payment in order to restore or repair the forest ecosystem to its original condition (Article 94).

In addition, Article 32 of Law on Mineral Resource Management and Exploitation states that the rate of royalty on the value of mineral resources, methods of royalty payment to the State, and incentives for competent officials as provided in Article 23, shall be determined by Inter-Ministerial Prakas. Taxes, duties, tax on shares, tax on personal share, provision, method of expenditure, tax payment procedure, accounting and financial principles and practices, definitions of losses, exemption and incentives of investment in mineral sector shall comply with laws in force.

Finally, according to Article 53, punishment for natural resource offences within protected areas include imprisonment, fines by court procedures, transaction fines, confiscation of evidence, payment of restoration damages, warning, termination or suspension of agreements or permits. Decisions to suspend or terminate agreements or permits shall be the responsibility of the Minister of Environment. Decisions to impose transaction fines, to pay restoration damages and to issue warnings shall be the responsibility of the Nature Conservation and Protection Administration.

### 3.1.3 Prior Experience with this Finance Mechanism in Cambodia

FA has been collecting royalties from timber products, fines and premiums for many years. For example, as stated in the National Forest Programme, the royalties for timber collected between 1999 and 2009 was calculated at USD 56.5 million. In 2008, the royalties to FA from 36,785 m<sup>3</sup> of round logs totaled approximately USD 2.5 million, while fines and premiums collected by FA was estimated at approximately USD 600,000. The revenues from forests have been derived from the sale of logs and timber as a sub-unit of the total value of the forests. Therefore, it should be noted that some of the significant services and incomes provided by forests that could add to the total amount of fines, fees and royalties from forests have not been estimated. Those include:

- The value of NTFPs such as fuel-wood, charcoal, medical plants, furniture processing, and wildlife;
- Employment resulting from timber harvesting in the primary sector, in particular the considerable downstream processing;
- Significant increases in value-added through the chain of wood processing;
- Payments for environmental services; and,
- Revenues from eco-tourism.

FA will focus from the present time through 2029 on the RGC's ability to contribute to the financing of forest conservation by pushing for the reallocation of funds from the national budget, the contribution from royalties and fines collected, as well as any export duties on timber and non-timber forest products.

In the next 10-20 years, some of the approaches that FA will pursue to raise revenues for sustainable forest management will include:

- Collecting royalties from logging in the intact evergreen areas;
- Royalties and legal fees from logging in community forest areas and concessions areas, including from non-timber forest products;
- Sales of services in forestry;
- Property tax on private plantations;
- Sale of carbon credits based on reduced impact logging and redd+;
- Entrance fees to protected forest areas; and,
- Sale of hunting rights.

According to the National Forest Programme, it is expected that royalties from logging in the intact evergreen areas (1.25 million hectares, which is 50 percent of the production forest) for the next 20 years will bring in an estimated USD 728 million. The other 50 percent of production forest will bring in the royalties estimated at USD 455 million. Finally, it is expected that 75% of the 2 million hectares of community forest areas will consist of degraded deciduous forests, and 25% of logged semi-evergreen forests. Therefore, royalties from logging can be expected to commence once all of CF is operational with proper management plans in place. It is expected that within 20 years, royalties from log-



ging in CF areas would total approximately USD 476 million. Overall, the RGC expects that within the next 20 years, FA would be collecting about USD 1.6 billion from royalties from logging in the intact forest areas, production forest areas, and CF areas.





## 3.2 Leases, Concession Fees, and Public-Private Partnerships to Generate Revenues from Forest Enterprise Products and Services

In most parts of the world, user fees – especially for tourism and resource harvesting – have traditionally provided the majority of revenues for protected forests. In Cambodia, a variety of charges can in principle be collected for the use of forest land, resources and facilities, including for access, recreational services, land rental and concessions, as well as for various extractive resource uses. As well as generating income, user fees have the additional advantage that they can be employed to manage demand and optimize income from both economic and conservation viewpoints. Considerable revenues can also be generated from public-private partnerships created by the government of Cambodia with private businesses. In such a case the resulting business will have an explicit mission to generate revenues for the conservation of forests, biodiversity, and ecosystems, and income for communities and regions. These public-private entrepreneurial partnerships can also provide existing or emerging markets with products that have a positive impact on the environment, educate consumers, and contribute to building a global constituency for conservation and sustainable production.

The potential certainly exists to widen considerably the range of goods and service for which charges are levied. For example, the Philippines has expanded the basis of revenue generation in protected areas by allowing for income to be generated from a wide variety of sources including entrance fees, charges for the use of facilities such as car parks and visitor centers, payments for services such as snorkeling, diving, swimming, boating, mountain climbing, trekking, picnicking, bird watching, filming and photography, as well as fees for resource harvesting, construction and aquaculture development, land rental and concessions. Diversifying the range of goods and services for which fees are charged can make a significant difference in terms of income generation and cost recovery. For example, even though New Zealand's Department of Conservation is not permitted to charge for entry into public lands, it is able to cover 15% or more of its annual budget from commercial concessions on tourism, agriculture and filming, as well as from income generated by the users of recreational facilities such as huts, trails and campsites. All of these rates are set at levels that will ensure full cost-recovery, and are regularly revised and updated in line with inflation (Phillips 2000).

As well as involving the creation of new fee systems, funds can be generated by improving existing markets and pricing structures. This is because, very often, charges are set so low that they neither accurately reflect prevailing prices, nor fully recover the costs of providing those services. Kenya's differential pricing system in their protected areas was, for example, preceded by studies to assess tourist demand and willingness to pay, and to look entry fees and service charges in neighboring countries.

There is some risk in developing public-private enterprises since considerable initial capital outlay may be required to finance a business start up. However, initial investments for business start-ups typically rely on blended capital in the form of grants and affordable loans. Public-private partnerships can be developed through collaboration between government, NGOs and private foundations, with a guarantee that revenues from the business be used to support social and economic needs and forest and ecosystem conservation management. An important advantage of public-private partnerships to create forest-based enterprises is that the revenues generated from these businesses can become commercially viable and will not be dependent on long-term donor subsidies.

Impact investors may also be a source for initial project funding in some contexts. Impact investments are made into companies, organizations, and funds with the specific intention to generate social and environmental benefits and a financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market-to-market rate, depending upon the circumstances.

There is a growing opportunity to take advantage of existing markets promoting conservation, including such markets as:

- Ecotourism - “experiential” tourism--which encompasses ecotourism, nature, heritage, cultural, and soft adventure tourism, as well as sub-sectors such as rural and community tourism—are among the sectors expected to grow most quickly over the next two decades. Tourists are willing to travel long distances and pay high rates for viewing of charismatic wildlife and scenic landscapes and ecosystems.
- Organic or Sustainable Intensified Agriculture – the sale of organically derived agricultural products has grown globally at a rate of nearly 20 percent per year for the last few years. Further, emerging land management strategies such as the System of Rice Intensification (SRI), can be a win-win for both conservation and farmers' yields and profits.

<sup>1</sup> It should however be noted that these revenues are not necessarily collected or administered by FA authorities, but can instead be managed by an independent third party entity.

- Non-timber forest products market development – increasing interest from impact investors in products such as bamboo, resins, rattans, etc.

Section 3.2.3 below outlines other examples of public-private partnerships that have already been tested in Cambodia.

### 3.2.1 How Does This Mechanism Work?

The government has considerable experience collecting fees and charges for the use of public lands and resources. This expansion of this revenue source needs only to explore new possible funding sources from resources from which fees are not been collected, or where fee structures do not currently reflect fair market values. Government also has considerable experience with public-private partnerships. However, it may be useful for government and NGOs to identify suitable private sector partners for possible collaborative ventures involving sustainable forest-based enterprises. Government can then solicit funding and collaboration requests from potential partners through a formal proposal submission process, and then select and share the development costs for collaboration ventures. Each venture would then require the following:

- Feasibility studies, business plans and possibly seed grants to support start-up enterprise concepts.
- Capital loans at low interest rates (0-11% per annum) provided by NGO, private foundation, or investor partners allocated to the most promising enterprises for working capital and/or scaling up (either vertically or horizontally). Actual terms can be customized to the situation of each enterprise.
- Sustainable sourcing plans to ensure consistent high quality in product delivery.
- Marketing plans to identify and build demand, and ensure best price options for products and services.
- On-going technical support provided through NGO or investor partners to optimize business operations (accounting, sourcing, legal compliance), and ensure the adoption of sustainable business management and best practices, including monitoring support.

The feasibility of these public-private enterprises to generate significant revenues as part of a comprehensive forest finance strategy will require a comprehensive initial market survey to determine opportunities for proposed new ventures to gain entry into existing marketplaces or to stimulate new ones.

#### *Protecting Parks and Gorillas in Congo*

*WCS has developed an ecotourism program in the Republic of Congo that generates revenue for and creates jobs in Nouabalé-Ndoki National Park (NNNP), and positions the park to cover its operating costs. The project simultaneously benefits the local community, and increases awareness and support of gorilla conservation, while demonstrating the value of the wildlife and habitat to the surrounding communities. In the short-term, WCS has worked with the government of Congo to help to secure funding to improve NNNP's ecotourism infrastructure.*

*Additional staff will be hired to track the existing gorilla groups, maintain and improve local hiking trails, and handle tourism logistics. The results will better position the operation to handle an increase in tourist demand and may encourage enthusiastic visitors to stay longer and visit multiple groups. In the long-term, the project seeks to attract private investment from tour operators who will gain from the increased tourism opportunities created by the venture. Early stage sales of approximately \$200,000 suggest that the low investments could eventually yield significant revenues to help defray long-term park management costs.*





### 3.2.2 Institutional and Policy Factors in Cambodia

The Government of Cambodia has been taking steps to improve the investment climate and levels of investment. Comprehensive sector development plans have been prepared, but implementation is constrained by institutional weaknesses and limited borrowing capacity. Most funding is sourced from user fees for services provided by state-owned enterprises (SOEs), and through public sector borrowing on a concessional basis. SOEs have limited capacity to borrow due to the lack of availability of long-term debt in local financial markets. The amount of public sector borrowing is limited by the size of the country's tax base, which is low and does not reflect the demand for infrastructure facilities and services. In December 2011, all public sector debt, by law, was sourced on a concessional basis, and there was no commercial debt program. Government and official development assistance (ODA) funding resources are insufficient to meet Cambodia's overall funding needs. Public-private partnership (PPP) can help the government meet this financing gap by stimulating private sector investment and financing for development activities.

The Royal Government has recognized the importance of PPPs, and a Law on Concessions (LOC) was enacted by the National Assembly in 2007. A draft sub-decree that would allow the LOC to be implemented has been prepared, but it has not been approved. Despite the absence of a legal framework, as of December 2012, a significant number of PPPs had been implemented, or were in the process of being implemented in Cambodia, and further PPP projects are planned in the power sector. The PPP projects being proposed are often quite small and emerge on an ad hoc basis. PPPs are not standardized, and they tend to be issued on a reactive, unsolicited, and negotiated basis, rather than through proactive government preparation and competitive tendering. As a result, the amount of funds being raised through PPPs is below potential, and it is unlikely the services provided accurately reflect market needs.

### 3.2.3 Prior Experience with this Finance Mechanism in Cambodia

To date, most PPP projects in Cambodia have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the International Monetary Fund (IMF) noted in a recent report on Cambodia's debt sustainability that the hydropower projects presently being developed by the government as PPPs have the potential to create significant liabilities for the government. The IMF does recommend that the government implement a phased PPP development program that builds on project successes to create political support and investor confidence in order to broaden the scope and sector coverage for PPP projects.

While the number of PPPs is impressive, the overall level of private investment outside power in sectors such as water and transport is low. Data from the World Bank's Private Participation in Infrastructure (PPI) Projects Database show that during the period 1990–2008 there was a total of 22 PPP projects in Cambodia. Slightly over half of these projects were in the energy sector, representing about 55% of total investments by number and investment value. While private investment in infrastructure has been increasing in recent years, the number of projects and the amounts mobilized continue to be small. It appears that in the road sector there has been little investment as the concessions were allocated for existing roads. There is virtually no PPP investment in social sectors such as health and education and cross-sectoral sectors such as environment and conservation.

#### PPPs Implemented by the RGC

Sector	Number and Form of PPP	Level of Government Issuing Contract
Power	6 hydropower generation BOT projects 3 coal-powered generation BOT projects 2 transmission leases/ BOT projects Various licenses issued to small REEs for generation and distribution	National National National Subnational
Airports	3 airport concessions Air navigation services concession	National National
Roads	National Route 4, concession Various rural concessions	National Subnational
Rail	Operation and maintenance contract	National
Seaports	Oil terminal and dry port concession	National
Water	16 small rural distribution concessions 1 bulk water project	Subnational Subnational
Solid Waste Management	2 concessions	Subnational

BOT: Build-Operate-Transfer; REE: Rural Electrification Enterprise; PPP: Public-Private Partnership  
Source: ADB 2012



## 3.3 Funding from Development Partners – Including Trust Funds

### 3.3.1 How Does This Mechanism Work?

Between 2008 and 2012, Cambodia received about USD 5.4 billion in development cooperation financing from development partners. Approximately USD 3.55 billion of this total was dispersed as grants, and US\$1.85 billion as loans. Based on projections in the NSDP 2014-2018, Cambodia is likely get USD 1.2 billion (USD 600 million as grant, and USD 600 million as loan) in the next 2-3 years. Development cooperation has accounted for approximately 10 percent of the country's GDP in the recent years. It has also probably contributed to the recent high economic growth rate, increased GDP per capita from USD 760 in 2008 to USD 1,036 in 2013, and reduced the poverty rate from around 47.8% in 2007 to 19.8% in 2011. Besides demonstrating the international community's support for the Royal Government's development program and reform effort, this increased level of external resources has also supported the creation of a positive enabling environment, which has been associated with expanded public and private investment, primarily in the infrastructure, garment, agriculture, construction, and tourism sectors.

Development partners provide an important source of funding for protected forests in Cambodia, with bilateral and multilateral agencies providing the largest source, along with some donations from individuals, NGOs, private charitable foundations, and private companies. However, donor interests and procedures can vary significantly. This means that fundraising approaches need to be tailored for each partner, and funding priorities can change quickly and dramatically. Most development partners provide support through two to five year projects, and this is often insufficient to fulfill the medium or long-term objectives and needs of many protected forests. However, some funders are increasingly willing to consider funding requests to catalyze long-term sustainable financing mechanisms and to capitalize financing mechanisms, such as conservation trust funds (see Section 3.3.2 below). Public-private-community partnerships, supported by donor financing, also provide new models for sustainable financing (see Section 3.2 above).

New approaches to traditional donor fundraising can also help to increase funding for protected forests. For example, many development partners have significantly increased available funding for programs responding to climate change and capitalizing on opportunities to generate revenues from payments for ecosystem services (PES – see Section 3.4 below). Others, such as the Global Environment Facility, have identified sustainable forest management as a funding core. Private charitable foundations are principally focused on social sectors in Cambodia. However, foundation support through NGO collaboration is another viable source of short-term funding. Increased private investment in Cambodia may also create new opportunities for private sector financing through partnership agreements, sustainable investments, and biodiversity offsets.

### 3.3.2 Conservation Trust Funds

Conservation Trust Funds (CTFs) are private, legally independent grant-making institutions that provide sustainable financing for biodiversity conservation and natural resource management. Conservation trust funds have been legally established in over 50 countries, typically as trust funds or foundations, as a way to manage long-term financing for protected areas, biodiversity conservation or other environmental purposes. These funds are usually independent of government, and are typically set up as private grant-making institutions that are governed by an independent board of directors which is charged with ensuring that funds are used for the specific purposes defined in the fund's legal statutes.

Conservation trust funds are often established to anchor other sustainable financing mechanisms by providing a transparent and efficient way to manage funding for conservation purposes. Conservation trust funds can manage endowment funds (e.g., only investment income is spent), sinking funds (e.g., both capital and investment income is disbursed) or revolving funds (e.g., pass-through sources of revenue are disbursed), or a combination of any of these.

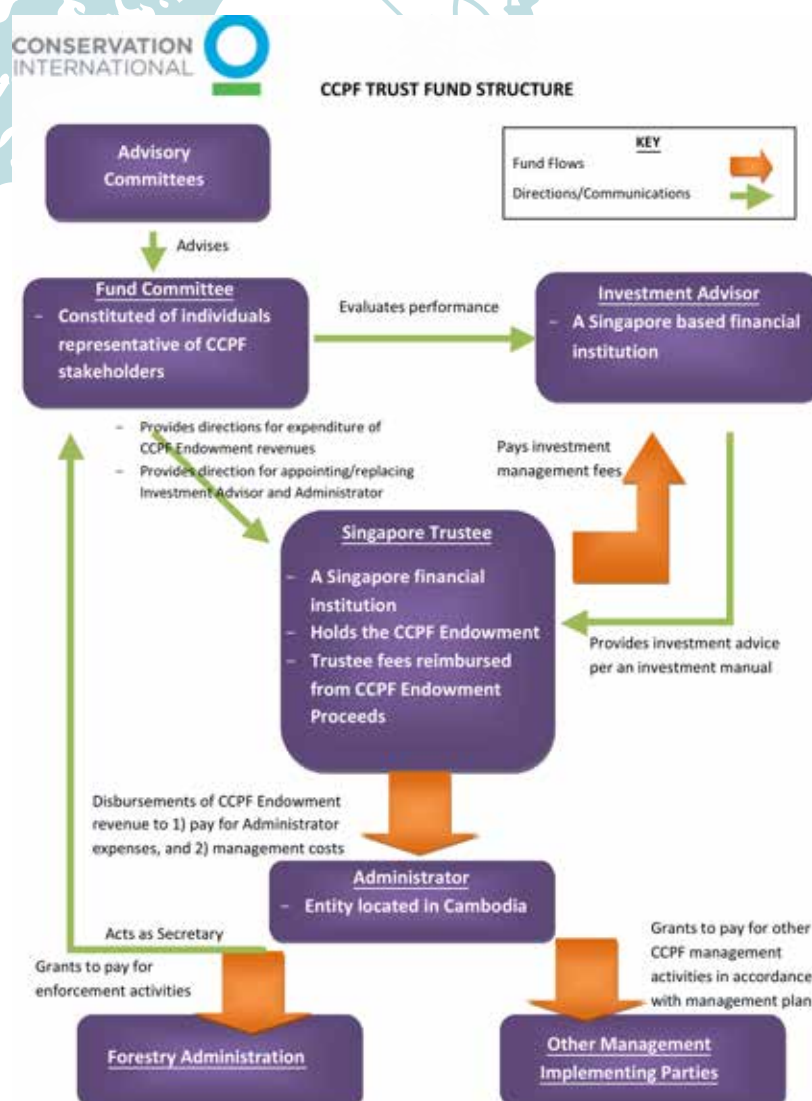
CTFs can be:

- Funds that support Protected Area (PA) management with a primary focus on biodiversity conservation, or
- Environmental funds that cover a range of environmental issues with significant support to civil societies and local communities.

- Endowment Fund – A large capital fund (often provided by a donor or via a grant or debt swap). Only spends the interest earned on the account.
- Sinking Fund – All funds in the account are spent over a specific time frame – 10 to 20 years.
- Revolving Fund – Income from taxes, fees, fines, donors, or PES are continuously raised and put in the fund.

Most funds combine 2 or 3 of the fund types as a way to diversify their sources of funding and take advantage of emerging opportunities.

The Central Cardamoms Protected Forest (CCPF) trust represents an important existing model to show how trust funds can significantly support forest management and conservation in Cambodia. The CCPF was signed and executed on June 10, 2015 by the MAFF, FA, and MEF and with support from The Global Conservation Fund of Conservation International (CI). The Fund includes an endowment (the “CCPF Endowment”) to provide a secure and steady long term flow of funds to support core management costs of the CCPF. An initial \$2.5 million in funds have been raised and invested by CI from various donors, with a gap of \$7.5 million in funds required for full target capitalization needed to cover management expenses. The first payout is expected in January 2017. Management decisions are made by a Fund Committee comprised of MAFF, MEF, a designated Administrator (CI), another NGO (FFI), private sector interests (Grandis Timber Ltd), academia (RUA), and donors (FINTRAC-HARVEST). The Fund Committee offers credible and transparent operational procedures and effective checks and balances for the administration of the Fund, pursuant to a CCPF Operations Manual. The CCPF protects habitat for 54 endangered species listed on the IUCN red list, provides drinking water for 30,000 people downstream, and stores an estimated 358,000 tons of CO2. The CCPF represents an essential source of funding to cover the significant gap in the \$250,000 minimum needed annually to manage the CCPF and enforce existing laws, including payment for 44 rangers, management and support staff and the fuel and motorbikes needed for monitoring patrols.



### 3.3.3 How Do Conservation Trust Funds Work?

CTFS are typically developed through a process that engages all affected stakeholders to carry out the following steps:

- Define the mission, vision, and desired outcomes from establishment of the fund.
- Determine the roles and responsibilities for all parties involved in the development and management of the fund – this can include the assignment of fund management responsibilities to an independent third party, often a local or international NGO, and appointment of secretariat to manage the overall development and implementation of the fund.
- Legally establish the fund, and define financial management procedures.
- Identify potential donors with demonstrated interest in the mission and vision of the proposed fund.
- Develop and submit proposals to raise the funds to endow the fund.
- Build the capacity for individuals and institutions managing funds.
- Help fund managers communicate with and learn from other trust funds.

#### *Madagascar Biodiversity Trust Fund*

*The Government of Madagascar established a conservation trust fund in 2005 as a part of a concerted effort to find sustainable financing the effective management of the protected area network by the National Park Service.*

*The external trust fund donors in addition to the participation of the Government of Madagascar are the Global Environment Facility (GEF), Fonds Français pour l'Environnement Mondial (AFD/FFEM), World Wildlife Fund (WWF), Conservation International (C.I.), World Bank (IDA), and KfW. The interests yielded from the assets will go to cover selected measures for infrastructure, and to partly cover the costs of maintaining the parks. They planned to have \$33 million EUR. As of 2007, \$11 million USD had already been disbursed.*

### 3.3.4 Institutional and Policy Factors in Cambodia

As previously mentioned, the NSDP 2014-2018 provides the overarching framework for implementing development activities and for programming domestic and external resources in Cambodia. The RGC has also produced a Development Cooperation and Partnerships Strategy to support implementation of the NSDP with the objective to promote development effectiveness in Cambodia. The Strategy is effective for the period between 2014 and 2018 and will guide the promotion of partnerships with a wide range of development actors, including Government ministries and agencies, development partners, civil society, the private sector and regional actors including South-South partners. Finally, the Cambodian Rehabilitation and Development Board of the Council for the Development of Cambodia (CRDB/CDC) is the focal point within the RGC for the mobilization of Official Development Assistance (ODA), for coordination of ODA with all development partners and NGOs, and for coordination with and between Royal Government ministries and agencies on ODA allocation and utilization issues.

#### *Development Partner Support for Conservation in Cambodia*

*Development partners have supported more than 550 projects in Cambodia. These development projects are divided into 4 main sectors: social, economic, infrastructure, and services/ cross-sectoral programs.*

*Environment and conservation projects are listed under the services/ cross-sectoral programs sector. There are in total 82 environment and conservation projects out of the 550 plus projects that are currently being supported by development partners. For the complete list of all projects in Cambodia, visit this Council for the Development of Cambodia's portal:*

*[http://cdc.khmer.biz/Reports/report\\_oda\\_and\\_ngo\\_listing\\_of\\_project\\_by\\_sector.asp](http://cdc.khmer.biz/Reports/report_oda_and_ngo_listing_of_project_by_sector.asp)*



The RGC divides development partners into two categories: bi-lateral partners and multi-lateral partners. Current bi-lateral partners include: Australia, Belgium, Canada, China, Denmark, Finland, France, Germany, Japan, the Netherlands, New Zealand, Norway, Republic of Korea, Russian Federation, Sweden, Thailand, United Kingdom, and the United States. Multi-lateral development partners include: United Nations Agencies (UNDP, UNICEF, WFP, UNFPA, UNHCR, UNESCO, FAO, WHO, UNCOHCHR, UNAIDS), Bretton-Wood Institutions (IBRD/ World Bank and IMF), Asian Development Bank, and the European Union/EEC. The RGC welcomes support from all of its development partners and acknowledges that, if carefully managed, this provides for innovation and a broad range of policy perspectives to help achieve successful implementation of priority policy objectives of the NSDP 2014-2018.

### ***Cambodia: Greater Mekong Subregion Biodiversity Conservation Corridors Project/Asia Development Bank, USD 19 Million***

*A Grant Agreement was signed between the RGC and ADB on 27 January 2011 to implement the GMS BCC Project in Cambodia over an eight year period (2011–2019) to establish sustainably managed biodiversity corridors in the GMS BCC Project provinces (Monduliri and Koh Kong). The Project covers 80 villages in 10 districts (covering 22 communes) across Monduliri and Koh Kong provinces in Cambodia. The long-term impact of the Project is to achieve climate resilient sustainable forest ecosystems benefiting local livelihoods. The Project outcome is sustainably managed biodiversity corridors. The Project has four outputs: (i) institutions and communities strengthened for biodiversity corridor management; (ii) biodiversity corridors restored, protected and maintained; (iii) livelihood improvement and small-scale infrastructure support in villages; and (iv) project management and support services provided.*

**Institutional and Policy Factors for Conservation Trust Funds:** Cambodia does not have any identifiable overarching law or any sub-decree that guides or regulates the establishment of funds generally (aside from the more general Law on Public Finance System 2008, discussed further below). The result is that existing funds in Cambodia have been created on an ad hoc basis through special subject-matter laws. Further details could be included below this law, via a sub-decree, in accordance with the hierarchy. An exception to this would be a project-based, donor managed trust fund established under contractual arrangements with a development partner(s) (also discussed further below). Nevertheless, there are various laws in Cambodia that do provide provision on how the different types of Conservation Trust Fund (discussed earlier) could be established.

The Law on Forestry 2002 establishes the legal framework for the management, harvesting, use, development and conservation of the forests in Cambodia. This law enables the establishment of a National Forestry Development Fund (NFDF), which is to be administered and managed under the responsibility of the National Forestry Development Committee (the organization and function of which is to be set out in Sub-Decree), and co-chaired by Minister of the MAFF and the Minister of MEF. The Forestry Law specifies that its revenue sources will include government allocations, premiums on forest products/by-products, wildlife conservation fees, contributions from international organizations, donations from individuals and non-government organizations, and revenue from 'other services in the forestry sector'. Activities the NFDF's funds may be only be used for are reforestation, silviculture and forestry rehabilitation, forest and biodiversity protection and conservation, scientific and technical research, extensions services; development in the forest and wildlife sector, development of community forestry; and training human resources for the forest and wildlife sector. The revenue of the fund must not be used for the organization and functioning of the FA. The FA is currently preparing the Sub-Decree to operationalize the NFDF.

The Law on Protected Areas 2008 ('PA Law') establishes a framework for the management, conservation and development of protected areas, under the jurisdiction of GDNAP of MoE. Amongst other things, the PA Law requires the establishment of a National Protected Area Strategic Management Plan, action plans and technical guidelines for managing protected areas, and proposals for establishing and modifying any protected areas. The PA Law also contains provisions enabling the establishment of a Protected Areas Fund ('PA Fund'). Similar to the Forestry Law, the PA Fund is to be organized, managed and 'given responsibility' by a protected area committee, which is to have the Minister of MoE and the Minister of MEF as co-chairs. PA Law also specifies that the PA Fund may be used for activities within protected areas including the protection, conservation, rehabilitation and enhancement of biological resources and ecosystems, technical and scientific research and study, maintenance and extension of eco-tourism services, training, human resource development and capacity building of staff, support for establishing community protected areas, education on protected areas, and infrastructure needs. The PA Fund has not yet been operationalized.

The Law on Environmental Protection and Natural Resource Management 1996 ('Environment Protection Law') under MoE establishes a broad framework on matters including national and regional environmental plans, natural resource management, environment protection and pollution control, and environmental impact assessment. It also provides the foundations for the establishment of an 'Environment Endowment Fund', a special Treasury account to be created and administer by the MoE 'for environmental protection and natural resource conservation' in Cambodia. Sources of revenue are to constitute government contributions, grants from international organizations, donations from individuals and non-government organizations, and other lawful sums. To date, MoE has not operationalized the Environment Endowment Fund.

### 3.3.5 Prior Experience with this Finance Mechanism in Cambodia

There are several examples of conservation trust funds that have been established in Cambodia. Thus far, the biggest trust fund that is currently operational and is relevant for conservation activities is the Cambodia Climate Change Alliance Trust Fund. Other trust funds that have been set up include the Marine Conservation Trust Fund and the Tropical Forest Conservation and Venture Trust Fund.

#### *Cambodia Climate Change Alliance (CCCA) Trust Fund*

*The CCCA Trust Fund is a multi-donor trust fund established by donors and government to apply a more coherent approach to climate change support for Cambodia. The fund is administered by UNDP, and implemented by a National Climate Change Committee within the MoE. A dedicated Trust Fund Secretariat appointed by government manages day-to-day operations, and reports to a Programme Support Board. A Trust Fund Administrator manages the Trust Fund, provides capacity development and financial assurance, and reports to the government and donors.*

*The CCCA Trust Fund is a sinking fund, where all committed funds will be disbursed by the end of the project time-frame. The initial design was for the duration of 3 years (2010-2012) and approximately USD 8.9 million was committed for that period. Recently the CCCA programme has been extended to 2014, with additional donor commitments being made (details to be finalized).*

*The CCCA Trust Fund operates under a project cycle, utilizing 'calls for proposals' followed by a two-step appraisal process (concept notes and full proposals), and grants are capped at a maximum of US\$300,000. It accepts proposals from government institutions, international organizations, NGOs and research institutes/universities. The CCCA Trust Fund prioritized projects that contribute to or are aligned with the 39 projects identified as priorities in the National Adaptation Programme of Action to Climate Change (NAPA). Four priority areas for adaptation are identified in the NAPA, which include water resource management and agriculture, forestry, health, and the coastal zone.*

#### *Tropical Forest Conservation and Venture Trust Fund, Eastern Plains Landscape (TRAFO)*

*The Eastern Plains Landscape covers an area of almost 16,000 km and constitutes the largest intact tropical dry forest in Southeast Asia, with 2 globally recognized protected areas: the Mondulkiri Protected Forest and the Phnom Prich Wildlife Sanctuary. Funded by WWF-Switzerland, the TRAFO project recognizes the multiple (economic, social and biological) values of forests. The approach also recognizes the role that communities play in retaining the forests, the opportunity costs of sustainable land uses and the sustainable commercialization of NTFP. There are three main objectives: (i) to identify appropriate financing incentives through an 'Incentive to Conserve' assessment, (ii) to establish and build capacity in the management of community forests, and (iii) to develop sustainable NTFP use and management processes. Communities are paid a set annual fee per hectare for protecting their forests. Another key strategy is to help establish Community Protected Areas (CPA) and Community Conservation Forests (CCF) that give communities management and decision-making rights within legally designated areas. The TRAFO also provides compensation to 30 forest patrol team members. Financial support is also given to CCF Management Committee and CPA Committee members to start up new enterprises based on natural products, or to scale up their existing ones to allow them to move beyond a subsistence level.*



### 3.4 Payments for Ecosystem Services (PES)

Ecosystem services are the many diverse benefits that people derive from nature. Payments for Ecosystem Services (PES) initiatives create financial mechanism allowing the people who protect ecosystem services to be compensated by the people who receive or benefit from those same services.

#### *What are 'Payments for Ecosystem Services'?*

*PES fall into four broad categories: supporting services (basic services upon which all other services depend such as photosynthesis, nutrient cycling, and soil formation); provisioning services (the goods that we directly derive and consume from nature which include food, fuel, drinking water, and medicine); regulating services (services that are often “invisible,” including flood control, disease regulation, water purification, pollination, and climate regulation); and cultural services (the spiritual, recreational, educational, and aesthetic services that nature provides to people).*





### 3.4.1 How Does This Mechanism Work?

PES projects create mechanisms to measure, value, incentivize, and create payment schemes for one or more of the recognized services provided by ecosystems. This process typically proceeds as follows:

1. A set of parameters is established for measuring the stocks and flows of a specific ecosystem service, such as drinking or irrigation water.
2. The economic (or social) value of the service is quantified in collaboration with affected stakeholders. In voluntary markets the value can be arbitrarily set by the affected stakeholders working in collaboration with an independent third party to facilitate transactions.
3. Public or private interests who benefit from the protection of the ecosystem service compensate landowners for the use of best management practices to ensure protection.

The landowner affecting the supply the environmental services must typically hold a publically recognized right over an environmental service that provides a flow of benefits to the demanding party in order for compensation to be equitably established. Once these rights are established then a PES program can be set up through a contract agreement between the consumers of ecosystem services (the beneficiaries) and landowners who affect the supply of these services. In some cases, such programs can operate in the open marketplace without government involvement. However, many PES programs are funded by governments and facilitated by independent third party intermediaries, such as non-government organizations.

### 3.4.2 Institutional and Policy Factors in Cambodia

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#### *An Ecosystems Services Approach in the Cardamom Mountains*

*With the financial support from a three year European Commission's grant, FFI has been implementing the Sustainable Provision of Ecosystem Services in the Cardamom Mountains Landscape (CML) Project. The main objective of this project is to explore new incentive approaches to deal with the challenges of balancing biodiversity conservation and development at two hydro-dam sites located within the CML. One of the outcomes of this project was the feasibility assessment of an incentives for ecosystems services scheme in the Stung Atay catchment, developed using principals from PES projects*

### 3.4.3 Prior Experience with this Finance Mechanism in Cambodia

As discussed in the previous section (section 3.3.2), there have been several references to PES in the national policy documents. Several international conservation NGOs, in particular WCS and FFI, have also piloted a series of PES programs in Cambodia as a complement to improving conservation strategies in protected areas. To date, there are three pilot PES projects that have been supported by WCS and a pilot Incentives for Ecosystems Services scheme at a hydroelectricity facility in the Cardamom Mountain Landscape by FFI. All three of WCS programs were piloted in two Protected Areas in the Northern Plains landscape: the Kulen Promtep Wildlife Sanctuary managed by MoE and the Preah Vihear Protected Forest managed by MAFF.

#### *Paying for Upstream Watershed Protection in Colombia*

*In Colombia, associations of irrigators and governmental agencies are paying upstream forest landowners along the Cauca River to manage their land, to improve base flows and to reduce sedimentation in irrigation canals. Voluntary payments are made by associations of irrigators to a government agency; water users originally paid \$0.50/L/second every trimester (covered administrative costs, based on theoretical water use for single crop), but they now voluntarily pay an additional fee of \$1.50 to \$2.00 to be put in a separate fund to be used by the CVC to finance those watershed activities necessary to improve stream flow. The program covers 1 million hectares of forest, and will stimulate reforestation.*

#### *Community-Based Ecotourism in Tmatboey, Cambodia*

*The community-based ecotourism program was started in 2004 in the village of Tmatboey in Kulen Promtep Wildlife Sanctuary, following initial awareness-raising in 2002-3. There are various criteria that contribute to the success of this initiative. First, the area contains rare species that are high profile targets for international birdwatchers (e.g. the Giant Ibis). Second, sightings of these species are reliable year-round. Third, the village is relatively easy to access from the major tourism centre at Siem Reap, which receives more than 2 million visitors annually and has an international airport. Finally, prices for accommodation and other related expenses are moderately inexpensive. An agreement is drawn between the PA authorities, WCS and the village, which stipulates that tourism revenue is subject to the villagers agreeing to stop hunting key species and abiding by the land-use plan. The value to local families of conserving wildlife is further reinforced by the fact that each tourist pays \$30 to the village if all key species are seen and only \$15 if just a subset is observed.*

## 3.5 Debt Relief (“Debt for Nature” Swaps)

Debt relief, or “debt for nature swaps” (DFNS) produce an agreement through which debt owed by a developing country, or a private or commercial company, can be renegotiated with the creditor to fund natural resource conservation. The debt owed is exchanged with the creditor for financial payments made by the debtor country to cover the costs of conservation or improved natural resource management. Bilateral, multilateral, and commercial debt has each been used in DFNS agreements.



### 3.5.1 How Does This Mechanism Work?

A DFNS involves an agreement between a “Debtor”, a “Creditor”, and a conservation intermediary. The debtor is generally the national government erasing debt owed to a bilateral or multilateral donor or bank, or a private company or borrower erasing debt from a commercial loan. Debtors must demonstrate a commitment to allocate funds for biodiversity conservation or natural resource management needs that would not otherwise be funded through other means. A DFNS typically proceeds through a process similar to the following:

- A creditor (donor or bank) converts existing debt into local currency at a discounted rate and pays the debtor (usually the government) cash.
- The debtor (government) agrees to use the cash to fund forest management, or similar conservation activities, in the country in which the debt is to be converted.
- A third party, often a conservation NGO, usually negotiates the debt purchase.

There are also typically several preconditions that must be satisfied to make the DFNS feasible, including the following:

- Funds are available to reduce or cancel the debt, and
- A transparent institution exists to manage the funds that will be used to fund the proposed conservation activities.
- Donors, banks, investors or creditors must be willing to sell a country’s debt at less than full face value.

The payments from a DFNS agreement are often placed into conservation trust funds set up as a public-private entities that are privately managed (often an NGO), with funds disbursed to respond to specific budgeted conservation management needs.

#### *From Debt to Conservation in Indonesia*

*In partnership with the World Wildlife Fund - Indonesia (WWF) and the Nature Conservancy, the United States and Indonesia signed a debt-for-nature swap agreement in 2011. The U.S. agreed to forgive a debt of \$28.5 million over the next eight years; in exchange, the Government of Indonesia promised to commit these funds to support grants to protect and restore the the country’s tropical forests in Kalimantan, as well as investments in green-growth activities to reduce carbon emissions from deforestation, forest degradation, and land use. This fund will be channeled through civil society and will strengthen capacity of local institutions and stakeholders to ensure that a balanced approach to economic development is supported.*



### 3.5.2 Institutional and Policy Factors in Cambodia

According to the IMF (2014), the stock of Cambodia's external public debt, including arrears, stood at around US\$4.5 billion or 32 percent of GDP by the end of 2012. The debt-to-GDP ratio has increased from 27 percent in 2008, partly reflecting greater external fiscal financing during the economic slowdown in 2009 and larger disbursement of bilateral loans during 2011–12 (IMF 2014). In addition, the share of bilateral debt, including arrears, in total external public debt has increased from 50 percent in 2009 to 63 percent in 2012. China remains the largest bilateral creditor, contributing to more than 50 percent of the total bilateral debt stock and about 80 percent of bilateral debt disbursement during the past three years. Cambodia remains in arrears to the Russian Federation and the U.S. (nearly 20 percent of total debt or 6 percent of GDP), and the status of negotiations of these arrears has remained unchanged since the last IMF's Debt Sustainability Analysis (DSA). Cambodia is not servicing its debt with these two creditors. The Cambodian authorities have been in contact with the Russian and U.S. authorities at least on an annual basis, but further efforts are needed to conclude agreements under the Paris Club framework.

In terms of national legal provisions, Article 68 of the Law on Public Finance System states that only MEF has the rights to prepare debt repayment schedules for either debt liable to and from others. The preparation of a debt schedule is defined by the Law on Finance. Furthermore, according to Article 21 of the Draft Law on Financial Regime and Property Management for Sub-National Administration (2012), the sub-national administrations shall not be entitled to involve in loan agreement, publish bonds or/ and financial tickets, issue guarantee letters, and directly or indirectly perform activities which cause direct or indirect debts or financial liabilities for the Kingdom of Cambodia. In receiving grants, the sub-national administrations shall obtain prior agreement from MoI and MEF.

### 3.5.3 Prior Experience with this Finance Mechanism in Cambodia

As stated in the IMF's Press Release No. 05/286, the IMF Executive Board, under the Multilateral Debt Relief Initiative, has approved debt relief for Cambodia. As part of the Initiative, the IMF will provide 100 percent relief of outstanding debt incurred before January 1, 2005. This amounts to approximately US\$82 million. This debt relief was made available in early January 2006 when the remaining consents of the contributors to the Trust Subsidy Account have been received. According to the IMF, Cambodia qualified for the debt relief because of its overall satisfactory recent macroeconomic performance, progress in poverty reduction, and improvements in public expenditure management. Since 1999, Cambodia has enjoyed robust economic expansion, with annual growth rates averaging over 7 percent and inflation being kept under control. During this period, the RGC has shown strong commitment to implementing its National Poverty Reduction Strategy, and improving public administration, in particular public expenditure management. Performance in these areas provides assurance that resources made available under the Multilateral Debt Relief Initiative would be used effectively.

These additional resources were made available to help Cambodia make progress toward its Millennium Development Goals (CMDGs). While environmental sustainability is part of the CMDGs (Goal 7), the targets for this goal include: reverse the loss of environmental resources; increase the proportion of people who have access to potable water supply and sanitation, to a stipulated number (separately defined for rural and urban areas); reduce dependence on firewood for cooking to 52%; and increase the proportion of people with secure land tenure. In other words, the existing debt relief does not conform to the conventional modes of debt-for-nature-swap such as that developed in Indonesia or other countries.

## 3.6 Loans, Bonds, and Sustainable Investment Funds

A bond is a written promise to pay back a specified amount of money, with interest earned on the principal, at a specific date or dates in the future. It is very similar to a loan, with the exception that a bond can be traded in the marketplace to generate revenue. This means that the issuer of the bond, usually government, can sell it to investors, who, in turn, will purchase shares in the bond on the expectation that its value will increase over time. Loans are more commonly agreements made between banks and customers, and are generally non-tradable. The issuer of the bond (usually government) provides financial backing for the bond through its credit rating.

Pioneered by issuers such as the World Bank and the European Investment Bank (EIB), the green bond market has expanded across agencies and the wider corporate market. Green bonds are essentially debt securities whereby the issuer declares that the proceeds must be channeled into a designated environmental cause. The potential to generate revenue from the sale of a bond has made this a very desirable mechanism to use to help finance many infrastructure improvement projects, with the credit rating of the bond issuer generally incentivizing investors.

Conservation funds can also be raised through similar bond mechanisms, such as a Social Impact Bond (SIB). An SIB uses a commitment by the public sector to pay for improved social outcomes that result in public sector savings. Repayment of the capital is tied to the achievement of specified social and environmental outcomes (or 'impacts'). An SIB transfers project risk to impact-oriented investors, and uses donor finance to repay the principle once set objectives are delivered, guaranteeing increased effectiveness of the donor financing.

Another financial tool available for consideration is a "credit enhancement" adopted by banks or other lending institutions. Credit enhancements are protections provided to a borrower through pledged financial support to cover the losses of securitized assets in adverse conditions. Banks use credit enhancements to improve the credit rating of a borrower who may not have established credit. Rating Agencies such as Moody's Investor Services, Standard and Poor's Ratings Service, or Fitch Ratings can establish the borrower's credit. Risk mitigation tools such as credit enhancements or guarantees provide stability and support to projects which otherwise do not have the track record necessary to attract investors.

A further emerging financial force is the engagement of impact investors in the management of forest resources and natural capital. Impact investors seek to achieve specific social and environmental results through investments made into companies, organizations, and funds, while simultaneously achieving a desired financial return on their investment. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market value to market rate, depending upon the circumstances. Investors can include private pension funds, wealthy individuals, or other mainstream retail investors. Consultations with impact investors at the recent Responsible Business Forum on Sustainable Development held in Singapore November 24-25, 2014 indicates very high investor interest in Southeast Asian markets, with a particular interest in infrastructure and natural capital development in the Mekong region

(<http://www.responsiblebusiness.com/events/responsible-business-forum-on-sustainable-development/>).

### 3.6.1 How Does This Mechanism Work?

Government backed bonds are typically developed and issued through a relatively simple process:

- The government determines how much money is needed to fund specific projects for a particular period of time.
- The Government then legally authorizes the creation of a bond to raise money from investors to fund the projects.
- Underwriters from national or international private sector companies buy the bonds and resell them to large and small investors. The underwriters make money on their investment when they re-sell the bonds. The investors in the bonds are most commonly pension funds, mutual funds, and other large investors. In some cases small investors will find bonds appealing, typically if they feel that the value will increase rapidly over a short time period.

Other key participants in the bond market include:

- Bond rating companies that provide a wide range of credit services, including establishing a rating that indicates how the financial market views the risk associated with the bonds.
- Debt Service administrators facilitate the payment schedule on the bond (principal and interest), with payments typically are made every 6 months for 20 or 25 years.

As the issuer of a bond, the government may also decide to declare a debt limit that restricts the amount of bonds the state can issue. Investors in the bond must have transparency, and some form of verification as to how the projects to be carried out fulfill the mandates of the bond. It is also essential that monitoring data demonstrate the use of proceeds from bond sales.



- *Proceeds bond* - a “full faith” senior unsecured bond whereby funds are set aside into a sub-portfolio to be used on a conservation project.
- *Proceeds Revenue bond* - these bonds have non-recourse to the issuer, and the credit exposure is made to pledged cash flows derived from other revenue streams such as fees, taxes, etc.
- *Project bond* - the investor has direct exposure to the risk of the project with or without recourse to the issuer of the bond.
- *Securitized bond* - these are collateralized by one or more projects, such as covered bonds or asset-backed securities.

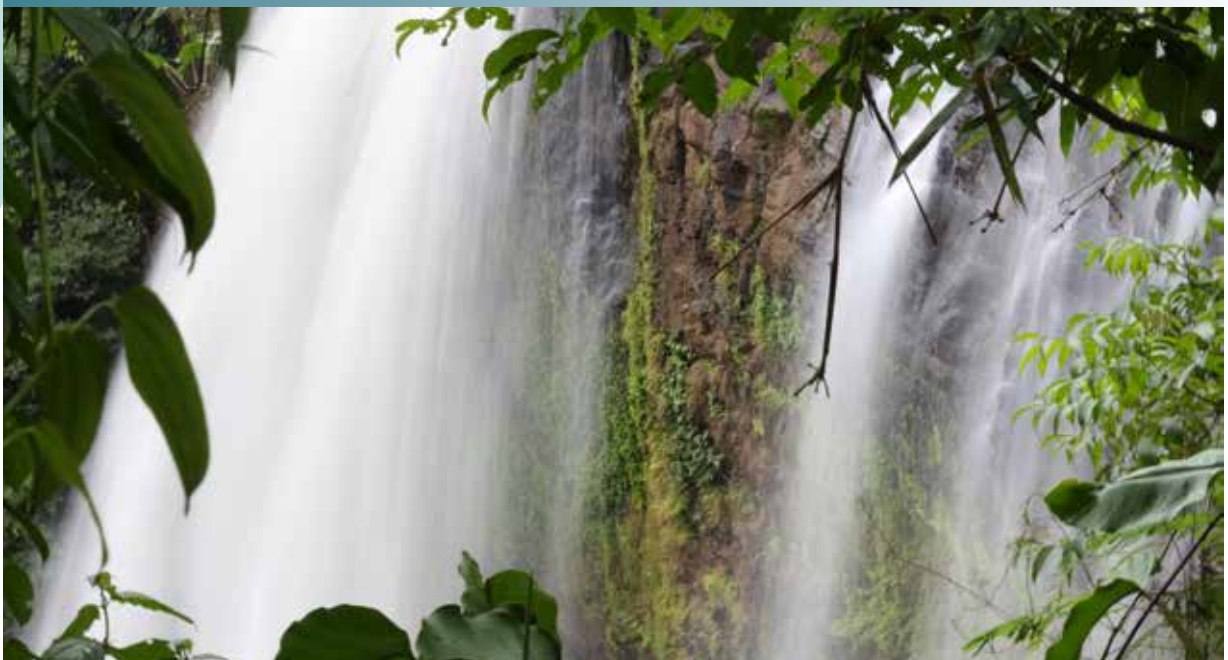
### *Green Bond Options*

Enterprise funds and other types of sustainable investment funds differ from bonds in that they channel capital – debt or equity – into environmentally-sustainable businesses. For-profit investments can be structured to provide financial returns for a private conservation trust or similar financial structure by tapping into the substantial financial resources of the private sector. In this way, these funds can provide both a direct financial benefit and promote adherence to environmental standards for use of resources.

The issuance of bonds to support forest or biodiversity conservation work is a relatively new mechanism, and has not been thoroughly tested to date. However, the mechanism is increasingly being viewed as a promising tool as part of a broader conservation finance strategy. Non-financial corporations began issuing such instruments in 2012. Although commercial banks have generally stood on the sidelines of the green bond market thus far, two banks have already been active - Bank of America kick-started the bank green bond market in November 2013 as part of a 10 year USD 50 billion environmental commitment. Canadian Toronto Dominion (TD) Bank followed in March 2014. There has also been some development in China. The Chinese government has already called for growth of a corporate green bond market, and the first yuan denominated green bond was issued last month by IFC.

### *A Green Bond for Rhinos*

*Threatened by poaching, rhino protection has become a high priority in Africa and Asia. In response to this problem, The Global Environment Facility (GEF) and the Zoological Society of London (ZSL) have teamed up to create what they call “rhino impact bonds” to raise money for rhino protection in up to five different conservation sites in Africa and Asia. These long-term funding commitments are used to leverage private investment on the basis that if outcomes are verifiably achieved then investors will be paid back (potentially with interest) by the donor. The project proposal outlines several goals, that when met, will be considered positive returns on the investment. The project will potentially receive over \$6 million USD in funding.*



### 3.6.2 Institutional and Policy Factors in Cambodia

The Government of Cambodia has undertaken comprehensive economic and structural reforms, beginning in 2001 when the Financial Sector Blueprint for 2001-2010 was adopted. The strategy outlines a sequence of policy reforms, including plans for the establishment of a securities exchange in 2007, and the legal and regulatory framework needed for market infrastructure. It also outlines the development of money market instruments, treasury bills, and the need to establish a bond market. Currently, Cambodia is in the second phase of implementation of the Financial Sector Blueprint. Through the National Bank of Cambodia (NBC), MEF has issued treasury bills, recapitalization bonds, and certificates of deposit. However, no negotiable instruments have been issued yet. The Law on Government Securities and Law on Issuance and Trading of Non-Government Securities were adopted in 2007, and have both been enforced. Additional to MEF's roles and responsibilities, the tasks related to bond market infrastructure are delegated to the Securities and Exchange Commission of Cambodia (SECC), the National Bank of Cambodia (NBC), and the Cambodia Securities Exchange (CSE).

The SECC is established under the Law on The Issuance and Trading of Non-Government Securities (Securities Law) to help regulate the securities industry in Cambodia and contribute to socio-economic development through capital mobilization from securities investors. The NBC is the central bank of Cambodia. Established in 1954, the NBC is referred to as the Government Securities Management Agency, whose authority is to address operational matters related to government securities. Finally, the CSE was established in March 2009 through a joint-venture agreement between the government, represented by MEF, and the Korea Exchange. CSE is considered as a public enterprise in accordance with the Law on the General Statutes of Public Enterprises. Cambodia Securities Exchange was then incorporated on 23 February 2010. In accordance with the agreement, CSX was capitalized by both parties, with MEF owning 55% of the registered capital and Korea Exchange the remaining 45%. In accordance with the Securities Law, CSX had been granted approval to function as market operator, clearing and settlement facility operator, and depository operator.

### 3.6.3 Prior Experience with this Finance Mechanism in Cambodia

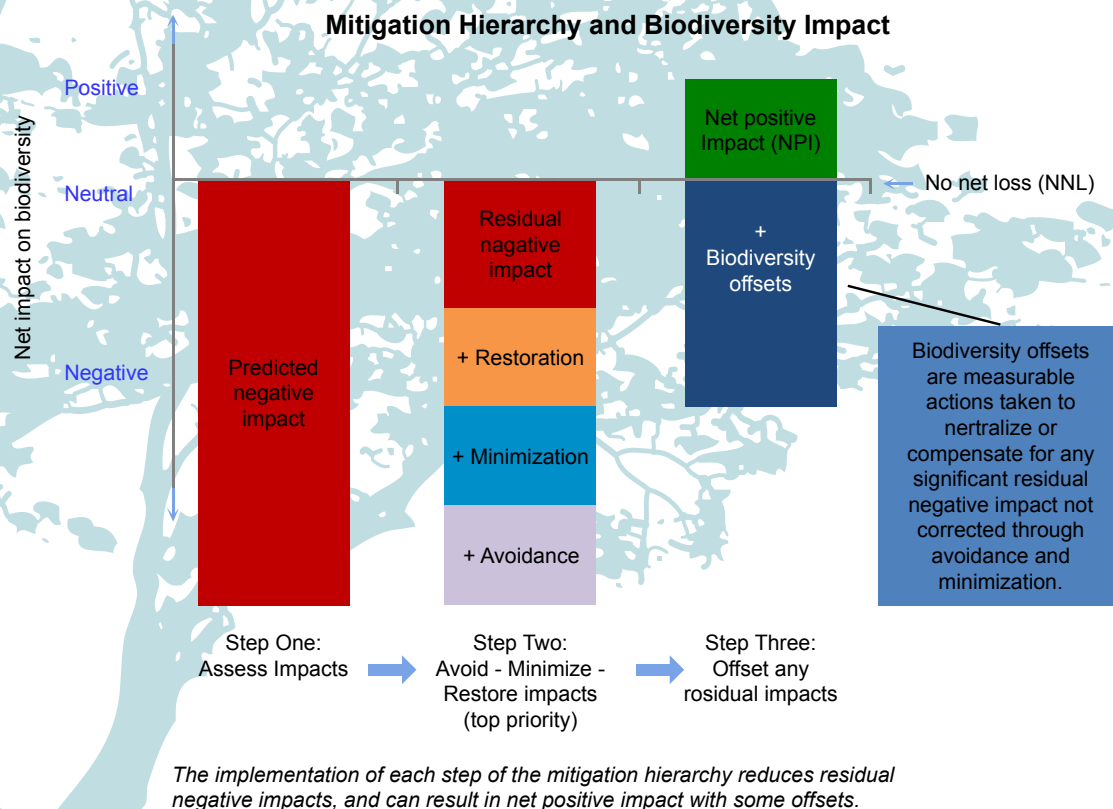
At the moment, there is no government bond market in Cambodia (ADB 2013). In the Financial Sector Development Strategy 2011-2020, it is stated that the Royal Government will consider issuing government bonds starting in 2017. Although the system no longer operates, Cambodia previously issued government bonds with maturities longer than 10 years, and it implemented a book-entry system. The Book-Entry System (BES) is a computerized registry for government bonds developed by the IMF that can process participant's details, auction outcomes, and secondary market transactions. BES also handles information on interest and redemption. In order to register, commercial banks need to create three accounts: securities account, customer account (one account for all customers of each bank that are trading on behalf of customers), and collateral account. A security account can be created for any large non-bank corporation that intends to participate in bond auctions on a regular basis, and a collateral account is also created when required. All submissions for bond auctions must be made on a standard physical form issued by the NBC. After all bid forms are validated, NBC enters all bid submissions in BES and selects accepted bids. The settlement date is 3 days (72 hours) after auction.

There are three patterns of bond sales and purchases in Cambodia: (i) between a bank and its customers, (ii) between two banks, and (iii) repo and reverse repo. For sales and purchases between a bank and its customers, the bank's securities account and bank's customer account are involved. The bank's customer account is one separate account whose current balance can be monitored by NBC. NBC occasionally requires a complete disclosure of a customer's particulars and the amount of securities held, the total of which must reconcile with the BES book-entry account held at NBC. All interest payments on bonds issued at face value with an annual rate of interest and a fixed maturity date are shown in BES. Interest can be paid to bond holders either once or twice per year depending on the terms of issuance. On the due date, NBC processes a fund transfer arising from interest payment by debiting a treasury account. NBC types and sends a letter to subscribers and also sends copies of an interest payment due report for to NBC's Internal Audit Department.



### 3.7 Biodiversity Offsets and Compensation

Biodiversity offsets are measurable actions taken to correct significant residual impacts to biodiversity and ecosystems that have resulted from a particular project development. Offsets are intended to correct adverse impacts that have not been avoided, minimized, or mitigated through other project actions. Offsets are generally developed in accordance with the protocol outlined in the mitigation hierarchy.



source: Tolisano et al., 2013

The mitigation hierarchy is a best practice approach to managing biodiversity risk. The approach applies efforts early in the project development process to prevent or avoid any adverse impacts to biodiversity and ecosystems wherever possible. The project developer then acts to minimize and reduce impacts that cannot be avoided; and then repair or restore impacts that cannot be avoided, minimized or reduced. If it is evident that the residual impacts cannot be corrected by actions to avoid, reduce, or mitigate the impact then an offset or compensation strategy may be the most appropriate action to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity. The mitigation hierarchy process distinguishes between actions to "compensate" for residual impacts, and those to "offset" residual impacts. Compensation for residual impacts can take a variety of forms, including financial payments or funds established and managed over the life of a project to cover recurrent costs for conservation management. Offsets typically involve specific actions designed to ensure that an equal or greater area of identical habitat is protected or improved as a result of residual project damages.

The corporation or business responsible for the project impacts assumes the costs for a biodiversity offsets. For example, a corporation or business may provide the funds to protect ecosystem services or the management costs for protected forests. Offset and compensation strategies typically create a mechanism through which the corporation or business either directly pays the mitigation and management costs, or finances the government or an assigned third party to carry out the same mitigation and management actions.

Although no standards have been adopted at the international level for biodiversity offsets, more than 30 countries have laws requiring biodiversity offsets or compensation. Brazil's industrial compensation program requires that, as a condition for licensing, project developers pay a percentage of the capital costs of development to finance the establishment or maintenance of protected areas. In Africa, although there are examples of companies voluntarily compensating for impacts on biodiversity (e.g. in Ghana and Madagascar), South Africa is one of the few countries that is developing a national biodiversity offset policy, and offset guidelines have already been drafted in the Western Cape and KwaZulu-Natal provinces. (Madsen et al. 2010)

### 3.7.1 How Does This Mechanism Work?

Examples of possible offset activities that may be included as a form of compensation could include:

- Strengthen ineffective protected areas by investing in capacity building for management staff and additional needed management activities;
- Establish new protected areas or no-go zones in collaboration with communities and government in order to conserve particular species and increase available habitat;
- Establish movement and dispersal corridors for wildlife;
- Establish or strengthen buffer zones adjacent to protected areas;
- Work with communities to develop alternative livelihoods that can reduce or eliminate unsustainable activities and hunting pressures.

Ideally, offsets should be designed and implemented as part of a national planning effort taking into account the cumulative impacts of development in the country, and contributing to and nested in existing national conservation strategies, including recovery plans for IUCN recognized threatened and endangered species and protected area strategies. Government-endorsed national offset and compensation strategies may also be most effective if supported and overseen by effective and transparent institutions, such as conservation trust funds, to ensure permanent funding to deliver conservation outcomes over the long term.

A key factor in the development of any compensation or offset strategy is the assurance that investments in conservation or offset activities do not simply provide a mechanism to allow inappropriate developments to move forward. This is particularly true in areas of rare, unique, or highly threatened species and ecosystems. Thus all compensation and offset strategies must ensure that appropriate monitoring, planning, and management mechanisms are in place and secure over the long term to guarantee that the compensation objectives are achieved.

#### *An Offset for Mining Impacts in Madagascar*

*Madagascar is a global hotspot for biodiversity, with a high species richness and many endangered and range-restricted species. Sherritt International, Sumitomo, KORES, and SNC Lavalin have teamed up in Madagascar to undertake a No-Net-Loss mining project in Madagascar. This site is a nickel and cobalt mining and processing joint venture, with an investment of \$7 billion USD. Their mission is to be the leader in the sustainable production of quality nickel and cobalt for the global market, while delivering no net loss, and preferably, a net gain in biodiversity. They plan to avoid pipeline tunnels underneath the forest, minimize paced directional clearing, and to restore the site after the mining is completed.*







## 3.7.2 Institutional and Policy Factors in Cambodia

The Draft Law on Environmental Impact Assessment under MoE establishes the legal framework for environmental impact assessments of all investment projects that create impacts on and harmful consequences to the environment, society, economy, culture, and legality and democracy of the nation. This law applies to all projects and activities carried out by naturalized persons, of owners of all types, of private legal entities, public legal entities, state units and institutions, and nations, which are under the jurisdiction of the Cambodian laws (Article 3), except for state projects, which have been decided by the government or approved by the National Assembly and which are considered to be the emergency projects related to national security, national protection, and disaster management (Article 4). The law establishes the condition that all development projects shall adopt and apply the 'polluter pays' principle in order to achieve the objective of sustainable development. Specifically, those who generate pollution and waste or cause harm to the environment should bear the cost of damage, containment, avoidance, or abatement (Article 7). As stated in Article 9, MoE is the only institution responsible for carrying out EIA.

The law further defines offsets as measurable conservation outcomes resulting from actions designed to compensate for significant adverse biodiversity impacts arising from project development and persisting after appropriate avoidance, minimization, and restoration measures have been taken. Generally, these are not within the project site (Annexure 1: Vocabulary). The format and procedure of the payment must be determined by a joint Prakas by MoE and MEF (Article 28). It should be noted that since this is still a draft law, sub-decree No. 72 dated August 11, 1999 on the Process of EIA and legal regulations related EIA are still valid until the draft law is adopted and that there are new regulations to replace them (Article 94).

## 3.7.3 Prior Experience with this Finance Mechanism in Cambodia

The RGC has thus far piloted various carbon and biodiversity offset projects across different sectors in Cambodia. These pilot projects could be grouped into two categories:

1. Forest specific offset projects, as in Reducing Emissions from Deforestation and Degradation (REDD+) pilot projects
2. Non-forest offset projects, taking the form of Clean Development Mechanisms

### REDD+ Pilot Projects

Following His Excellency Dr. Mok Mareth's remark at the 2007 UNFCCC conference in Indonesia, the Royal Government of Cambodia (RGC) started to implement REDD+ pilot projects. Classified as a priority "high forest cover, high deforestation" country for the purposes of REDD+, Cambodia started to pilot REDD+ projects in May 2008 when the Forestry Administration (FA) of the RGC approved the first REDD+ pilot project in Oddar Meanchey province, followed by the second REDD+ pilot project in the Seima Protection Forest, Mondulkiri province in 2009 (Forestry Administration, 2011). In addition to these two pilot projects, there are several other REDD+ projects that have been initiated under the different institutional jurisdictions of the RGC. Additionally the RGC has developed a jurisdictional REDD+ concept, submitted 2014 to FCPF, for the Northern Plains regions (Oddar Meanchey and Preh Vihear). The program was not pursued by the FCPF at this time. However, jurisdictional REDD+ development is still being pursued through other possible financial mechanisms. The following table lists the potential and current REDD+ pilot project sites in Cambodia.



## Pilot and potential REDD+ pilot sites in Cambodia

Forestry Administration	Ministry of Environment	Fisheries Administration
<ol style="list-style-type: none"> <li>1. Oddar Meanchey Community Forest REDD+ Pilot Project</li> <li>2. Seima Protection Forest REDD+ Pilot Project</li> <li>3. Southern Cardamom Mountains</li> <li>4. Central Cardamom Mountains</li> <li>5. Cardamom Mountains REDD+ project</li> <li>6. Siem Reap REDD Project</li> <li>7. Prey Lang REDD Project</li> <li>8. Western Siem Pang Important Bird Area</li> </ol>	<ol style="list-style-type: none"> <li>1. Kulen Promtep Wildlife Sanctuary REDD+ Pilot Project</li> <li>2. Phnom Oral REDD Project</li> <li>3. Phnom Samkos REDD Project</li> <li>4. Lomphat Wildlife Conservation Area</li> </ol>	<ol style="list-style-type: none"> <li>1. Koh Kong mangrove and flooded forest REDD Project</li> <li>2. Kampong Chhnang REDD Project</li> <li>3. Sihanouk Ville REDD Project</li> </ol>
1. Samlout REDD+ Project		

*Source: Information collected through interviews and desk review*

Oddar Meanchey Community Forest REDD+ Pilot Project and Seima Protection Forest REDD+ Pilot Project are the most advanced of these 16 projects.

The Oddar Meanchey REDD+ pilot project has been implemented by the FA, communities of the Oddar Meanchey province, Pact Cambodia, Terra Global Capital, the Children's Development Association and the Monk's Community Forestry Association. It has partnered directly with local communities to establish Community Forest groups that implement project activities in order to reduce deforestation, to improve livelihoods and to protect biodiversity. The project is the first community-based mosaic REDD+ project to achieve registration under the Verified Carbon Standard (VCS) and, in recognition of its exceptional social and biodiversity benefits, Gold level validation under the Climate, Community and Biodiversity (CCB) Alliance's standard. Over its 30-year lifetime (2008-2038), the project is expected to result in the generation of 8.1 million tons of emissions reductions (Forestry Administration, 2011).

The Seima REDD+ pilot project was officially launched by the Council of Ministers with the collaboration between the FA and the Wildlife Conservation Society (WCS). It aims to expand and improve law enforcement activities, to register existing communities land claims, and to provide incentives for communities to protect forests. According to Winrock International's feasibility study, the project is highly feasible and under a conservative scenario, it would avoid millions of tons of carbon emissions. It is estimated that 1.5 million tons of carbon will be sequestered over the 2008-2012 period if deforestation is decreased by 50 percent in the project area. The Seima project was validated in December 2014 and is currently under verification.

### Clean Development Mechanism Projects

Additional to REDD+ pilot projects, as a member of the Non-Annex I countries of the UNFCCC, the RGC is eligible for hosting emission reduction projects under the Clean Development Mechanism (CDM). In general, CDM projects have two key goals: (i) to assist developing countries who host CDM projects to achieve their sustainable development objectives, and (ii) to help developed countries partially meet their GHG reduction commitments by allowing them to take credits from emission reducing projects undertaken in developing countries (MoE 2004). For Cambodia, CDM projects represent a new source of investment on environmentally friendly technology and capacity building in the fields of energy, forestry, agriculture and waste management. Furthermore, the RGC expect that CDM projects will provide many environmental benefits and services such as watershed protection, control of soil erosion and degradation, biodiversity conservation, provision of non-timber products (MoE 2004).

On 15 July 2003, the RGC appointed the Ministry of Environment (MoE) as the Interim Designated National Authority (DNA) for CDM projects (Government Decision No. 01). As of now, MoE is the national implementing agency for a number of projects that aim to generate broad understanding and develop institutional and human capacity to fully participate as equal partner with developed countries in the formulation and implementation of potential CDM projects in Cambodia (MoE 2004). Furthermore, the Cambodian DNA is responsible for assessing proposed CDM projects against national sustainable development criteria and is authorized to provide written approval for proposed CDM projects in accordance with these criteria. Cambodia uses a sustainable development matrix as a tool for assessing the contribution of CDM projects in four aspects of sustainable development: economic, social, environmental and technology transfer. As of October 2014, there are 10 CDM projects listed under the Cambodia Climate Change Office of the MoE. The following table summarizes the projects.

Name of CDM Project Activity	Type of Project	Supplemental Information	Approval Date (D/M/Y)	Annual emission reduction (tCO <sub>2</sub> /per year)	Project Participants (Host Country)	Project Participants (Others)	Status
Angkor Bio Cogen Rice Husk Power Project	Biomass	Rice Husk	19/11/2006	51,620	Angkor Bio Cogen Co., Ltd.	Mitsubishi UFJ Securities Co., Ltd.	Registered
T. T. Y. Cambodia Biogas Project	Biogas	Agricultural Waste	4/7/2007	50,036	T. T. Y. Agricultural Plant Development and IMEX Co., Ltd.	None	Registered
Methane Fired Power Generation Plant in Samrong Thom Animal Husbandry	Biogas	Animal Waste	15/10/2007	5,593	Samrong Thom Animal Husbandry	Mitsubishi UFJ Securities Co., Ltd.	Registered
Kampot Cement Waste Heat Power Generation Project (KCC-WHG)	Waste heat/ gas utilization	Cement Production Line	20/11/2008	17,107	Kampot Cement Company Co., Ltd.	None	Registered
Kamchay Hydroelectric BOT Project	Hydro	New Reservoir	20/11/2008	370,496	RGC's Electricite du Cambodge	Sinohydro Corporation Limited	Under validation
Biogas Project at MH Bio-ethanol Distillery, Cambodia	Biogas	Agricultural Waste	29/6/2009	52,831	MH-Bio-Energy Co., Ltd.	None	Under validation
W2E Siang Phong Biogas Project Cambodia	Biogas	Agricultural Waste	3/11/2010	27,121	W2E Siang Phong Ltd.	None	Under validation
Lower Stung Russei Chrum Hydro-Electric Project	Hydro	New Reservoir	2/11/2011	701,199	China Huanan Lower Stung Russei Chrum Hydro-Electric Project (Cambodia) Co., Ltd.	Vitol S. A. Switzerland	Under validation
Cambodia Stung Atay Hydropower Project	Hydro	New Reservoir	3/1/2012	266,472	C. H. D. (Cambodia) Hydropower Development Co., Ltd.	Carbon Asset Management Sweden Pte Ltd.	N/A
Stung Tatay Hydroelectric Project	Hydro	New Reservoir	16/1/2012	563,074	Cambodian Tatay Hydropower Limited	Gazprom Marketing & Trading Singapore Pte. Ltd.	N/A

Source: Cambodia Climate Change Office's Database, Ministry of Environment







# 4. Conclusions and Recommendations – A Proposed Action Plan for Development of a Cambodia Forest Finance Strategy

The forest finance options assessment has identified several promising opportunities for the Forestry Administration to consider as it strategizes the long-term conservation of Cambodia's protection forests. This assessment builds from the dialogue developed during an initial forest finance workshop carried out with 70 participants in Phnom Penh on May 26, 2014. This workshop provided an overview of the legal context in which any finance strategy must be developed. The workshop also examined existing forest financing sources being used to support forest management in Cambodia, including taxes levied on the legal trade in forest products, non-timber forest product (NTFPs), and wildlife permit; bilateral and multilateral funding for forest sector; income generated from Economic Land Concessions, or breeding or trade of wildlife species; government investment funds allocated to forestry development and conservation; tourism revenues; and donors funding.

Attention in the workshop was then given to financial tools that will have the most political and social acceptance; and identification of actions necessary to administer and manage the use of forest finance funds. It was suggested that four conditions can ensure the sustainability of a finance instrument:

- (1) Markets and capital exist to support the instrument over the long term
- (2) Political will and commitment exist to support the use of the financial instrument
- (3) Financial instruments have the support of communities, CBOs, NGOs, and the business community
- (4) The management and use of funds is transparent and well organized

Examples of innovative forest finance instruments being applied outside of Cambodia were then reviewed, including Payments for Ecosystem Services (PES); Debt Relief – Debt Exchanges; Trust Funds; Bonds and other investment funds; Offset and compensation payments; and Forest Enterprises. A comprehensive review of the information covered in this workshop is included in Annex 2 to this report.

The more detailed review of each of these potential financial instruments included in this assessment report suggests that each may hold potential for contributing to the financial resources needed to manage Cambodia's protection forests and secure their ecological integrity for future generations. Ultimately, it is expected that the Forestry Administration will work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;
- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

It is also recommended that protected forest financing measures and instruments mechanisms to ensure that the following three factors are achieved:

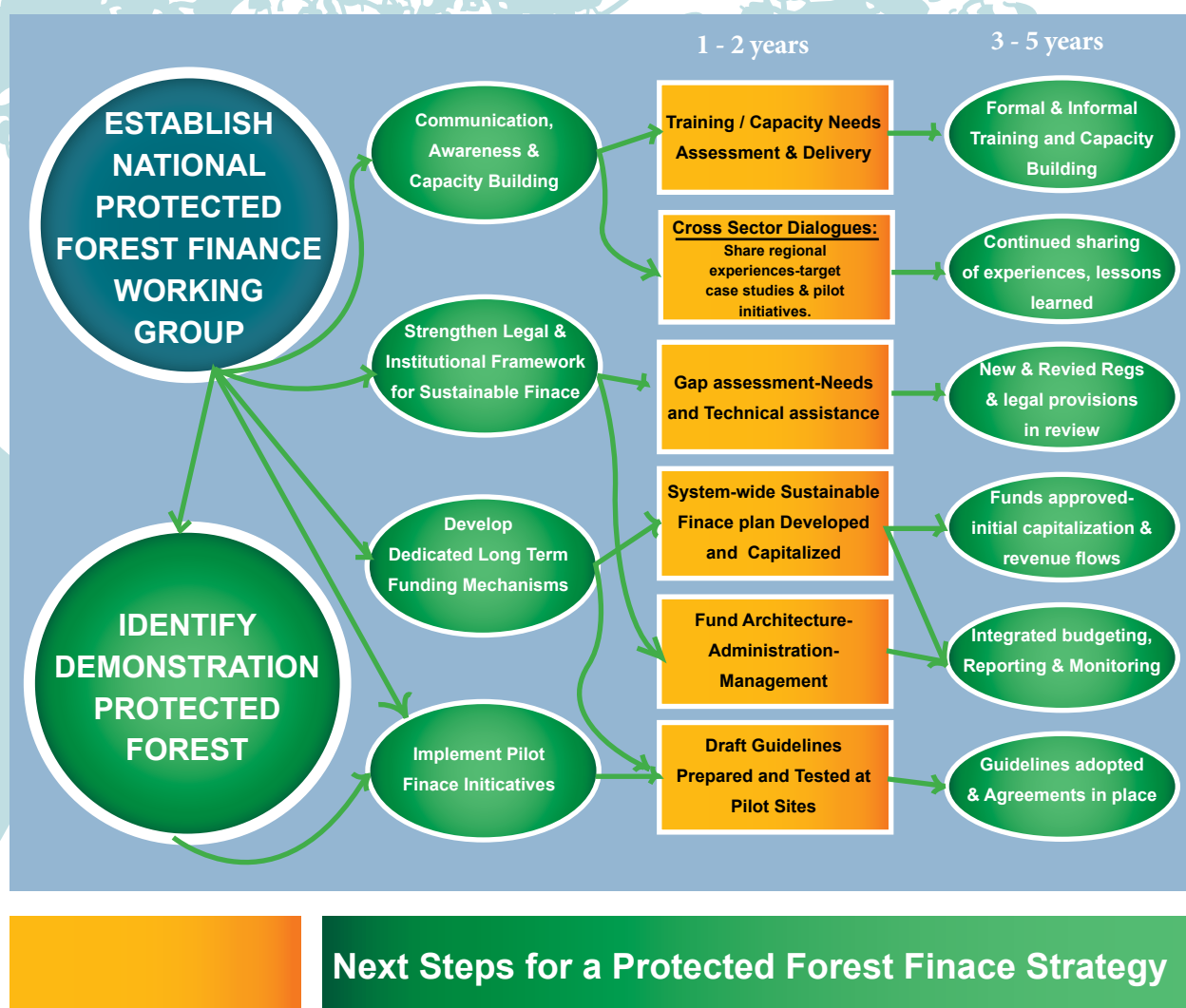


- A. Increase the size and diversity of financing sources and funding portfolios;
- B. Enhance revenue retention and promote direct reinvestment in conservation; and
- C. Streamline protected forest financial planning, costing and allocation procedures.

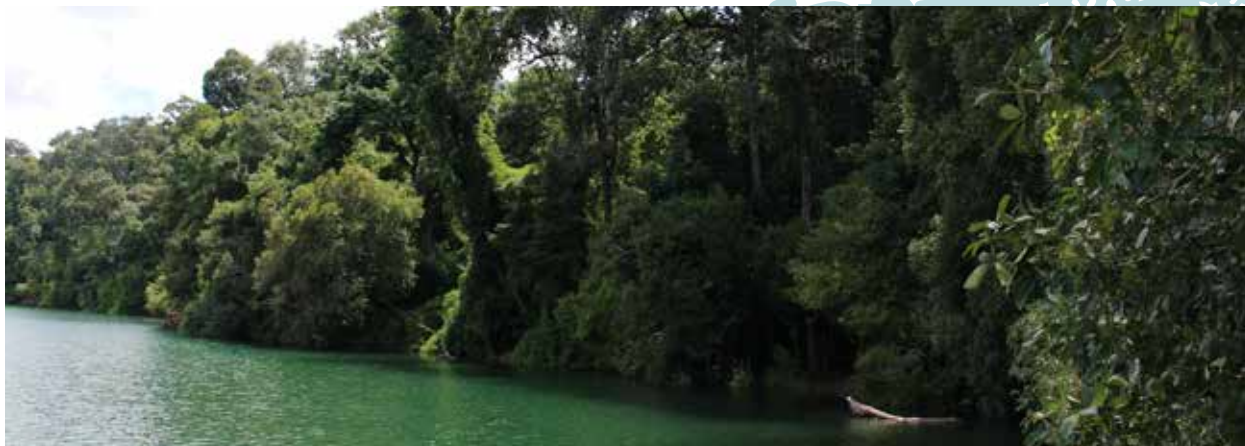
It is further recommended that TWG-FA now establish an action plan to carry out each of these steps. The results from this work will help provide more precise answers to each of the following concerns:

- The “Mission” and “Vision” of the proposed finance strategy;
- The approximate amount of funding required to ensure long-term conservation of Cambodia’s protection forest resources;
- The expected outputs and outcomes from the funding;
- Identification of the institutional structure and responsibilities of the management authority; and,
- Determination of the disbursement and accounting procedures for all leveraged funds.

A more detailed summary of the next steps that can be carried out to implement a sustainable finance strategy for Cambodia’s protected forests is shown in Figure.



The proposed action plan to move this work forward can proceed from the following:



A more detailed elaboration of the action has been produced as an outcome from the dissemination workshop held June 4, 2015.

### **Institutional Context for Going Forward**

Further action on the forest finance assessment must occur in the context of existing and anticipated institutional policy. For the next five years, 2014-2018, the policy priorities for the RGC in terms of sustainable management of natural resources will focus on four areas.

1. Further managing forest and wildlife resources in a sustainable and equitable manner, in accordance with the “National Forest Programme 2010-2029”, in particular through better law enforcement and governance, demarcation, classification and registration of forest, effective management and exploitation of state and private forests, implementation of measures for improving the livelihoods of and promoting participation from forest-dependent communities, enhancement of management and effectiveness of conservation measures, reduction of deforestation and degradation of forests, intensified tree planting and forest rehabilitation, strengthening the conservation of wildlife and wildlife sanctuaries, development of institutional and human capacity, and promotion of research studies and their dissemination.
2. Further strengthening the management and conservation of fishery resources in a sustainable manner in line with the “Strategic Planning Framework for Fisheries Sector 2010-2019” and the “Declaration on the National Policy for Fisheries Sector”, especially through the suppression of all violations of laws, rules and regulations related to fisheries including tightened control of fishing gears and fishing period, elimination of overfishing, strengthening fishing communities’ capacity for the management, use and conservation of fisheries resources, protection of biodiversity and aquatic-animal habitats, control of freshwater and seawater quality through pollution minimization, protection and replanting of flooded forests and mangroves, demarcation of flooded forest and fisheries conservation zones, development of institutional and human capacity, and preparing research studies and their dissemination.
3. Intensifying the implementation of necessary measures to ensure the sustainability of the ecosystem, aimed at ensuring the quality of soil, and surface and underground water for serving the agriculture sector and the livelihood of Cambodian people by promoting the preparation and effective implementation of policies and regulations, as well as related action plans and programs for the management of protected natural areas such as national parks, wildlife sanctuaries, protected landscape areas, multiple use areas, wetlands, biodiversity conservation areas, natural heritage conservation areas, and maritime parks, and in particular, strengthening the implementation of “Law on the Environmental Protection and the Management of Natural Resources”, “Law on Protected Natural Areas” and “Guideline on the Development of Coastal Areas in the Kingdom of Cambodia”.
4. Stepping up cooperation with relevant development stakeholders under the framework of the “National Policy on Green Development” and the “National Strategic Plan on Green Development 2013-2030” through the development of regulatory frameworks and mechanisms for carbon trading, strengthening the capability, preparation and implementation of climate change adaptation measures, assessment of the scope of the use of environmental financing mechanisms including payment for environmental services and environmental fund, strengthening the management of protected natural areas including protection of biodiversity, rain forests, and wetland areas; and environment and ecosystem monitoring and control mechanism at both national and sub-national levels.



# ANNEXES

Annex 1 is a list of relevant National Strategies, Laws, Policies and Regulations and literatures which used to compile the report. Annex 2 provides a summary result of the consultative meetings which aim to present and consult upon the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms. The meeting was held in May 2014 attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The list of all the participants in this consultative meeting can be found in Annex 3. In addition, Annex 4 highlights key articles from National Strategies, Laws, Policies and Regulations which enabling references in developing the forest financing options assessment. Annex 5 provides a legal assessment and some policy considerations that may affect the viability, or the practical reality of adoption, of each financial mechanism. Annex 6 gives a short description of a preliminary analysis of potential benefits and costs of the forest finance options proposed for the Royal Government of Cambodia's protected forests and protected areas, along with some recommendations.

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## Annex 2: Results From Consultative Meeting May 26, 2014

### Summary

The meeting was held on Monday 26th May, 2014 at the Sunway Hotel, attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The meeting started at 08:00am and finished at 15:30pm. The main objective of this consultative meeting was to present and consult upon the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms. The restitution workshop, to be held in July 2014, will present and consult upon the findings from the forest financing options assessment study.

The key outputs for this May 26th consultative meeting were to:

1. Review and consult upon the options for forest financing in Cambodia
2. Build the capacity of different stakeholders, especially relevant government line agencies, about the development of forest financing in Cambodia and international best practice
3. Produce an official report with the approval from the TWG-FR chair (Forestry Administration). This report will be used as a basic roadmap to support the development of forest financing in Cambodia. The results of the workshops will be posted in TWG-FR webpage to ensure the report is widely accessible.

Below is a summary of key points from each session.

1. **Welcome Remark, Dr. Ross Sinclair:** Dr. Sinclair started his welcome remark by reminding participants of the composition and key functions of the sustainable forest financing sub-group under the Technical Working Group on Forestry Reform (TWG-FR), a government and non-government platform that supports the implementation of the National Forest Programme (NFP). Dr. Sinclair mentioned that current work on sustainable forest financing will help contribute to keeping remaining forests in Cambodia by providing necessary finance for the implementation of key national policies and strategic plans on sustainable development and green growth.

Dr. Sinclair also stressed that the Forestry Administration has been very open and participatory in its approach to sustainable forest financing by inviting an NGO to be its co-chair for the sub-group. He ended his remark by encouraging participants to contribute to the activities planned for this consultative meeting as their comments will be taken up by the TWG-FR for its current work on sustainable finance to help with the conservation of Cambodia remaining forests.

2. **Opening speech, H. E. Chea Sam Ang, PhD :** For an opening speech, H.E. Dr. Chea Sam Ang welcomed all participants to this consultative meeting. He mentioned how this participation is a reflection of the collaboration between government and non-government counterparts on this important task to sustain Cambodia remaining forests and to improve the livelihood of communities living in and around the forest areas. His Excellency then focused his speech on the importance of sustainable financing in addressing some of the key challenges – human, resources, and collaboration with NGOs at the field – in the implementation of the NFP. Next, His Excellency highlighted some of the recent natural disasters in provinces such as Pailin and those near Tonle Sap that are attributable to climate change and its impacts on local communities and national economy to make his point regarding the roles of forests in reducing the impacts of climate change. Finally, His Excellency mentioned that study on options for sustainable forest financing should align with Cambodia existing legal context while at the same time taking into consideration international requirements and obligations that come with those options. His Excellency closed his opening speech by stating that the contributions from all participants will be very important in how the sub-group will be proceeding with this task to assess the feasible options for sustainable finance for conservation of Cambodia forests.
3. **Forest Conservation Financing in Cambodia: Status and Progress Forwards, Mr. Chhun Delux:** Mr. Chhun Delux made a presentation to explain existing legal context in Cambodia to be taken into account for conversations on sustainable financing for forest conservation. Mr. Chhun remarked that successful implementation of the NFP requires Cambodia to improve its ability to gather revenue from forestry sectors either from existing forest financing sources or innovative forest financing sources. He also stressed that in order to attract international funding, Cambodia would need to have transparent rules to manage funds; appropriate governance arrangements; and follow international best-practice principles. However, these principals have to align with existing laws and regulations relating to fund management in Cambodia, and must be aligned with the existing policies of other relevant government ministries such as the Ministry of Economy and Finance (MEF). Mr. Chhun closed his presentation by discussing existing forest financing sources in Cambodia, which include: taxes levied on the legal trade in forest products, non-timber forest product (NTFPs), and wildlife permit; bilateral and multilateral funding for forest sector; income generated from Economic Land Concessions, or breeding or trade of wildlife species; government investment funds allocated to forestry development and conservation; tourism revenues; and donors funding.
4. **Innovative Tools for Forest Finance, Dr. James Tolisano:** Dr. Tolisano focused on five key points in his presentation. First, he introduced participants to the main purposes of the Forest Finance Assessment, which include identification of financial tools and instruments that can be used to pay the costs for the management of Cambodia forests and habitats; assessment of the identified financial tools that will have the most political and social acceptance; and identification of actions necessary to administer and manage the use of forest finance funds. Second, Dr. Tolisano stated the four conditions that make a forest finance instrument sustainable, which are (1) markets and capital exist to support the instrument over the long term; (2) political will and commitment exist to support the use of the financial instrument; (3) financial instruments have the support of communities, CBOs, NGOs, and the business community; and (4) the management and use of funds is transparent and well organized. Dr. Tolisano then explored six examples of innovative forest finance instruments that have been tried in other countries. These instruments were: Payments for Ecosystem Services (PES); Debt Relief – Debt Exchanges; Trust Funds; Bonds and other investment funds; Offset and compensation payments; and Forest Enterprises. For each of these instruments, Dr. Tolisano first defined what they are, then explained how they could be set up, and finally highlighted some examples of where (which countries) these instruments have been piloted. Fourth, Dr. Tolisano informed participants of the next activities that will be conducted to complete the Forest Finance Assessment. According to the proposed timeline, the Assessment report will be completed by the second week of August 2014. To close his presentation, Dr. Tolisano shared with the participants key chapters that will be included in the Assessment report.
5. **Question and Answer Session:** After the presentation by Mr. Chhun Delux and Dr. James Tolisano, the floor



was open for questions from participants.

**Question 1 (H. E. Than Sarath, MAFF):** H. E. Than asked how/ what processes will be required to establish forest as an asset for the purposes of forest financing? How would government extract revenue from these financing options? Before asking his question, H. E. Than mentioned the difficulties of managing public property, for example a national park, where various stakeholders are involved.

**Answer 1 (Dr. James Tolisano, WCS):** Answer to H. E. Than's question would depend on which specific sustainable forest financing tool has been selected for a particular land area because each financing tool comes with different details on how land, forest and/ or natural resources should be managed. Similar to this point, the question on how government could extract revenue from these financing options is in fact one of the underlying factors that would indicate the constraints or feasibilities of certain financing options. **Mr. Chhun Delux** mentioned that he agreed with Dr. Tolisano's points. He also added that to ensure that revenues from these financing options reach the government, various policies and measures might need to be established depending on which option is selected for implementation. In addition, Mr. Chhun stated that this conversation highlighted the significance of having existing sources of funding for conservations well-coordinated amongst NGOs and development partners.

**Question 2 (Dr. Tim Boyle, UN-REDD Regional):** Dr. Boyle asked two clarifying questions. First, how money would be raised and managed for sustainable forest financing? Based on the concept note for the consultative meeting, Dr. Boyle's second question was why is REDD+ not included as one of the potential forest financing options?

**Answer 2 (Dr. James Tolisano, WCS):** Dr. Tolisano mentioned that the current Assessment report that he is working on with the help from Mr. Chhun Delux does not look at implementation of any financing option in particular. Thus Dr. Boyle's question on how fund should be managed will be answered at a later stage of the assessment.

- 6. Group Discussions:** After the coffee break, participants were divided into four groups to discuss two main questions following the presentations by Mr. Chhun Delux and Dr. James Tolisano. Except for one group where members are non-Khmer speakers, each discussion group composed of representatives from government ministries, private sector, NGOs and CSOs. The group discussed two questions: (1) what conservation finance mechanisms have been tried in Cambodia? (2) If you were in charge of this process, which finance mechanisms would you choose? It should be mentioned that before breaking into group, each participant was given 10 minutes to write their own answers to these questions on the Q-cards.

Each group received a flip chart. The group appointed one person to record the information shared on the flip chart. This person was also responsible for reporting the group's results to the full group of participants. A facilitator was assigned for each group, and was responsible for keeping the group on task and making sure everyone gets an opportunity to talk. Each group member started by sharing the answers they wrote on the Q-cards with other members while the recorder wrote down those mechanism identified by each participants on the flip chart. The group then discussed each of the identified mechanism in terms of its pros and cons in order to identify 3 to 5 prioritized mechanisms for conservation finance in Cambodia. The group also took into consideration the risks (social, economic, institutional, and environmental) that each of the mechanism might impose. Below are the summary from the group discussions.

## Question 1: What conservation finance mechanisms have been tried in Cambodia?

Group 1	Group 2	Group 3	Group 2
<ol style="list-style-type: none"> <li>1. REDD+</li> <li>2. Forest Management</li> <li>3. Government Investment Fund</li> <li>4. Development Partners' Fund</li> <li>5. Climate Change Trust Fund</li> <li>6. Ibis Rice Project</li> <li>7. Nature-based Tourism</li> <li>8. PES</li> <li>9. Proposed Trust Fund</li> <li>10. NTFP-based Enterprise</li> <li>11. Pilot Forest Production Enterprise</li> <li>12. CIP (NCDD) NRM</li> <li>13. Revolving Fund</li> </ol>	<ol style="list-style-type: none"> <li>1. Pilot REDD+</li> <li>2. Wild Cattle Conservation Fund</li> <li>3. Government Investment Fund</li> <li>4. Commune/ Sangkat Fund</li> <li>5. National Social Security Fund</li> <li>6. Cambodia Climate Change Alliance Trust Fund</li> <li>7. TWG-FR</li> <li>8. NGOs Trust Fund</li> </ol>	<ol style="list-style-type: none"> <li>1. Government Investment Fund</li> <li>2. Development Partners' Fund</li> <li>3. Bilateral and Multilateral Fund</li> <li>4. Commune/ Sangkat Fund</li> <li>5. National Social Security Fund</li> <li>6. Cambodia Climate Change Alliance Trust Fund</li> <li>7. Private Sectors</li> <li>8. International NGOs Fund</li> </ol>	<ol style="list-style-type: none"> <li>1. National Budget</li> <li>2. Bilateral Funding</li> <li>3. Grants from Donors, NGOs</li> <li>4. PES</li> <li>5. Tourism</li> <li>6. REDD+</li> <li>7. Offsets/ Lease from ELCs</li> <li>8. Cambodia Climate Change Alliance Trust Fund</li> <li>9. Conservation Agreements</li> <li>10. Conservation Enterprises</li> </ol>

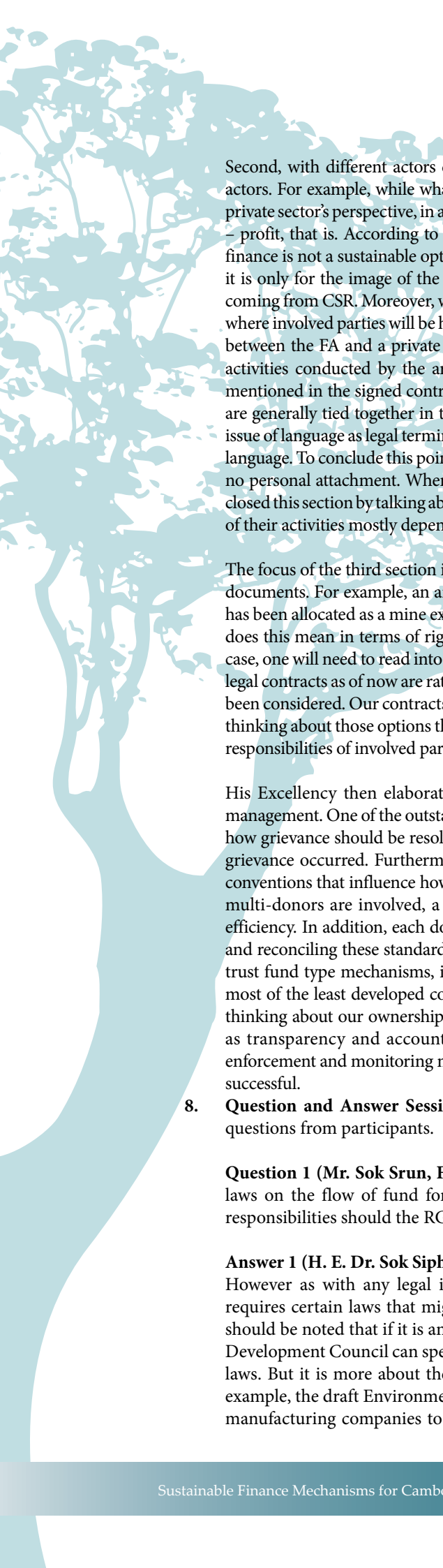
## Question 2: If you were in charge of this process, which finance mechanisms would you choose?

Group 1	Group 2	Group 3	Group 2
<ol style="list-style-type: none"> <li>1. REDD+</li> <li>2. Nature-based Tourism</li> <li>3. PES/ PEFF</li> <li>4. NTFP Enterprise</li> <li>5. Climate Change Trust Fund</li> </ol>	<p>There should be further studies on these options:</p> <ol style="list-style-type: none"> <li>1. TWG-FR</li> <li>2. Cambodia Climate Change Alliance Trust Fund</li> <li>3. NGOs Trust Fund</li> </ol>	<ol style="list-style-type: none"> <li>1. Government Investment Fund</li> <li>2. Development Partners' Fund</li> <li>3. International NGOs Fund</li> <li>4. Private Sectors</li> </ol>	<ol style="list-style-type: none"> <li>1. National Budget</li> <li>2. Trust Fund Development</li> <li>3. PES</li> <li>4. REDD+</li> <li>5. Private Sector</li> </ol>

### 7. Legal considerations for development of forest financing options in Cambodia, H. E. Sok Siphana, PhD:

His Excellency mentioned that from the legal perspective, there are three points that one should think about when it comes to discussions on sustainable forest financing options, which were rights, responsibilities, and actors. Starting with actors, His Excellency mentioned that this could include government (e.g. ministry), private sector (e.g. banks), and civil society. In this category, actors such as the World Bank or the International Finance Corporation would impose on actors such as national government their standards/ conditions/ requirements as payments will be based on compliance with these standards. To think back to the different options that Mr. Tolisano presented in the morning, the discussions on actors that will be involved in these different options and the complications that it entail would depend on the scale of implementation for these options. For example, a micro level PES program in a rural area in Cambodia where the project is simply paying for local communities to stop what they are doing could not be compared to a national or international level of finance, for example bond, where the issues of credit rating will bring into the equation various international organizations. A very good example to illustrate this point is the US government shut down which affected the US credit rating, which in consequence affected the various actors that are involved with the US bond market. The point is, we should think of actors' involvement in conservation finance options as a funnel from international to national to local. Doing so, we will be able to see the different actors and their responsibilities at these various levels.





Second, with different actors come different responsibilities, some of which are beyond the control of certain actors. For example, while what has been mentioned so far are the responsibilities of the government, from the private sector's perspective, in addition to rights and responsibility, there is an added dimension for any discussions – profit, that is. According to His Excellency, corporate social responsibility (CSR) as a source of conservation finance is not a sustainable option because first of all it is a limited amount for a specified timeframe, and second it is only for the image of the company. Thus, government should really think more about the money that are coming from CSR. Moreover, when working with any private sector, one should be cautious of the legal procedure where involved parties will be held responsible to protect an investment. For example, a REDD+ contract is signed between the FA and a private company to protect a forest area. After the contract is signed, there was logging activities conducted by the army. In this case, the FA would be held responsible for this loss of forest area mentioned in the signed contract. The point is, when it comes to legal conversations, actors and responsibilities are generally tied together in the form of a contract. An additional comment to be made about contracts is the issue of language as legal terminologies are most of the time different in their meanings in comparison to everyday language. To conclude this point about private sector, one just has to remember that it is all about business, there is no personal attachment. When a signed contract is breached, someone will be responsible. His Excellency then closed this section by talking about the responsibilities of civil society organizations (CSOs), where implementation of their activities mostly depends on the agreements with their donors in order to receive funding.

The focus of the third section in His Excellency's presentation focused on government's responsibilities and legal documents. For example, an area has been allocated by MAFF as an ELC while at the same time this very same has been allocated as a mine exploration site by MIME. How would the government deal with this overlap? What does this mean in terms of rights and responsibilities of those involved? According to His Excellency, in such a case, one will need to read into the contracts that were signed by those involved. The difficulty however is that our legal contracts as of now are rather loose in comparison to international agreement where different scenarios have been considered. Our contracts are in general 5 to 6 pages in length, thus very difficult to interpret. In this context, thinking about those options that Mr. Tolisano presented this morning, one must think about these overlapped of responsibilities of involved parties, then clearly elaborate these responsibilities in the contracts.

His Excellency then elaborated on different issues one should think about in terms of trust fund and its management. One of the outstanding issues in terms of trust fund is the management of conflicts. In other words, how grievance should be resolved. In most cases, this issue has often been addressed outside the country where grievance occurred. Furthermore, most countries including Cambodia are signatories to various international conventions that influence how grievance shall be addressed. In terms of management of trust fund where there multi-donors are involved, a huge percentage of the fund would go to administrative costs - a question of efficiency. In addition, each donor or development partner operates according to their standards of operations, and reconciling these standards in general is not possible. Specific to Cambodia, in terms of ownership of these trust fund type mechanisms, in the next few years Cambodia will become a middle income country, and thus most of the least developed country's privileges would no longer apply. Therefore, Cambodia should now start thinking about our ownership and management of these trust funds in way that would address the issues such as transparency and accountability. His Excellency concluded his speech by stressing the importance of enforcement and monitoring mechanisms that must be in place for any conservation finance options for it to be successful.

8. **Question and Answer Session:** Following H. E. Dr. Sok Siphana's presentation, the floor was open for questions from participants.

**Question 1 (Mr. Sok Srun, FA):** Mr. Sok asked two questions. First, could you elaborate on RGC's existing laws on the flow of fund for forest management? Second, in terms of sources from private sector, what responsibilities should the RGC have in place to manage this fund?

**Answer 1 (H. E. Dr. Sok Siphana):** RGC has almost all the basic laws covering most activities in the country. However as with any legal issue, the specificity of the activity for sustainable conservation finance will requires certain laws that might already exist. In short, the contract will determine what law to be used. It should be noted that if it is an agreement, law would not be relevant in most cases. In general, the Cambodia Development Council can specify the content of the agreement. For your second question, we do have general laws. But it is more about the effective implementation of these laws that is the point of conversation. For example, the draft Environmental Impact Assessment (EIA) law specifies the standards and requirements for manufacturing companies to comply. However, in reality we (the RGC) do not have the resources nor the

technology to implement these requirements. In general, it is difficult to exactly estimate relevant stakeholders that should be responsible for the true costs of business activities on the environment.

**Question 2 (H. E. Than Sarath, MAFF):** H.E. Than asked two questions. First, how can we ensure that the procedure that Cambodia will use for establishing sustainable forest financing option will be compliant with both national and international requirements to be able to attract funding? Second, in terms of rights and responsibilities for economic growth, how can we ensure that private sector comply/ fulfill their responsibilities in the management of Economic Land Concessions?


**Answer 2 (H. E. Dr. Sok Siphana):** First we need to understand who is included in the partnership so that we can understand the enforcement and implementation of the contract for relevant stakeholders involved in this partnership. There is no one size fits all for these issues. Any one of the forest financing options we discussed so far will vary in terms of its rights, responsibilities and conditions. As for the second question, in any ELC agreement there are rights and responsibilities for parties involved when it comes to implementation. However, these ELC agreements are in general 6 or 7 pages in length, thus interpretation of articles in these agreements are very much open-ended. This type of agreement is where the weakness lies in terms of effective implementation of ELC agreements, for parties involved, in particular private sector. Therefore, we (the RGC) need to address these poorly articulated agreements to avoid the possibility of being sued by the private sector actors.

9. **Conclusion and Next Steps, Mr. Chhun Delux:** Mr. Chhun provided a short summary of activities conducted throughout the consultative meeting. He then reminded participants of the upcoming activities that will be required to complete the Assessment report. These include analysis of results from this consultative meeting, supplemented by a review of existing literature on the options prioritized by participants through group discussion activities and further consultation with key stakeholders. Mr. Chhun also informed the participants that the first draft of the Assessment report will be completed by mid-July, and a dissemination workshop of the results from this first draft will be conducted. The final draft of the Assessment report will be completed by mid-August, 2014.
10. **Closing remark:** H.E. Chea Sam Ang, Ph.D: H.E. Dr. Chea Sam Ang started the closing remark by mentioning that our efforts to further explore the feasibility of sustainable forest financing options in Cambodia should build on what we have at the moment. As such, we have looked at options such as PES and ecotourism. However, His Excellency mentioned that Cambodia is still learning about how we could get access to those potential options that Mr. Tolisano presented. His Excellency stated that there are various fund available for this task from development partners, but as His Excellency Sok Siphana mentioned there need to be better coordination of these supports to help with the implementation of existing strategies and policies that contribute to financing conservation of remaining forests in Cambodia. His Excellency then discussed the importance of the sustainable finance feasibility study which he hopes would contribute to a better coordinated sources of conservation finance current available in Cambodia and the potential of setting up innovative financing tools, to be completed by July 2014 (see Mr. Tolisano's presentation). His Excellency mentioned that if this feasibility study indicates that there are gaps in current policies/ laws/ regulations that would stymie the establishment of potential innovation conservation financing tools in Cambodia, actions could be taken to amend those identified gaps. His Excellency concluded his closing remark by reminding each participant to think about not just the finance that could come from these potential innovative conservation financing tools, but also the responsibilities that will be bestowed on relevant stakeholders. He mentioned that these responsibilities could be inter-generational, thus we must be careful on the decisions we make today. His Excellency then thanked all participants for joining today consultative meeting, and the organizers for making this meeting possible.











Annex 3: Participants in Assessment Scoping Session,  
May 26, 2014

No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរសព្ទ Tel	អ៊ីមែល E-mail	
1	ឯ.ឧ បណ្ឌិត ឆេង គឹមស៊ុន	ប្រធានរដ្ឋបាលព្រៃឈើ	រដ្ឋបាលព្រៃឈើ	012-671-222	chheng.kimsun@yahoo.com	
2	ឯ.ឧ ជា សំអាង	អនុប្រធានរដ្ឋបាលព្រៃឈើ	រព	012-862-730	chsang@online.com	✓
3	បណ្ឌិត កែវ អូម៉ាលីស្ស	ប្រធាននាយកដ្ឋានសត្វព្រៃ និង ជីវចម្រុះ	រព	012-755-558	omaliss@gmail.com	
4	លោក ប៊ុន វណ្ណា	ប្រធាននាយកដ្ឋានសុរាហកម្មព្រៃ ឈើ និងសហប្រតិបត្តិការអន្តរជាតិ	រព	012-880-303	vannabun@yahoo.com	
5	លោក ហួត ពន្លឺ	ប្រធាននាយកដ្ឋានផែនការ និង ហិរញ្ញវត្ថុ	រព	017-664-378	houptponloeu@yahoo.com	
6	លោក បណ្ឌិត សូ ធា	អនុប្រធានវិទ្យាស្ថានស្រាវជ្រាវ និង អភិវឌ្ឍន៍ព្រៃឈើ-សត្វព្រៃ	រព	097-620-7925	sothea67@hotmail.com	
7	លោក ឡាវ សេដ្ឋាផល	អនុប្រធាននាយកដ្ឋាននីតិកម្ម និង ពង្រឹងការអនុវត្តច្បាប់	រព	077-827-063	laosethaphal2007@yahoo.com	
8	លោក សំរិត វណ្ណា	អនុប្រធាននាយកដ្ឋានព្រៃឈើ និង សហគមន៍ព្រៃឈើ	រព	092-720-071	samrethv@yahoo.com	
9	លោក ឈាង ដានី	អនុប្រធាននាយកដ្ឋានសត្វព្រៃ និង ជីវចម្រុះ	រព	012-867-447	vanthachan@yahoo.com	



No.	ឈ្មោះ Name	តំណាង Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
10	លោក ហុង គឹមហ៊ាន	អនុប្រធាននាយកដ្ឋានអភិវឌ្ឍន៍ចំការព្រៃ និងព្រៃឯកជន	រោ	012-955-702	kimhean-hong@hotmail.com	
11	លោក វីស័រ វិសាល	ប្រធានការិយាល័យគ្រប់គ្រងស្ថានីយ៍ផ្ទាល់បណ្តុះនិងស្ថានទូទៅ	រោ	017-792-727		
12	លោក ញឹក គនៈពេជ្រ	ប្រធានទូទាត់ស្ថានសត្វ និងមជ្ឈមណ្ឌលសង្គ្រោះសត្វព្រៃក្នុងតាម៉ៅ	រោ	012-934-093	ratanapichhok@gmail.com	
13	លោក លីម ប៊ុនណា	អនុប្រធានការិយាល័យស្ថិតិ និងប្រកាសប្រ	រោ	088-8787-878		
14	លោក ឈុន ឌីសុច	អនុប្រធានការិយាល័យគណនាកម្មវិធីព្រៃ និងការប្រែប្រួលអាកាសធាតុ	រោ	077-805-610	chhundelux04@yahoo.com	V
15	លោក ជុន ជន្មា	អនុប្រធានការិយាល័យគ្រប់គ្រងដែនជម្រក និងទេសចរណ៍ធម្មជាតិ	រោ	០៩៥ ៥០៤១១៥	huchphallafora@gmail.com	
16	លោក សុខ ស្រីន	អ្នកសម្របសម្រួល TWG-FR	រោ	012-940-936	twgfr@wikam.com.kh	
17	លោក ម៉េង ឡុក	មន្ត្រីវិទ្យាស្ថានស្រាវជ្រាវ និងអភិវឌ្ឍន៍សត្វព្រៃ	រោ	012 890 144	wengloth@gmail.com	M. Loth
18	លោក វ៉ាន់ វ៉ាន់	លោកស្រី វ៉ាន់ វ៉ាន់	លោក វ៉ាន់ វ៉ាន់	012 827091		
19	លោក វ៉ាន់ វ៉ាន់	លោកស្រី វ៉ាន់ វ៉ាន់	លោក វ៉ាន់ វ៉ាន់	012 827091	sokhom-noungyane.com	
20	លោក វ៉ាន់ វ៉ាន់	លោកស្រី វ៉ាន់ វ៉ាន់	លោក វ៉ាន់ វ៉ាន់	012 904 690	sokun theatong@gmail.com	

No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
21	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥	konny@phn.com	
22	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥		
23	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥	konny@gmail.com	
24	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥	konny@gmail.com	
25	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥		
26	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥		
27	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥	konny@gmail.com	
28	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥		
29	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥		
30	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥	konny@gmail.com	
31	គុណ្ណី ឌីណា	នាយកដ្ឋានបរិស្ថាន	ម/ក. ភីអេស	០៩៥៥៥៥៥	konny@gmail.com	



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				លេខទូរសព្ទ Tel	អ៊ីម៉ែល E-mail	
32	Thibault Ledeey	Conversion Pig Manager	Went		Thibault.ledeey@wspredimchy.org	
33	Prak Munny	WCS - Advisor	WCS	012555486		
34	Teang David	Chief of OMC	CFA. Odd	012350997	davidteang@yahoo.in	
35	Sin Rosal	Chief of K-G	CFA. odd.	012-889723	kompomgchimaif fa- @yahoo.com.	
36	Chhidy Sany	CD	WWF	012929595		
37	Chhay Saran	Chief of Pursat FA - Contentment	FA	012565327	Saravichhay@yahoo.com	
38	Boe Kumthay	Translator	Sunthe (operation)	012602960		
39	Boe Koss	Secretary	ស.ព	01888088	chunthathannarakeyabocan	
40	វ៉ង់ វ៉ង់	19 ០ km	MC-F			
41	ស៊ី ឈី	15.7 km	ស.ព	0976207925		
42	ស៊ី ឈី	5 km	ស.ព	012881877		

No.	ឈ្មោះ Name	តំណែង Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
43	Alex Diment	T.A.	WCS	012 434554	adiment@wcs.org	hi
44	Sofheany	Coordinator	BNHI	012249407	Soo.sothearyag@gmail.com	Sofheany
45	Vibol Neth	Assistant to CEO	Wildlife Alliance	012 713774	neth@wildlifealliance.org	Vibol
46	ប្រាក់ ណូម៉ា	Chief of FA-Ky Chau	FA	017534496		
47	Prak Noma	DD of DPS	MAFF	012 231314	praknoma@yahoo.com	
48	THAN SARATH			012 812383	fsarath@yahoo.com	
49	Kim Monethin	Envi specialist	USAID	017535318	mls@ecsaider.com	Kim Monethin
50	Lu H. Kimhy	PC	RTS	011 911102	kimhy.luu@undp.org	
51	TRACY FARREL	TECHNICAL ASSISTANT	CI	085772287	tfarrel@cameraweb.org	Tracy
52	Moelco Saito-Jusen	Programme Analyst	UNEP	017868835	moelco.saito-jusen@undp.org	
53	Limchun Ht.	Country Coordinator	W	012365778	limchun@wri.org	Limchun



No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
65	Go/ Sokcha	Training Coordinator	Recofte	012322696		
66	ឃីន ឈុន	សិស្ស	FA	012591678		
67	Maas Khean	Student	RUPP	0899773376	kheanrupp@gmail.com	
68	Meas Chenda	Student	RUPP	017294819	measchendarup@yahoo.com	
69	Sam Sophaek	Assistant	TN6-FR	014578474	sam.sophaek@wri.com.kh	
70	JIEL A. SURGENS	PROJECT MANAGER (SPES)	FFI	012234170	IEL.SURGENS@FIANA.FIORA.ORG	
71						
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## Annex 4: Enabling Provisions under Cambodian Law for Options Identified

### **The Constitution of the Kingdom of Cambodia, 1993**

**Article 59:** The State shall protect the environment and balance of abundant natural resources and establish a precise plan of management of land, water, air, wind, geology, ecological system, mines, energy, petrol and gas, rocks and sand, gems, forests and forestry products, wildlife, fish and aquatic resources.

### **Political Platform of the Royal Government of Cambodia of the Fifth Legislature of the National Assembly, 2013** **Section 3.11. Environment**

- Preserving and protecting biodiversity and ecosystem while exploiting onshore and offshore natural resources in a sustainable manner for the benefit of people now and in the future in order to respond to the increased pollution caused by industrial development and global climate change and to ensure socio-economic advancement and the public well-being.
- Hastening the protection of environment quality and preservation of natural resources to ensure their sustainability in the ecosystem by way of: enhancing the development of green economy with full participation from all strata of society, especially local communities; and through strengthening the institutional and legal framework relating to environmental protection.
- Streamlining environment sector into the socio-economic development plan, and deepening regional and international cooperation in this sector. Accelerating the implementation of the Law on Environment with the aim to preserve protected natural areas, prevent environmental quality degradation and mitigate disasters.
- Undertaking sound environmental impact assessments for all development projects in order to ensure sustainable use of natural resources for advancing socio-economic development. Reinforcing the management of land concessions so as to ensure sustainable land use for development projects with the aim to prevent forest land encroachment at core and protected zones all the while providing technical support to local people living in those areas. Promoting eco-tourism that will help protect the environment and natural resources.
- Increasing environmental control and reducing pollution including: the management of solid waste, dangerous substances, air quality monitoring and quality improvement; monitoring and prevention of land and water pollution, including sound and visual pollution.

### **Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III of the Royal Government of Cambodia, 2013**

**Paragraph 27:** The Royal Government will continue to take a comprehensive development approach toward environmental management in Cambodia, through:

1. Sustainable management of natural resources.
2. Intensifying efforts to reduce the impacts of climate change by strengthening adaptation capacity and resiliency to climate change, particularly by implementing the “National Policy on Green Development” and the “National Strategic Plan on Green Development 2013-2030”.
3. Continuing to strengthen technical and institutional capacity to promote the mainstreaming of climate change responses into the policies, laws and plans at national and sub-national levels.
4. Continuing to introduce measures to control environment and ecosystems pollution.

### **National Strategic Development Plan 2014-2018**

- **Paragraph 4.40 – see Paragraph 27 of Rectangular Strategy Phase III**



## **Cambodia Climate Change Strategic Plan: 2014-2023**

**Strategic Objective 3: Ensure climate resilience of critical ecosystems (Tonle Sap Lake, Mekong River, coastal ecosystems, highlands, etc.), biodiversity, protected areas and cultural heritage sites Strategies:**

- a. Strengthen biodiversity conservation and restore ecosystems threatened by climate change;
- b. Promote and encourage community-based, ecosystem-based approaches and ecotourism as cost-effective ways of addressing climate change;
- c. Promote payment for ecosystem services including REDD+;
- d. Promote participatory land-use planning.

**Strategic Objective 8: Strengthen collaboration and active participation in regional and global climate change processes Strategies:**

- a. Promote regional cooperation on climate change within inter-governmental and non-governmental mechanisms:
  - i. Implementation of commitments under the UNFCCC
  - ii. Cooperation under ASEAN framework
  - iii. South-South and North-South collaboration
  - iv. Trans-boundary initiatives, e.g. within the Mekong River Basin framework
  - v. Cooperation through the Clean Development Mechanism (CDM), carbon market mechanisms and other relevant carbon credit schemes.

## **National Policy on Green Growth, 2013**

### **Section 3.2: Objectives**

- Developing an economy in balance with environment, society and culture;
- Create a favorably enabling environment for green growth in equity, balance, fraternity, and quality of socio-economic systems and ecology that uphold national cultural value;
- Effective management of Access to water resources management and sanitation, Access to food security and food safety, Access to development, forest conservation, and mixed resources water, and sustainable land use, Access to renewable energy, and energy efficiency, Access to information and knowledge and skill, Access to better social livelihood service means and environment, and Access to finance for creation of small medium } enterprise and investment associated with green growth;
- Enhancing education and training on green growth;
- Strengthening information exchange, knowledge, good experiences, technology and investment related to green growth;
- Stimulating green growth cooperation at a national and sub national level, region and the world.

## **Law on Forestry, 2002**

**Article 1:** The objective of this law is to ensure the sustainable management of these forests for their social, economic and environmental benefits, including conservation of biological diversity and cultural heritage.

**Article 7:** The Forestry Administration shall perform the following duties: Study, collect data on State forests regarding scientific, economic, social and environmental factors in order to set a sustainable production level.

**Article 51:** The Forestry Administration shall collect the following Wildlife Conservation Fee and Wildlife Royalty:

1. A Wildlife Conservation Fee shall be paid to the Forest Development Fund; and
2. A Wildlife Royalty shall be paid to the National Budget.

The amount of a Wildlife Conservation Fee and Wildlife Royalty shall be determined by Joint-Prakas between the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Economy and Finance.

**Article 52:** Except as stated in Article 53 of this law, any individual or legal entity harvesting Forest Products & By-products for commercial purposes within the Permanent Forest Reserve shall pay royalties and premiums to the national budget through the Forestry Administration. The Royal Government of Cambodia shall determine the royalties and premiums upon the joint proposal of Ministry of Agriculture, Forestry and Fisheries and Ministry of Economy and Finance. The state will not require the payment of royalties or premiums for the harvesting of Forest Products & By-products from private forests. The Model Forest Concession Management Agreement shall include a table of royalties and premiums on Forest Products & By-products.

**Article 56:** Anyone with legal possession of a permit to harvest Forest Products & By-products shall pay all applicable royalties and premiums prior to transferring or selling any of these rights to a third party. The Minister of Ministry of Agriculture, Forestry and Fisheries, after consultation with the Ministry of Economy and Finance, may approve a delay in the payment of Royalties and Premiums on Forest Products & By-products for a permit holder who the Forestry Administration has recognized for practicing the sustainable forest management, and the delay of payment shall be based on rules and guideline under Article 55, 2nd paragraph of this law.

**Article 62:** The Royal Government of Cambodia shall establish a fund known as “National Forestry Development Fund” which shall be administered and managed under the responsibility of the National Forestry Development Committee, and co-chaired by the Minister of Ministry of Agriculture, Forestry and Fisheries and the Minister of the Ministry of Economy and Finance. The organization and functioning of the National Forestry Development Committee shall be determined by AnuKret.

**Article 63:** The National Forestry Development Fund shall have sources of revenues derived from:

1. Distributions from the Royal Government of Cambodia;
2. Premium on Forest Products & By-products;
3. Wildlife Conservation Fees;
4. Aid from international organizations;
5. Donations from charitable individuals and national and international non-governmental organizations, and
6. Revenue from other services in the forestry sector.

All of the above mentioned revenue should be deposited into the account of the National Forestry Development Fund.

**Article 64:** National Forestry Development Fund shall not be used for the organization and functioning of the Forestry Administration. This fund shall be used only for the following activities:

1. Reforestation;
2. Silviculture and forestry rehabilitation;
3. Forest Protection and Conservation and bio-diversity
4. Forest and wildlife scientific and technical research;
5. Extensions on Forest and Wildlife sector;
6. Development in Forest and wildlife sector;
7. Development of Community Forestry; and
8. Training human resources for the Forest and Wildlife sector.

**Article 94:** Any individual who has committed a forestry offense harming the forest ecosystem shall be liable for payment in order to restore or repair the forest ecosystem to its original condition.

### **National Forest Programme: 2010-2029**

#### **Strategic objectives**

1. Maximize sustainable forest contribution to poverty alleviation, enhanced livelihoods and equitable economic growth
2. Adapt to climate change and mitigate its effects on forest based livelihoods
3. Macro land-use planning that allows for holistic planning across sectors, jurisdictions and local government borders
4. Forest governance, law and enforcement at all levels
5. Develop a conflict management system
6. Raise awareness, capacity of institutions and quality of education to enable sustainable implementation of the National Forest Programme
7. Ensure environmental protection and conservation of forest resources
8. Apply modern sustainable management models adaptive to changing context
9. Develop sustainable financing systems



## 6. Sustainable Forest Financing

Sustainable Forest Financing provides an economically sustainable and transparent framework required in meeting all the NFP objectives. This will be achieved through:

Sub-programme 6.1 – Government Financing

Sub-programme 6.2 – Income from Forest Sector

Sub-programme 6.3 – Income from the Private Sector and Community Forestry

Sub-programme 6.4 – Financing via Donors

Sub-programme 6.5 – Innovative Financing from Payments of Environmental services and Carbon Credit

### Law on Nature Protection Area/ Protected Areas Law 2008

**Article 1:** This law defines the framework of management, conservation and development of protected areas. The objectives of this law are to ensure the management, conservation of biodiversity, and sustainable use of natural resources in protected areas.

**Article 4:** The management of protected areas as mentioned in Article 2 of this law shall be under the jurisdiction of the Ministry of Environment. The Ministry of Environment has the “Nature Protection and Conservation Administration” (NPCA) as its own secretariat to manage the protected areas pursuant to the policy of the RGC. The organization and functioning of the Nature Protection and Conservation Administration in each protected area shall be determined by Prakas (Declaration) of the Ministry of Environment. The management of the protected area shall have to guarantee the rights of the local communities, indigenous ethnic minorities and the public to participate in the decision-making on the sustainable management and conservation of biodiversity.

**Article 32:** The Government shall establish a fund called “protected areas fund” which is organized, managed and given responsibility by a protected area committee with Minister of Environment and Minister of Economy and Finance as co-chairmen. The establishment and functioning of the committee shall be determined by a Sub-decree.

Article 33: Funding support for rehabilitation, improvement of protected areas and biodiversity shall come from:

1. National budget
2. Protected area entrance and other service fees
3. Environmental endowment insurance
4. Donations
5. Assistance from national and international organizations and friendly countries
6. Assistance from international environment funds

Article 34: Budget and funds from sources as stated in article 33 of this law may be used to support the following activities within the protected areas:

- The protection and conservation of biological resources and ecosystems;
- Rehabilitation and enhancement of biodiversity and ecosystems;
- Technical and scientific research study on the biological diversity and ecosystem;
- Maintenance and extension of eco-tourism services
- Training, human resource development and capacity building of the Nature Conservation and Protection Administration staff for effective protection and conservation of biodiversity and ecosystems;
- Programmes supporting the establishment of community protected area;
- Dissemination and education on protected area; and
- Construction, rehabilitation and maintenance of infrastructure.

## **Law on Environmental Protection and Natural Resource Management, 1996**

**Article 1:** This law has an objective:

- To protect and upgrade the environment quality and public health by means of prevention, reduction and control of pollution.
- To assess the environmental impacts of all proposed projects prior to the issuance of decision by the Royal Government;
- To ensure the rational and sustainable preservation, development, management and the use of the natural resources of the Kingdom of Cambodia.
- To encourage and provide possibility to public to participate in the protection of environment and the management of the natural resources.
- To suppress any acts which may affect to environment.

**Article 8:** Natural resources of the Kingdom of Cambodia which primarily consist of land, water, airspace, air, geology, ecological systems, minerals, energy, petroleum and gas, rocks and sand, gems and stones, forests and forest sub-products, wildlife, fish and aquatic resources, shall be preserved, developed and managed to use in a rational and sustainable manner. Natural resource protected zones consists primarily of National Parks, wildlife sanctuaries, landscape protected areas, multiple use areas, shall be determined by Royal Decree.

**Article 19:** A special Treasury account, the Environment Endowment Fund, shall be crested, and administered by the Ministry of Environment for environmental protection and natural resource conservation in the Kingdom of Cambodia in accordance with the Finance Law. The Environment Endowment Fund, which comes from contributions from the Royal Government, grants from international organizations, donations from charitable individuals, donations from non-governmental organizations, and other lawful sums, shall be included in the National Budget in order to provide the above special account.

**Article 21:** Any person who refuses to allow access or obstructs the inspection officials from entering to examine or carry out an inspection inside the premise as provided for in the para.1 of the article 15 of this law, shall be subject to an administrative fine in cash from 500,000 (five hundred thousand) to 1,000,000 (one million) riels. In case of repeated offenses, shall be penalized a fine of 1,000,000 (one million) riels to 5,000,000 (five million) riels or shall be punished to imprisonment from 1 month to 3 months or to both punishments.

Any person who violate the article 20 of this law, shall be subject to administrative fine in cash of 1000,000 (one million) riels to 10,000,000 (ten million) riels. In case of repeated offenses, shall be penalized a fine from 21,00,000 (twenty one million) riels to 30,000,000

(thirty million) riels or shall be subject to punishment to imprisonment from 1 (one) month to 1 (one) year, or to both punishments.

## **Law on Mineral Resource Management and Exploitation, 2001**

**Article 1:** The purpose of this law is to determine the management and exploitation of mineral resources, the manipulation of mines and all activities relating to the mining operation in the Kingdom of Cambodia save for the mining operation of petroleum and gas which shall be under a separate law.

**Article 22:** Guidelines on the form, plan expansion and increase and content of all necessary documents and work program, financial guarantee for proper implementation shall be determined by a Prakas of the Minister.

**Article 23:** In each necessary case, the Minister shall appoint competent officials to monitor the implementation of this law. Appointed officials shall:

1. Be responsible to the Minister for methods of administration in accordance with the provisions of the law.
2. Prepare an annual report on regulatory activities of exploration and mining during the preceding year and submit it to the Minister.
3. Collate information and maintain records of operations of explorations, mining, treatments, marketing and exportation of mineral resources and products.
4. Follow up and monitor to ensure that all provisions of this law have been implemented.
5. Make inspection to ensure that all regulations relating to the health and safety of workers and of the general public have been properly applied.



6. Perform other duties as determined by the Minister.

The power and duties of the officials appointed to monitor, inspect and report on all activities relating to the exploration, mining, research and analysis related to the methods of administration under the authority of this law shall be prescribed in Sub-decree.

**Article 31:** According to the applicable laws, a special tax regime shall be established for application to the output and revenue gained from the 6 (six) categories of the mining licenses as provided in Article 11.

**Article 32:** The rate of royalty on the value of mineral resources, methods of royalty payment to the State, and incentives for competent officials as provided in Article 23 shall be determined by Inter-Ministerial Prakas. Taxes, duties, tax on shares, tax on personal share, provision, method of expenditure, tax payment procedure, accounting and financial principles and practices, definitions of losses, exemption and incentives of investment in mineral sector shall comply with laws in force.

**Article 33:** Any person who conducts the operation of the mineral resource exploration without a mineral resource license shall be liable to a fine ranging from 500,000 (Five Hundred Thousand) Riels to 1,000,000 (One Million) Riels. In case of recalcitrance, the penalty shall be from 1,000,000 (One Million) Riels to 2,000,000 (Two Million) Riels, or such person shall be punished by 1 (one) month to 1 (one) year imprisonment, or both punishments.

**Article 34:** Any person who conducts the exploration operation in violation of the second paragraph of Article 7 or of Article 8 of this law shall be liable to a fine ranging from 5,000,000 (Five Million) Riels to 10,000,000 (Ten Million) Riels, or punished by 6 (six) months to 2 (two) years imprisonment or both penalties.

**Article 35:** Any person who conducts mining operation without a mining license or in violation of Article 7 and Article 8 of this law shall be liable to a fine of an amount equal to 3 (three) times the assessed value for a period the output of mineral has been extracted based on the size of apparatuses, used production machinery and quantity of minerals within such area, and shall be punished with a fine ranging from 1,000,000 (One Million) Riels to 10,000,000 (Ten Million) Riels per diem starting from the date such person illegally committed to the date the activities of mining operation have been ceased, and by imprisonment ranging from 1 (one) year to 5 (five) year regardless of compensation for damages. And the apparatuses and production machinery shall be confiscated into the State's property.

#### **Land Law, 2001**

**Article 1:** This law has the objective to determine the regime of ownership for immovable properties in the Kingdom of Cambodia for the purpose of guaranteeing the rights of ownership and other The Khmer version is the official version of this document rights related to immovable property, according to the provisions of the 1993 Constitution of the Kingdom of Cambodia.

**Article 8:** Only natural persons or legal entities of Khmer nationality have the right to ownership of land in the Kingdom of Cambodia. Thus, the following persons or entities may be owners of land in Cambodia: Cambodian citizens, public territorial collectives, public institutions, Cambodian communities or associations, public enterprises, Cambodian civil or commercial enterprises and any Cambodian organization which is recognized by law as a legal entity. A foreigner who falsifies national identity to become an owner of land in Cambodia shall be punished as determined under article 251 of this law. Any property bought under these circumstances will be seized as State property without compensation from the State.

**Article 12:** The State is the owner of the properties in the territory of the Kingdom of Cambodia enumerated in Article 58 of the 1993 Constitution and of all properties that are escheat, or that are voluntarily given to the State by their owners, or that have not been the subject of due and proper private appropriation or that are not presently being privately occupied in accordance with the provisions of Chapter 4 of this law.

**Article 26:** Ownership of the immovable properties described in Article 25 is granted by the State to the indigenous communities as collective ownership. This collective ownership includes all of the rights and protections of ownership as are enjoyed by private owners. But the community does not have the right to dispose of any collective ownership that is State public property to any person or group. The exercise of all ownership rights related to immovable properties of a community and the specific conditions of the land use shall be subject to the responsibility of the traditional authorities and mechanisms for decision-making of the community, according to their customs, and shall be subject to the laws of general enforcement related to immovable properties, such as the law on environmental protection. The provisions of this article are not an obstacle to the undertaking of works done by the State that are required by the national interests or a national emergency need.

#### **Law on Public Finance 2008**

**Article 2:** The Law has its objective to manage public financial system by complying with the principles of integrity, authority, unity, associability, universality, consistency, accountability, transparency, stability, comprehensiveness, and achievements. The public financial management covers national public finance including relations and interactions between national and international public finance, national and international private finance ensuring compliance with budget principles, financial accountability, linkages between budget and policies, and accountability for achievements.

**Article 13:** Permanent resources of the state include current and capital revenues.

■ Current revenue is divided into 2 groups and 3 categories, namely:

- Group 1: Real revenue
  - ◆ Category 1: Fiscal revenue
  - ◆ Category 2: Non-fiscal revenue
- Group 2: Revenue by order
- Category 3: Revenue by order

■ Capital revenue is divided into 2 groups and 3 categories, namely:

- Group 1: Real revenue
  - ◆ Category 1: Revenue from own sources
  - ◆ Category 2: Revenue from external sources
- Group 2: Revenue by order
  - ◆ Category 3: Revenue by order

Each type of revenue is classified by chapter, account, sub-account, and eventually can be in more detail by the Prakas issued by the Minister of Economy and Finance.

**Article 16:** Taxes, excises, and other fiscal revenues shall be determined by laws, collected and supervised by the Minister of Economy and Finance. The rates of taxes, excises, basis for taxation, tax exemption, and disputes related to the identification, collection, and control of taxes shall be determined in the framework and formalities stated in the law pertaining to the types of each tax and excise. No regulations of any kind, no international conventions shall induce changes leading to losses of revenue. The above case can only happen unless implementation of the formalities of similar laws and orders after having the approval from the Minister of Economy and Finance. The collection of non-fiscal revenue shall be under the supervision of the Minister of Economy and Finance.

**Article 68:** Under the limits defined by the Law on Finance and under the authority of the Prime Minister, only the Minister of Economy and Finance has the rights to prepare debt repayment schedules for either debt liable to and from others. The preparation of debt schedule shall be defined by the Law on Finance.

#### **Law on Tourism, 2009**

**Article 2:** The purposes of this Law are as follows:

- Govern the development of the tourism sector in a sustainable manner effectively and qualitatively and to reduce poverty;
- Protect and conserve the natural resources, culture and customs, which serve as the foundation of the tourism sector;



- Ensure and promote the quality of tourism services in the Kingdom of Cambodia through the introduction of a quality assurance system by providing security, safety, and comfort and by increasing tourists' satisfaction;
- Minimise negative impacts and maximise positive impacts of the tourism sector;
- Seek markets and enhance publicity with participation of both the public and private sectors;
- Develop human resources in the tourism sector; and
- Contribute to the development of international friendship and understanding through the tourism industry.

**Article 21:** Funds for the development and the management of the tourism sector shall be financed by:

- Allocation of the annual budget of the Ministry of Tourism;
- Cooperative finances from development partners;
- Contributions from charitable persons, customers, charity organizations, and the Tourism Industry Associations;
- Donations from the Cambodian Tourism Marketing and Promotion Board;
- Contributions from tourism operators; and
- Other financing sources or legitimate incomes.

The management and utilisation of funds for the development of tourism sector shall be determined by an interministerial regulation of the Ministry of Tourism and the Ministry of Economy and Finance.

**Article 36:** An application for the grant of or renewal of a tourism license shall be made by the operators of the tourism business and shall be in the form and accompanied by the supporting documents and other information as required by a Prakas (regulation) of Minister of the Ministry of Tourism. An application of tourism licence must thereof attach the license fees which were determined by an inter-ministerial Prakas (regulation) of Minister of the Ministry of Tourism and Minister of the Ministry of Economy and Finance.

**Article 55:** The types of complaints and disputes for which are in the jurisdiction of the Ministry of Tourism to undertake the role of ombudsman include complaints from and disputes between tourism businesses operators, their agents, employees, contractors, government officials concerned with tourism, tourists and other stakeholders. The Tourism Ombudsman Committee shall consider justly undertaking the dispute including the complaint. If the ombudsman is unable to resolve the dispute, any party may then refer the matter to the courts for resolution according to law. The expenditure and fee of the Tourism Ombudsman Committee shall be determined by a Prakas (regulation) of Minister of the Ministry of Tourism and Minister of the Ministry of Economy and Finance.

**Article 69:** Any tourist or leisure traveler who causes damages to the environment, cultural and natural heritages shall be guilty of an offence and subject to a legal liability in accordance with laws and regulations in effect.

Sub-Decree 19 on Social Land Concessions, 2003

Article 1: This sub decree has the objective to define the criteria, procedures and mechanism for the granting of social land concessions for residential use and/or family farming.

**Article 16:** The maximum size of social concession land granted for residential purposes is one thousand two hundred (1200) square meters, except in rural areas where land is available, the size of social concession may be increased up to three thousand six hundred (3600) square meters. In appropriate cases, particularly in urban areas, social land concessions for residential purposes may granted in the form of co-ownership.

**Article 17:** The maximum size of social concession land granted for family farming purposes is two (2) hectares, but for some areas the size of social concession land may be increased up to five (5) hectares based on the characteristics and potentiality of the land or the type of crop, and labor.

#### **Sub-Decree 79 on Community Forestry Management, 2003**

**Article 1:** This Sub-Decree aims at determining rules for the establishment, management and use of community forests throughout the Kingdom of Cambodia.

Article 4: Power in leading and managing a CF Community is gained through the election of community members.

**Article 10:** Roles and duties of CF Community members are as follows:

- Follow the instruction of the Forestry Administration and MAFF;
- Participate in developing and implementing Community Forestry Regulations, Community Forest Agreement and Community Forest Management Plan in compliance with Prakas of MAFF;
- Participate in forest resources management in compliance with Community Forestry Regulation, Community Forest Management Plan and other legislation related to forestry sector;
- Participate in sharing benefits from the community forest;
- Participate in monitoring the use of community forest resources by secondary users;
- Participate in conserving, protecting and planting the forest to ensure the sustainability of forest resources and environment.

**Article 11:** The User Rights of CF Community members include:

- Customary User Rights prescribed in Article 40 of the Forestry Law.
- The rights to barter, process, transport and sell NTFPs as described in Article 40(B) in point 5 of the Forestry Law.
- CF Community may continue to practice traditional swidden agriculture during specific periods of time as determined in the Community Forest Management Plan, as authorized in Article 37 of the Forestry Law.
- The right to appeal decisions which impact CF Community rights.
- The rights granted under a Community Forest Agreement within a specific area that shall ensure the sustainable use of forest resources.

**Article 31:** The Forestry Administration may use the national forest development budget to support the development process of Community Forestry consistent with provision prescribed in Article 62, 63 and 64 of the Forestry Law. Community Forestry Management Committee can seek direct financial sources to support the development process of Community Forestry from charity people, national and international organizations.

#### **Sub-Decree 146 on Economic Land Concessions, 2005**

**Article 3:** Economic land concessions may be granted to achieve the following purposes:

- To develop intensive agricultural and industrial-agricultural activities that requires a high rate and appropriate level of initial capital investment.
- To achieve a specific set of agreements from the investor for developing the land in an appropriate and perpetual manner based on a land use plan for the area.
- To increase employment in rural areas within a framework of intensification and diversification of livelihood opportunities and within a framework of natural resource management based on appropriate ecological system,
- To encourage small as well as large investments in economic land concession projects, and
- To generate state revenues or the provincial or communal revenues through economic land use fees, taxation and related services charges.

**Article 6:** There are two permissible ways to initiate economic land concession projects:

1. Solicited proposal, where a Contracting Authority proposes a project for solicitation of proposals from investors.
2. Unsolicited proposal, where an investor proposes a project proposal to the state for approval
  - o Contracting Authority refers to the authorities who have the legal power and exercise such power as granted by the Prime Minister to enter into Economic Land Concession Contracts on behalf of the Royal Government of Cambodia and who carries out duties in accordance with provisions of this sub-decree.





## Annex 5: Opinion on the Legal and Policy Considerations of the financing Mechanisms for Protected Areas

Prepared for the Cambodia Forestry Administration, MAFF  
By Dr. Sok Siphana  
April 13, 2015

### BACKGROUND:

process of Community Forestry consistent with provision prescribed in Article 62, 63 and 64 of the Forestry Law. Since the 1990s the Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have received the mandate from the Royal Government of Cambodia (RGC) to secure protected forests in ecologically important landscapes and to establish new protected areas. One of their challenges is the ability to secure long-term financial arrangement necessary to pay for the full costs incurred in sustaining and safeguarding existing on-the-ground achievements, as well as ensuring the long-term integrity of standing forests.

Through a consultative process with key stakeholders the FA has reviewed the following finance mechanisms, which were thought to be technically achievable:

1. Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
2. Donor funding;
3. Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
4. Debt relief ('Debt-for-nature swaps');
5. Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
6. Biodiversity and Forestry offsets and compensation agreements with industry;
7. Public-private partnerships, in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
8. Establishing a forest conservation trust fund, with revenues generated from multiple sources;

This analysis provides a legal assessment and some policy considerations that may affect the viability, or the practical reality of adoption, of each financial mechanism.

### 1. GOVERNMENT BUDGET SUPPORT – PUBLIC TAXES, FEES, FINES, AND OTHER DIRECT ALLOCATIONS FROM THE STATE

Government revenue allocations should be the primary source of financial support for protected areas. Government budget allocations are done on an annual basis as part of the Financial Law, where fees collected directly from public taxes, fines, and other payments from concessions and businesses using Cambodia's natural resources are typically re-apportioned back through a centralized revenue system to support costs for management of protection forests.

The legal framework legislating and regulating the revenues collection through a centralized revenue system for natural resources conservation from environmental taxes, fines, fees, and/ or royalties are well in place:

1. The Law on Forestry provides for the collection of both Wildlife Conservation Fee and Wildlife Royalty,<sup>1</sup> the exact amount of which are regulated in a Joint- Prakas of MAFF and Ministry of Economy and Finance (MEF).
2. Payment of royalties and premiums are directed to the national budget through the FA:
  - a) for harvesting forest products and by-products for commercial purposes within the Permanent Forest Reserve.<sup>2</sup>
  - b) for any transfer of the rights under any permit to harvest forest products and by-products to a third party.<sup>3</sup>
3. Payment for forestry offenses collected by the FA are as well for the account of the national budget (payment to be used for the restoration or repair of the forest ecosystem to its original condition).<sup>4</sup>

New sources of public finance may be accessible through additional public taxes, fees or fines derived from natural resources exploitation or use. Taxes, fees and fines related to natural resource use can also be charged in sectors

such as petroleum, mining, hydropower and other energy production, fisheries, land, water supply, and tourism:

1. In the mining sector, payment of royalty on the value of mineral resources, methods of royalty payment to the State, i.e. through its centralized revenue system, is provided for in the Law on Mineral Resource Management and Exploitation.<sup>5</sup>
2. Fees, taxes and fines for environmental licensing and environmental impact assessment (EIA) are also collected for the account of the State.

#### LEGAL OPINION:

*We are of the opinion that the public finance is the best and viable long term and sustainable option, provided the FA in full collaboration with the MoE and other stakeholders can undertake the following sequential actions:*

1. *Undertake a fair assessment of the market value for various sources of public taxes, fees or fines and other services and products derived from or use of natural resources exploitation. The gist of such an assessment is to ensure:*
  - a) *proper market valuation of various revenue sources and benchmark it with global or regional standard or practices:*
    - (i) *licensing or permit system;*
    - (ii) *royalties from logging in the intact evergreen areas;*
    - (iii) *royalties and legal fees from logging in community forest areas and concessions areas, including from non-timber forest products;*
    - (iv) *sales of services in forestry;*
    - (v) *property tax on private plantations;*
    - (vi) *sale of carbon credits based on reduced impact logging and REDD+;*
    - (vii) *entrance fees to protected forest areas; and,*
    - (viii) *sale of hunting rights.*
  - b) *adequate cost recovery to finance conservation, restoration and redevelopment of damages ecosystem, i.e. sufficient funding available to cover transportation, community meeting, or facility maintenance costs of forest guards, bearing in mind that their basic salaries are covered under the regular national budget;*
2. *Renegotiation with the MEF for a fair re-allocation of these revenue collection with the FA and the key local forestry communities. Such a renegotiation can take into account:*
  - a) *the rewards or incentives for performance of forest guards or rangers, in addition to their low basic salaries;*
  - b) *adequate financing resources for the local communities: (i) to protect and preserve their respective natural resources, and (ii) to start an endowment system for generating regular revenues to support their sustained livelihood development from these natural resources.*
  - c) *the ability of the FA to devise a transparent well governed and managed fund designated for forest conservation uses.*
3. *In light of the trends of economic growth of the country, where public finance revenues are on the increase, competition with other line ministries for redistribution of these revenues will be fierce, although the prospect is more than viable provided the FA can provide the negotiation leadership backed by evidence based solutions.*
4. *However, taking into account the nascent nature or recent development of other natural resource sectors, (i.e. oil and gas, mining, hydropower and other energy production, fisheries, land, water supply, and tourism) and their thirst for financial resources to develop their own sectors, it is very unlikely that the FA and the MoE can argue for the MEF to tap these sectoral resources for protected areas conservation.*

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<sup>1</sup> Law on Forestry, Article 51.

<sup>2</sup> *ibid*, Article 52.

<sup>3</sup> *ibid*, Article 56.

<sup>4</sup> *ibid*, Article 94.

<sup>5</sup> Law on Mineral Resource Management and Exploitation, Article 32.



## 2. FUNDING FROM DEVELOPMENT PARTNERS

Funding for protected forests in Cambodia through Development Partners (DPs) has been and will continue to be an important source, in particular from major bilateral and multilateral agencies. The role of smaller and more ad hoc players, which include NGOs, private charitable foundations, and private companies, and some individual donations, can't be ignored.

Procedurally and agenda wise, DPs' interests and procedures can vary significantly and generally are well beyond the control of the RGC or the FA. DPs' respective approaches to providing funding are idiosyncratic, and although they well appreciated by the government and the local communities, they are not in the long run sustainable. With the pressure to move their gradually limited financial resources to other post crisis countries, Cambodia's importance will fade away from their radar screen in the near or medium term.

### LEGAL OPINION:

*We are of the opinion that DPs' financial support for protected areas still remain a strong and viable long term sustainable financing option, provided the FA, the MoE and other stakeholders, can position it as a complementary source to the public finance. The FA should position their needs to reflect the new reality or concerns of the world, i.e. dramatic effects of climate change, sustainable forest management, etc. The following sequential actions could be envisaged to achieve that objective and to retain DPs' interests:*

- 1. Redirect the major DPs to support to long term financing mechanisms, such as conservation trust funds and public-private-community partnerships.*
- 2. Refocusing DPs' efforts to strengthen the capacity of FA and MoE and their stakeholders to capitalize on opportunities to generate sustainable revenues from payments for ecosystem services.*
- 3. The FA can initiate a mapping process of the long-term development needs of many protected forests so as to provide a coherent framework for interventions by smaller and ad hoc players such as NGOs, private charitable foundations, and private companies, and some individual donations. As the human resources of the FA is finite, it is crucial that they are not diverted or distracted by small and unsolicited petty projects.*

*The harsh reality of dealing with DPs is that they are here but each one of them has its own set of rigid rules of engagement, which leaves very space for the FA to maneuver. As such from the legal arrangement standpoint, there is not much the FA can design or take leadership. The FA needs to bear this legal and institutional reality for as long as the DPs are operating in Cambodia: DPs have their own standard agreements, Memorandums, and programme and project templates for the FA to populate, with minor efforts.*

## 3. PAYMENTS FOR ECOSYSTEM SERVICES (PES)

The RGC has stated unambiguously in many of its key national development strategic plans the possibility of PES as an option to generate revenues for financing sustainably conservation activities. Ecosystem services are the many diverse benefits that people derive from nature and those providing ecosystem services should be compensated by those receiving ecosystem services.

Legally speaking, the process to operationalize the PES process should not be in principle difficult nor complex. The complexity lies upstream with the FA and the MoE to define, design and negotiate projects with clear mechanisms to measure, value, incentivize, and create payment schemes for one or more of the recognized services provided by ecosystems. Such process generally involves: (i) establishing a set of parameters for measuring the stocks and flows of a specific ecosystem service, such as drinking or irrigation water; (ii) quantifying the economic (or social) value of the service in collaboration with affected stakeholders. In voluntary markets the value can be arbitrarily set by the affected stakeholders working in collaboration with an independent third party to facilitate transactions; and (iii) determining compensation by public or private interests who benefit from the protection of the ecosystem service to landowners for the use of best management practices to ensure protection.

### LEGAL OPINION:

*We are of the opinion that while the design of the legal mechanism to implement the PES is not difficult, the real challenges will be in its subsequent enforcement. The issue of minor versus substantial breaches, the latter of which could lead to defaults and therefore of non payments are issues of significant importance; a potential post transaction*

*loss of publically recognized right over an environmental service that provides a flow of benefits to the demanding party could nullify the agreed compensation scheme; the need to secure independent third party monitoring intermediaries is another issue related to the right of payment or non payment.*

*A strong feeling of comfort on the viability of the PES mechanism is the success of existing pilot PES programs in Cambodia as a complement to improving conservation strategies in protected areas. To date, there are three pilot PES projects in two Protected Areas in the Northern Plains landscape -- the Kulen Promtep Wildlife Sanctuary managed by MoE and the Preah Vihear Protected Forest managed by MAFF -- that have been supported by Wildlife Conservation Society (WCS) and a pilot Incentives for Ecosystems Services scheme at a hydroelectricity facility in the Cardamom Mountain Landscape by Flora and Fauna International (FFI).*

#### 4. DEBT RELIEF (“DEBT FOR NATURE” SWAPS)

Debt Relief generally is not well practices in the case of Cambodia. The Cambodian authorities have in vain negotiated with the Russian and U.S. authorities at least on an annual basis to find solution to its decades old debts. A few years ago, there is an exceptional case with the IMF, which provided 100 percent relief of outstanding debt incurred before January 1, 2005. These additional resources freed up from the outstanding debt were made available to help Cambodia make progress toward its Millennium Development Goals (CMDGs). Reallocation of these resources were thus for general poverty reduction related initiatives.

##### LEGAL OPINION:

*We are of the opinion the Law on Public Finance System provides the mandate for the MEF to oversee the debt repayment process<sup>6</sup> and as such the overarching parameters MEF generally follow are directly related to major development agenda of the country, i.e. MDGs and in the next several year the Sustainable Development Goals (SDGs) in the UN Post 2015 Development Agenda. Other key priorities are related to initiatives to generate growth in the lead up to the imminent integration to the ASEAN Economic Community, the focus on remaining competitive and generating new jobs under the recently enacted “Industrial Development Policy (IDP)”. All these elements, combined with the little or no experiences by MEF in existing debt relief, let alone the sophisticated debt-for-nature-swap, lead to a pessimistic conclusion that this financing option will not be considered by the RGC, at least in the near term.*

#### 5. LOANS, BONDS, AND SUSTAINABLE INVESTMENT FUNDS

A bond is a written promise to pay back a specified amount of money, with interest earned on the principal, at a specific date or dates in the future. It is very similar to a loan, with the exception that a bond can be traded in the marketplace to generate revenue. Government backed bonds are typically developed and issued through a relatively simple process whereby (i) the government determines how much money is needed to fund specific projects for a particular period of time, and (ii) the Government then legally authorizes the creation of a bond to raise money from investors to fund the projects.

The real challenges in developing a bond market in Cambodia are the missing soft infrastructure to administer the mechanism. In other words, Cambodia still lack key participants such as (i) bond rating companies (Moody’s Investor Services, Standard and Poor’s Ratings Service, or Fitch Ratings) that provide a wide range of credit services, including establishing a rating that indicates how the financial market views the risk associated with the bonds, and (ii) debt service administrators to facilitate the payment schedule on the bond (principal and interest), where payments typically are made every 6 months for 20 or 25 years.

Institutional coordination wise, the tasks related to bond market infrastructure are still unclear with the MEF delegating its roles and responsibilities to the Securities and Exchange Commission of Cambodia (SECC) and the Cambodia Securities Exchange (CSE) on the one hand, and the National Bank of Cambodia (NBC) on the other. This explains in simple term why at the moment, there is no government bond market in Cambodia.

##### LEGAL OPINION:

*Despite the RGC’s policy commitment as highlighted in the Financial Sector Development Strategy 2011-2020, that it*

<sup>6</sup> Law on Public Finance System, Article 68.

*will consider issuing government bonds starting in 2017, we are of the opinion that such a timeframe is unrealistic. And assuming the optimistic scenario, if the RGC will decide to move so to launch its first bond market, the priorities will be more to raise crucially needed financing to develop and transform Sihanoukville into a Special Administrative Region (SAR) whereas the entire region will be developed into a sort of multi-purpose model Special Economic Zone. This SAR is highlighted as one of the four key practical measures to promote the implementation of the IDP to be achieved by the end of 2018.*

## 6. BIODIVERSITY OFFSETS AND COMPENSATION

Biodiversity offsets are measurable actions taken to respond to significant residual impacts from project development on biodiversity and ecosystems. Offsets are intended to correct adverse impacts that have not been avoided, minimized, or mitigated through other project actions. Offsets are generally developed in accordance with the protocol outlined in the mitigation hierarchy.

Although no standards have been adopted at the international level for biodiversity offsets, more than 30 countries have laws requiring biodiversity offsets or compensation, which could include the followings:

- Strengthening ineffective protected areas by investing in capacity building for management staff and additional needed management activities;
- Establishing new protected areas or no-go zones in collaboration with communities and government in order to conserve particular species and increase available habitat;
- Establish movement and dispersal corridors for wildlife;
- Establish or strengthen buffer zones adjacent to protected areas;
- Work with communities to develop alternative livelihoods that can reduce or eliminate unsustainable activities and hunting pressures.

The RGC has thus far piloted various carbon and biodiversity offset projects across different sectors in Cambodia. These pilot projects could be grouped into two categories:

1. Forest specific offset projects, as in Reducing Emissions from Deforestation and Degradation (REDD+) pilot projects in Oddar Meanchey province launched in May 2008, followed by the second REDD+ pilot project in the Seima Protection Forest, Mondulkiri province launched in 2009.
2. Non-forest offset projects, taking the form of Clean Development Mechanisms.

In addition to these two pilot projects, there are several other REDD+ projects that have been initiated under the different institutional jurisdictions of the RGC.

Additional to REDD+ pilot projects, there is the Clean Development Mechanism (CDM), under which Cambodia is eligible for hosting emission reduction projects. In general, CDM projects have two key goals: (i) to assist developing countries who host CDM projects to achieve their sustainable development objectives, and (ii) to help developed countries partially meet their GHG reduction commitments by allowing them to take credits from emission reducing projects undertaken in developing countries. As of October 2014, there are 10 CDM projects listed under the Cambodia Climate Change Office of the MoE.

### LEGAL OPINION:

*There are initial precedence in carbon and biodiversity offset projects and other projects under the Clean Development Mechanism are well tested. As such the relevant government institutions are very familiar with the legal and procedural aspects to ensure permanent funding to deliver conservation outcomes over the long term.*

*There are currently 14 projects at various phases, which could benefit from the experiences of the Oddar Meanchey Community Forest REDD+ Pilot Project and Seima Protection Forest REDD+ Pilot Project. However, current funding governance and its disbursement mechanism needs to be revisited to ensure timely redistribution of these funds to the local Forest communities.*

## 7. PUBLIC-PRIVATE PARTNERSHIPS TO GENERATE REVENUES FROM FOREST ENTERPRISE PRODUCTS AND SERVICES

Public-private partnerships (PPP) is another mechanism, which can be developed by the government to establish a business with an explicit mission to generate revenues for the conservation of forests, biodiversity, and ecosystems, and income for communities and regions. Like any business, there is some risk in developing public-private enterprises



since considerable initial capital outlay in the form of grants and affordable loans will be required to finance a business start up. Moreover, all funding proposals to select and fund collaboration ventures would require other upfront costs to undertake feasibility studies, business plans and possibly seed grants to support start-up enterprise concepts. There is

also the cost of capital even though loans at low interest rates (0-11% per annum) can be provided by NGO, private foundation, or investor partners. Generally PPPs are very attractive for the power and road infrastructure and there is clearly a large critical mass of consumers who are consuming or buying round the clock energy in their households or their businesses, or travelling on a toll road, thus providing a good steady flow of proceeds to repay the loans. There is virtually no PPP investment in social sectors such as health and education and cross-sectoral sectors such as environment and conservation.

#### LEGAL OPINION:

*While the possibilities of public-private partnerships exist to create forest-based enterprises that can generate revenues and become commercially viable, there is a clear need for an initial endowment or subsidies support from development partners to kick start upstream preparatory works such as feasibility studies, business plans, marketing plans as well as on-going technical support to ensure optimization of business operations, i.e. accounting, sourcing, legal compliance.*

*Moreover, the existing legal framework governing infrastructure concessions, i.e. the 2007 Law on Concessions, is neither appropriate nor applicable for PPP investments in environment and conservation sectors. As such, the viability of this option is slim.*

## 8. CONSERVATION TRUST FUNDS

Conservation Trust Funds (CTFs) are private, legally independent grant-making institutions that provide sustainable financing for biodiversity conservation and natural resource management. Conservation trust funds are often established to anchor other sustainable financing mechanisms by providing a transparent and efficient way to manage funding for conservation purposes. Conservation trust funds can manage endowment funds (e.g., only investment income is spent), sinking funds (e.g., both capital and investment income is disbursed) or revolving funds (e.g., pass-through sources of revenue are disbursed), or a combination of any of these. Most funds combine 2 or 3 of the fund types as a way to diversify their sources of funding and take advantage of emerging opportunities.

Despite the efforts of the MEF in the past several years to draft a Trust Law with the assistance of the Asian Development Bank, Cambodia has yet to have an overarching law or any sub-decree that guides or regulates the establishment of funds generally. The more general trust principles are laid in the 2008 Law on Public Finance System, which explains the creation on an ad hoc basis of existing funds in Cambodia through special subject-matter laws:

1. The 1996 Law on Environmental Protection and Natural Resource Management provides the foundation for the establishment of an 'Environment Endowment Fund', a special Treasury account to be created and administered by the MoE 'for environmental protection and natural resource conservation' in Cambodia.
2. The 2002 Law on Forestry enables the establishment of a National Forestry Development Fund, which is to be administered and managed under the responsibility of the National Forestry Development Committee.
3. The 2008 Law on Protected Areas also contains provisions enabling the establishment of a Protected Areas Fund, which is to be organized, managed and 'given responsibility' by a protected area committee, with the Ministers of MoE and MEF as co-chairs.

On the Development Partners side, there are several examples of conservation trust funds that have been established in Cambodia, the biggest trust fund relevant for conservation activities operational thus far is the Cambodia Climate Change Alliance Trust Fund. This fund is a multi-donor trust fund established by donors and the RGC to apply a more coherent approach to climate change support for Cambodia. It is administered by UNDP, and implemented by a National Climate Change Committee within the MoE. A dedicated Trust Fund Secretariat appointed by government manages day-to-day operations, and reports to a Programme Support Board. A Trust Fund Administrator manages the Trust Fund, provides capacity development and financial assurance, and reports to the government and donors. Other trust funds that have been set up include the Marine Conservation Trust Fund and the Tropical Forest Conservation and Venture Trust Fund.

#### LEGAL OPINION:

*The Conservation Trust Fund option is also another well tested concept, which have tremendous flexibility in terms modes of operations (Endowment Fund, Sinking Fund, Revolving Fund) and can absorb large contribution from development partners. In term of operational efficiency, scale and long term impact, but foremost appreciation and buy-in from the Government, this option should be pursued as much as possible.*

#### CONCLUSION:

*In light of the above review, we are of the opinion that, out of eight options, five options are quite viable though different in procedural approaches: Public finances generated from taxes, fees, and fines levied on the legal trade in forest and non-timber forest products; traditional donor funding; Payment for Environmental Services (PES), Biodiversity and Forestry offsets and compensation schemes; and conservation trust fund.*

The remaining three options are considered as still premature for application in Cambodia; Debt relief ('Debt-for-nature swaps'); bonds, and other sustainable investment funds, including impact investments, allocated to forestry development and conservation; and public-private partnerships. In the medium term, all three options could be considered by the Government as additional options to secure long-term financial arrangement to meet the Government's objectives of sustaining and safeguarding the environment and its forests.

## Annex 6: Benefits, Costs, and Follow Up Information Needs For Potential Forest Finance Options in Cambodia

A preliminary analysis of potential benefits and costs of the forest finance options proposed for The Royal Government of Cambodia's (RGC) protected forests and protected areas is outlined here, along with a summary of follow on recommendations. The purpose of a benefit-cost analysis (BCA) is to compare the potential social and economic benefits associated with each of the finance options policy or investment decisions with the anticipated financial or related costs required to implement the policy or investment. The feasibility of a policy or investment significantly increases if it can be shown that the sum of the benefits exceeds the costs. The accuracy and usability of the results from a BCA is greatly improved if benefits or costs can be measured and monetized. However, in practice, many BCAs are greatly limited by a lack of available information and methods for estimating and monetizing the consequences of the proposed investment or policy. Unfortunately, this is very much the case with the benefit-cost analysis of the options for financing the management and expansion of protected forests and protected areas in Cambodia. Very few data exist to quantify anticipated costs that will be associated with each proposed financial option. As a result, the current analysis is considered to be very preliminary and speculative, and has been designed to serve as a framework from which a more detailed BCA can be developed once the Cambodia Forest Authority (FA) determines the most feasible finance options.

The basic steps carried out to do this preliminary assessment included the following:

1. Define the Project Alternative considered in the analysis. For each alternative the following factors have been estimated:
  - a. Basic cumulative user costs
  - b. Selected economic factors that could affect user costs
  - c. Assumed user benefits.
  - d. Possible risks associated with the finance option
2. Recommendations for the preparation of a more thorough BCA once the preferred financial options for financing Cambodia's protected forests have been determined.

To simplify the benefit-cost-risk analysis, the Project Alternatives described in the Cambodia Forest Finance Assessment have been combined into three categories:

- Direct user fees and service charges, allocation of additional government revenues, voluntary levies and surcharges, along with cross-sectoral and sub-national fiscal transfers;
- Payments for ecosystem services, biodiversity offsets and leases, concessions and joint ventures;
- Debt relief, loans and bonds, and sustainable investment funds.

A summary of conclusions drawn from the preliminary analysis is included, along with recommendations for additional information that can produce a deeper assessment of potential benefits and costs associated with each option.

***Alternative 1 - Direct user fees and service charges, allocation of additional government revenues, voluntary levies and surcharges, along with cross-sectoral and sub-national fiscal transfers.***

Direct user fees and service charges can be derived from taxes, fees and fines related to natural resource uses that are charged in sectors such as petroleum, mining, hydropower and other energy production, fisheries, forestry, land, water supply, and tourism. A percentage of the fees, taxes and fines for environmental licensing and environmental impact assessment (EIA) can also be assigned to a government or independently managed fund designated for forest conservation uses. Fee structures should include "willingness to pay" surveys that are further linked with market surveys to determine a fair market rate for each service offered to private businesses for the use of Cambodia's natural resources. Government budget allocations are typically done on an annual basis, and protected forests typically are funding through a centralized revenue system. Thus revenues from taxes, fees or other charges within a specific protected forest or PA are not retained at the local level, but are delivered to a central agency or the national Treasury. Protected forests and PAs typically receive only a small portion of these collected fees through one annual allocation. Also, the separation of budget allocations from earnings reduces any incentives for protected forest managers to generate more revenue, and creates little responsibility or accountability for them to do so.

**Economic Factors Affecting User Benefits and Costs:** FA has been collecting royalties from timber products, fines and premiums for many years. For example, as stated in the National Forest Programme, the royalties for timber



collected between 1999 and 2009 was calculated at U.S. 56.5 million dollars (USD). In 2008, the royalties to FA from 36,785 m3 of round logs equalled approximately USD 2.5 million, while fines and premiums collected by FA was estimated at approximately USD 600,000. The revenues from forests have been derived from the sale of logs and timber as a sub-unit of the total value of the forests. Thus additional revenues that could add to the total income from fines, fees, and royalties could include:

- The value of NTFPs such as fuel-wood, charcoal, medical plants, furniture processing, and wildlife;
- Employment resulting from timber harvesting in the primary sector, in particular the considerable downstream processing;
- Significant increases in value-added through the chain of wood processing;
- Payments for environmental services; and,
- Revenues from eco-tourism.

FA will focus from the present time through 2029 on the RGC's ability to contribute to the financing of forest conservation by pushing for the reallocation of funds from the national budget, the contribution from royalties and fines collected, as well as any export duties on timber and non-timber forest products.

In the next 10-20 years, some of the approaches that FA will pursue to raise revenues for sustainable forest management will include:

- Collecting royalties from logging in the intact evergreen areas;
- Royalties and legal fees from logging in community forest areas and concessions areas, including from non-timber forest products;
- Sales of services in forestry;
- Property tax on private plantations;
- Sale of carbon credits based on reduced impact logging and redd+;
- Entrance fees to protected forest areas; and,
- Sale of hunting rights.

According to the National Forest Programme, it is expected that royalties from logging in the intact evergreen areas (1.25 million hectares, which is 50 percent of the production forest) for the next 20 years will bring in an estimated USD 728 million. The other 50 percent of production forest will bring in the royalties estimated at USD 455 million. Finally, it is expected that 75% of the 2 million hectares of community forest areas will consist of degraded deciduous forests, and 25% of logged semi-evergreen forests. Therefore, royalties from logging can be expected to commence once all of CF is operational with proper management plans in place. It is expected that within 20 years, royalties from logging in CF areas would total approximately USD 476 million, or an approximate gross yield of more than USD 20 million per year. Overall, the RGC expects that within the next 20 years, FA could be collecting about USD 1.6 billion from royalties from logging in the intact forest areas, production forest areas, and CF areas, or a cumulative gross income of USD 80 million per year.

The government has considerable experience collecting fees and charges for the use of public lands and resources. This expansion of this revenue source needs only to explore new possible funding sources from resources from which fees are not been collected, or where fee structures do not currently reflect fair market values. Government also has considerable experience with public-private partnerships.

From this coarse assessment it is evident that significant financial benefits can be accrued from this Alternative. Management costs are estimated at net present value of approximately USD 35 million per year, which suggests that financial benefits could significantly exceed anticipated costs. However, additional social and ecological costs could be incurred in the process of forest harvests unless stringent forest management practices are incorporated into harvest leases, including minimal impact felling practices, selective logging, and low impact skidding and transport policies, and on-going monitoring of the impacts of harvesting practices on biodiversity and ecosystem dynamics. Although actual cost estimates are not available to calculate the finances required to include these sustainable harvesting measures, it is obvious that including them in forest harvest leases will add significant costs to each lease agreement, and the costs will reduce net financial gain.

**Conclusions:** Despite the anticipated additional costs of sustainable forest harvest measures, the direct user fee options appear to have high potential, with greater benefits than costs. Each method is explicitly enabled by law, and is already under operation in Cambodia. The main opportunity lies in expanding the scope and scale of these arrangements, extending the range of sites in which they are applied, and rationalising fee levels in line with market prices and to consumer willingness to pay.

The voluntary levies and charge financial options are identified as having medium potential. All of these instruments tap into existing revenue streams, and do not require the development of new markets, products or services. Although earmarking and retention is not wholly consistent with the government's current stated policies, on-going public financial management reforms and decentralisation processes open the door to the possibility of these kinds of arrangements becoming more viable in the near future.

#### ***Alternative 2 – Payments for ecosystem services, biodiversity offsets and leases, concessions and public-private partnership (PPP) joint ventures***

It may be useful for government and NGOs to identify suitable private sector partners for possible collaborative ventures involving sustainable forest-based enterprises. Government can then solicit funding and collaboration requests from potential partners through a formal proposal submission process, and then select and share the development costs for collaboration ventures. Each venture would then require the following:

- Feasibility studies, business plans and possibly seed grants to support start-up enterprise concepts.
- Capital loans at low interest rates (0-11% per annum) provided by NGO, private foundation, or investor partners allocated to the most promising enterprises for working capital and/or scaling up (either vertically or horizontally). Actual terms can be customized to the situation of each enterprise.
- Sustainable sourcing plans to ensure consistent high quality in product delivery.
- Marketing plans to identify and build demand, and ensure best price options for products and services.
- On-going technical support provided through NGO or investor partners to optimize business operations (accounting, sourcing, legal compliance), and ensure the adoption of sustainable business management and best practices, including monitoring support.

The feasibility of these public-private enterprises to generate significant revenues as part of a comprehensive forest finance strategy will require a comprehensive initial market survey to determine opportunities for proposed new ventures to gain entry into existing marketplaces or to stimulate new ones.

Examples of possible offset activities that may be included as a form of compensation could include:

- Strengthen ineffective protected areas by investing in capacity building for management staff and additional needed management activities;
- Establish new protected areas or no-go zones in collaboration with communities and government in order to conserve particular species and increase available habitat;
- Establish movement and dispersal corridors for wildlife;
- Establish or strengthen buffer zones adjacent to protected areas;
- Work with communities to develop alternative livelihoods that can reduce or eliminate unsustainable activities and hunting pressures.

Ideally, offsets should be designed and implemented as part of a national planning effort taking into account the cumulative impacts of development in the country, and contributing to and nested in existing national conservation strategies, including recovery plans for IUCN recognized threatened and endangered species and protected area strategies. Government-endorsed national offset and compensation strategies may also be most effective if supported and overseen by effective and transparent institutions, such as conservation trust funds, to ensure permanent funding to deliver conservation outcomes over the long term.

A key factor in the development of any compensation or offset strategy is the assurance that investments in conservation or offset activities do not simply provide a mechanism to allow inappropriate developments to move forward. This is particularly true in areas of rare, unique, or highly threatened species and ecosystems. Thus all compensation and offset strategies must ensure that appropriate monitoring, planning, and management mechanisms are in place and secure over the long term to guarantee that the compensation objectives are achieved.

**Economic Factors Affecting User Benefits and Costs:** To date, most PPP projects in Cambodia have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the International Monetary Fund (IMF) noted in a recent report on Cambodia's debt sustainability that the hydro-power projects presently being developed by the government as PPPs have the potential to create significant liabilities for the government. The IMF does recommend that the government implement a phased PPP development program that builds on project successes to create political support and investor confidence in order to broaden the scope and sector coverage for PPP projects.

While the number of PPPs is impressive, the overall level of private investment outside power in sectors such as water and transport is low. Data from the World Bank's Private Participation in Infrastructure (PPI) Projects Database show

that during the period 1990–2008 there was a total of 22 PPP projects in Cambodia. Slightly over half of these projects were in the energy sector, representing about 55% of total investments by number and investment value. While private investment in infrastructure has been increasing in recent years, the number of projects and the amounts mobilized continue to be small. It appears that in the road sector there has been little investment as the concessions were allocated for existing roads. There is virtually no PPP investment in social sectors such as health and education and cross-sectoral sectors such as environment and conservation.

Unfortunately, the potential financial revenues from PES and offset strategies remain highly speculative at this time, and predictions are too varied to provide a reliable estimate of potential financial benefits. However, based on experiences in similar environments, the costs of implementation for these projects are expected to be less than potential income, rendering the option as representing a financial gain for the RGC. The social and ecological benefits are also expected to be very significant, including retention of important hydrologic and ecological functions, reduced losses of biodiversity, and increased availability of non-timber forest resources.

**Conclusions:** These financial options are identified as having high-medium potential, with benefits most likely exceeding costs, and low risk associated with each venture. All have been recognized by the MOE for development, and work is already underway on identifying legal and operational modalities for their implementation. All respond to opportunities and interests associated with the recent opening up of the economy to outside investments, especially ongoing developments in the tourism, infrastructure and extractive industries sectors.

### **Alternative 3 – Debt relief, loans and bonds, and sustainable investment funds**

Between 2008 and 2012, Cambodia received about USD 5.4 billion in development cooperation financing from development partners. Approximately USD 3.55 billion of this total was dispersed as grants, and US\$1.85 billion as loans. Based on projections in the NSDP 2014–2018, Cambodia is likely get USD 1.2 billion (USD 600 million as grant, and USD 600 million as loan) in the next 2–3 years. Development cooperation has accounted for approximately 10 percent of the country's GDP in the recent years. It has also probably contributed to the recent high economic growth rate, increased GDP per capita from USD 760 in 2008 to USD 1,036 in 2013, and reduced the poverty rate from around 47.8% in 2007 to 19.8% in 2011. Besides demonstrating the international community's support for the Royal Government's development program and reform effort, this increased level of external resources has also supported the creation of a positive enabling environment, which has been associated with expanded public and private investment, primarily in the infrastructure, garment, agriculture, construction, and tourism sectors.

Development partners provide an important source of funding for protected forests and PAs in Cambodia, with bilateral and multilateral agencies providing the largest source, along with some donations from individuals, NGOs, private charitable foundations, and private companies. However, donor interests and procedures can vary significantly. This means that fundraising approaches need to be tailored for each partner, and funding priorities can change quickly and dramatically. Most development partners provide support through two to five year projects, and this is often insufficient to fulfill the medium or long-term objectives and needs of many protected forests and PAs. However, some funders are increasingly willing to consider funding requests to catalyze long-term sustainable financing mechanisms and to capitalize financing mechanisms, such as conservation trust funds.

Government backed bonds are typically developed and issued through a relatively simple process:

- The government determines how much money is needed to fund specific projects for a particular period of time.
- The Government then legally authorizes the creation of a bond to raise money from investors to fund the projects.
- Underwriters from national or international private sector companies buy the bonds and resell them to large and small investors. The underwriters make money on their investment when they re-sell the bonds. The investors in the bonds are most commonly pension funds, mutual funds, and other large investors. In some cases small investors will find bonds appealing, typically if they feel that the value will increase rapidly over a short time period.

Other key participants in the bond market include:

- Bond rating companies that provide a wide range of credit services, including establishing a rating that indicates how the financial market views the risk associated with the bonds.
- Debt Service administrators facilitate the payment schedule on the bond (principal and interest), with payments typically are made every 6 months for 20 or 25 years.



As the issuer of a bond, the government may also decide to declare a debt limit that restricts the amount of bonds the state can issue. Investors in the bond must have transparency, and some form of verification as to how the projects to be carried out fulfill the mandates of the bond. It is also essential that monitoring data demonstrate the use of proceeds from bond sales.

Enterprise funds and other types of sustainable investment funds differ from bonds in that they channel capital – debt or equity – into environmentally-sustainable businesses. For-profit investments can be structured to provide financial returns for a private conservation trust or similar financial structure by tapping into the substantial financial resources of the private sector. In this way, these funds can provide both a direct financial benefit and promote adherence to environmental standards for use of resources.

**Economic Factors Affecting User Benefits and Costs:** At the moment, there is no government bond market in Cambodia. In the Financial Sector Development Strategy 2011-2020, it is stated that the Royal Government will consider issuing government bonds starting in 2017. Although the system no longer operates, Cambodia previously issued government bonds with maturities longer than 10 years, and it implemented a book-entry system. The Book-Entry System (BES) is a computerized registry for government bonds developed by the IMF that can process participant's details, auction outcomes, and secondary market transactions. BES also handles information on interest and redemption. In order to register, commercial banks need to create three accounts: securities account, customer account (one account for all customers of each bank that are trading on behalf of customers), and collateral account. A security account can be created for any large non-bank corporation that intends to participate in bond auctions on a regular basis, and a collateral account is also created when required. All submissions for bond auctions must be made on a standard physical form issued by the NBC. After all bid forms are validated, NBC enters all bid submissions in BES and selects accepted bids. The settlement date is 3 days (72 hours) after auction.

There are three patterns of bond sales and purchases in Cambodia: (i) between a bank and its customers, (ii) between two banks, and (iii) repo and reverse repo. For sales and purchases between a bank and its customers, the bank's securities account and bank's customer account are involved. The bank's customer account is one separate account whose current balance can be monitored by NBC. NBC occasionally requires a complete disclosure of a customer's particulars and the amount of securities held, the total of which must reconcile with the BES book-entry account held at NBC. All interest payments on bonds issued at face value with an annual rate of interest and a fixed maturity date are shown in BES. Interest can be paid to bond holders either once or twice per year depending on the terms of issuance. On the due date, NBC processes a fund transfer arising from interest payment by debiting a treasury account. NBC types and sends a letter to subscribers and also sends copies of an interest payment due report for to NBC's Internal Audit Department.

Unfortunately, all of the potential income options in this Alternative are minimally developed in Cambodia at this time, and the legal hurdles required to more fully develop each option could be substantial. The potential revenues that can be derived from each option (debt relief, loans and bonds, and outside investment) are also highly speculative and uncertain given Cambodia's fragile credit rating. Thus it is uncertain if the benefits from the investment in the legal and policy infrastructure required outweigh the probable costs.

**Conclusions:** These financial options are identified as have low to medium potential, with costs possibly exceeding benefits in most cases, and moderate to high risk associated with some of these finance strategies. The policy framework to pursue these strategies is only partially in place, and some legal and operational hurdles may exist to constraint their use. Much more information will be required on anticipated changes in market conditions, credit ratings, and expected commercial ventures associated with Cambodian public forests before greater confidence can be generated for these possible ventures.

### **Recommendations for Future B/C Analysis of the Cambodia Forest Finance Options**

A more detailed review of each of the potential financial instruments included in this assessment report suggests that each may hold potential for contributing to the financial resources needed to manage Cambodia's protection forests and secure their ecological integrity for future generations. However, the emphasis should probably be placed on Alternatives 1 and 2, in that priority, with Alternative 3 assigned for more in depth legal and policy cost analysis. Ultimately, it is expected that the Forestry Administration will work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;

- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

It is also recommended that protected forest financing measures and instruments mechanisms to ensure that the following three factors are achieved:

- A. Increase the size and diversity of financing sources and funding portfolios;
- B. Enhance revenue retention and promote direct reinvestment in conservation; and
- C. Streamline protected forest financial planning, costing and allocation procedures.

Five particularly pervasive financial constraints to effective protected forest management are evident, and each of these factors will ultimately influence the ratio of benefits to costs required to fulfil each alternative:

1. There is insufficient funding at the present time to cover core site-level costs and coordinate national-level forest management activities;
2. Funding is distributed unevenly across the protected forest network;
3. Staff costs dominate public budgets;
4. Protected forests and PAs rely on a very narrow funding base and limited range of financial sources;
5. Protected forests and PAs operate according to a short-term financial planning horizon.

Again, this analysis remains very preliminary due to the very limited data available to assess potential benefits, costs, and risks associated with each forest finance opportunity. Future work will seek to increase the available data to allow a more robust and thorough CBA in order to facilitate greater confidence in the selection and development of specific finance options.

## References

Cited in Annex 1 of full report







## **Sustainable finance mechanisms for conservation of forests and protected areas in Cambodia**

**Source:** For full assessment, refer to **James Tolisano, Nguon Pheakkdey and Chhun Delux** (2016) Sustainable Finance Mechanisms for Conservation of Forests and Protected Areas in Cambodia: Finance Options Assessment Report. Phnom Penh, Cambodia: Technical Working Group on Forestry Reform of the Forestry Administration and Wildlife Conservation Society.

### **Introduction**

The Cambodia Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have led actions taken since the 1990s to establish new protected areas and secure protected forests in ecologically important landscapes. These actions have resulted in the stabilization, and, in some cases, recovery of populations of some threatened species. However, these accomplishments require on-going funding to insure payments for recurrent and new costs. Continued investments by donors and NGOs into the same landscapes may provide some of this funding, but is not expected to represent by itself a sustainable source for these funds. As a result, the development of a long-term financial plan to secure fund is essential in order to safeguard existing on-the-ground achievements, and ensure the long-term integrity of standing forests.

These financial pressures continue in parallel with on-going social and ecological pressures. The forested landscapes in Cambodia are under significant and increasing levels of threat. Cambodia now has one of the world's highest rates of deforestation, driven by large-scale forest clearance for agriculture and in-migration to frontier regions. Deforestation rates increased significantly following changes in forest management policies in the mid-2000s that provided a basis to expropriate forestlands for agriculture, and the new Protected Areas Law in 2008 that permitted the de-gazettement of protected areas for economic development. Since 2008 more than 10% of Cambodia's protected area network has been allocated to investment firms. Assignment of large-scale concessions to corporations also removes options for local people to use land and resources for livelihoods and new enterprises. Securing the finances to sustain forest landscapes in Cambodia thus becomes important for the needs of local people and biodiversity.

Five particularly pervasive financial constraints to effective protected forest management are evident:

1. There is insufficient funding at the present time to cover core site-level costs and coordinate national-level forest management activities;
2. Funding is distributed unevenly across the protected forest network;
3. Staff costs dominate public budgets;
4. Protected forests rely on a very narrow funding base and limited range of financial sources;
5. Protected forests operate according to a short-term financial planning horizon.

Cambodia can reduce the risks to its protected forests and enhance overall protection measures by diversifying the financing mechanisms used to produce the funds required for recurrent management costs. The principal task for Cambodia will be to ensure that funding for protected forests is not exclusively dependent on government budget allocations and external donor support, and that funding sources are sufficiently varied to allow conservation and sustainable management programs to continue even during market downturns (e.g., if, for example,

tourism-based revenues decline or demand decreases for specific forest products). More effective revenue collection and cost reduction mechanisms are also important financing strategies to achieve financial sustainability.

### **Assessing options for sustainable financing mechanisms**

This brief is based on an assessment report conducted by the Sustainable Finance Sub-group of the Technical Working Group on Forestry Reform (TWG-FR). The report intended to provide technical information that can be used by stakeholders in Cambodia to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the protected forests of Cambodia. The approach used in the assessment follows the lead provided by several other national conservation finance strategies being developed or applied worldwide, particularly the assessments developed for Mozambique and Belize.

The assessment of finance options for Cambodia's protection forests examined all mechanisms that were determined to be technically achievable by the FA and its associates. The options considered were reviewed, verified, and prioritized at a consultative meeting held on Monday 26th May, 2014 at the Sunway Hotel in Phnom Penh, Cambodia, and attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Environment, Ministry of Economy and Finance), development partners, private sector, and civil society organizations. The consultative meeting provided input on the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms.

The participants in the consultative meeting identified eight possible finance mechanisms to include in the assessment, including each of the following:

1. Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
2. Public-private partnerships, including leases, concession fees, and direct payment or profit sharing ventures in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
3. Donor funding;
4. Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
5. Debt relief ('Debt-for-nature swaps');
6. Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
7. Biodiversity and Forestry offsets and compensation agreements with industry;
8. Establishing a forest conservation trust fund, with revenues generated from multiple sources;

The assessment of each mechanism included the following information:

- A concise description of the theory and intent of the mechanism;
- An overview of how the financial mechanism is typically applied in practice;
- An example of how the financial mechanisms has been applied in a country of similar social and environmental conditions, and a summary of any results to date;
- An overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia

- A description of any prior experience with the financial mechanism in Cambodia.

## **Findings**

The assessment identified several promising opportunities for the government to consider as it strategizes the long-term conservation of Cambodia's protection forests. This assessment provided an overview of the legal context in which any finance strategy must be developed. It also examined existing forest financing sources being used to support forest management in Cambodia, including taxes levied on the legal trade in forest products, non-timber forest product (NTFPs), and wildlife permit; bilateral and multilateral funding for forest sector; income generated from Economic Land Concessions, or breeding or trade of wildlife species; government investment funds allocated to forestry development and conservation; tourism revenues; and donors funding. Attention in the assessment was then given to financial tools that will have the most political and social acceptance; and identification of actions necessary to administer and manage the use of forest finance funds.

It was suggested that four conditions can ensure the sustainability of a finance instrument:

- (1) Markets and capital exist to support the instrument over the long term
- (2) Political will and commitment exist to support the use of the financial instrument
- (3) Financial instruments have the support of communities, CBOs, NGOs, and the business community
- (4) The management and use of funds is transparent and well organized

## **Recommendations**

It is recommended that the TWG-FR shall work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;
- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

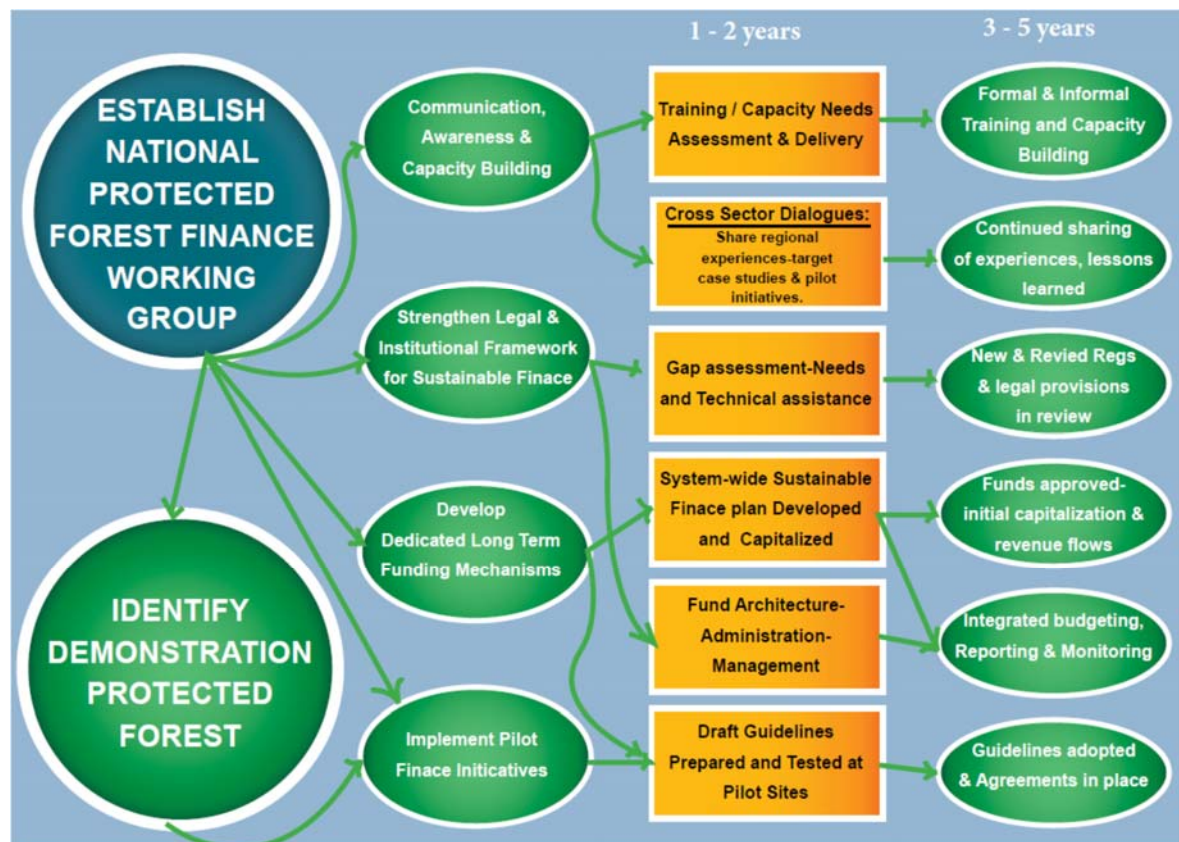
The work plan should also establish the respective stakeholder roles and responsibilities in the design and implementation of a comprehensive Cambodia forest finance strategy. In turn, the completed strategy should determine the funding requirements necessary to achieve long-term forest management goals in Cambodia; the institutional and policy framework necessary to implement the strategy; and implementation, monitoring, and reporting procedures.



Furthermore, it is recommended that protected forest financing measures and instruments mechanisms to ensure that the following three factors are achieved:

- A. Increase the size and diversity of financing sources and funding portfolios;
- B. Enhance revenue retention and promote direct reinvestment in conservation; and
- C. Streamline protected forest financial planning, costing and allocation procedures.

A more detailed summary of the next steps that can be carried out to implement a sustainable finance strategy for Cambodia's protected forests is shown in the following Figure.



## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: 17 May 20016

Submitted by (provide individual and STWG contact information):

WCS – STWG 3&5

1. Issue:

Wildlife trafficking

2. Reference to Code Book and Chapter (if applicable):

BOOK 8

3. Comparative Experience (including Cambodian and international examples and experience):

Some of the international agreements/declarations that the Environmental Code should link to it, as relates to wildlife crime/trafficking. There is an opportunity here for Cambodia to be a leader in the growing regional movement to harmonise laws to combat transnational crime (wildlife crime is now recognised as a transnational organised crime), and it would be great to ensure there are regulations for cooperation on criminal prosecutions of wildlife crime.

Please see the East Asia Summit Declaration on Combating Wildlife Trafficking (attached and link to PR below), passed in November 2014, which declared support for the above and in linking wildlife crime with the UN Convention Against Transnational Organised Crime and the UN Convention Against Corruption. [https://cites.org/eng/east\\_asia\\_summit](https://cites.org/eng/east_asia_summit)

Attached also the UN Resolution on Wildlife Trafficking (2015) and the Doha Declaration (2015) from the UN Crime Congress which states that countries will adopt measures to prevent and counter serious crimes that have an impact on the environment, such as wildlife trafficking (page 11). I am not sure if Cambodia has signed this declaration or not though.

In addition, it would be great to make some mention of the ASEAN-Wildlife Enforcement Network (WEN) somewhere within the Environmental Code, if MOE is supportive of this idea. It is a regional inter-governmental initiative to combat wildlife trafficking, and promotes international cooperation and adoption of best practice for law enforcement, among other things. Countries are meant to have a national WEN but Cambodia's is not functioning well at the moment. MOE may (or may not, depending on jurisdictions related to wildlife and law enforcement outside of protected areas) need to be involved from now on. Here is some information on the purpose of ASEAN-WEN: <https://cites.org/eng/news/sundry/2005/ASEAN-WEN.shtml>

Here is a link to download the Wildlife and Forest Crime Analytic Toolkit, developed by a consortia of partners, to help countries analyse and strengthen their response to wildlife and forest crime. The legislation section I think could be particularly useful for the development of the Environmental Code.

<https://drive.google.com/file/d/0B24rY9wdhYcYMklXa2pscDRFN2M/view?usp=sharing>

4. Recommendation:

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):





# General Assembly

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## Sixty-ninth session

Agenda item 13

### **Integrated and coordinated implementation of and follow-up to the outcomes of the major United Nations conferences and summits in the economic, social and related fields**

**Albania, Armenia, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Central African Republic, Chile, China, Colombia, Congo, Costa Rica, Croatia, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Ecuador, Estonia, Finland, France, Gabon, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Monaco, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Togo, Uganda, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania and United States of America: draft resolution**

### **Tackling illicit trafficking in wildlife**

*The General Assembly,*

*Reaffirming* the intrinsic value of biological diversity and its various contributions to sustainable development and human well-being, and recognizing that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the Earth which must be protected for this and the generations to come,

*Concerned,* therefore, about the increasing scale of poaching and illegal trade in wildlife and wildlife products and its adverse economic, social and environmental impacts,

*Expressing serious concern* over the steady rise in the level of rhino poaching and the alarmingly high levels of killings of elephants in Africa, which threaten those species with local extinction and, in some cases, with global extinction,

*Recognizing* that illicit trafficking in wildlife contributes to damage to ecosystems and rural livelihoods, including those based on ecotourism, undermines good governance and the rule of law and, in some cases, threatens national stability and requires enhanced regional cooperation and coordination in response,

*Emphasizing* that the protection of wildlife must be part of a comprehensive approach to achieving poverty eradication, food security, sustainable development,



including the conservation and sustainable use of biological diversity, economic growth, social well-being and sustainable livelihoods,

*Reaffirming* its call for holistic and integrated approaches to sustainable development that will guide humanity to live in harmony with nature and lead to efforts to restore the health and integrity of the Earth's ecosystem,

*Expressing concern* that, in some cases, illicit trafficking in protected species of wild fauna and flora is an increasingly sophisticated form of transnational organized crime, recalling Economic and Social Council resolution 2012/19 of 26 July 2012, in which the Council recognized that organized crime had diversified and represented a threat to health and safety, security, good governance and the sustainable development of States, and therefore underlining the need to combat such crimes by strengthening international cooperation, capacity-building, criminal justice responses and law enforcement efforts,

*Recognizing* the legal framework provided by and the important role of the Convention on International Trade in Endangered Species of Wild Fauna and Flora,<sup>1</sup> an international agreement that stands at the intersection between trade, the environment and development, promotes the conservation and sustainable use of biodiversity, should contribute to tangible benefits for local people and ensures that no species entering into international trade is threatened with extinction,

*Recognizing also* the importance of other multilateral environmental agreements, including the Convention on the Conservation of Migratory Species of Wild Animals,<sup>2</sup> the Convention on Biological Diversity,<sup>3</sup> the Convention concerning the Protection of the World Cultural and Natural Heritage<sup>4</sup> and the Convention on Wetlands of International Importance especially as Waterfowl Habitat,<sup>5</sup>

*Recalling* Economic and Social Council resolution 2013/40 of 25 July 2013 on crime prevention and criminal justice responses to illicit trafficking in protected species of wild fauna and flora, in which the Council encouraged Member States to make illicit trafficking in protected species of wild fauna and flora involving organized criminal groups a serious crime,

*Recalling also* Economic and Social Council resolution 2011/36 of 28 July 2011 on crime prevention and criminal justice responses against illicit trafficking in endangered species of wild fauna and flora,

*Reaffirming* that the United Nations Convention against Transnational Organized Crime<sup>6</sup> and the United Nations Convention against Corruption<sup>7</sup> constitute effective tools and an important part of the legal framework for international cooperation in fighting illicit trafficking in endangered species of wild flora and fauna,

*Recognizing* the important work of the International Consortium on Combating Wildlife Crime, a collaborative effort of the secretariat of the Convention on

<sup>1</sup> United Nations, *Treaty Series*, vol. 993, No. 14537.

<sup>2</sup> *Ibid.*, vol. 1651, No. 28395.

<sup>3</sup> *Ibid.*, vol. 1760, No. 30619.

<sup>4</sup> *Ibid.*, vol. 1037, No. 15511.

<sup>5</sup> *Ibid.*, vol. 996, No. 14583.

<sup>6</sup> *Ibid.*, vol. 2225, No. 39574.

<sup>7</sup> *Ibid.*, vol. 2349, No. 42146.

International Trade in Endangered Species of Wild Fauna and Flora, the International Criminal Police Organization, the United Nations Office on Drugs and Crime, the World Bank and the World Customs Organization, by, inter alia, providing technical assistance to Member States,

*Welcoming* resolution 1/3 of 27 June 2014 of the United Nations Environment Assembly of the United Nations Environment Programme, on illegal trade in wildlife,<sup>8</sup> in which the Environment Assembly called upon the General Assembly to consider the issue of illegal wildlife trade at its sixty-ninth session,

*Welcoming also* the efforts of and cooperation between Member States, intergovernmental organizations and non-governmental organizations, as well as activities of United Nations agencies and other entities, aimed at preventing and fighting illicit trafficking in wildlife, and in this regard taking note of the Paris Declaration of 2013, the London Declaration of 2014, the Kasane Statement of 2015 and the Brazzaville Declaration of 2015,

*Recalling* its resolution 68/205 of 20 December 2013, in which it proclaimed 3 March, the day of the adoption of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, as World Wildlife Day, and welcoming the international observance of the Day in 2014 and 2015 in order to celebrate and raise awareness of the world's wild fauna and flora,

*Taking note* of the Doha Declaration on Integrating Crime Prevention and Criminal Justice into the Wider United Nations Agenda to Address Social and Economic Challenges and to Promote the Rule of Law at the National and International Levels, and Public Participation, adopted by the Thirteenth United Nations Congress on Crime Prevention and Criminal Justice, held in Doha from 12 to 19 April 2015,

*Taking note also* of the ministerial declaration of the high-level segment of the eleventh session of the United Nations Forum on Forests on the international arrangement on "The forests we want: beyond 2015" and of the resolution on the international arrangement on forests beyond 2015 adopted by the Forum at its eleventh session,

1. *Reaffirms* the outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want",<sup>9</sup> in which were recognized the economic, social and environmental impacts of illicit trafficking in wildlife, where firm and strengthened action needs to be taken on both the supply and demand sides, and the importance in this regard of effective international cooperation among relevant multilateral environmental agreements and international organizations was emphasized;

2. *Encourages* Member States to adopt effective measures to prevent and counter the serious problem of crimes that have an impact on the environment, such as illicit trafficking in wildlife and wildlife products, including flora and fauna as protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora,<sup>1</sup> and poaching;

3. *Urges* Member States to take decisive steps at the national level to prevent, combat and eradicate the illegal trade in wildlife, on both the supply and

<sup>8</sup> See United Nations Environment Programme, document [UNEP/EA.1/10](#), annex I.

<sup>9</sup> Resolution 66/288, annex.



demand sides, including by strengthening the legislation necessary for the prevention, investigation and prosecution of such illegal trade as well as strengthening enforcement and criminal justice responses, in accordance with national legislation and international law, acknowledging that the International Consortium on Combating Wildlife Crime can provide valuable technical assistance in this regard;

4. *Calls upon* Member States to make illicit trafficking in protected species of wild fauna and flora involving organized criminal groups a serious crime, in accordance with their national legislation and article 2 (b) of the United Nations Convention against Transnational Organized Crime;<sup>6</sup>

5. *Also calls upon* Member States to review and amend national legislation as necessary and appropriate so that offences connected to the illegal wildlife trade are treated as predicate offences, as defined in the United Nations Convention against Transnational Organized Crime, for the purposes of domestic money-laundering offences, and are actionable under domestic proceeds of crime legislation;

6. *Encourages* Member States to harmonize their judicial, legal and administrative regulations to support the exchange of evidence regarding and criminal prosecution of illicit trafficking in wildlife, as well as to establish national-level inter-agency wildlife crime task forces, consistent with national legislation;

7. *Urges* Member States to engage actively in efforts to raise awareness about and address the problems and risks associated with the supply and transit of and demand for illegal wildlife products and to reduce the demand using targeted strategies in order to influence consumer behaviour;

8. *Strongly encourages* Member States to support, including through bilateral cooperation, the development of sustainable and alternative livelihoods for communities affected by illicit trafficking in wildlife and its adverse impacts with the full engagement of the communities in and adjacent to wildlife habitats as active partners in conservation and sustainable use, enhancing the rights and capacity of the members of such communities to manage and benefit from wildlife and wilderness;

9. *Urges* Member States that have not yet done so to consider taking measures to ratify or accede to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption,<sup>7</sup> and calls upon States parties to take appropriate measures to ensure the full and effective implementation of their obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora and other relevant multilateral agreements, as well as to consider ways to share information with one another on best practices to tackle illicit trafficking in wildlife in line with those instruments;

10. *Calls upon* Member States to prohibit, prevent and counter any form of corruption that facilitates illicit trafficking in wildlife and wildlife products;

11. *Strongly encourages* Member States, in line with Economic and Social Council resolution 2013/40, to cooperate at the bilateral, regional and international levels to prevent, combat and eradicate international illicit trafficking in wildlife

and wildlife products through, inter alia, the use of international legal instruments such as the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption;

12. *Encourages* Member States, where relevant and appropriate, to enhance cooperation for the timely and cost-efficient repatriation of live illegally traded wildlife, including eggs, consistent with the Convention on International Trade in Endangered Species of Wild Fauna and Flora;

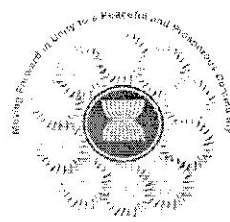
13. *Calls upon* United Nations organizations, within their respective mandates and in line with Economic and Social Council resolution 2013/40, to continue to support efforts by Member States to fight illicit trafficking in wildlife, such as through capacity-building and by supporting alternative livelihoods, and to improve cooperation with all relevant stakeholders in order to facilitate a holistic and comprehensive approach by the international community;

14. *Calls upon*, in this regard, the United Nations Office on Drugs and Crime, within its mandate and resources, in line with Economic and Social Council resolution 2013/40 and in close cooperation and collaboration with Member States, to continue to collect information on patterns and flows of illicit trafficking in wildlife and to report thereon;

15. *Requests* the Secretary-General to further improve the coordination of activities undertaken by United Nations offices, funds and programmes relating to the scope of the present resolution, within their respective mandates and in line with Economic and Social Council resolution 2013/40;

16. *Also requests* the Secretary-General, taking into account Economic and Social Council resolution 2013/40, to report to the General Assembly at its seventieth session on the global status of illicit trafficking in wildlife, including poaching and illegal trade, and on the implementation of the present resolution, and to make proposals for possible future action, including consideration of the appointment of a special envoy to promote awareness and galvanize international action;

17. *Decides* to revisit the issue and the implementation of the present resolution on an annual basis, beginning at its seventieth session.



MYANMAR, 2014

## **EAS DECLARATION ON COMBATING WILDLIFE TRAFFICKING**

WE, the Heads of State/Government of the Member States of the Association of Southeast Asian Nations (ASEAN), Australia, the People's Republic of China, Republic of India, Japan, the Republic of Korea, New Zealand, the Russian Federation and the United States of America on the occasion of the 9<sup>th</sup> East Asia Summit (EAS) held in Nay Pyi Taw, Myanmar;

**REAFFIRMING** our commitment to build an ASEAN Community by 2015, comprising three pillars, namely the ASEAN Political-Security Community, the ASEAN Economic Community, and the ASEAN Socio-Cultural Community that are closely intertwined and mutually reinforcing;

**REALIZING** that ASEAN integration and the emergence of an ASEAN Economic Community by 2015 will increase peace, stability, and prosperity for ASEAN and its people;

**AWARE** that the EAS Member States are rich in biodiversity and home to many endangered species of wild fauna and flora;

**RECOGNIZING** that the illicit trafficking and illegal trade in specimens of species of wildlife are prejudicial to the planet's natural heritage and to the political, economic and social interests of the EAS;

**ACKNOWLEDGING** that the inadvertent or purposeful introduction of illicitly trafficked and illegally traded wildlife and wildlife products poses serious risks to the health and safety of human, plant, and animal populations due to the spread of pathogens and non-native invasive species, threatening economic development and prosperity;

**NOTING** that the increase in illicit trafficking and illegal trade of specimens of species wildlife and wildlife products including fauna and flora, and particularly of endangered species included in the Convention on International Trade in



Endangered Species of Wild Fauna and Flora (CITES) necessitates increased cooperation and coordination, surveillance, investigative and enforcement measures amongst relevant authorities, including Wildlife, Forestry, Customs, Police, Judicial and Prosecutorial authorities, as well as their increased surveillance, investigative and enforcement measures;

**RECOGNIZING** that international and regional cooperation are essential to protect natural resources, wildlife habitats, and particularly, endangered species of wild fauna and flora;

**RECOGNIZING** the conservation actions and commitments that have already been made with respect to the species regulated by CITES through its Decisions and Resolutions;

**ACKNOWLEDGING** our commitment to the objectives of the Convention on Biological Diversity (CBD) on the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of arising out of the access to and the utilization of genetic resources;

**RECALLING** the ASEAN Statement on CITES on the Occasion of the 13<sup>th</sup> Meeting of the Conference of the Parties to CITES in October 2004 and the adoption of the ASEAN Regional Action Plan on CITES Trade in Wild Fauna and Flora (2011 – 2015), where ASEAN recognized the need to promote its objectives for CITES implementation through collaborative initiatives;

**FURTHER RECALLING** the ASEAN Statement on Launching of the ASEAN Wildlife Law Enforcement Network (ASEAN-WEN) at the Special Meeting of the ASEAN Ministers Responsible for the Implementation of CITES in December 2005;

**RECOGNIZING** the unprecedented success of ASEAN Member States in combatting the illegal trade in CITES wildlife and wildlife products through support of the ASEAN WEN as well as stronger coordination and linkages between national and regional agencies, such as CITES Management Authorities, customs, police, and other relevant law enforcement agencies, resulting in an exponential increase in arrests, seizures, and prosecutions of cases of illicit wildlife trafficking and illegal trade of wildlife and wildlife products;

**APPRECIATING** the enormous value accrued from ASEAN-WEN workshops and training sessions on wildlife trade regulation, species identification, detection

and investigation, protected areas enforcement, and wildlife forensics at both regional and national levels, and public awareness campaigns and activities aimed not only for the public at ports of entry and key border checkpoints, but also for members of the judiciary and prosecutors;

**RECOGNISING** the progress the EAS participating countries have achieved in combating illicit wildlife trafficking in East Asia, including the achievement of the “Operation Cobra” organized by China, US, ASEAN-WEN, SA-WEN, UNODC and other countries and organizations;

**RECALLING** our commitments made in the ASEAN Declaration on Environmental Sustainability at the 13<sup>th</sup> ASEAN Summit in November 2007 which identified the need to strengthen efforts to implement the ASEAN Regional Action Plan on Trade in Wild Fauna and Flora, through mechanisms such as the ASEAN Wildlife Enforcement Network;

**ACKNOWLEDGING** the commitments to further strengthen ASEAN regional cooperation on biodiversity, as embodied in the ASEAN Socio-Cultural Community Blueprint of the Cha-am Hua Hin Declaration on the Roadmap for the ASEAN Community (2009-2015);

**RECALLING** the ASEAN Ministers on Agriculture and Forestry Statement on “ASEAN and International Year of Forests 2011” in October 2011 recognizing the achievements and continuing efforts in addressing threats and challenges faced by the forestry sector in the region, such as through enhancing efforts in addressing international trade of endangered species and wildlife enforcement;

**REFERENCING** the Joint Statement of the ASEAN Environment Ministers for the 11<sup>th</sup> Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD) in promoting the aim to ensure conservation and sustainable management of ASEAN biodiversity towards enhancing social, economic, and environmental well-being;

**NOTING** the September 2012 Resolution of the 33rd General Assembly of the ASEAN Inter-Parliamentary Assembly (AIPA) on Strengthening Law Enforcement and Regional Cooperation to Combat Wildlife Crime, and the 2012 Joint Statement of the APEC Meeting of Ministers Responsible for the Environment;

**FURTHER NOTING** the 2013 APEC Economic Leaders' Declaration delivered in Bali, Indonesia on wildlife trafficking that recognizes the serious negative economic implications of environmental crime and acknowledges the important role that Wildlife Enforcement Networks play in effectively addressing this issue;

**FURTHER NOTING** the role of the ASEAN Centre for Biodiversity in its function as an effective regional centre of excellence in promoting biodiversity conservation and management, and regional initiatives such as the Heart of Borneo, Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, ASEAN Heritage Parks, and Greater Mekong Sub-Region in protecting and enhancing conservation of the region's biodiversity;

**FURTHER NOTING** progress being made to include environmental crime, which includes wildlife trafficking and wildlife-related crimes, as an additional priority under the ASEAN Plan of Action on Transnational Crime;

**ACKNOWLEDGING** the commitments of individual EAS countries to CITES and the CBD, and other relevant multi-lateral biodiversity-related environmental agreements;

**FURTHER ACKNOWLEDGING** the progress made against wildlife trafficking in the region through the financial and technical support and assistance from the international community in helping countries in EAS Countries to build resources, expertise and capacity to address the illegal exploitation and trade in wild fauna and flora;

**DO HEREBY AGREE TO:**

1. **REAFFIRM** our conservation actions and commitments that have already been made with respect to CITES and CBD and to other relevant multi-lateral biodiversity-related environmental agreements;
2. **SUPPORT** the ASEAN Regional Action Plan in CITES Trade in Wild Fauna and Flora which aims at effective regional cooperation on improved implementation of CITES, including law enforcement collaboration through ASEAN-WEN;



3. **URGE** all Parties to fully implement their obligations under CITES and also to urge ASEAN Member States to implement the ASEAN Regional Actions Plan in CITES Trade in Wild Fauna and Flora;
4. **PROMOTE** action to further strengthen regional and international cooperation between source, transit and destination countries, including through additional support to wildlife law-enforcement networks;
5. **INSTITUTIONALIZE** the role of the ASEAN Secretariat as the coordinating and implementing body under which the ASEAN-WEN operates;
6. **SUPPORT** the financial sustainability and the strengthening of the ASEAN-WEN and its full integration within the ASEAN Secretariat in facilitating the concerted and coordinated joint actions and enforcement efforts, and increased cooperation between ASEAN Member States, to address the illegal exploitation and trade in CITES wild flora and fauna within the ASEAN region;
7. **WELCOME** the establishment of a budget line item under the ASEAN Secretariat to support ASEAN-WEN and associated collaborative funding activities to enable it to receive contributions from interested parties, to include direct budget support from ASEAN Member States and international and regional institutions and partners;
8. **REQUEST** the ASEAN Ministers' Meeting on Transnational Crime (AMMTC) to consider recognizing environmental crime as a serious transnational crime and include it as an area of cooperation in the ASEAN Plan of Action to Combat Transnational Crime;
9. **FURTHER SPUR AND REINFORCE** ASEAN's commitment to operationalize and ensure the sustainability of ASEAN-WEN, and expand and nurture ASEAN Member States' cooperation and coordination in promoting regional wildlife law enforcement efforts;
10. **URGE** relevant ASEAN sectoral bodies to carry out steps to ensure effective networking and cooperation that strengthen efforts against illicit

trafficking and illegal trade of wildlife and wildlife products at the national level and in collaboration with other related regional bodies and initiatives;

11. **ENCOURAGE** ASEAN Dialogue Partners, development partners, and relevant regional and international organisations to help develop a supportive environment that optimizes cooperation on crime prevention and criminal justice response to combat illicit trafficking and illegal trade of wildlife and wildlife products as well as implementation of CITES and biodiversity-related environment agreements such as through capacity building, information sharing and technical assistance;
12. **IDENTIFY** priority areas of engagement for collaboration with Dialogue Partners and development partners, such as capacity building, information sharing, technology transfer, technical assistance, and direct support for law enforcement operations;
13. **PROMOTE** regular dialogue among relevant ASEAN ministerial bodies to accelerate concerted efforts against CITES wildlife trafficking and related crimes and to realize the effective communication and development of ASEAN-WEN where appropriate;
14. **SUPPORT** ASEAN integration through the harmonization of environmental crime laws to combat transnational crime; including through the implementation of relevant international agreements to which ASEAN members are parties, such as the UN Convention Against Transnational Organized Crime and the UN Convention Against Corruption;
15. **ENCOURAGE** harmonization of legal and administrative regulations to support the exchange of evidence and criminal prosecution of wildlife crime;
16. **ENHANCE** capacity building among EAS participating countries in the area of combating illicit trafficking and illegal trade of wildlife and wildlife products;
17. **URGE** donors and partners to continue to support capacity building through regional, sub-regional and national workshops, trainings and meetings, and to support our efforts in combating illegal wildlife trade;

- 18.**ENCOURGE** national-level wildlife crime task forces, consistent with national circumstances;
- 19.**ENCOURAGE effective** public relations and educational campaigns to raise awareness of the important environmental heritage of ASEAN's indigenous flora and fauna and the threat posed by illicit trafficking and illegal trade in wildlife and wildlife products;
- 20.**DEVELOP** measures to build upon public awareness and education initiatives to reduce the demand for and supply of illegal wildlife and wildlife products;
- 21.**ENHANCE** international cooperation by strengthening linkages between regional Wildlife Enforcement Networks (WENs), and supporting the development of other WENs around the world.

Adopted in **Nay Pyi Taw, Myanmar on the thirteenth Day of November in the Year Two Thousand and Fourteen.**

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# **Thirteenth United Nations Congress on Crime Prevention and Criminal Justice**



Doha, 12-19 April 2015

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## **Items 3, 4, 5 and 6 of the provisional agenda\***

**Successes and challenges in implementing comprehensive crime prevention and criminal justice policies and strategies to promote the rule of law at the national and international levels, and to support sustainable development**

**International cooperation, including at the regional level, to combat transnational organized crime**

**Comprehensive and balanced approaches to prevent and adequately respond to new and emerging forms of transnational crime**

**National approaches to public participation in strengthening crime prevention and criminal justice**

**Draft Doha Declaration on integrating crime prevention and criminal justice into the wider United Nations agenda to address social and economic challenges and to promote the rule of law at the national and international levels, and public participation**

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\* A/CONF.222/1.



*We, Heads of State and Government, Ministers and Representatives of Member States,*

*Having assembled* at the Thirteenth United Nations Congress on Crime Prevention and Criminal Justice in Doha, from 12 to 19 April 2015, to reaffirm our shared commitment to uphold the rule of law and to prevent and counter crime in all its forms and manifestations, at the domestic and international levels, to ensure that our criminal justice systems are effective, fair, humane and accountable, to provide access to justice for all, to build effective, accountable, impartial and inclusive institutions at all levels, and to uphold the principle of human dignity and the universal observance and respect of all human rights and fundamental freedoms,

*To that end, declare the following:*

1. We acknowledge the 60-year legacy and continuing significant role of the United Nations congresses on crime prevention and criminal justice as one of the largest and most diverse international forums for the exchange of views and experiences in research, law and policy and programme development between States, intergovernmental organizations and individual experts representing various professions and disciplines in order to identify emerging trends and issues in the field of crime prevention and criminal justice. We recognize the unique and important contributions of the congresses to law and policy development, as well as to the identification of emerging trends and issues in crime prevention and criminal justice.

2. We reaffirm the cross-cutting nature of crime prevention and criminal justice issues and the consequent need to integrate those issues into the wider agenda of the United Nations in order to enhance system-wide coordination. We look forward to the future contributions of the Commission on Crime Prevention and Criminal Justice with regard to designing and implementing national and international crime prevention and criminal justice policies and programmes, taking into account and building upon the recommendations of the congresses.

3. We recognize the importance of effective, fair, humane and accountable crime prevention and criminal justice systems and the institutions comprising them as a central component of the rule of law. We commit ourselves to holistic and comprehensive approaches to countering crime, violence, corruption and terrorism in all their forms and manifestations, and to ensuring that those responses are implemented in a coordinated and coherent way, along with broader programmes or measures for social and economic development, poverty eradication, respect for cultural diversity, social peace and social inclusion.

4. We acknowledge that sustainable development and the rule of law are strongly interrelated and mutually reinforcing. We therefore welcome the inclusive and transparent intergovernmental process for the post-2015 development agenda, which is aimed at developing global sustainable development goals to be agreed by the General Assembly, and acknowledge the proposals of the Open Working Group of the General Assembly on Sustainable Development Goals as the main basis for integrating sustainable development goals into the post-2015 development agenda, while recognizing that other inputs will also be considered. In this context, we reiterate the importance of promoting peaceful, corruption-free and inclusive societies for sustainable development, with a focus on a people-centred approach

that provides access to justice for all and builds effective, accountable and inclusive institutions at all levels.

5. We reaffirm our commitment and strong political will in support of effective, fair, humane and accountable criminal justice systems and the institutions comprising them, and encourage the effective participation and inclusion of all sectors of society, thus creating the conditions needed to advance the wider United Nations agenda, while respecting fully the principles of sovereignty and territorial integrity of States and recognizing the responsibility of Member States to uphold human dignity, all human rights and fundamental freedoms for all, in particular for those affected by crime and those who may be in contact with the criminal justice system, including vulnerable members of society, regardless of their status, who may be subject to multiple and aggravated forms of discrimination, and to prevent and counter crime motivated by intolerance or discrimination of any kind. To that end, we endeavour:

(a) To adopt comprehensive and inclusive national crime prevention and criminal justice policies and programmes that fully take into account evidence and other relevant factors, including the root causes of crime, as well as the conditions conducive to its occurrence, and, in accordance with our obligations under international law and taking into consideration relevant United Nations standards and norms in crime prevention and criminal justice, to ensure appropriate training of officials entrusted with upholding the rule of law and the protection of human rights and fundamental freedoms;

(b) To ensure the right of everyone to a fair trial without undue delay by a competent, independent and impartial tribunal established by law, to equal access to justice with due process safeguards and, if needed, to access to an attorney and to an interpreter, and to ensure relevant rights under the Vienna Convention on Consular Relations;<sup>1</sup> to exercise due diligence to prevent and counter acts of violence; and to take effective legislative, administrative and judicial measures to prevent, prosecute and punish all forms of torture and other cruel, inhuman or degrading treatment or punishment and eliminate impunity;

(c) To review and reform legal aid policies for expansion of access to effective legal aid in criminal proceedings for those without sufficient means or when the interests of justice so require, including, when necessary, through the development of national plans in this field, and to build capacities to provide and ensure access to effective legal aid in all matters and in all its forms, taking into account the United Nations Principles and Guidelines on Access to Legal Aid in Criminal Justice Systems;<sup>2</sup>

(d) To make every effort to prevent and counter corruption, and to implement measures aimed at enhancing transparency in public administration and promoting the integrity and accountability of our criminal justice systems, in accordance with the United Nations Convention against Corruption;<sup>3</sup>

(e) To integrate child- and youth-related issues into our criminal justice reform efforts, recognizing the importance of protecting children from all forms of

<sup>1</sup> United Nations, *Treaty Series*, vol. 596, No. 8638.

<sup>2</sup> General Assembly resolution 67/187, annex.

<sup>3</sup> United Nations, *Treaty Series*, vol. 2349, No. 42146.



violence, exploitation and abuse, consistent with the obligations of parties under relevant international instruments, including the Convention on the Rights of the Child<sup>4</sup> and its two Optional Protocols,<sup>5</sup> and taking into consideration the relevant provisions of the United Nations Model Strategies and Practical Measures on the Elimination of Violence against Children in the Field of Crime Prevention and Criminal Justice,<sup>6</sup> as well as to develop and apply comprehensive child-sensitive justice policies focused on the best interests of the child, consistent with the principle that the deprivation of liberty of children should be used only as a measure of last resort and for the shortest appropriate period of time, so as to protect children who are in contact with the criminal justice system, as well as children who are in any other situation requiring legal proceedings, particularly in relation to their treatment and social reintegration. We look forward to the results of the global study on children deprived of their liberty in this regard;

(f) To mainstream a gender perspective into our criminal justice systems by developing and implementing national strategies and plans to promote the full protection of women and girls from all acts of violence, including gender-related killing of women and girls, in accordance with the obligations of parties under the Convention on the Elimination of all Forms of Discrimination against Women<sup>7</sup> and its Optional Protocol,<sup>8</sup> and taking into account the updated Model Strategies and Practical Measures on the Elimination of Violence against Women in the Field of Crime Prevention and Criminal Justice<sup>9</sup> and General Assembly resolutions on the gender-related killing of women and girls;

(g) To promote gender-specific measures as an integral part of our policies on crime prevention, criminal justice and the treatment of offenders, including the rehabilitation and reintegration of women offenders into society, taking into consideration the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders;<sup>10</sup>

(h) To develop and implement appropriate and effective national strategies and plans for the advancement of women in criminal justice systems and institutions at the leadership, managerial and other levels;

(i) To enhance equality for all persons before the law, including gender equality, for individuals belonging to minority groups and for indigenous people, through, inter alia, a comprehensive approach with other sectors of government, relevant members of civil society and the media, and the promotion of the recruitment by criminal justice institutions of individuals belonging to these groups;

(j) To implement and enhance policies for prison inmates that focus on education, work, medical care, rehabilitation, social reintegration and the prevention of recidivism, and to consider the development and strengthening of policies to support the families of inmates, as well as to promote and encourage the use of

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<sup>4</sup> Ibid., vol. 1577, No. 27531.

<sup>5</sup> Ibid., vols. 2171 and 2173, No. 27531.

<sup>6</sup> General Assembly resolution 69/194, annex.

<sup>7</sup> United Nations, *Treaty Series*, vol. 1249, No. 20378.

<sup>8</sup> Ibid., vol. 2131, No. 20378.

<sup>9</sup> General Assembly resolution 65/228, annex.

<sup>10</sup> General Assembly resolution 65/229, annex.

alternatives to imprisonment, where appropriate, and to review or reform our restorative justice and other processes in support of successful reintegration;

(k) To intensify our efforts to address the challenge of prison overcrowding through appropriate criminal justice reforms, which should include, where appropriate, a review of penal policies and practical measures to reduce pretrial detention, to enhance the use of non-custodial sanctions and to improve access to legal aid to the extent possible;

(l) To adopt effective measures for the recognition, protection and provision of support for and assistance to victims and witnesses in the framework of criminal justice responses to all crimes, including corruption and terrorism, in accordance with relevant international instruments and taking into consideration the United Nations standards and norms in crime prevention and criminal justice;

(m) To implement a victim-oriented approach to prevent and counter all forms of trafficking in persons for the purpose of exploitation, including the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs, where appropriate, in accordance with the relevant provisions of the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime,<sup>11</sup> and taking into account the United Nations Global Plan of Action to Combat Trafficking in Persons,<sup>12</sup> and to work, as necessary, with regional, international and civil society organizations to overcome the obstacles that may impede the delivery of social and legal assistance to victims of trafficking;

(n) To implement effective measures to protect the human rights of smuggled migrants, particularly women and children, and unaccompanied migrant children, in accordance with the obligations of parties under the United Nations Convention against Transnational Organized Crime<sup>13</sup> and its Protocol against the Smuggling of Migrants by Land, Sea and Air,<sup>14</sup> which include the obligation that migrants shall not become liable to criminal prosecution under the Protocol only for the fact of having been the object of smuggling, and other relevant international instruments, and to make every possible effort to prevent the further loss of lives and bring the perpetrators to justice;

(o) To implement effective measures to eliminate violence against all migrants, migrant workers and their families, and to take all necessary legal and administrative steps to prevent and counter crimes involving violence against those groups;

(p) To conduct further research and gather data on crime victimization motivated by discrimination of any kind and to exchange experiences in and information on effective laws and policies that can prevent such crimes, bring perpetrators to justice and provide support to victims;

<sup>11</sup> United Nations, *Treaty Series*, vol. 2237, No. 39574.

<sup>12</sup> General Assembly resolution 64/293.

<sup>13</sup> United Nations, *Treaty Series*, vol. 2225, No. 39574.

<sup>14</sup> *Ibid.*, vol. 2241, No. 39574.

(q) To consider providing specialized training to criminal justice professionals to enhance capacities for recognizing, understanding, suppressing and investigating hate crimes motivated by discrimination of any kind, to help engage effectively with victim communities and to build public confidence and cooperation with criminal justice agencies;

(r) To intensify our national and international efforts to eliminate all forms of discrimination, including racism, religious intolerance, xenophobia and gender-related discrimination by, inter alia, raising awareness, developing educational materials and programmes, and considering, where appropriate, drafting and enforcing legislation against discrimination;

(s) To prevent and counter, through appropriate domestic procedures for the timely identification and processing of cases, acts of violence falling within our jurisdiction against journalists and media professionals, whose professional duties often put them at specific risk of intimidation, harassment and violence, in particular from organized criminal groups and terrorists, and in conflict and post-conflict situations, and to ensure accountability through the conduct of impartial, speedy and effective investigations, in accordance with national legislation and applicable international law;

(t) To strengthen the development and use of tools and methods aimed at increasing the availability and quality of statistical information and analytical studies on crime and criminal justice at the international level, in order to better measure and evaluate the impact of responses to crime and to enhance the effectiveness of crime prevention and criminal justice programmes at the national, regional and international levels.

6. We welcome the work of the open-ended intergovernmental expert group on the Standard Minimum Rules for the Treatment of Prisoners and take note of the draft updated Standard Minimum Rules for the Treatment of Prisoners, as finalized by the expert group at its meeting held in Cape Town, South Africa, from 2 to 5 March 2015, and look forward to the consideration of this revised draft, and action thereon, by the Commission on Crime Prevention and Criminal Justice.

7. We emphasize that education for all children and youth, including the eradication of illiteracy, is fundamental to the prevention of crime and corruption and to the promotion of a culture of lawfulness that supports the rule of law and human rights while respecting cultural identities. In this regard, we also stress the fundamental role of youth participation in crime prevention efforts. Therefore, we will endeavour:

(a) To create a safe, positive and secure learning environment in schools, supported by the community, including by protecting children from all forms of violence, harassment, bullying, sexual abuse and drug abuse, in accordance with domestic laws;

(b) To integrate crime prevention, criminal justice and other rule-of-law aspects into our domestic educational systems;

(c) To integrate crime prevention and criminal justice strategies into all relevant social and economic policies and programmes, in particular those affecting youth, with a special emphasis on programmes focused on increasing educational and employment opportunities for youth and young adults;



(d) To provide access to education for all, including technical and professional skills, as well as to promote lifelong learning skills for all.

8. We endeavour to strengthen international cooperation as a cornerstone of our efforts to enhance crime prevention and ensure that our criminal justice systems are effective, fair, humane and accountable, and ultimately to prevent and counter all crimes. We encourage States parties to implement and make more effective use of the United Nations Convention against Transnational Organized Crime and the Protocols thereto, the United Nations Convention against Corruption, the three international drug control conventions and the international conventions and protocols related to countering terrorism, and urge all Member States that have not yet done so to consider ratifying or acceding to those instruments. We underscore that any measures taken to counter terrorism must comply with all our obligations under international law. We endeavour to enhance further international cooperation to stop the systematic exploitation of large numbers of individuals who are forced and coerced into a life of abuse and degradation. We therefore strive:

(a) To promote and strengthen international and regional cooperation to further develop the capacity of national criminal justice systems, including through efforts to modernize and strengthen national legislation, as appropriate, as well as joint training and upgrading of the skills of our criminal justice officials, in particular to foster the development of strong and effective central authorities for international cooperation in criminal matters, inter alia, in the areas of extradition, mutual legal assistance, transfer of criminal proceedings and transfer of sentenced persons, and to conclude, where appropriate, bilateral and regional cooperation agreements, and to continue the development of specialized networks of law enforcement authorities, central authorities, prosecutors, judges, defence lawyers and legal aid providers to exchange information and share good practices and expertise, including, where appropriate, by promoting a global virtual network to advance, where possible, direct contact among competent authorities to enhance information-sharing and mutual legal assistance, making the best possible use of information and communication platforms;

(b) To continue to support the implementation of capacity-building programmes and training for criminal justice officials aimed at preventing and countering terrorism in all its forms and manifestations, in line with human rights and fundamental freedoms, including with regard to international cooperation in criminal matters, the financing of terrorism, the use of the Internet for terrorist purposes, the destruction of cultural heritage by terrorists and kidnapping for ransom or for the purpose of extortion, and at addressing the conditions conducive to the spread of terrorism, and to cooperate, as well as address, further analyse and identify appropriate areas for joint action, through, inter alia, effective exchange of information and sharing of experiences and best practices, to counter any existing, growing or potential links, in some cases, between transnational organized crime, illicit drug-related activities, money-laundering and the financing of terrorism, in order to enhance criminal justice responses to those crimes;

(c) To adopt effective measures at the national and international levels aimed at preventing terrorist groups from benefiting from ransom payments;

(d) To strengthen cooperation at the international, regional, subregional and bilateral levels, to counter the threat posed by foreign terrorist fighters, including

through enhanced operational and timely information-sharing, logistical support, as appropriate, and capacity-building activities, such as those provided by the United Nations Office on Drugs and Crime, to share and adopt best practices to identify foreign terrorist fighters, to prevent the travel of foreign terrorist fighters from, into or through Member States, to prevent the financing, mobilization, recruitment and organization of foreign terrorist fighters, to counter violent extremism and radicalization to violence, which can be conducive to terrorism, to enhance our efforts to implement deradicalization programmes, and to ensure that any person who participates in the financing, planning, preparation or perpetration of terrorist acts or in the supporting of terrorist acts is brought to justice, in compliance with obligations under international law, as well as applicable domestic law;

(e) To implement effective measures to detect, prevent and counter corruption, as well as the transfer abroad and laundering of assets derived from corruption, and to strengthen international cooperation and assistance to Member States to assist in the identification, freezing or seizure of such assets, as well as in their recovery and return, in accordance with the United Nations Convention against Corruption, in particular its chapter V, and in this regard to continue discussing innovative modalities to improve mutual legal assistance in order to speed up asset recovery proceedings and render them more successful, while also drawing on the experience and knowledge built through the implementation of the Stolen Asset Recovery Initiative of the United Nations Office on Drugs and Crime;

(f) To develop strategies to prevent and combat all illicit financial flows and emphasize the urgent need to adopt more effective measures to fight against economic and financial crimes, including fraud, as well as tax and corporate crimes, especially in their relevant transnational dimensions;

(g) To strengthen or, as appropriate, adopt procedures to more effectively prevent and counter money-laundering and enhance measures for the identification, tracing, freezing, seizure and recovery of the proceeds of crime, including money and other assets that have not been accounted for and that are found in safe havens, for the purpose of their eventual confiscation, including, where appropriate and in accordance with domestic law, non-conviction-based confiscation, and for the transparent disposition of confiscated proceeds;

(h) To develop and implement adequate mechanisms to manage and preserve the value and condition of frozen, seized or confiscated assets that are the proceeds of crime, as well as to strengthen international cooperation in criminal matters and to explore ways of affording one another similar cooperation in civil and administrative proceedings for confiscation purposes;

(i) To take appropriate measures to prevent and counter trafficking in persons and the smuggling of migrants, while protecting the victims and those who have been the object of such crimes, through all necessary legal and administrative steps, in accordance with the respective protocols, as appropriate, and strengthening inter-agency cooperation and coordination at the national level, as well as closer bilateral, regional and multilateral cooperation;

(j) To consider, when investigating and prosecuting offences related to trafficking in persons and the smuggling of migrants, the concurrent undertaking of

financial investigations, with a view to tracing, freezing and confiscating proceeds acquired through those crimes, and the establishment of such crimes as predicate offences for money-laundering, as well as to enhance coordination and information-sharing among relevant agencies;

(k) To develop and adopt, as appropriate, effective measures to prevent and combat the illicit manufacturing of and trafficking in firearms, their parts, components and ammunition, as well as explosives, including through awareness-raising campaigns designed to eliminate the illicit use of firearms and the illicit manufacture of explosives, to encourage States parties to the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime,<sup>15</sup> to strengthen implementation of the Protocol by, inter alia, considering the use of available tools, including marking and record-keeping technologies, to facilitate the tracing of firearms and, where possible, their parts and components and ammunition, in order to enhance criminal investigations of illicit trafficking in firearms, to support the implementation of the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All its Aspects,<sup>16</sup> and to note the contributions of existing instruments on this issue and on related matters at the regional and international levels;

(l) To intensify our efforts to address the world drug problem, based upon the principle of common and shared responsibility and through a comprehensive and balanced approach, including through more effective bilateral, regional and international cooperation among judicial and law enforcement authorities, to counter the involvement of organized criminal groups in illicit drug production and trafficking and related criminal activities, and to take steps to reduce the violence that accompanies drug trafficking;

(m) To continue to explore all options regarding an appropriate and effective mechanism or mechanisms to assist the Conference of the Parties to the United Nations Convention against Transnational Organized Crime in the review of the implementation of the Convention and the Protocols thereto in an effective and efficient manner;

(n) To invite Member States to draw on the United Nations model treaties on international cooperation in criminal matters when considering developing agreements with other States, bearing in mind their value as important tools for the development of international cooperation, and to invite the Commission on Crime Prevention and Criminal Justice to continue its initiative to identify United Nations model treaties that may need to be updated, based on inputs received from Member States.

9. We endeavour to ensure that the benefits of economic, social and technological advancements become a positive force to enhance our efforts in preventing and countering new and emerging forms of crime. We recognize our

<sup>15</sup> Ibid., vol. 2326, No. 39574.

<sup>16</sup> *Report of the United Nations Conference on the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, New York, 9-20 July 2001* (A/CONF.192/15), chap. IV, para. 24.



responsibility to adequately respond to emerging and evolving threats posed by such crimes. Therefore, we strive:

(a) To develop and implement comprehensive crime prevention and criminal justice responses, including strengthening of the capacities of our judiciary and law enforcement institutions, and to adopt, when necessary, legislative and administrative measures to effectively prevent and counter new, emerging and evolving forms of crime at the national, regional and international levels, taking into account the scope of application of the United Nations Convention against Transnational Organized Crime with regard to “serious crimes”, in accordance with national legislation;

(b) To explore specific measures designed to create a secure and resilient cyberenvironment, to prevent and counter criminal activities carried out over the Internet, paying particular attention to identity theft, recruitment for the purpose of trafficking in persons and protecting children from online exploitation and abuse, to strengthen law enforcement cooperation at the national and international levels, including with the aim of identifying and protecting victims by, inter alia, removing child pornography, in particular child sexual abuse imagery, from the Internet, to enhance the security of computer networks and protect the integrity of relevant infrastructure, and to endeavour to provide long-term technical assistance and capacity-building to strengthen the ability of national authorities to deal with cybercrime, including the prevention, detection, investigation and prosecution of such crime in all its forms. In addition, we note the activities of the open-ended intergovernmental expert group to conduct a comprehensive study of the problem of cybercrime and responses to it by Member States, the international community and the private sector, and invite the Commission on Crime Prevention and Criminal Justice to consider recommending that the expert group continue, based on its work, to exchange information on national legislation, best practices, technical assistance and international cooperation, with a view to examining options to strengthen existing responses and to propose new national and international legal or other responses to cybercrime;

(c) To strengthen and implement comprehensive crime prevention and criminal justice responses to illicit trafficking in cultural property, for the purpose of providing the widest possible international cooperation to address such crime, to review and strengthen domestic legislation to counter trafficking in cultural property, where appropriate, in accordance with our commitments under international instruments, including, as appropriate, the Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property<sup>17</sup> of 1970, and taking into consideration the International Guidelines for Crime Prevention and Criminal Justice Responses with Respect to Trafficking in Cultural Property and Other Related Offences,<sup>18</sup> to continue to gather and share information and statistical data on trafficking in cultural property, in particular on trafficking that involves organized criminal groups and terrorist organizations, and to further consider the potential utility of and improvements to the model treaty for the prevention of crimes that infringe on the cultural heritage of

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<sup>17</sup> United Nations, *Treaty Series*, vol. 823, No. 11806.

<sup>18</sup> General Assembly resolution 69/196, annex.

people in the form of movable property,<sup>19</sup> and international standards and norms in this field, in close cooperation with the United Nations Educational, Scientific and Cultural Organization, the International Criminal Police Organization and other competent international organizations, with a view to ensuring coordination of efforts in fulfilment of their respective mandates;

(d) To conduct further research on the links between urban crime and other manifestations of organized crime in some countries and regions, including crimes committed by gangs, as well as to exchange experiences in and information on effective crime prevention and criminal justice programmes and policies among Member States and with relevant international and regional organizations, in order to address through innovative approaches the impact of urban crime and gang-related violence on specific populations and places, fostering social inclusion and employment opportunities and aiming at facilitating social reintegration of adolescents and young adults;

(e) To adopt effective measures to prevent and counter the serious problem of crimes that have an impact on the environment, such as trafficking in wildlife, including flora and fauna as protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora,<sup>20</sup> timber and timber products and hazardous waste, as well as poaching, by strengthening legislation, international cooperation, capacity-building, criminal justice responses and law enforcement efforts aimed at, inter alia, dealing with transnational organized crime, corruption and money-laundering linked to such crimes;

(f) To ensure that our law enforcement and criminal justice institutions have the expertise and technical capacities to adequately address these new and emerging forms of crime, in close cooperation and coordination with one another, and to provide those institutions with the necessary financial and structural support;

(g) To continue the analysis and exchange of information and practices relating to other evolving forms of transnational organized crime with varying impacts at the regional and global levels, with a view to more effectively preventing and countering crime and strengthening the rule of law. These may include, as appropriate, smuggling of petroleum and its derivatives, trafficking in precious metals and stones, illegal mining, counterfeiting in trademark goods, trafficking in human organs, blood and tissue, and piracy and transnational organized crime committed at sea.<sup>21</sup>

10. We support the development and implementation of consultative and participatory processes in crime prevention and criminal justice in order to engage all members of society, including those at risk of crime and victimization, to make our prevention efforts more effective and to galvanize public trust and confidence in criminal justice systems. We recognize our leading role and responsibility at all levels in developing and implementing crime prevention strategies and criminal justice policies at the national and subnational levels. We also recognize that, to

<sup>19</sup> *Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders, Havana, 27 August-7 September 1990: report prepared by the Secretariat* (United Nations publication, Sales No. E.91.IV.2), chap. I, sect. B.1, annex.

<sup>20</sup> United Nations, *Treaty Series*, vol. 993, No. 14537.

<sup>21</sup> As defined by the Commission on Crime Prevention and Criminal Justice in its resolution 22/6.

enhance the effectiveness and fairness of such strategies, we should take measures to ensure the contribution of civil society, the private sector and academia, including the network of institutes of the United Nations crime prevention and criminal justice programme, as well as the media and all other relevant stakeholders, in the development and implementation of crime prevention policies. Therefore, we endeavour:

(a) To plan and implement comprehensive policies and programmes that foster socioeconomic development, with a focus on the prevention of crime, including urban crime, and violence, and to support other Member States in such endeavours, in particular through the exchange of experience and relevant information on policies and programmes that have been successful in reducing crime and violence through social policies;

(b) To develop awareness-raising programmes to convey key values based on the rule of law and supported by educational programmes, to be accompanied by economic and social policies promoting equality, solidarity and justice, and to reach out to young people, drawing on them as agents of positive change;

(c) To promote a culture of lawfulness based on the protection of human rights and the rule of law while respecting cultural identity, with particular emphasis on children and youth, seeking the support of civil society and intensifying our prevention efforts and measures targeting and using the full potential of families, schools, religious and cultural institutions, community organizations and the private sector in order to address the social and economic root causes of crime;

(d) To promote the management and resolution of social conflict through dialogue and mechanisms of community participation, including by raising public awareness, preventing victimization, increasing cooperation between the public, competent authorities and civil society, and promoting restorative justice;

(e) To raise public confidence in criminal justice by preventing corruption and promoting respect for human rights, as well as enhancing professional competence and oversight in all sectors of the criminal justice system, thus ensuring that it is accessible and responsive to the needs and rights of all individuals;

(f) To explore the potential for the use of traditional and new information and communication technologies in the development of policies and programmes to strengthen crime prevention and criminal justice, including for identifying public safety issues, and fostering public participation;

(g) To promote the improvement of e-government systems in the area of crime prevention and criminal justice, with a view to enhancing public participation, and to promote the use of new technologies to facilitate cooperation and partnerships between the police and the communities they serve, as well as to share good practices and exchange information on community policing;

(h) To strengthen public-private partnerships in preventing and countering crime in all its forms and manifestations;

(i) To ensure that the content of the law is accessible to the public, and to promote, as appropriate, the transparency of criminal trials;

(j) To establish or build upon existing practices and measures to encourage the public, especially victims, to report and follow up on incidents of crime and



corruption, and to develop and implement measures for the protection of whistle-blowers and witnesses;

(k) To consider partnering and supporting community initiatives and fostering the active participation of citizens in ensuring access to justice for all, including awareness of their rights, as well as their involvement in the prevention of crime and the treatment of offenders, including by creating opportunities for community service and supporting the social reintegration and rehabilitation of offenders, and in that regard to encourage the sharing of best practices and the exchange of information on relevant social reintegration policies and programmes and on relevant public-private partnerships;

(l) To encourage the active participation of the private sector in crime prevention, as well as in social inclusion programmes and employability schemes for vulnerable members of society, including victims and those released from prison;

(m) To build and maintain capacities for the study of criminology, as well as forensic and correctional sciences, and to draw on contemporary scientific expertise in the design and implementation of relevant policies, programmes and projects.

11. As we continue our efforts to achieve the objectives set forth in this Declaration, to enhance international cooperation, to uphold the rule of law and to ensure that our crime prevention and criminal justice systems are effective, fair, humane and accountable, we reaffirm the importance of adequate, long-term, sustainable and effective technical assistance and capacity-building policies and programmes. We therefore strive:

(a) To continue to provide sufficient, stable and predictable funding in support of the design and implementation of effective programmes to prevent and counter crime in all its forms and manifestations, upon the request of Member States and based on an assessment of their specific needs and priorities, in close collaboration with the United Nations Office on Drugs and Crime;

(b) To invite the United Nations Office on Drugs and Crime, the network of institutes of the United Nations crime prevention and criminal justice programme, and all relevant United Nations entities and international and regional organizations, in fulfilment of their mandates, to continue to coordinate and cooperate with Member States to provide effective responses to the challenges faced at the national, regional and global levels, as well as to strengthen the effectiveness of public participation in crime prevention and criminal justice, including through the preparation of studies and the development and implementation of programmes.

12. We reaffirm that the United Nations Office on Drugs and Crime remains an essential partner for the achievement of our aspirations in the field of crime prevention and criminal justice and for the implementation of the provisions of this Declaration.

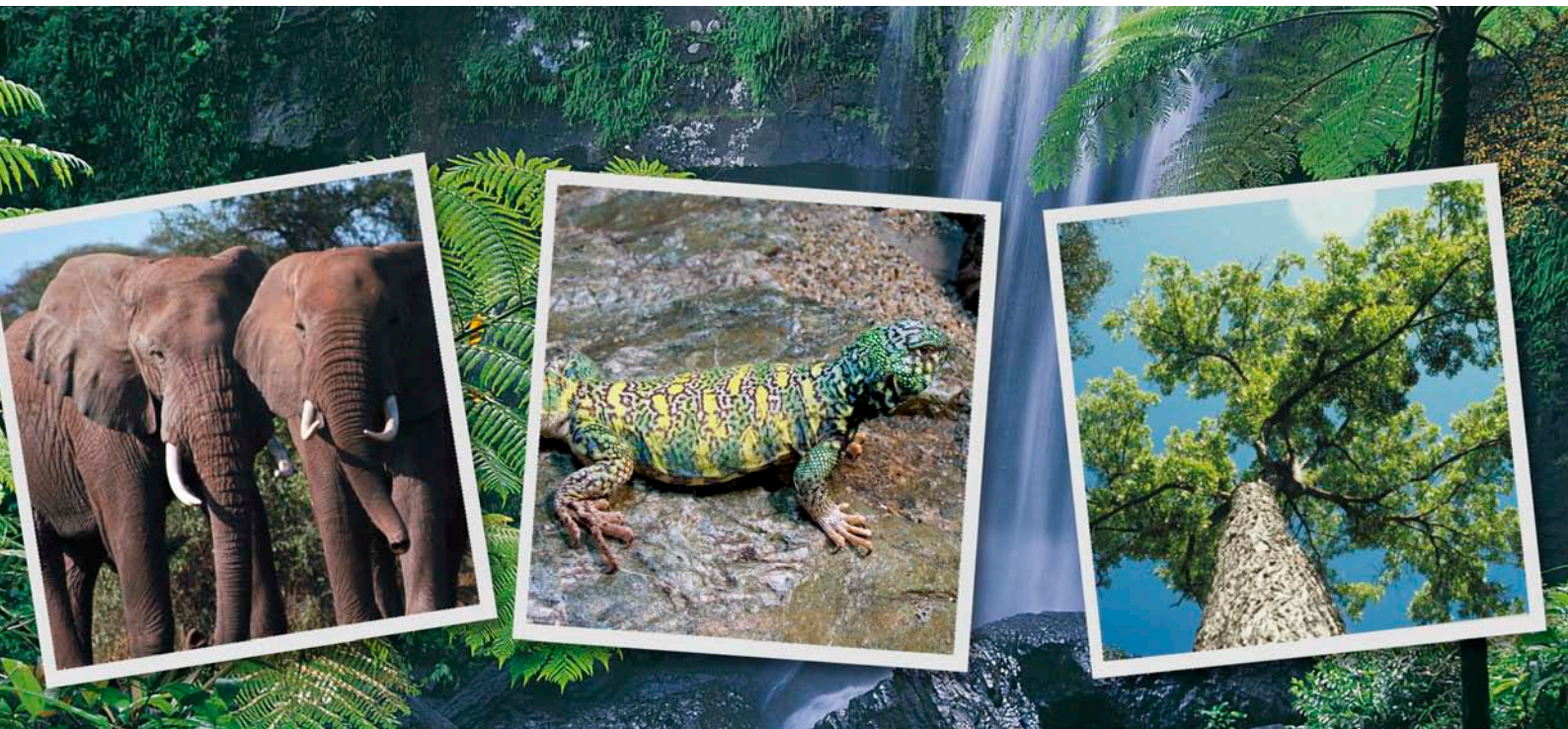
13. We welcome with appreciation the offer of the Government of Japan to act as host to the Fourteenth United Nations Congress on Crime Prevention and Criminal Justice in 2020.

14. We express our profound gratitude to the people and Government of Qatar for their warm and generous hospitality and for the excellent facilities provided for the Thirteenth Congress.



# UNODC

United Nations Office on Drugs and Crime



# Wildlife and Forest Crime Analytic Toolkit

REVISED EDITION



## UNODC

United Nations Office on Drugs and Crime

INTERNATIONAL CONSORTIUM ON COMBATING WILDLIFE CRIME



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UNITED NATIONS OFFICE ON DRUGS AND CRIME  
Vienna

# Wildlife and Forest Crime Analytic Toolkit

REVISED EDITION



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# Abbreviations

ASEAN	Association of Southeast Asian Nations
CEN	Customs Enforcement Network
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
ETIS	Elephant Trade Information System
EU-TWIX	European Union Trade in Wildlife Information Exchange
FAO	Food and Agriculture Organization of the United Nations
FATF	Financial Action Task Force
FIU	Financial Intelligence Unit
FLEG	Forest Law Enforcement and Governance
FLEGT	Forest Law Enforcement, Governance and Trade
ICCWC	International Consortium on Combating Wildlife Crime
ICT	information and communication technology
INTERPOL	International Criminal Police Organization
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
MIKE	Monitoring the Illegal Killing of Elephants
MOU	memorandum of understanding
NGO	non-governmental organization
PEP	politically exposed person
PROFOR	Program on Forests
UNODC	United Nations Office on Drugs and Crime
VPA	Voluntary Partnership Agreement
WCO	World Customs Organization
WWF	World Wildlife Fund

# About the *Toolkit*

The present version of the *Wildlife and Forest Crime Analytic Toolkit* is an initial attempt to provide a comprehensive overview for understanding the main issues related to environmental offences and for analysing preventive and criminal justice responses to wildlife and forest offences in a given country. Efforts have been made to provide a framework through which measures for prevention and response can be analysed and understood as the basis for an effective national response to wildlife and forest offences.

The *Toolkit* is designed mainly to assist government officials in wildlife and forestry administration, Customs and other relevant enforcement agencies. It will help them to conduct a comprehensive analysis of possible means and measures to protect wildlife and forests and monitor their use and thus, to identify technical assistance needs. In this sense, the *Toolkit* may also be used as training material for law enforcers. In addition, other stakeholders at the international and national levels, as well as civil society, may find the *Toolkit* useful regarding their daily responsibilities.

The *Toolkit* can be used effectively to address (a) a wide range of wildlife and forest offences, including illegal logging and illegal trade in timber and a lack of adherence to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and, (b) the usefulness of the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption.

This *Wildlife and Forest Crime Analytic Toolkit* is organized into five parts:

## Part one      Legislation

Part one analyses legislation relevant to wildlife and forest offences and other illegal activities. It includes an overview of international law, CITES implementation and regional initiatives, as well as domestic wildlife and forest offences and associated crimes, such as corruption and money-laundering.

## Part two      Enforcement

Part two analyses law enforcement measures pertaining to wildlife and forest offences. It includes analytic tools related to enforcement agencies, staffing, intelligence, investigations, border control and Customs, international cooperation, technical assistance and aid, witness and victim protection, and the accountability and integrity of law enforcers.

## Part three      Judiciary and prosecution

Part three analyses prosecutorial and judicial capacities to respond to wildlife and forest crime. It includes an analysis of the mandate, structure and processes of prosecution services and judicial organs, sentencing issues, international judicial cooperation and victim compensation.

Part four Drivers and prevention

Part four analyses the factors that drive wildlife and forest offences, and the effectiveness of preventive interventions. This includes the motives of the actors involved, different uses of wildlife and forest products, and natural resource management systems and other preventive mechanisms.

Part five Data and analysis

Part five explores the availability, collection, analysis and examination of data and other information relevant to wildlife and forest crime. It includes an analysis of available crime statistics and other data, mechanisms for information sharing, performance measures and analytic research capacities of a given country.

In its entirety, the *Toolkit* provides an overview of the immense number and great variety of tools available to prevent and combat wildlife and forest offences. Each part of the *Toolkit* provides a practical and detailed guide on the key issues to be examined, with reference to the relevant international conventions, standards and norms, as well as the relevant guidelines and documents. Every effort has been made to make each section comprehensive so as to provide *Toolkit* users with a checklist to analyse thoroughly the root causes of crime, preventive mechanisms and responses of the criminal justice system. However, the *Toolkit* does not replace the need for a tailor-made approach to the assessment of the situation in specific countries, and it does not purport to cover all aspects of each country's legal systems.

The *Toolkit* presented here is the first version of a living document that will be improved and developed in the course of its use, building on feedback received, lessons learned, best practices observed and case studies carried out in the field of wildlife and forest crime prevention and suppression. In this sense, the *Toolkit* should be considered a first working draft that is intended to present a collection of tools and resources from which its users can pick and choose.

To make the practical application of this *Toolkit* most effective, it is recommended that a government-led analysis be carried out with the participation of all the relevant stakeholders, including, *inter alia*, government agencies, civil society and local community groups. The user of the *Toolkit* is invited to choose those tools relevant to an analysis of the area of interest. To enable an effective analysis and a sustainable follow-up, it is recommended that the results of the analysis be put in a report form. Such a report could subsequently be shared with heads of the relevant national agencies and government policymakers who are responsible for instigating changes to existing legislation, agency structures, human and logistical resources, agency and governmental policies, and so forth. It should also prove very useful for organizations (intergovernmental and non-governmental)—such as the International Consortium on Combating Wildlife Crime (ICWC)—which may be in a position to offer support and capacity-building. Such a report may also be of considerable use in liaising with the donor community when designing projects or programmes to instigate change at the national level.

The co-sponsors of this *Toolkit* intend to verify its utility through a series of pilot tests with partner governments, following which the proposed approach may be further refined and information revised. It is intended that the *Toolkit* be a living and evolving document, and its regular updates will be based on practical cases, recent literature and studies, and feedback from users in order to ensure that it continues to reflect the most comprehensive tools and relevant experiences in this field.





# Executive summary

Wildlife and forest offences<sup>1</sup> are a complex phenomenon with many layers and dimensions. Wildlife and forest offences often result from the interplay of a multitude of factors—cultural, economic, social and environmental—and can involve a wide variety of actors. Thus, to achieve an effective response, wildlife and forest offences need to be addressed via a coordinated and multisectoral approach. This complexity makes it challenging for governments and international organizations to identify the strengths and weaknesses of and gaps in existing legislative, administrative, enforcement, judicial and preventive systems.

Additionally, the fundamental difference between wildlife and forest offences and other forms of crimes should be acknowledged. Most property crimes, such as robbery, theft, arson and vandalism, are criminalized because they inflict harm on people or man-made property by creating uncertainty, diminishing confidence, and harming commerce and economic growth. All of these reasons apply for criminalizing the same acts against natural resources. However, there is an additional dimension to the fight against wildlife and forest crime; legislation to protect wildlife and forests also aims to ensure the sustainability of natural resource systems. This sets a different dynamic for wildlife and forest law enforcement, which should lead to the analysis of uses and users of wildlife resources taking into consideration the sustainability and promotion of compliance with good resource management policies.

This *Wildlife and Forest Crime Analytic Toolkit* is intended to serve as an initial entry point for national governments, international actors, practitioners and scholars to better understand the complexity of the issue, and to serve as a framework around which a prevention and response strategy can be developed.

The *Toolkit* provides an inventory of measures that can assist in the analysis of the nature and extent of wildlife and forest offences and in deterring and combating these offences. It is also intended to contribute to an understanding of the various factors that drive wildlife and forest offences to integrate the information and experience gained from such analysis into national, regional and international strategies. The *Toolkit* has been developed based on (a) lessons learned from national and international efforts to curtail illegal trade in wildlife, plants, animal derivatives and plant material, (b) scholarly analyses and the examination of cases, and (c) consultations with key stakeholders and relevant experts.

The causes, components and consequences of wildlife and forest offences vary among countries, regions and societies around the world. There is no “one size fits all” solution to this issue. In formulating effective countermeasures, it is important that local patterns of wildlife and forest offences

<sup>1</sup> For the purposes of the *Wildlife and Forest Crime Analytic Toolkit*, the term “offence” includes all activities that may be subject to criminal or administrative penalties.

and the concerns of local communities be recognized and integrated into policy and legislation. The *Wildlife and Forest Crime Analytic Toolkit* is intended to provide a range of options that, in various combinations, will enable each country to assemble an integrated strategy that will be as effective as possible in meeting the country's own unique needs.

The measures set out in this *Toolkit* have been grouped into five key parts: legislation, enforcement, judiciary and prosecution, drivers and prevention, and data and analysis. The tools are organized thematically to ensure ease of use and to assist users in understanding the key issues confronting the system being analysed. The *Toolkit* in its current form will be pilot-tested in partnership with three selected national governments and will be revised to ensure that it is a practical, applicable tool. Additional material will be added as future needs are identified.

## 1. Background

In this *Toolkit*, “wildlife and forest” refers to all wild fauna and flora, including animals, birds and fish, as well as timber and non-timber forest products. “Wildlife and forest crime” refers to the taking, trading (supplying, selling or trafficking), importing, exporting, processing, possessing, obtaining and consumption of wild fauna and flora, including timber and other forest products, in contravention of national or international law.<sup>2</sup> Wildlife and forest offences considerably accelerate the destruction of forest and wildlife resources and contribute to deforestation, desertification and other forms of environmental degradation. They also have an impact on biodiversity as they reduce or even eliminate species, destroy many unique natural habitats and deprive many countries and their populations of scarce renewable resources.<sup>3</sup>

Wildlife and forest offences threaten the existence of many plant and animal species. The more endangered a species becomes, the greater the commercial value of the remaining specimen—thereby increasing the incentive for further illegal activities. The fact that some trade in wild fauna and flora is regulated while some trade is prohibited provides opportunities for circumventing the relevant laws and regulations through false documents. In particular, staff that have not received adequate training may have difficulties in differentiating species that can be legitimately traded from those that cannot.<sup>4</sup>

The loss of income from the illegal trade in plants, plant material, wildlife and animal derivatives erodes the revenues of governments and undermines their ability to implement development programmes and to strengthen the rule of law. Where they are linked to organized crime, violence, grand corruption or armed conflict, wildlife and forest offences may destabilize governments and threaten regional security.<sup>5</sup>

Despite many suggestions that wildlife and forest offences are one of the most profitable forms of organized crime, only after illegal drugs and trafficking in firearms and ammunitions,<sup>6</sup> it remains difficult, if not impossible, to estimate the true scale of the problem. Wild fauna and flora are very heterogeneous specimens that are sourced, traded and consumed for a great variety of purposes. For example, wildlife and forest products are used for food, fuel, construction, furniture, medicine, as collectable goods and in the manufacture of other goods. Secondary wildlife and forest products are

<sup>2</sup> Cf. John E. Cooper, Margaret E. Cooper and Paul Budgen, “Wildlife crime scene investigation: techniques, tools and technology”, *Endangered Species Research* (2009), p. 1. With further references.

<sup>3</sup> Cf. Jacqueline L. Schneider, “Reducing the illicit trade in endangered wildlife”, *Journal of Contemporary Criminal Justice*, vol. 24, No. 3 (2008), pp. 274-289.

<sup>4</sup> United Nations, Economic and Social Council, “Illicit trafficking in protected species of wild flora and fauna and illicit access to genetic resources”, report of the Secretary-General, 4 March 2003 (E/CN.15/2003/8), para. 26.

<sup>5</sup> Mara E. Zimmermann, “The black market for wildlife”, *Vanderbilt Journal of Transnational Law*, vol. 36, No. 5 (2003), pp. 1657-1661.

<sup>6</sup> See, for example, Mara E. Zimmermann, “The black market for wildlife”, pp. 1657-1659.

not produced to a uniform standard and thus considerable price variation can occur. Moreover, the loss of wild fauna and flora, and the damage wildlife and forest offences cause to the environment, extend well beyond monetary value. This heterogeneity makes valuing the illegal trade in wild fauna and flora very challenging.<sup>7</sup>

For most countries, combating wildlife and forest crime is not currently a priority and often remains overlooked and poorly understood, despite the actual and potential scale and consequences. Wildlife and forestry policies and laws and their enforcement have not, or not always, kept up with the changing levels and patterns of trafficking in wild fauna and flora. Underdeveloped legal frameworks, weak law enforcement and poor prosecutorial and judicial practices, as well as a lack of understanding of the different factors that drive wildlife and forest offences, have resulted in valuable wildlife and plant resources becoming threatened by, *inter alia*, illegal logging, illegal trade in timber products, poaching and trafficking in animal parts, derivatives and plant material. The high demand for timber, wildlife, animal parts and plant material around the world has seen large-scale illegal logging, harvesting and poaching operations. Illegal trade in protected fauna and flora offers opportunities to make significant profits because it supplies goods that are considerably cheaper than legally sourced material. This illegal trade is also an impediment to developing long-term legal industries. The gaps in domestic and international control regimes, difficulties in identifying illegal commodities and secondary products, along with intricate trafficking routes, have resulted in the inability to effectively curtail the trade. One commentator notes:

Wildlife protection legislation remains a low priority in most parts of the world, and non-existent in the rest of it. Enforcement of the few international treaties aimed at preventing trade in this macabre biological bazaar ranges from delinquent to derelict. In fact, Customs officials in many nations are not inspecting for biological contraband or are untrained in detecting it. Similarly, wildlife inspectors and permit authorisation agencies in member nations often lack the training necessary to discharge their responsibilities... The odds of getting caught are extremely low, and the possibility of being convicted is virtually non-existent.<sup>8</sup>

In many countries, the existing systems governing the wildlife and forestry sectors have also enabled corruption to flourish and yielded considerable profits for corrupt wildlife and forestry officials, as well as politicians and businesspeople, in the form of bribes and commissions. This, in turn, has given logging and hunting companies the freedom to engage in illegal practices without fear of prosecution. Wildlife and forest offences also enrich transnational organized criminal groups and other criminal networks that engage in cross-border sourcing and supplying illegal commodities.

Although some producer and consumer country governments, international organizations and non-governmental organizations have launched initiatives aimed at bringing international attention to the problem of wildlife and forest offences, the resulting levels of political commitment and operational capacity to tackle this problem are still not commensurate with the scale of the problem itself. However, in the 2000s, an increasing number of countries (for example, Australia, the Member States of the European Union and the United States of America) introduced legislation to ban the import of illegally harvested timber and wood products. This has also led to bilateral agreements with exporter countries to implement the legislation.

Where wildlife and forest law enforcement measures are implemented or strengthened, the direct impact of these measures on the livelihoods of rural communities is often not a central aspect of

<sup>7</sup> Cf. Steven Broad, Teresa Mulliken and Dilys Roe, "The nature and extent of legal and illegal trade in wildlife", in *The Trade in Wildlife: Regulation for Conservation*, Sara Oldfield, ed. (London: Earthscan, 2003), pp. 3-11; Brendan Moyle, "The black market in China for tiger products" *Global Crime*, vol. 10, Nos. 1 and 2 (March 2009), pp. 124-125; Jacqueline L. Schneider, "Reducing the illicit trade in endangered wildlife", pp. 274-282; Mara E. Zimmermann, "The black market for wildlife" pp. 1657-1669.

<sup>8</sup> Jonathan P. Kazmar, "The international illegal plant and wildlife trade: biological genocide?", *University of California Davis Journal of International Law and Policy* (Winter 2000) pp. 105-109.



consideration. In addition, laws related to wildlife and forests often tend to limit the rights and livelihoods of persons depending on natural resources for their living.<sup>9</sup> By not taking this into consideration and focusing only on law enforcement, communities could be harmed. The links between wildlife and forest offences and issues beyond the wildlife and forestry sectors, such as rural development and public awareness, are often neglected.

Complicating the situation further is the fact that the international community lacks a common understanding and a universally accepted definition of wildlife and forest offences. To date, there is no universal strategy acceptable to all nations to prevent and suppress wildlife and forest offences. Despite a prolific production of bibliographical material, there is not enough available expertise on this phenomenon, and studies based on systematic empirical analysis are still scarce.

## 1.1 International Consortium on Combating Wildlife Crime

In November 2009, various international organizations and agencies with mandates in law enforcement and criminal justice capacity-building—as they relate to wildlife and forest offences—decided to come together to work jointly on the formation of an international consortium. Representatives from the CITES Secretariat, the International Criminal Police Organization (INTERPOL), the United Nations Office on Drugs and Crime (UNODC), the World Bank and the World Customs Organization (WCO) held their first-ever joint meeting in Vienna to design a strategy intended to prevent and combat illegal trade in wild animals and plants. While several of these organizations and agencies had previously worked together on this subject, this was the first occasion that the five entities had collaborated together on this, or any other form of crime prevention. They decided to form ICCWC to jointly move forward in a coordinated manner.

The Consortium was formally launched in November 2010 during the International Tiger Forum, hosted in St. Petersburg, Russian Federation, by Prime Minister Vladimir Putin, when the final signatures were added to a letter of understanding among the five entities.

At its initial meeting, ICCWC requested UNODC to take the lead in developing an analytic *Toolkit* concerning existing wildlife and forest law enforcement systems.

## 2. Purpose, concept and objectives

### 2.1 Purpose

The aim of this *Toolkit* is to provide comprehensive guidance in analysing administrative, preventive and criminal justice responses to wildlife and forest crime and other related offences in a given country. An additional purpose of the *Toolkit* is to identify the different actors in the wildlife and forest offences chain and to provide an understanding of the factors that drive their activities, in order to begin the comprehension of what may be required to prevent an increase in wildlife offences as a global phenomenon. To that end, the *Toolkit* contains a great number of components that are crucial to curtailing wildlife and forest crime both nationally and internationally. The “next great step,” notes INTERPOL:

<sup>9</sup> Marcus Colchester and others, *Justice in the Forest: Rural Livelihoods and Forest Law Enforcement* (Bogor, Indonesia: Center for International Forestry Research, 2006).

must be to bridge the divisions that separate law enforcement agencies from the public, the activists, the academics, and the policy makers. If we, the international community, are committed to the conservation of the world's environment, biodiversity, and natural resources, all five elements must work together in harmony.<sup>10</sup>

The *Wildlife and Forest Crime Analytic Toolkit* facilitates the sharing of knowledge and information among the policymakers, law enforcement agents, judges, prosecutors, researchers, administrators and members of civil society who are working at different levels towards the same objectives.

The *Toolkit* presents a collection of tools and resources from which its users can pick and choose.

## 2.2 Concept

Combating crime, including corruption, in sectors that form the backbone of many countries' economies is crucial for the political, social and economic future of a nation. This is a complex process that requires the commitment of all levels and all sectors of government and civil society. Preventing, deterring and detecting wildlife and forest offences require determination, time and consistency, as well as a comprehensive understanding of the underlying causes and drivers of such criminal behaviour. Building integrity and establishing credibility in sectors that sometimes have a long history of illegal activities is a slow and ongoing process. Success cannot be expected overnight. Change is possible, however, and there are positive examples that can be a reason for optimism.

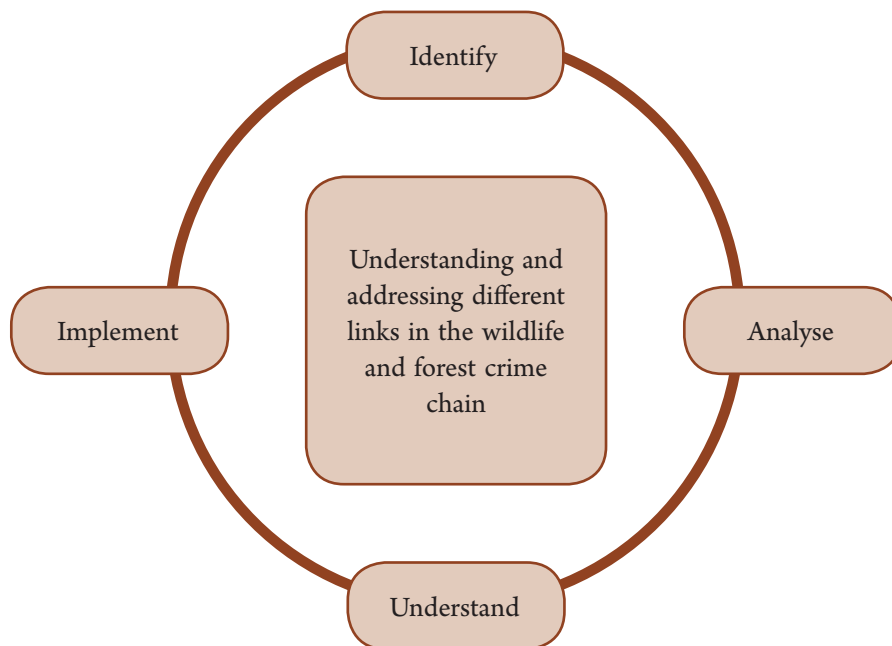
The *Toolkit* has attempted to provide a comprehensive set of assessment guidelines, which—individually and collectively—may assist in curtailing illegal trade in wild fauna and flora.

The concept of this *Toolkit* has four key elements, which assist users in the following ways:

- (1) Identifying current patterns of wildlife and forest offences, including their drivers and actors;
- (2) Analysing the criminal justice response, including the legislative, enforcement, prosecutorial and judicial systems in use;
- (3) Understanding the different links and actors in the wildlife and forest offences chain; and
- (4) Implementing measures to address and prevent wildlife and forest offences from being committed by offering alternative incentives.

<sup>10</sup> INTERPOL, *Environmental Crime Programme: Strategic Plan 2009-2010* (Lyon, France, 2009), p. 6.

Figure 1. Four keys of the *Wildlife and Forest Crime Analytic Toolkit*



Building on other UNODC assessment toolkits, particularly the *Criminal Justice Assessment Toolkit* (an analytic tool with a broader scope),<sup>11</sup> the *Wildlife and Forest Crime Analytic Toolkit* has been developed to serve as a compendium that can be requested by and given to countries as initial assistance in approaching existing wildlife and forest offence issues. While encompassing various international aspects of wildlife and forest offences (and thus not being limited to regional experiences), the *Toolkit* is set up to be adaptable to specific situations in individual States.

## 2.3 Specific objectives

The *Toolkit* is designed to help users to:

- Analyse the capacity of national wildlife and forest law enforcement agencies and of the judiciary in investigating, prosecuting and adjudicating cases of wildlife and forest offences;
- Examine the capacity of national wildlife and forestry management institutes and mechanisms;
- Analyse the procedures, capacity and level of transparency in wildlife and forest law enforcement regarding detection, deterrence, and data collection and analysis;
- Analyse the effectiveness of existing mechanisms and proposals for enhancing the overall capacity of a government—or a group of governments in a region—in countering wildlife and forest offences;
- Identify different actors in the wildlife and forest offence chain, as well as factors that drive wildlife and forest offences;
- Identify any gaps in the existing response to wildlife and forest offences; and

<sup>11</sup> UNODC, *Criminal Justice Assessment Toolkit* (New York, United Nations, 2006).



- Facilitate the formulation and development of measures that adequately respond to the needs and deficiencies identified.

The *Toolkit* is not designed to act as a substitute for expertise, experience or judgement in the assessment of wildlife and forest crime and the response to it. It does not set out or advocate model laws, or templates for administrative and enforcement systems, and does not comment on the quality or effectiveness of existing domestic and international strategies and systems.

Instead, the *Toolkit* can be useful to the expert practitioner as a checklist and effective guide to understanding the main issues in this emerging field. The measures proposed in the *Toolkit* are intended to help to analyse criminal justice systems and other mechanisms to prevent and address wildlife and forest offences. The detailed sets of tools should function to provoke thought about, and to provide insight into, the relevant causes and consequences of wildlife and forest offences.

While the terms of reference for an analytic mission may call for an analysis of specific aspects of the wildlife and forestry system, such as policing or the judiciary, a complete analysis will always include an analysis of the country's legal and administrative framework so that decision-makers may understand the context in which a system exists and operates, as well as the opportunities, challenges and limitations that the current framework may present. Critical in this regard is an adequate understanding of different legal traditions, as well as basic legal concepts and national policy directives. Thus, the *Toolkit* can serve as a basis against which to develop the frame of reference of the initial analysis, and can function as a checklist against which the findings and proposed methodology can be verified.

## 2.4 Audience

The *Wildlife and Forest Crime Analytic Toolkit* is designed to enable government officials in wildlife and forestry administration, Customs and law enforcement agencies, United Nations agencies, as well as civil society, industry and individuals, to (a) conduct a comprehensive analysis of domestic systems, (b) identify areas of technical assistance, (c) assist in the design of interventions that integrate international standards and norms on the prevention, deterrence and detection of wildlife and forest offences, and (d) assist in training on these issues.

The *Toolkit* is sufficiently flexible to facilitate the conduct of analyses both in places where a solid infrastructure for combating wildlife and forest offences exists, and in places with less complex institutions. Specifically, the *Toolkit* will serve the following audiences and target groups:

- Governments, by providing them with a sound understanding of their responses to wildlife and forest offences, and the strengths, weaknesses and needs of these responses;
- International, non-governmental and other civil society organizations, by assisting them in analysing the degree to which the responses provided by countries meet existing international obligations and best practice standards;
- Specialized law enforcement agencies, prosecutorial authorities and members of the judiciary, by assisting them in reviewing their own activities;
- Governmental and international entities, by enabling cross-border law enforcement and judicial cooperation;
- National and international entities and research institutions, by assisting them in developing in-depth and comparable analyses of countries' responses; and

- Donor countries and agencies, by enabling and improving the purposeful funding of activities against wildlife and forest crime.

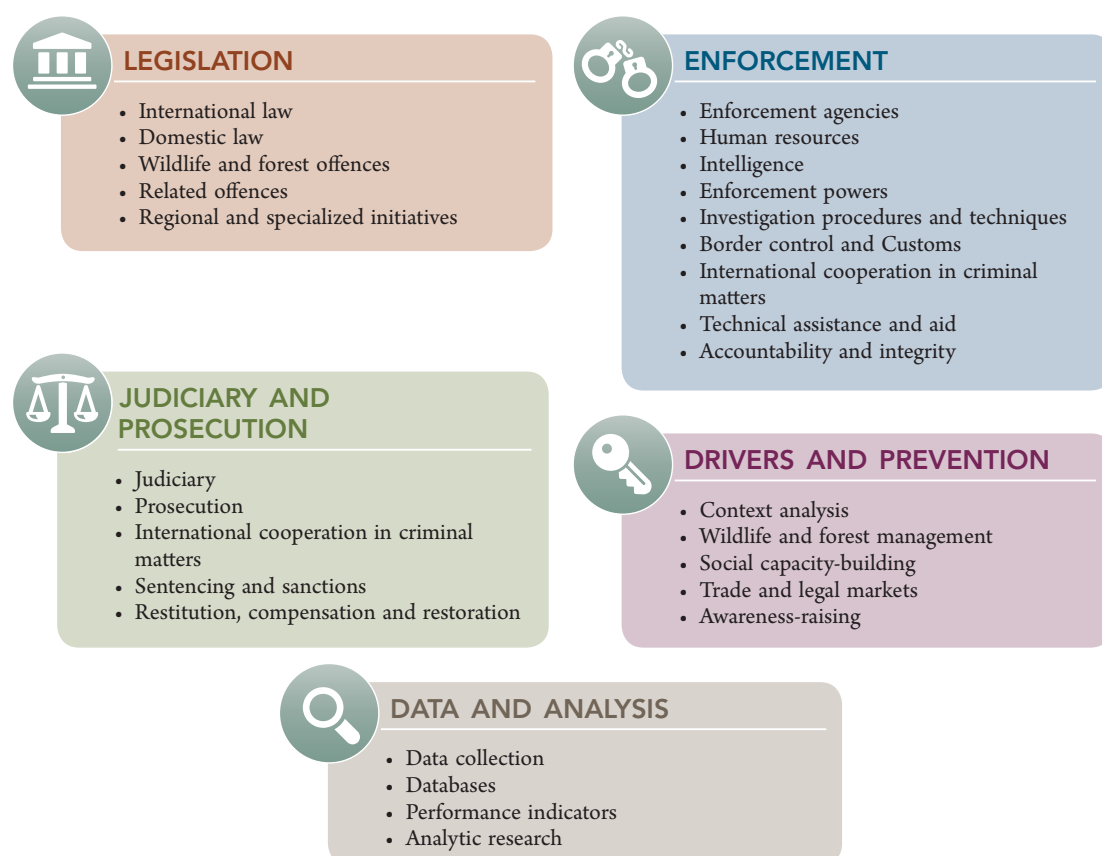
### 3. Structure and contents of the *Toolkit*

The *Wildlife and Forest Crime Analytic Toolkit* is organized into five parts: (a) legislation; (b) enforcement; (c) judiciary and prosecution; (d) drivers and prevention; and (e) data and analysis. Each part represents one of the sectors involved in the preventive and criminal justice response to wildlife and forest offences. The five parts also reflect and bring together a great variety of government agencies, civil society organizations, individuals and other stakeholders.

The criminal justice systems and other relevant mechanisms pertaining to wildlife and forests—even when dysfunctional—are highly interdependent and interactive. Accordingly, the five parts of the *Toolkit* cannot be isolated. Many parts overlap and several tools and elements appear in more than one part. Within each part of this *Toolkit* are analytic tools and checklists designed to enable a comprehensive analysis of that aspect of the wildlife and forestry system. Wherever possible and relevant, tools are cross-referenced to applicable sections in the other parts.

A thorough analysis of any jurisdiction will involve the use of the complete *Toolkit*. However, individual parts and tools are separable to allow smaller, discrete analysis of individual sectors and thus cater to different types of analyses, budgets and time frames. All parts follow the same template and are supplemented by visual aids and icons to facilitate the use of the *Toolkit*. Each part is colour coded.

Figure II. Five parts of the *Wildlife and Forest Crime Analytic Toolkit*



Each part provides a practical and detailed guide to the key issues to be examined, with reference to the relevant international conventions, standards and norms, as well as the relevant literature, documents and guidelines (where applicable). The level of detail in each part is deliberate, allowing users to gain an understanding of the depth and complexity that a thorough analysis of the criminal justice system pertaining to the wildlife and forestry sectors should involve.

In its entirety, the *Toolkit* provides an initial overview of the immense and multifaceted tools available in preventing and combating wildlife and forest offences. In each individual part, the *Toolkit* provides guidance on specific aspects of wildlife and forest offences and respective criminal justice measures.

## 4. Methodology

The development, review and future maintenance of the *Wildlife and Forest Crime Analytic Toolkit* is based on pilot testing of the *Toolkit* with a number of partner governments, as well as ongoing research of the criminal justice systems relevant to combating wildlife and forest offences. Core areas of research include:

- Analysis of mechanisms, dynamics and loopholes in the activities of the various government institutions that are charged with combating wildlife and forest offences;
- Availability and quality of legal frameworks to counter wildlife and forest offences;
- Effectiveness of internal enforcement, national border control standards and cross-border collaboration; and
- Inter-agency cooperation, bottlenecks and gaps hindering effective action, and how to counter them.

The *Toolkit* was prepared using exclusively open source material. It is based on a comprehensive review of existing academic scholarship, the analysis of legislative material, official publications by government sources and international organizations, the close examination of reported case law and consultation with many experts.

The tools set out in this publication are not static. They exist in dynamic environments as the patterns and levels of wildlife and forest offences—and the efforts to combat them—change constantly, often at short, or without any, notice. The *Toolkit* reflects the best available and most comprehensive information at the time of writing, and every effort will be made to update the *Toolkit* in the future and to keep relevant information as current as possible.

The present version of the *Toolkit* was completed in, and the information presented is current as of, November 2012.

## 5. Using the *Toolkit*

Each part of the *Toolkit* has been structured so that it can be consulted independently of the others. Users of this *Toolkit* who have an interest in a particular aspect may refer only to those sections and tools that are of interest to them. Because the five parts do not function in isolation, the tools are cross-referenced to relevant sections in other parts.

A simple set of icons, colour codes and other graphic features are employed to facilitate the use of the *Toolkit*.



I	Legislation
II	Enforcement
III	Judiciary and prosecution
IV	Drivers and prevention
V	Data and analysis

Within each part, individual tools are clustered around key themes. The design, structure and layout of each tool follow a simple pattern that provides background information on the significance and context of each tool. This is followed by an explanation of the tool and its application. Where possible, references have been included that may serve as entry points for further reading and analysis.

Each subsection of this *Toolkit* contains one or more “tools” that summarize the relevant analytic points, usually in the form of a question or questions. The following is an example of a tool:



### Tool I.1 CITES

- Is the country a Party to CITES?
- In which domestic law or laws has CITES been implemented? Is there a single national endangered species statute or similar law, or are there multiple legislative instruments?

The tools are not checklists with questions simply to be ticked. Not every wildlife and forestry system in every country approaches the same issue in the same way. The appreciation of differences is as important as the acknowledgement of similarities when it comes to the development of insight into what works best in particular settings. Not all of the suggested tools are appropriate nor, indeed, desirable in every situation. They are there to prompt systematic enquiry and to guide users through the major areas to be analysed.

The resources included in the *Toolkit* by no means comprise an exhaustive collection of all successful, creative and innovative responses to wildlife and forest offences. The *Toolkit* demonstrates the range of resources available to assist those involved in combating wildlife and forest crime.

It is hoped that the guidance offered and the resources recommended in the *Wildlife and Forest Crime Analytic Toolkit* may inspire and assist policymakers, law enforcers, judges, prosecutors, administrators and members of civil society in playing their role in the global effort to combat illegal trade in wild fauna and flora.



# Part one.

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# Legislation

Wildlife and forest crime and other offences of this nature vary from country to country. Within a country, violations of wildlife and forest laws or regulations can give rise to administrative, civil or criminal liability, with some States relying more on criminal sanctions, while others rely more on civil or administrative sanctions.

Over the last 40 years, there has emerged an extensive body of treaties, agreements, declarations and organizations that seek to protect the environment, natural resources, habitats, and the world's wild fauna and flora. While none of these initiatives is specifically aimed at preventing and suppressing wildlife and forest offences, many international treaties and domestic laws provide frameworks that, directly or indirectly, regulate, control and limit international trade in wild fauna and flora, and criminalize illegal activities in the wildlife and forestry sectors.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is the principal international instrument to control and regulate international trade in protected species and to suppress any illegal dealings in wild fauna and flora. The treaty has quickly widened its membership and to this day, with its 175 Parties, remains the single most important instrument in this field. In addition, the offences and international cooperation frameworks established by the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption enable the criminalization, investigation and prosecution of those aspects of wildlife and forest offences that are linked to organized crime or corruption. Part one, section 1, of this *Toolkit* identifies and explores relevant international legal frameworks.

Great discrepancies exist within and among national wildlife, forestry, criminal and other laws. Many countries do not, or do not yet, comprehensively criminalize the many activities involved in illegal trade in wild fauna and flora. In some jurisdictions, the criminal law does not adequately capture attempts at committing offences or participation in these offences. In addition, it may not contain special provisions for corruption and money-laundering in the wildlife and forestry sectors. Consequently, the reform of legal and regulatory systems becomes a prerequisite for combating wildlife and forest crime. This may include creating clear definitions of illegal activities, including corrupt or improper allocation of concessions, establishing significant deterrent sanctions and specifying relevant control and enforcement powers at every stage in the commodity chain.<sup>12</sup> Part one, sections 2 to 4, of the *Toolkit* identify the spectrum of wildlife and forest offences and related domestic provisions.

In addition to domestic and international frameworks, a number of regional and topic-specific initiatives to curtail wildlife and forest offences have emerged. These are identified and examined in part I, section 5.

## 1. International law

Existing international law, insofar as it relates to illegal activities in the wildlife and forestry sectors, consists largely of agreements designed for environmental protection and the sustainable use of natural resources. Agreements may deal with:

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<sup>12</sup> Cf. Duncan Brack, Kevin Gray and Gavin Hayman, "Controlling the international trade in illegally logged timber and wood products", study prepared for the United Kingdom Department for International Development (London, Royal Institute of International Affairs, 2002), p. 14.



- Species protection, including measures to suppress illegal trade in those species, is important to prevent the extinction of particular animals and plants, and to prevent their unnecessary exploitation. Species protection measures, however, cannot prevent the destruction of natural habitats and entire ecosystems.<sup>13</sup>
- Mechanisms to protect national parks, ecosystems or geographical areas are predominantly concerned with the preservation of a designated area of particular ecological, biological or natural value. These areas may be placed under international protection because of their rare or unique features, or their wild fauna or flora.
- Biodiversity protection involves conservation and habitat protection. Its purpose is to safeguard certain ecosystems or natural areas and all the species therein. The conservation of biodiversity usually involves the protection of designated lands, so-called conservation areas or reserves, from any encroachment. Habitat protection, in contrast, refers to the protection of human land use, including the sustainable development, income-producing opportunities and maintenance of the habitat.<sup>14</sup>

An important feature of all aspects of international environmental law is the emerging concept of sustainable development, which is increasingly recognized in many international treaties and regional agreements. Sustainable development may be defined as “the integration of environmental considerations into the development planning process so that long-term economic development is ensured while the quality of life of present and future generations is preserved and improved.”<sup>15</sup> The concept of sustainable development recognizes the need for environmental protection and for economic development, and seeks to reconcile these often opposing and conflicting objectives; it seeks to strike a balance between conservation and protection needs on the one hand, and economic and developmental demands on the other.<sup>16</sup>

The following sections identify those international treaties that are directly or indirectly connected to wildlife and forest offences and other associated offences. It should be noted, however, that international law remains fragmentary and inconsistent insofar as specific measures to prevent and suppress wildlife and forest offences are concerned. To this day, there is no specific treaty dealing comprehensively with the many aspects and facets of wildlife and forest offences, such as illegal logging, poaching, trafficking in wild fauna and flora, the possession and consumption of illegally traded plant and animal material, and associated offences such as money-laundering. The absence of such a treaty impedes the prosecution of many acts since they may not be considered to be criminal offences.

## 1.1 Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>17</sup>

CITES is the principal international instrument to control and regulate international trade in protected species and to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

In short, the purpose of CITES is to protect species of endangered wild fauna and flora (including products from them) by creating a control system for any trade and transaction in these species.

<sup>13</sup> Ben Boer, Ross Ramsay and Donald Rothwell, *International Environmental Law in the Asia Pacific* (London, Kluwer Law International, 1998), p. 100.

<sup>14</sup> *Ibid.*, p. 101.

<sup>15</sup> Roda Mushkat, “International environmental Law in the Asia-Pacific region: recent developments”, *California Western International Law Journal*, vol. 20 (1989), pp. 21-29. With reference to the World Commission on Environment and Development.

<sup>16</sup> For further information, see part four on drivers and prevention.

<sup>17</sup> United Nations, *Treaty Series*, vol. 993, No. 14537. CITES was opened for signature in Washington, DC, on 3 March 1973 and entered into force on 1 July 1975.

The Convention contains three separate Appendices of species, and sets out the control and reporting mechanisms applicable to them:

- Appendix I includes those species threatened with extinction and in respect of which commercial trade is not appropriate or sustainable. Any trade listed in Appendix I species requires prior permits from both the importing and the exporting country. Certificates are also required for the re-export of species.
- Appendix II includes those species not necessarily in danger of extinction but which may become endangered if trade in them is not strictly regulated, as well as those for which trade must be strictly regulated to permit effective control. An export permit is required for any trade in Appendix II species and must be presented to the importing State's Customs authorities.
- Appendix III includes those species that individual Parties choose to make subject to regulation and which require the cooperation of the other Parties in controlling trade. Trade in Appendix III species requires the Management Authority of the exporting State to issue an export permit, if it is the State that included the species concerned in Appendix III, or a certificate of origin, if it is another country.

CITES is the single most important international instrument dealing with illegal trade in wild fauna and flora because it is the only treaty that requires Parties to penalize some aspects of illegal trade in protected species. It also enables countries to confiscate illegally sourced wild fauna and flora. CITES is, in fact, the only international treaty that sets out specific violations relating to illegal activities in the wildlife and forestry sectors.

Many Parties to CITES have not enacted specific legislation to implement the Convention. Instead, they rely on general wildlife and forest laws, or in some cases they use their Customs or foreign trade legislation to control trade in CITES-listed species. At times, these laws do not fully conform to or comply with CITES requirements, especially in cases where they were enacted long before CITES came into existence.<sup>18</sup> It has been noted that:

If national legislation does not provide for the basic implementation of the [CITES] permit system, it becomes difficult both to prevent criminal groups from engaging in the illegal trade in wildlife species and to punish the perpetrators. The lack of national legislation implementing CITES greatly diminishes the effectiveness of the treaty in specific members and throughout the world.<sup>19</sup>

Thus, CITES can be effective only to the extent that Parties enact (and enforce) specific provisions. This is usually done through an endangered species statute or similarly termed legislation.<sup>20</sup>

CITES is widely implemented, even if not always to its full extent. The treaty has also had some success in preventing the extinction of particularly endangered species, especially where commercial trade has been ended completely. CITES is therefore likely to prove of value in curtailing wildlife and forest offences insofar as the protection of individual endangered species is concerned, but it cannot credibly be extended into an agreement to suppress and control every aspect of illegal trade in wild fauna and flora.<sup>21</sup>

It has also been noted that listing species in one of the CITES Appendices can have a negative side effect in that it “may promote, as opposed to curb, the illegal trade in species by inadvertently

<sup>18</sup> Cyrille de Klemm, “Guidelines for legislation to implement CITES”, IUCN Environmental Policy and Law Paper, No. 26 (Gland, Switzerland, and Cambridge, United Kingdom, International Union for Conservation of Nature, 1993), p. 5.

<sup>19</sup> Mara E. Zimmermann, “The black market for wildlife”, pp. 1657-1665 (emphasis added).

<sup>20</sup> See further section 2.4.

<sup>21</sup> Duncan Brack, Kevin Gray and Gavin Hayman, “Controlling the international trade”, p. 36.

advertising their rarity.”<sup>22</sup> Such criticism highlights the fact that the accession to and implementation of CITES must be accompanied by clear and stringent control mechanisms and enforcement action.



### Tool I.1 CITES

- Is the country a Party to CITES?
- In which domestic law or laws has CITES been implemented? Is there a single national endangered species statute or similar law, or are there multiple legislative instruments?
- Do these laws empower the government to regulate international and domestic trade, possession and transport in animal and plant species?

The domestic implementation of CITES obligations is further analysed in part one, section 2.3, of the *Toolkit*. Section 3.5 examines criminal offences relating to the protection of endangered species.

### CITES reservations

The operation and application of CITES may be limited in relation to specific plants or animals if a State enters a reservation with regard to any species included in the three Appendices or any parts or derivatives specified in relation to a species included in Appendix III (in accordance with article XXIII, paragraph 2, of the Convention). This may be done upon becoming a Party to the Convention or upon amendments to the Appendices with respect to trade in the species or part or derivative concerned. The reservation mechanisms under CITES effectively allow countries to act as non-Parties in relation to specific species (article XV, paragraph 3, and article XVI, paragraph 2).<sup>23</sup>

The reservations allowed under CITES are seen by many as weakening the purposes of the Convention as they open the door for countries to opt out of the protection of some species, thus enabling the commercial exploitation of endangered species.<sup>24</sup> On the other hand, the reservation clauses are an avenue to increase general support for the Convention and encourage membership by countries that may otherwise not accede to CITES. Further, the reservation clauses acknowledge that countries may have legitimate trading interests in some species and seek to protect their economic interests.<sup>25</sup>



### Tool I.2 CITES reservations

- Has the country entered reservations in relation to specific CITES-listed species? What are these species?
- Is there any trade in these species? If so, has this trade been linked to criminal groups?

<sup>22</sup> Erika Alacs and Arthur Georges, “Wildlife across our borders: a review of the illegal trade in Australia”, *Australian Journal of Forensic Sciences*, vol. 40, No. 2 (December 2008), pp. 147-154.

<sup>23</sup> Gwyneth G. Stewart, “Enforcement problems in the endangered species convention: reservations regarding the reservation clauses”, *Cornell International Law Journal*, vol. 14, No. 3 (1981), pp. 429-435.

<sup>24</sup> Patricia W. Birnie and Alan E. Boyle, *International Law and the Environment*, 2nd ed. (New York, Oxford University Press, 2002), pp. 629-630; Ben Boer, Ross Ramsay and Donald Rothwell, *International Environmental Law in the Asia Pacific*, p. 106.

<sup>25</sup> Gwyneth G. Stewart, “Enforcement problems in the endangered species convention”, pp. 429-436.

## 1.2 United Nations Convention against Transnational Organized Crime

Several recent United Nations reports suggest that criminal organizations have diversified into the illegal markets for wild fauna and flora, attracted by high profits and low risks.<sup>26</sup> Serious and organized forms of wildlife and forest offences, such as trafficking in tiger products,<sup>27</sup> ivory, exotic birds, caviar, *inter alia*, may fall within the scope of the United Nations Convention against Transnational Organized Crime.<sup>28</sup> Since its inception, the Convention has become an important and nearly universal tool in preventing and combating organized crime, including illegal trade in wild fauna, flora, and their parts and derivatives.

The Convention against Transnational Organized Crime—also known as the Palermo Convention—is the main instrument in the fight against transnational organized crime. It signifies the recognition by its Member States of the seriousness of the problems posed by organized crime, as well as the need to foster close international cooperation. The Convention encourages Parties to adopt measures against transnational organized crime, including the establishment of domestic criminal offences, as well as frameworks for extradition, mutual legal assistance and law enforcement cooperation. The Convention also seeks to enhance the standardization and coordination of national legislative, administrative and enforcement measures relating to transnational organized crime, and to ensure a more efficient and effective global effort to prevent and suppress it.<sup>29</sup>

The Convention applies to specific sets of offences, specified in the following provisions: participation in an organized criminal group (article 5); money-laundering (article 6); corruption (Article 8); and obstruction of justice (article 23). Additionally, the Convention applies to the offences under the three protocols that supplement the Convention,<sup>30</sup> as well as to all “serious crime” with a transnational organized criminal aspect. Under article 2, paragraph (b), “serious crime” shall mean a conduct, constituting an offence punishable by a maximum deprivation of liberty of at least four years of imprisonment or a more serious penalty.<sup>31</sup> “Seriousness” refers to the penalty foreseen for an offence under domestic law and thus “serious crime” can also capture those wildlife and forest offences that are punishable by an imprisonment of four years or more.

Since both the perpetration and the effects of wildlife and forest offences are often transnational in nature, and given the frequent involvement of organized criminal groups in these undertakings, there is considerable potential for invoking the Convention against Transnational Organized Crime in a legal response to the cross-border aspects of wildlife and forest offences.<sup>32</sup> Indeed, the General Assembly of the United Nations confirmed that the Convention:

constitutes an effective tool and the necessary legal framework for international cooperation in combating such criminal activities as the illegal trafficking of protected species of wild flora and fauna, in furtherance of the principle of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).<sup>33</sup>

<sup>26</sup> United Nations, Economic and Social Council, “Illicit trafficking in protected species”, para. 28.

<sup>27</sup> See further Brendan Moyle, “The black market in China for tiger products”, pp. 124-141.

<sup>28</sup> United Nations, *Treaty Series*, vol. 2225, No. 39574. Adopted on 15 November 2000; entered into force on 29 September 2003.

<sup>29</sup> See further David McClean, *Transnational Organized Crime: A Commentary on the United Nations Convention and its Protocols* (Oxford, Oxford University Press, 2007), pp. 1-31; and Andreas Schloenhardt, *Palermo in the Pacific: Organised Crime Offences in the Asia Pacific Region* (Leiden, Boston, Martinus Nijhoff, 2010), pp. 33-39.

<sup>30</sup> The Convention is supplemented by three protocols: the Protocol to Prevent, Suppress, and Punish Trafficking in Persons, especially Women and Children, the Protocol against the Smuggling of Migrants by Land, Sea and Air, and the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition.

<sup>31</sup> See further Andreas Schloenhardt, *Palermo in the Pacific*, pp. 41-43.

<sup>32</sup> Under the condition that such offences are considered in the legislation of the States Parties to the Convention.

<sup>33</sup> United Nations General Assembly resolution 55/25 of 15 November 2000. See further Mara E. Zimmermann, “The black market for wildlife”, pp. 1657-1685.





### Tool 1.3 United Nations Convention against Transnational Organized Crime

- Is the country a Party to the United Nations Convention against Transnational Organized Crime?
- In which domestic law or laws has the Convention been implemented?

The domestic implementation of Convention provisions is discussed further in part one, section 4.5, below. The Convention against Transnational Organized Crime also offers a particularly effective mechanism for international cooperation in criminal matters by providing a broad and flexible legal basis for cooperation on extradition, mutual legal assistance and international cooperation among States Parties with regard to all forms of serious crime. These tools are further explored in part two, section 5 of the *Toolkit*.

## 1.3 United Nations Convention against Corruption

Insofar as the different forms of wildlife and forest offences are connected with corrupt practices, the United Nations Convention against Corruption<sup>34</sup> can provide an important legal basis for combating them. This Convention, which is the first global legally binding instrument against corruption, builds on the precedent of the Convention against Transnational Organized Crime and incorporates a substantial number of similar provisions. As of May 2011, the United Nations Convention against Corruption had 152 States Parties.

The Convention seeks:

“to promote and strengthen measures to prevent and combat corruption more effectively; to promote, facilitate and support international cooperation and technical assistance in the prevention of and fight against corruption, including in asset recovery; to promote integrity, accountability and proper management of public affairs and public property.”<sup>35</sup>

The Convention sets out a great range of preventive anti-corruption measures, and measures relating to criminalization and law enforcement, international cooperation, asset recovery, technical assistance and information exchange.



### Tool 1.4 United Nations Convention against Corruption

- Is the country a Party to the United Nations Convention against Corruption?
- In which domestic law or laws has the United Nations Convention against Corruption been implemented?

<sup>34</sup> United Nations, *Treaty Series*, vol. 2349, No. 42146. Adopted on 31 October 2003 and entered into force on 14 December 2005.

<sup>35</sup> United Nations Convention against Corruption, chap. I, art. 1.

The domestic implementation of Convention provisions is discussed further in section 4.3 below. The United Nations Convention against Corruption also offers a particularly effective mechanism for international cooperation in criminal matters by providing a broad legal basis for cooperation on extradition, mutual legal assistance and international cooperation among States Parties. These tools are further explored in part two, sections 7 and 8.

The United Nations Convention against Corruption contains a comprehensive set of preventive measures aimed at establishing integrity, transparency and accountability that can help to curb corruption in the agencies involved in the fight against wildlife and forest offences, such as law enforcement agencies, Customs, wildlife and forestry departments, but also prosecutors and the judiciary. These and other measures are discussed in part two, section 9, and part three, sections 1.4 and 2.4.

## 1.4 Other international conventions

In addition to the system created by CITES, the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption, several other treaties set out principles and mechanisms that can be utilized to curtail wildlife and forest offences.

### Convention on Biological Diversity

The Convention on Biological Diversity<sup>36</sup> focuses predominantly on habitat protection by endeavouring to balance the need for economic development with the protection of biodiversity, especially through the nomination of reserves in developing countries. The principal emphasis of the Convention is on the sustainable development and use of natural resources (article 1), including wild fauna and flora, recognizing “the interaction between habitats and human populations.”<sup>37</sup>

In relation to wild fauna and flora, the Convention seeks to protect ecosystems, including forests. To this end, the Convention requires States Parties to, *inter alia*, take steps to limit activities that threaten the extinction of species or the degradation of ecosystems within their territory. Specifically, the Convention calls on States Parties to take active steps in the rehabilitation and restoration of degraded ecosystems, to create and enforce laws and regulations to protect threatened species, to establish special protection areas, and to conduct environmental impact assessments of development projects (articles 8 and 9).<sup>38</sup>

The Convention on Biological Diversity has frequently been criticized for achieving limited practical outcomes.<sup>39</sup> First, the protection mechanisms are secondary to “economic and social development and poverty eradication”, which are recognized as “the first and overriding priorities of developing countries”. The Convention also ensures that States Parties maintain full sovereignty “to exploit their own resources [according to] their own environmental policies” (article 3). Consequently, critics argue that biodiversity protection “will continue to be limited by other developmental priorities within the individual nations.”<sup>40</sup> Second, unlike CITES, the Convention on Biological Diversity does not protect particular species and, unlike the Convention Concerning the Protection of the World Cultural and Natural Heritage, it does not protect particular places or areas. While the Convention on Biological Diversity advocates the protection of natural habitats, it does not contain specific measures to achieve this end.

<sup>36</sup> United Nations, *Treaty Series*, vol. 1760, No. 30619. Adopted on 5 June 1992 and entered into force on 29 December 1993.

<sup>37</sup> Ben Boer, Ross Ramsay and Donald Rothwell, *International Environmental Law in the Asia Pacific*, p. 111.

<sup>38</sup> Cf. Debra J. Callister, “Corrupt and illegal activities in the forest sector: current understandings and implications for the World Bank”, background paper for the 2002 Forest Strategy (Washington, DC, May 1999), p. 26.

<sup>39</sup> Ben Boer, Ross Ramsay and Donald Rothwell, *International Environmental Law in the Asia Pacific*, pp. 111-112.

<sup>40</sup> Raymond Michalowski and Kevin Bitten, “Transnational environmental crime”, in *Handbook of Transnational Crime and Justice*, Philip Reichel, ed. (Thousand Oaks, California, Sage Publications, 2005), pp. 139-155.

One strength of the Convention is considered to be the financial assistance that developing nations can seek for biodiversity conservation programmes. Moreover, some experts have noted that:

In principle, the Convention on Biological Diversity could provide a home for a set of multi-lateral negotiations aimed at creating a specific protocol on illegal logging... However, it is fair to say that most of the forestry industry remains suspicious of the Convention on Biological Diversity, which is generally seen as a tool of environmentalists.<sup>41</sup>



### Tool I.5 Convention on Biological Diversity

- Is the country a Party to the Convention on Biological Diversity?
- Does the country have domestic laws on the sustainable development and use of natural resources that seek to balance environmental protection with economic development?
- How do these laws ensure the enforcement of their provisions? Do they create offences relating to wildlife and forest crime?

## Convention Concerning the Protection of the World Cultural and Natural Heritage

The purpose of the Convention Concerning the Protection of the World Cultural and Natural Heritage,<sup>42</sup> also referred to as the World Heritage Convention, is to protect designated cultural and natural sites from destruction, encroachment and exploitation. The Convention seeks to “establish an effective system of collective protection of the cultural and natural heritage of outstanding universal value, organized on a permanent basis and in accordance with modern scientific methods”.<sup>43</sup> The main concern raised by the Convention is the protection of the world’s natural (and cultural) heritage of “outstanding universal value”.<sup>44</sup> Guidelines issued for the operation of the Convention set out in detail the criteria that need to be met to elevate natural heritage to one of “outstanding universal value”. Parties may identify their national “inventory of property forming part of the cultural and natural heritage” and submit their proposals to the World Heritage Committee.<sup>45</sup> The Committee collects information about legislative and administrative measures relevant to the protection of designated properties situation on the territory of Member States. It also maintains and updates the List of World Heritage in Danger for natural heritage that requires major operations for its conservation (article 11, paragraph 4). Inclusion in this list is limited to properties that face “serious and specific dangers such as the threat of disappearance”.<sup>46</sup>

Unlike CITES, the Convention Concerning the Protection of the World Cultural and Natural Heritage does not protect particular plant or animal species. Importantly, it does not require mandatory steps of protection and conservation. The Convention provides a set of guidelines to encourage Parties to protect their cultural and natural heritage. Article 5 sets out a range of steps that countries

<sup>41</sup> Duncan Brack, Kevin Gray and Gavin Hayman, “Controlling the international trade”, p. 36.

<sup>42</sup> United Nations, *Treaty Series*, vol. 1037, No. 15511. Adopted on 16 November 1972 and entered into force on 17 December 1975.

<sup>43</sup> Convention Concerning the Protection of the World Cultural and Natural Heritage, preamble.

<sup>44</sup> Article 2 of the Convention Concerning the Protection of the World Cultural and Natural Heritage establishes that the term “natural heritage” includes “natural features consisting of physical and biological formations of groups of such formations which are of outstanding universal value from the aesthetic or scientific point of view; geological or physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view science, conservation or natural beauty”.

<sup>45</sup> Convention Concerning the Protection of the World Cultural and Natural Heritage, art. 8 and art. 11, para. 11.

<sup>46</sup> Convention Concerning the Protection of the World Cultural and Natural Heritage, art. 11, para. 4.

may take to achieve the protection, conservation and presentation of the natural and cultural heritage. The Convention also creates the World Heritage Fund,<sup>47</sup> to which Parties contribute voluntarily, and from which they can seek financial and other assistance to protect their cultural and natural heritage.



### Tool 1.6 Convention Concerning the Protection of the World Cultural and Natural Heritage

- Is the country a Party to the Convention Concerning the Protection of the World Cultural and Natural Heritage?
- Are any natural sites in the country listed under the Convention as world heritage of “outstanding universal value”?
- Does the country have domestic laws to protect natural heritage sites? Do they contain criminal offences relating to illegal trade in natural heritage?

## 1.5 Bilateral agreements

Many countries or their responsible authorities have made numerous bilateral agreements—such as mutual administrative or judicial assistance agreements and memorandums of understanding (MOUs)—for general enforcement issues, which could also apply to combating transnational wildlife and forest offences. At the same time, some countries have entered into specific bilateral agreements to curtail illegal trade in wildlife and forest products. Such agreements may be set up between individual producer and consumer countries that agree to take action to prevent and suppress the illegal trade in wild fauna or flora that affects them. The possibility of having such voluntary agreements has also been endorsed by the Ministerial Declaration made at the Forest Law Enforcement and Governance East Asia Ministerial Conference, held in Bali, Indonesia, in 2001.<sup>48</sup>

The first of this kind of bilateral agreements was an MOU between Indonesia and the United Kingdom of Great Britain and Northern Ireland in 2002, which commits the two countries to work together to reduce, and eventually eliminate, illegal logging and international trade in illegally logged timber and wood products. Indonesia has since entered into similar agreements with China, Japan, Norway and the Republic of Korea.<sup>49</sup>

In July 2010, the European parliament approved the European Union Timber Regulation (formerly the Due Diligence Regulation). This regulation not only requires timber traders to exercise “due diligence” when selling timber on the European Union market but also prohibits the sale of illegally harvested timber in the European Union. It is expected that the regulation will become applicable in all European Union Member States in early 2013.

Timber from Forest Law Enforcement, Government and Trade (FLEGT) partner countries will be considered to have met the requirements of the European Union Timber Regulation if the FLEGT Voluntary Partnership Agreements (VPAs) with these countries establish control and licensing procedures that ensure that only timber products derived from legally harvested timber are sold on the European Union market.

<sup>47</sup> Convention Concerning the Protection of the World Cultural and Natural Heritage, art. 15.

<sup>48</sup> See part one, section 5.1.

<sup>49</sup> Food and Agriculture Organization of the United Nations and International Tropical Timber Organization, *Best Practices for Improving Law Compliance in the Forestry Sector*, FAO Forestry Paper, No. 145 (Rome, FAO, 2005), p. 69.



A common element to all VPAs is that producing countries put in place credible control systems to verify that timber is produced in accordance with national laws. This implies:

- A commitment to ensure that the applicable forest law is consistent, understandable and enforceable, and promotes sustainable forest management;
- The development of technical and administrative systems to monitor logging operations and to identify and track timber from the point of harvest and the point of import to the point of export;
- A commitment to improving transparency and accountability in forest governance;
- The building of checks and balances into the tracking and licensing system, including the implementation of an independent monitoring system; and
- The developing procedures to license the export of legally harvested timber.

As of July 2011, the European Union had concluded VPAs with six countries, and it is negotiating agreements with several more. The European Union and China have an MOU to work on FLEGT-related matters in preparation of the entry into force of the European Union Timber Regulation in 2013.<sup>50</sup>

A number of other consumer countries have similar legislation or are in the process of developing legislation against trade in illegally harvested timber. The United States was the first to take such measures by amending the Lacey Act in 2008 to make it illegal to import, trade in or transport illegally harvested wood and wood products. Australia is in the process of developing legislation against trade in illegally harvested timber, while Switzerland is introducing an import declaration. A growing number of countries have developed public procurement policies that aim to avoid using illegally harvested timber in public projects.



### Tool 1.7 Bilateral agreements

- Has the country entered into any bilateral agreements with other countries that, directly or indirectly, relate to wildlife and forest crime or illegal trade in wild fauna and flora?
- Is the country engaged in VPA negotiations, free trade agreements or other bilateral agreements to curtail illegal timber trade?
- What mechanisms does the agreement contain? Does it include criminal offences, measures for Customs and law enforcement cooperation, information exchange and so forth? How is the agreement enforced?

Often such bilateral agreements between individual countries affected by illegal trade are relatively easy to negotiate and are usually supported by the political willingness necessary for them to work.

<sup>50</sup> European Commission, "Forest Law Enforcement, Governance and Trade: Voluntary Partnership Agreements", FLEGT Briefing Notes, No. 6 (2007). Available from [http://ec.europa.eu/development/icenter/repository/B2\\_Flegt\\_Br6\\_2007\\_en.pdf](http://ec.europa.eu/development/icenter/repository/B2_Flegt_Br6_2007_en.pdf); European Forest Institute, FLEGT Team, *Forest Law Enforcement Governance and Trade: The European Union Approach*, Policy Brief, No. 2 (Helsinki: European Forest Institute, 2008). Available from [www.efi.int/files/attachments/publications/efi\\_policy\\_brief\\_2\\_eng\\_net.pdf](http://www.efi.int/files/attachments/publications/efi_policy_brief_2_eng_net.pdf); European Forest Institute, EU FLEGT Facility, *What is a Voluntary Partnership Agreement? The European Union Approach*, EFI Policy Brief, No. 3 (2009). Available from [www.efi.int/files/attachments/publications/efi\\_policy\\_brief\\_3\\_eng\\_net.pdf](http://www.efi.int/files/attachments/publications/efi_policy_brief_3_eng_net.pdf), [www.euflegt.efi.int/portal/home/vpa\\_countries/](http://www.euflegt.efi.int/portal/home/vpa_countries/).

However, it has to be noted that bilateral agreements can be evaded by trans-shipping products through third countries, neighbouring the country of origin or the country of destination.<sup>51</sup>

For example, over the last two decades, the United States and its trading partners have also included in their bilateral free trade agreements the requirement to curtail illegal logging and other illegal trade in wildlife products. Such provisions facilitate legal trade in wildlife and timbers and promote cooperation in the area of environmental protection, but they have also been criticized for creating possible loopholes due to simplified procedures and reduced border control. The bilateral administrative agreements signed between countries have also provided enhanced mutual assistance and information exchange in various areas, including indirectly enforcing legislation related to wildlife and forests.

## 2. Domestic law

The lack of comprehensive international legal norms dealing with wildlife and forest offences means that domestic law is primarily responsible for determining the nature, scope and consequences of wildlife and forest offences. In turn, without comprehensive wildlife and forest laws at the national level, including criminal offences, it is difficult to combat wildlife and forest offences at the international level.<sup>52</sup>

In many countries, the reform of legal and regulatory systems is a prerequisite for addressing wildlife and forest offences. One of the many challenges in developing and enhancing these systems is the fact that wildlife and forest offences relate to a diverse range of government sectors that are governed by a great variety of legislative instruments. The following sections and tools are designed to identify the relevant statutes pertaining to wildlife, forests, species protection and criminal law.

In some countries, laws related to wildlife and forests are poorly developed or suffer from significant gaps. Elsewhere, legal frameworks may be so extensive that government agencies, including law enforcement agencies, do not have the resources to monitor compliance adequately.

In analysing domestic wildlife, forest and criminal laws, including offences, and in developing recommendations for law reform, it is important to avoid unnecessary duplication, complication and bureaucratization: “Simplicity and efficiency of regulations often go hand in hand.”<sup>53</sup>

[F]ewer and simpler government rules reduce opportunities for arbitrary interpretation and malfeasance... Laws that are too complex and difficult to understand require complicated and expensive procedures and abrupt reorientation of institutional or social behaviour, run the risk of becoming unenforceable, irrelevant, and open opportunities for corruption and other illegal activities.<sup>54</sup>

Furthermore, it is not sufficient to have the correct laws; transparency is also critical. This includes both the broad dissemination of the laws and ensuring that the language they use is understandable to the public.<sup>55</sup>

<sup>51</sup> Duncan Brack, Kevin Gray and Gavin Hayman, “Controlling the international trade”, p. 32.

<sup>52</sup> Mara E. Zimmerman, “The black market for wildlife”, pp. 1657-1675.

<sup>53</sup> Esa Puustjärvi, *Proposal for Typology of Illegal Logging* (Helsinki, Savcor Indufor Oy, 2008), p. 30.

<sup>54</sup> Arnaldo Contreras-Hermosilla, “Law compliance in the forest sector: an overview”, World Bank Institute Working Paper (Washington, DC, World Bank, 2002), pp. 15-16.

<sup>55</sup> World Bank, “Strengthening forest law enforcement and governance: addressing a systematic constraint to sustainable development”, Report No. 36638-GLB (Washington, DC, 2006), p. 6.

The World Bank notes that, although there is “no one size fits all” description of good wildlife and forest laws, lawmakers can design laws in ways that resist illegal activities and corruption by doing the following:<sup>56</sup>

*Avoid legislative overreaching:* Do not write laws that exceed national capacity, that are more elaborate than necessary to achieve the intended policy or that are socially unacceptable.

*Avoid unnecessary requirements for licences or permissions:* These add to the burden on both government and private sector resources and offer opportunities for corruption. Make sure licence and control requirements serve a genuine purpose.

*Promote transparency and accountability:* These serve both to deter bad acts and to make their detection easier. Where the law grants discretion to officials, it should provide standards for exercise of that discretion.

*Enhance the stake of local, non-government interests in forest management:* The law can do this by better recognizing existing rights or by creating new opportunities for local people to benefit from forest management. Without local support, law enforcement in forest areas is difficult.

*Adopt the law through a broadly participatory process:* This promotes a sense of ownership of the law among stakeholders and a resulting respect for it.<sup>57</sup>

*Increase the effectiveness of law enforcement mechanisms in the law:* Set appropriate penalties and have effective enforcement powers and procedures.

Domestic laws, however, do not exist in a vacuum and are generally influenced by government policy. Wildlife and forestry policy development is an essential precursor to developing and maintaining adequate legislation. Wildlife and forestry policy choices are, of course, the prerogative of individual countries and this *Toolkit* is not intended to assess or comment on the wildlife and forestry policies of individual countries. It is pertinent to note that policy choices should be made carefully, in consultation with relevant stakeholders, and should be reflected fully and accurately in legislation. A thorough review of the stakeholders that should be considered is established in part four. A clear wildlife and forestry policy basis facilitates the introduction of procedures and practices to ensure, *inter alia*:

- Coherence and predictability of the legislation;
- Transparency of legal rights and obligations;
- Consistency, fairness and due process in application of legislation; and
- Efficiency of management and ease of implementation.<sup>58</sup>

Donor country governments and international organizations can assist in the process of improving governance by providing financial and technical assistance and, in some cases, by making the disbursement of development assistance conditional on such improvements.<sup>59</sup>

<sup>56</sup> Ibid.

<sup>57</sup> Aspects of forest management and participation are further discussed in part four of the *Toolkit*.

<sup>58</sup> CITES Secretariat, *Model Law on International Trade in Wild Fauna and Flora* (Geneva, n.d.), p. 5.

<sup>59</sup> Duncan Brack, Kevin Gray and Gavin Hayman, “Controlling the international trade”, p. 14.

## 2.1 Wildlife and forest law

In most countries, the ownership of, management of, and offences relating to, the wildlife sector are usually set out in a wildlife and forest statute or similar law. While many aspects of domestic wildlife and forest laws focus predominantly on administrative matters, these frameworks directly and indirectly shape the patterns of criminal activity in the wildlife and forestry sectors. Criminal groups quickly adapt to loopholes in domestic legislation, attempt to circumvent certain rules and processes or identify access points for corruption and coercion. Accordingly, domestic wildlife and forest laws, including ownership and management, should form part of any analysis of the criminal justice response to wildlife and forest offences. A more detailed analysis of these points are included in part four of the *Toolkit*.

For the most part, wildlife law is intended to address issues arising from claims concerning conflicts over wild animals living on or transiting through public habitats, or private lands or waterways. Historically, competing claims related to the hunting and trapping of wildlife has been a major driver behind the development of wildlife law. In addition, environmental concerns and issues of conflict with domestic animals have become important. In general, domestic laws pertaining to the wildlife sector should, at a minimum, set out rules for the following aspects:

- Ownership over wildlife, that is, State-ownership, private property rights, rights of indigenous people or native title;
- Designation of government agencies to oversee and regulate the wildlife sector, administrative processes and so forth;
- Game reserves and hunting areas, including the identification of the areas where subsistence, commercial or leisure hunting is prohibited or permitted;
- Licence systems for leisure and commercial hunting, including conditions for granting, renewing and cancelling hunting licences;
- Transport and import/export rules to control the movement of wildlife, dead or alive, animal parts and products made from wildlife across the country and across international borders; and
- Offences for violations of domestic wildlife laws and enforcement measures.

The following tool sets out basic analytic questions designed to identify the core components and organization of domestic wildlife laws. Provisions relating specifically to wildlife offences and the enforcement of wildlife laws are examined separately in part one, section 3, and part two of the *Toolkit*.



### Tool 1.8 Domestic wildlife laws

- Which domestic laws regulate the wildlife sector? When were these laws enacted? When were they last updated?
- Do domestic laws regulate ownership and property rights over wildlife?
- Do domestic laws regulate the management and administration of the wildlife sector? Which agency is charged with wildlife administration? Which government department does the agency belong to, and to whom does it report?
- Are subsistence, leisure or commercial hunting permissible under domestic law? What are the requirements to hunt legally?



- Do domestic laws designate game reserves or other areas in which no hunting is permitted? Do they designate areas in which subsistence, leisure or commercial hunting is permissible?
- Do domestic laws set out a system for hunting concessions? Who issues hunting concessions? How can they be obtained, renewed, suspended and cancelled?
- Do domestic laws set out rules for the transportation and import/export of wildlife, including live animals, dead animals, trophies, animal parts and products made from wildlife?
- Do domestic wildlife laws set out specific offences and enforcement measures?
- Do domestic wildlife laws set out specific responsibilities of each agency or authority and mechanisms of coordination and cooperation?

Domestic laws pertaining to the forestry sector should, at a minimum, set out rules for the following aspects:

- Ownership over forests, that is, State-ownership, private property rights, rights of indigenous people or native title;
- Designation of government agencies to oversee and regulate the forestry sector, administrative processes and so forth;
- Forest and nature reserves, catchment areas and logging areas, including the identification of the areas where subsistence and/or commercial logging are prohibited and those where they are permissible;
- Licence systems for logging, including conditions for granting, renewing and cancelling logging concessions;
- Licence systems for timber processing, including conditions for granting, renewing and cancelling licences;
- Transport and export rules to control the movement of timber (logs, sawn timber and other products) across the country and across international borders; and
- Offences for violations of domestic forest laws and enforcement measures.

The following tool lists basic analytic questions designed to identify the core components and organization of domestic forest laws. Provisions relating specifically to forest offences and the enforcement of forest laws are examined in part one, section 3, and part two of the *Toolkit*.



### Tool 1.9 Domestic forest laws

- Under which domestic laws is the forestry sector regulated? When were these laws enacted? When were they last updated?
- Do domestic laws regulate ownership and property rights pertaining to forests?

- Which domestic laws regulate the management and administration of the forestry sector? Which agency is charged with forest administration? Which government department does the agency belong to, and to whom does it report?
- Do domestic laws designate forest and nature reserves and catchment areas (in which no logging or taking of plants is permitted)? Do they designate areas in which subsistence or commercial logging is permissible?
- Is subsistence or commercial logging permissible under domestic law? What are the requirements to extract timber and take other plants legally?
- Do domestic laws set out a system for logging concessions? Who issues logging concessions? How can these be obtained, renewed, suspended and cancelled?
- Does domestic law require licences to process timber (for example, for sawmills)? Who issues these licences? How can these be obtained, renewed, suspended and cancelled?
- Do domestic laws set out rules for the transportation and import/export of timber, including logs, sawn timber and the like?
- Do domestic forest laws set out specific offences and enforcement measures?
- Do domestic forest laws set out specific responsibilities of each agency or authority and mechanisms of coordination and cooperation?

In addition to forest laws, some countries have specific legislation on the use of wild flora. This legislation is often related to species protection, which is examined in the next section. It is, however, conceivable that separate statutes, such as conservation acts, wild flora acts or similar laws, exist and set out provisions to administer and manage the harvesting, taking, processing, trade, supply, sale or possession of specific plants or of wild flora generally. Insofar as they exist, these statutes should be integrated into an analysis of domestic laws related to wildlife and forests.

## 2.2 Species protection

In most countries, laws pertaining to species protection and the regulation of the trade in endangered species of wild fauna and flora are synonymous with the domestic laws implementing CITES.<sup>60</sup> Given the widespread adhesion to CITES globally, there are only very few countries in which species protection laws are unrelated to CITES. In some countries, the relevant legislation is termed “endangered species law”, or similar, while other countries rely on their general wildlife legislation, and sometimes on Customs or foreign trade legislation to control the trade in specimens of CITES-listed species.<sup>61</sup>

To ensure the protection of endangered species under the framework of CITES, further elaboration and implementation of legislation at the national level is needed. In this context, the CITES Secretariat notes that:

<sup>60</sup> See tool I.1.

<sup>61</sup> Juan C. Vasquez, “Compliance and enforcement mechanisms of CITES”, in *The Trade in Wildlife: Regulation for Conservation*, Sara Oldfield, ed. (London, Earthscan Publications, 2003), pp. 63-65.

Creating and adopting effective and enforceable legislation is not an easy task. Effective legislation is not just a piece of paper but the practical solution to a problem. Enforceable legislation is that which is realistic in terms of what can be achieved within a country's particular context and its human or financial resources...

The legislative provisions for implementing CITES in each Party are similar, though Parties may have different legal structures, national policies, culture, species in trade, or types of trade. All Parties, however, should have a solid legal foundation for regulating international wildlife trade. It is only through legislation that is adequate, up to date, and efficiently enforced that CITES can really work.<sup>62</sup>

The current reality, however, shows that less than half of CITES Parties have adequate domestic legislative, regulatory and institutional measures that effectively implement CITES.<sup>63</sup>

## Implementation of CITES

The CITES Secretariat can help States Parties to implement the Convention by offering a variety of tools, expertise, documents and training. Further, the Secretariat, through its National Legislation Project,<sup>64</sup> has developed a template for a model law on international trade in wild fauna and flora that can be used by States Parties in order to develop new, and analyse existing, legislation.

The Secretariat has also issued a legislation checklist to review domestic CITES laws. It contains 70 items for review that are based on resolutions of the CITES Conference of Parties and on the "Guidelines for legislation to implement CITES".<sup>65</sup> The checklist contains items relating to the general design and application of domestic CITES laws; management and scientific authorities; permit requirements; the form and validity of permits and certificates; the revocation, modification and suspension of permits; exceptions to permit requirements; border controls; the control of consignments and permits; enforcement and penalties; the disposal of confiscated specimens; the acceptance and refusal of foreign permits; reports; and financial matters.

The following tool sets out those elements of the Convention that are of particular relevance to the control and prohibition of wildlife and forest offences. It also considers whether domestic CITES legislation covers all specimens of all species (animals and plants, alive or dead, and parts and derivatives) included in the three CITES Appendices, and whether the legislation and its schedules are amended regularly as necessary.<sup>66</sup>



### Tool I.10 Domestic CITES implementation

- Do the relevant laws set out the following?

General rules to regulate international and domestic trade in endangered species;

Role of Management and Scientific Authorities;

Role and powers of enforcement agents;

<sup>62</sup> CITES Secretariat, *Model Law on International Trade*, p. 2 (emphasis added).

<sup>63</sup> CITES Secretariat, "National laws for implementation of the Convention", Fifteenth meeting of the Conference of the Parties, Doha, March 2010. See also Juan C. Vasquez, "Compliance and enforcement mechanisms of CITES", pp. 63-65.

<sup>64</sup> See also Juan C. Vasquez, "Compliance and enforcement mechanisms of CITES", pp. 63-65.

<sup>65</sup> Cyrille de Klemm, "Guidelines for legislation to implement CITES", IUCN Environmental Policy and Law Paper, No. 26 (Gland, Switzerland and Cambridge, United Kingdom, International Union for Conservation of Nature, 1993).

<sup>66</sup> CITES Secretariat, *Model Law on International Trade*, p. 3.

Permit requirements, including (a) the form and validity of permits and certificates, (b) the revocation, modification and suspension of permits, and (c) exceptions to permit requirements;

Prohibitions and offences relating to illegal trade in endangered species;

Powers for confiscation; and

General powers for the government to make regulations as necessary.

- Do the relevant domestic laws apply to all animal and plant species listed in CITES Appendices I, II and III? Do these laws apply to non-CITES species? Are these listed in a separate schedule?
- Do the laws use the Convention definitions of “specimen”, “introduction from sea” and other relevant terms?
- When were these laws last updated? Are schedules and appendices updated if and when listings in the CITES Appendices change?

## CITES Management and Scientific Authorities

Each CITES signatory must designate a Management Authority (or Authorities) to issue permits or certificates, as well as a Scientific Authority to be consulted in certain cases before permits or certificates are issued. Any international trade, including any export, re-export, import or introduction from the sea, in any animal or plant, or part or derivative of species included in the Appendices to the Convention requires the issuance of a permit or certificate (depending on the case) issued by the Management Authority. The procedures for issuing the permits or certificates vary depending on the CITES Appendix involved, the source of the specimen and other factors.

An analysis of national CITES Authorities should consider the legal instrument (law, regulation, decree) that authorizes the designation of CITES Management and Scientific Authorities or expressly designates those Authorities. For example, the legislation of some countries may not make a provision for the designation of a Scientific Authority. The analysis should further consider whether legislation clearly and precisely gives the CITES Management Authority the powers necessary to carry out its responsibilities (for example, the power to grant permits and certificates) and provides mechanisms for coordination and communication between the Management Authority and other government agencies with relevant competencies (for example, Scientific Authority, police, Customs and relevant ministries).<sup>67</sup>

<sup>67</sup> CITES Secretariat, *Model Law on International Trade*, p. 3.





### Tool I.11 CITES Management Authority

- If the country is a Party to CITES, has it designated a Management Authority? What is the name of the Authority? Is it created by statute?
- Has the country designated a Scientific Authority?
- What is the mandate of the Management Authority? Is it the body designated to grant, cancel and retain the permits and certificates required under CITES?
- Is the Management Authority authorized to proceed with any required investigation and detain specimens where there are reasonable doubts on their identification, pending the results of other investigations?
- Can the Management Authority refuse to accept permits from exporting countries when it has reasonable grounds to do so (for example, if it appears that substantial irregularities have occurred)?
- Where is the Management Authority located? How is it equipped and funded? How is it staffed?

The mandate of the national Management Authority necessitates close collaboration with domestic law enforcement agencies, especially Customs. To facilitate such cooperation, the World Customs Organization and the CITES Secretariat recommend the signing of a national MOU between Customs and the CITES Management Authority. Such a framework gives Customs an appropriate platform for obtaining information from the Management Authority with which to target high-risk consignments and travellers. The MOU also enables Customs to help the Management Authority by indicating the existence of suspicious circumstances or consignments. The increased quantity and frequency of information provided by the Management Authority enables Customs to identify, distinguish and target high-risk traffic more effectively, while permitting the majority of legitimate trade to move freely.<sup>68</sup>



### Tool I.12 Cooperation between Management Authority and Customs

- How does the Management Authority cooperate with Customs? Has an MOU or other agreement been set up to facilitate their cooperation? What does it state?
- How does the Management Authority collaborate with other law enforcement agencies and government agencies?
- Is the Management Authority mandated to provide other law enforcement agencies with assistance in terms of the identification, handling and disposal of detained or confiscated specimens?

<sup>68</sup> See *Guidelines on Co-operation between Customs Administrations and CITES Management Authorities Managing the Trade in Animals and Plants (CITES)*. WCO reference number Annex IV to Doc. 41.827 (only available to WCO members).

## Species protection beyond CITES

The application and enforcement of CITES provisions are necessarily limited to specimens of species listed in the CITES Appendices. Most timber species, for instance, are not listed in CITES and are not protected by any other international agreement. This, in turn, means that the protection and enforcement mechanisms under CITES are not available to respond to illegal trade in endangered species that are not listed in the Appendices. Neither do they apply to any trade involving countries that are not a Party to CITES. As a result, trade through non-Parties may be used as a way to circumvent reporting and permit requirements.<sup>69</sup>

It is for this reason that several countries have adopted additional legislation to prevent and suppress illegal trade in non-CITES species and extend the application of documentation, permit and reporting requirements to States not a Party to CITES. The CITES Secretariat also recommends the use of Convention standards in any trade involving non-signatory nations, using “comparable documentation” issued by competent authorities,<sup>70</sup> as provided for in article X of the CITES Convention.<sup>71</sup>



### Tool 1.13 Species protection outside CITES

- Do domestic laws relating to species protection apply to the trade in endangered species with States not a Party to CITES?
- Do domestic laws apply to species not listed in the CITES Appendices?

## 2.3 Criminal law

Generally, criminal law articulates those principles that apply to all criminal offences within one jurisdiction, regardless of the nature of the crime. This includes the elements of offences, extensions and limitations of criminal liability, general defences, the limitations and conditions applicable to children and legal entities (corporations), burden of proof and geographical application, among many others. Depending on the jurisdiction, these general principles of criminal liability—along with specific offences—are set out in a single statute or a series of laws, or even in case law, depending on the legal system.

The general rules and principles of criminal liability are of equal importance to wildlife and forest offences as they determine the way in which criminal liability is established and explain the organization, scope and operation of the relevant offences, including those that relate, directly or indirectly, to the wildlife and forestry sectors. The *Toolkit* is not equipped to conduct a comprehensive analysis of the general rules of criminal law and of all specific offences in one jurisdiction. The following sections highlight those general principles that are of particular importance to criminal liability for wildlife and forest offences.

It should be emphasized that the analyses of criminal justice systems must be tailor-made as each country’s legal system may apply principles of criminal law in different manners and under different designations and definitions.

<sup>69</sup> Patricia W. Birnie and Alan E. Boyle, *International Law and the Environment*, p. 629.

<sup>70</sup> Rosalind Reeve, *Policing International Trade in Endangered Species: The CITES Treaty and Compliance* (London, Royal Institute of International Affairs, 2002), pp. 34-35.

<sup>71</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora, article X.

## Establishing fault elements (*mens rea*)

Most common law and civil law jurisdictions require proof of fault for criminal offences. In most countries, criminal liability is based on the presumption of “no conviction without fault”. Before a person is found guilty of an offence, the prosecution must prove the *mens rea*, or mental elements, of the offence. This ensures that the prosecution establishes the “guilty mind” of the accused before a conviction. It is based on the principle that persons should not be convicted for something they did not intend, did not know, or were unaware of.

The difficulty with fault elements, especially subjective fault elements such as intention and knowledge, is to prove that a defendant intended a particular outcome or knew a particular fact. Some jurisdictions make it possible to infer the necessary knowledge, intent or other subjective mental element from other (circumstantial) evidence. This would be in line with, for example, article 5, paragraph 2, of the United Nations Convention against Transnational Organized Crime, which provides that “the knowledge, aim, purpose or agreement” required to establish relevant offences under the Convention “may be inferred from objective factual circumstances”.<sup>72</sup> The same provision is found in article 28 of the United Nations Convention against Corruption.

In determining the scope of the application of wildlife and forest offences, it is important to decide whether only those offences that have been committed intentionally, knowingly or recklessly should be punishable or whether liability for an offence should apply in all cases, even when the person concerned was negligent or had no awareness whatsoever that his or her conduct was unlawful. Some legal systems admit the concept of “strict liability”, where certain forms of conduct would be criminalized regardless of whether or not an accused intended the outcome, or at least without the need to prove subjective elements. The establishment of liability without the proof of fault elements eases the work of investigative and prosecutorial organs and may theoretically constitute a greater deterrent. However, in other countries, the concept of strict liability is not acceptable under criminal law. A system of administrative offences may then be considered in complement of criminal offences to address harmful conduct against wildlife and forest resources, where proof of subjective elements is not possible.



### Tool I.14 Proof of subjective fault elements

- Does the national criminal law permit the use of objective factual circumstances to prove subjective fault elements such as intention, knowledge and so forth?
- Is it permissible to infer the subjective fault elements of the relevant wildlife and forest offences from objective factual circumstances?
- Does the criminal law presume that every offence requires the proof of fault elements (such as intention, knowledge or recklessness)?
- Does the criminal law permit criminal liability to arise without the proof of a fault element? Is the concept of strict liability available? In what circumstances can liability without fault arise?
- What fault elements are required for wildlife and forest offences? Can liability for wildlife and forest offences arise without the proof of fault?

<sup>72</sup> See further David McClean, *Transnational Organized Crime*, pp. 65-66.

## Extensions of criminal liability

In all jurisdictions, criminal liability is not limited to completed offences, and extensions are provided to capture those persons who attempt, incite or participate in a criminal offence. The extensions are also of great importance to wildlife and forest offences as they enable the prosecution of offenders who try but fail, who are accessories to someone else's crime or who instigate others to commit a relevant offence.

Most jurisdictions recognize three inchoate offences, namely attempt, conspiracy and incitement, as described below. The common thread among these offences is that they are committed even though the substantive offence that had been intended was not completed and no harm was caused.

- Attempt is designed to punish those who intend to commit a crime and who commit acts that are more than merely preparatory to the crime, but who are unsuccessful in carrying it out. Liability for attempt may also arise if the prosecution cannot prove that the accused committed the complete offence because relevant evidence is missing or because the planned activities of the accused were abandoned, aborted, interrupted or were doomed to fail from the outset.
- Conspiracy—an offence known mostly in common law countries—serves to criminalize an agreement between two or more persons to commit an unlawful act where there is an intention to commit that unlawful act.
- The offence of incitement covers situations in which a person tries to incite or persuade another to commit a crime that the inciter wants and intends to have committed by the other person. It is an offence to incite another person to commit an offence, even if that offence is not carried out and even if the incitement has no effect on the individual who incited the crime.

Secondary liability extends criminalization beyond the main offenders. It refers to extensions of criminal liability that capture offenders who commit offences jointly or who contribute to the commission of a criminal offence by others. Secondary liability applies to persons who are parties to the principal offence but who themselves are not criminally responsible as principal offenders. The rationale for extending liability beyond the principal offender(s) is that a person who promotes or assists in the commission of a crime is just as blameworthy as the person who actually commits it. Secondary liability may apply to conduct that occurs before or during the commission of the principal offence: so-called “accessorial liability” (accessories).



### Tool I.15 Extensions to criminal liability

- Are attempts, conspiracy and incitement to wildlife and forest crime criminalized? What are the requirements to establish liability for these inchoate offences?
- Does liability for wildlife and forest offences extend to persons aiding, abetting, counselling or facilitating the offence, as well as to other accomplices? What are the requirements to hold persons criminally liable as participants or accessories?

## Liability of legal persons

In many States, criminal law extends liability for criminal offences to legal persons such as corporations. The simple rationale of corporate criminal liability is that corporate entities on whose behalf



or for whose benefit any offence, including wildlife and forest crime, was committed by one of their employees or agents ought to be criminalized in the same way as natural persons. Corporate structures should not be used—as they often are—to shield anyone from criminal prosecution and punishment. Other States do not accept the criminal liability of legal persons, but they may establish civil or administrative liability to prevent or deter wrongful acts committed by or through legal persons. For example, article 10 of the United Nations Convention against Transnational Organized Crime requires States to adopt measures to establish the liability of legal persons for participation in serious crimes involving an organized criminal group and for the offences defined in the Convention. Paragraph 2 states that, “subject to the legal principles of the State Party, the liability of legal persons may be criminal, civil or administrative”.



### Tool 1.16 Liability of legal persons

- Can legal persons be held criminally responsible for wildlife and forest offences?
- Does the prosecution of the corporation prejudice the prosecution of individuals?
- What types of sanctions can be imposed on corporations?
- If corporate criminal liability does not exist, is it possible to impose civil or administrative sanctions on corporations?

## 3. Wildlife and forest offences

Wildlife and forest crime comprises a myriad of diverse and sometimes overlapping offences from illegal logging and hunting, processing, exporting and importing, trafficking, supplying, to receiving, possessing and consuming wild fauna and flora. It also covers associated offences, such as document fraud (including fraudulent marking and stamping), money-laundering, tax evasion and corruption. However, there is a simple taxonomy for understanding the nature of criminal activities that may have a significant impact on the environment. These activities involve illegal products, illegal places and illegal practices. Wildlife and forest crime can occur equally in countries of origin, at transit points and in countries of destination.

To combat wildlife and forest crime effectively, it is important to identify and define all possible offences and to enforce appropriate penalties for the complete array of offences. Identifying the many offences that constitute or contribute to wildlife and forest crime goes some way in defining the phenomenon and in articulating what wildlife and forest crime is, and—just as importantly—what it is not. Exploring the whole spectrum of criminal activities associated with wildlife and forest crime also assists in identifying access points for law enforcement investigations and other government interventions. Also important in effectively preventing wildlife and forest offences is identifying all links in the supply chain and understanding driving factors that may lie beyond wildlife and forest areas.

The table below presents a non-exhaustive overview of the categories of criminal offences in countries of origin, at transit points and in countries of destination, as well as a list of associated offences. Each category is further explored in sections 3.1 to 3.6 and section 4 below. It has to be noted that there is significant overlap among the offences as countries often play more than one role, in that they are, for instance, simultaneously the source of the plant or animal and the place in which plant or animal material is further processed and perhaps also consumed.

Table 1. Wildlife, forest and associated offences at origin, transit and destination points

	Wildlife offences	Forest offences	Associated offences
<b>Origin</b>	Poaching (illegal hunting) Use of prohibited hunting equipment or methods Taking of restricted prey (breeding females, young, protected species) Violation of seasonal restrictions Illegal possession Illegal processing of animal material Illegal export	Illegal logging and harvesting Illegal possession Illegal processing of plant material Illegal export	Corruption Tax evasion and non-payment of fees Document fraud Money-laundering
<b>Transit</b>	Illegal import Illegal possession Illegal supply and sale Illegal processing Illegal export	Illegal import Illegal possession Illegal supply and sale Illegal processing Illegal export	Corruption Tax evasion and non-payment of fees Document fraud Money-laundering
<b>Destination</b>	Illegal import Illegal processing Illegal possession Illegal supply and sale Illegal consumption	Illegal import Illegal processing Illegal possession Illegal supply and sale Illegal consumption	Corruption Tax evasion and non-payment of fees Document fraud Money-laundering

One of the principal obstacles in wildlife and forest crime investigations is the fact that, in many countries, criminal offences pertaining to the wildlife and forestry sectors are not clearly defined. The definition and scope of legality may depend on government policies and administrative regulations, and these are easily changeable by local or national governments. Many undesirable and environmentally unsustainable practices in the wildlife and forestry sectors may in fact be legal under existing laws in an effort to maximize short-term revenues.<sup>73</sup> The legalization and criminalization of certain activities in the wildlife and forestry sectors are driven by a great range of political, economic and environmental factors, many of which are beyond the wildlife and forestry sectors and therefore beyond any analysis of the criminal justice system. Part four of the *Toolkit* offers tools to analyse some of these factors, as well as preventive interventions to address them.

Neither is there consensus among countries about the exact scope and elements of wildlife and forest offences. What may be illegal in one country may be perfectly legal in neighbouring countries. In analysing the relevant criminal offences and developing recommendations for reform, it is important to avoid creating marked imbalances between countries. If one country has very strong, well-defined wildlife and forest legislation, then a relatively wide spectrum of wildlife and forestry activities may be illegal. In contrast, in a neighbouring country with weaker legislation, the same

<sup>73</sup> Cf. Duncan Brack, Kevin Gray and Gavin Hayman, "Controlling the international trade", p. 13.

type of activities may be in compliance with the law. Purely national-level concepts of “legality” therefore have the potential to create disparities between countries when controls are applied at the international level.<sup>74</sup>

### 3.1 Illegal logging and harvesting

The term “illegal logging” is used very broadly to describe a great range of activities associated with the felling of trees. While the term has widespread use, it is largely void of technical meaning and it is not defined in international law. In summary, illegal logging usually refers to one or more of the following activities:<sup>75</sup>

- Logging of protected or endangered species
- Logging in protected or prohibited areas
- Excessive logging
- Logging without permits or with fraudulent permits
- Obtaining logging permits illegally
- Non-payment of taxes and other forest fees
- Damaging forest ecosystems.

#### Logging of protected species

Illegal logging frequently involves the felling of trees that belong to a protected species. Most countries have protected tree species of conservation concern under domestic laws and prohibit their logging. Illegality may thus arise if trees are logged in violation of these prohibitions or in the absence of any authority or permit to take them.

#### Logging in protected areas

Logging activities may be illegal because of the location in which they are carried out. This is usually the case if logging is carried out in geographical areas that are placed under environmental protection, such as national parks or conservation areas. Most countries prohibit logging activities in areas that have been placed under protection to preserve their biodiversity, natural habitat or heritage, or to protect the livelihoods of indigenous people or local communities. This type of illegal logging also includes situations in which the logging is carried out outside concession boundaries or in particularly vulnerable areas, such as steep slopes, river banks or water catchments. It may also involve instances in which public or protected forests are illegally occupied and converted to land for agricultural use or cattle ranching.

<sup>74</sup> Ibid., p. 14.

<sup>75</sup> Andreas Schloenhardt, “The illegal trade in timber and timber products in the Asia-Pacific region”, Research and Public Policy Series, No. 89 (Canberra, Australian Institute of Criminology, 2008), pp. 47-49; Cf. Alison Watson, “The proposed New Zealand approach towards addressing illegal logging and associated trade activities, MAF Discussion Paper, No. 2006/01 (Wellington, Ministry of Agriculture and Forestry, 2006), pp. 17-18; Duncan Brack, “Illegal logging and the illegal trade in forest and timber products”, *International Forestry Review*, vol. 5, No. 3 (2003), p. 195; Duncan Brack, Kevin Gray and Gavin Hayman, “Controlling the international trade”, p. 7.

## Excessive logging

A further type of illegal logging involves activities that exceed allocated concessions. This usually involves cases in which concession holders harvest trees in excess of their concession where that concession sets out a logging quota. This problem is particularly common in countries with little, if any, capacity to take inventories of their forests, so there is no ready way to identify excess harvests.

## Logging without permits or with fraudulent permits

Many logging activities are illegal because the person or company carrying out the activities does not hold a valid permit to do so. This is the case if permits were never obtained or have expired, or if the activities carried out are outside the scope of the logging permit. Areas that are only infrequently inspected by government officials are particularly vulnerable to unauthorized logging of this kind. Another involves the duplication of permits. In areas where surveys are carried out more frequently, the use of fake permits or duplications of real permits are more common.<sup>76</sup>

## Obtaining logging permits illegally

Perhaps one of the most widespread forms of illegal logging involves instances in which logging concessions have been obtained illegally. This may occur because of coercion, corruption, conflict of interest or fraud, or by providing false information to forest authorities. More commonly though, logging concessions are issued illegally by government officials in return for bribes. Allegations of the corruption of government officials are particularly widespread in the forestry sector of many countries and equally affect the harvesting, processing, transportation, export and import stages of the timber trade.<sup>77</sup>

## Non-payment of taxes and other forest fees

Even if an operator has obtained a legal permit to harvest, the non-payment of taxes, royalties or other fees make the operation illegal. Often these violations go hand in hand, and if the operator harvests additional trees, other fees remain unpaid. The arrears can in some cases become a huge drain of public resources and revenue.

## Damaging forest ecosystems

The final type of activity associated with illegal logging involves the damaging of trees, especially by way of girdling, ringbarking or burning them. The purpose of this activity is to damage the trees to the extent that they can be harvested legally as most countries allow the removal of damaged trees to reduce the risk of bushfires and other hazards. There have been numerous reports of loggers taking advantage of this legal loophole by damaging forests deliberately to necessitate their removal. Once a tree is removed from its original place, it becomes difficult if not impossible to distinguish legally sourced timber from illegally damaged trees.<sup>78</sup>

<sup>76</sup> Abt Associates, "Illegal logging: a market-based analysis of trafficking in illegal timber", final report for the National Institute of Justice, Washington, DC, 2006, p. 46.

<sup>77</sup> See further part one, sections 3.3 to 3.5 of the *Toolkit*.

<sup>78</sup> Abt Associates, "Illegal logging", p. 43.



Some reports, especially those issued by non-governmental organizations (NGOs), use the term “illegal logging” more loosely to refer to any kind of unsustainable forest activity. The term has also been used to describe harvesting activities that may infringe on the customary rights of indigenous people and local communities. These types of activities are further explored in part four of the *Toolkit*.

Many countries are relatively effective at prosecuting illegal logging offences, especially those with tightly regulated forestry sectors. A few even extend the criminal offences available for the illegal taking of trees to other plants. The illegal harvesting of plants, the taking of plants from protected or prohibited areas and so forth are, however, equally damaging to the environment and can contribute to the extinction of species, as well as fuel other criminal offences further down the trade chain.



### Tool 1.17 Illegal logging and harvesting

- Are the following activities criminalized pursuant to domestic law?
  - Logging protected timber species;
  - Harvesting (as well as theft and other taking) of protected plant species;
  - Logging and harvesting without valid authorization (including no permit, expired permits and forged permits);
  - Logging and harvesting in protected areas (including natural reserves and national parks);
  - Logging and harvesting in prohibited areas (such as steep slopes, river banks and catchment areas);
  - Logging and harvesting outside concession boundaries;
  - Illegal occupation and use of forest lands;
  - Logging and harvesting above concession quotas;
  - Removing under- or oversized trees, damaging trees, using slash and burn practices, girdling and ringbarking;
  - Obtaining logging and harvesting concessions illegally; and
  - Underreporting and misreporting logging and harvest activities or quotas.
- Pursuant to which legislation are these activities criminalized? Are these criminal offences or administrative offences?
- What types of offences are included?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- Do the offences criminalize incidental illegal logging and harvesting (when the result is incidental to some other activity)?
- What are the penalties for these offences?

## 3.2 Illegal hunting (poaching)

Illegal hunting or poaching refers to a variety of offences that criminalize the unlawful taking of wild animals. For example, poaching frequently involves the hunting of animals that belong to a protected species. Hunting activities may also be illegal because of the location in which they are carried out. This is usually the case if hunting takes place in geographical areas that are placed under environmental protection, such as national parks or game reserves. Hunting may also be illegal if it occurs outside designated areas. Several countries designate specific lawful methods of hunting in relation to specific species. For example, a minimum calibre of firearm may need to be used to hunt “big game”. In some instances, the use of crossbows, bow and arrows, or snares or traps may be prohibited. Using such methods would be regarded as poaching and result in violations of national law.

A further type of poaching involves activities that exceed allocated quotas. Other hunting activities are illegal because the person or organization carrying out the hunting does not hold a valid licence to do so. This is the case if hunting licences were never obtained, are invalid, have expired or have been forged. Hunting licences may also be void because they have been obtained by way of coercion or corruption.<sup>79</sup>



### Tool I.18 Illegal hunting (poaching)

- Are the following activities criminalized pursuant to domestic law?
  - Killing or capturing protected animal species;
  - Killing or capturing wild animals without valid authorization (including no permit, expired permits and forged permits);
  - Killing or capturing wild animals in protected areas (including game reserves and national parks);
  - Killing or capturing wild animals outside licensed boundaries;
  - Killing or capturing wild animals above licensed quotas;
  - Killing or capturing young animals; the destruction of or damage to nests, dens and eggs; and the removal of eggs;
  - Hunting outside of season or at other unauthorized times;
  - Obtaining a hunting licence illegally;
  - Use of unauthorized hunting devices or hunting methods (including traps and explosives);
  - Interference with other people's hunting or trapping; and
  - Underreporting and misreporting hunting activities or quotas.
- Pursuant to which legislation are these activities criminalized? Are these criminal offences or administrative offences?
- What types of offences are included?

<sup>79</sup> Cf. Arlene Kwasniak, “Enforcing wildlife law”, Canadian Wildlife Law Project Paper, No. 2 (Calgary, Canada, Canadian Institute of Resources Law, 2006), pp. 6-7.

- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- Do the offences criminalize incidental illegal logging and harvesting (when the result is incidental to some other activity)?
- What are the penalties for these offences?

### 3.3 Illegal processing of animal and plant material

In the chain of illegal activities associated with wildlife and forest crime, the steps that follow illegal logging, harvesting and poaching are the processing of plant and animal material (such as milling or slaughtering) and the manufacturing of plant and animal products. The illegal processing of wildlife and forest products is one of the most complex steps in the supply chain as it is used to disguise the origin of the material used and of the types of species involved so that the final product becomes indistinguishable from products involving materials obtained legally.

The use of illegally obtained plants or animals often reduces the production costs and ultimately the costs of the finished product, thus creating an advantage for operators who do not adhere to laws and industry regulations. If exotic species are involved, the processing stage frequently involves the manufacturing of luxury goods made from rare materials, such as ivory, mahogany or ramin, or of food items and medicines that contain protected plant or animal material. Illegal processing and manufacturing also involves activities such as processing without a licence, with a fake licence or with illegally obtained licences.<sup>80</sup>



#### Tool I.19 Illegal processing of animal and plant material

- Are the following activities criminalized pursuant to domestic law?  
Processing illegally obtained or protected plant or animal material;  
Processing without documentation verifying the legal origin of the material;  
Manufacturing of prohibited goods made from wild fauna or flora; and  
Operating processing facilities for timber (or other plant or animal material) without a licence.
- Pursuant to which legislation are these activities criminalized? Are these criminal offences or administrative offences?
- What types of offences are included?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- What are the penalties for these offences?

<sup>80</sup> Duncan Brack, "Illegal logging and the illegal trade", p. 195.

### 3.4 Trafficking, trade, sale and supply

Offences relating to trafficking cover a range of commercial activities involving wild fauna and flora, and activities relating to their transportation. For example, domestic law may criminalize the sale, supply and offering for sale of protected species and illegally obtained wildlife and animal material, or may otherwise prohibit the trade in and transport of such material. Offences relating to exports, imports and other cross-border transactions are set out separately in part one, section 3.5, below.



#### Tool 1.20 Trafficking, illegal trade, sale and supply

- Are the following activities criminalized pursuant to domestic law?

Selling wild fauna or flora that has been illegally logged, harvested or otherwise obtained illegally;

Transport, sale and offering for sale of any specimen of CITES-listed species that has been imported, introduced from the sea or taken from the wild without the required permits;

Trade and transport of unlawfully imported specimens; and

Trade in defiance of trade restrictions or national control measures.

- Pursuant to which legislation are these activities criminalized? Are these criminal offences or administrative offences?
- What types of offences are included?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- What are the penalties for these offences?

In addition to these criminal offences, some countries impose far-reaching restrictions on trade in wildlife and animal material in an attempt to close the market to any product where legal origins cannot be proved. Such trade regulations are not explored further in the *Toolkit*, but they can be integrated into wider strategies to stop wildlife and forest crime.

### 3.5 Import and export offences

Export offences involve a range of illegal cross-border activities, including the transportation of wild fauna and flora without authorization, the export of illegally obtained wildlife and forest products, the illegal export of protected species and the misclassification of exports, as well as export with fraudulent documents, excessive export and the declaring of lower values and volumes, clandestine export, export without permits and illegally obtaining export permits.<sup>81</sup>

<sup>81</sup> Alison Watson, "The proposed New Zealand approach", pp. 17-18; Duncan Brack, 'Illegal logging and the illegal trade', p. 195.



Similar to these export offences, the import of wild fauna and flora into a country may be illegal because of violations of Customs and other border control requirements. In particular, illegality may arise in the following cases:

- The import involves protected species;
- An import ban from that particular source is in place;
- The import is not declared;
- Documentation requirements are not complied with;
- False declarations are made or papers used; and
- The import exceeds the limit.

In most countries, a Customs statute or similar law criminalizes the import and export of prohibited goods, and sets up a licensing system for the legitimate cross-border trade in otherwise prohibited items. Such legislation usually applies to a great range of contraband ranging from wild fauna and flora to illegal drugs, weapons, pornography, explosives and other banned items. Often, these laws contain no measures specifically tailored for animals and plant material, which are listed along with other prohibited goods. Moreover, some countries have quarantine laws that ban the import of certain species of wild fauna and flora, though these laws are generally concerned with disease and pest control and focus on species and other environmental protection only as a side effect.

CITES, in contrast, provides measures that are specifically tailored to enforce the provisions of the Convention and to prohibit the export and import of CITES-listed species. Under article VIII, paragraph 1, States Parties are required to take the appropriate measures to enforce the provisions of the Convention and to prohibit trade in specimens in violation thereof. In particular, they must prohibit and make it an offence to import or export specimens in violation of the provisions of the Convention, which is to say without appropriate and valid permits.<sup>82</sup> Article VIII does not in itself create a criminal offence and it does not provide any guidance as to the design of criminal offences under domestic law. The creation of the offence and the enforcement of the provisions of CITES are left to the signatories, and States Parties are at liberty to adopt more stringent prohibition and restriction requirements than required by the Convention. The criminalization of the retail trade in illegally sourced species and of attempts to trade in or possess protected species is not included in the Convention.<sup>83</sup>

<sup>82</sup> Cyrille de Klemm, "Guidelines for legislation to implement CITES", p. 60.

<sup>83</sup> David Favre, *International Trade in Endangered Species: A Guide to CITES* (Dordrecht, Netherland, Martinus Nijhoff Publishers, 1989), pp. 215-216.



### Tool 1.21 Import and export offences

- Are the following activities criminalized pursuant to domestic law?
  - Export and import of protected species (protected under domestic law or protected in the CITES Appendices);
  - Export and import of wild fauna and flora without valid permits (including no permit, invalid permits and forged permits);
  - Export and import of wild fauna and flora above set quotas or above documented quotas;
  - Export and import of wild fauna and flora in contravention of national bans; and
  - Other export and import of wild fauna and flora not in consistency with valid permits.
- Pursuant to which legislation are these activities criminalized? Are these criminal offences or administrative offences?
- What types of offences are included?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- What are the penalties for these offences?

## 3.6 Acquisition, possession and consumption

The demand for and consumption of wild fauna and flora is one of the most integral drivers of the illegal trade. While many of the criminal aspects associated with wildlife and forest crime are carried out in source and transit countries, these offences would not occur if it were not for the continuing demand in the main consumer countries.

Jacqueline L. Schneider notes:

“[W]hatever illegal property is demanded, illegal suppliers will strive to fulfil the demand. Thieves (or poachers) acquire the goods because they know there are avenues through which they can sell them—there is an opportunity to sell the demanded property to those who either use it themselves or are willing and able to sell it on to their final consumers.”<sup>84</sup>

The demand for rare species or cheap material is the single most important reason for widespread illegal activities in the wildlife and forestry sectors. Without demand for exotic pets, furniture made from tropical timber, food containing rare animals or plants, carvings made from ivory or rhinoceros horn, inexpensive imported veneer and plywood, and so forth, wildlife and forest crime would be dramatically reduced. As such, demand constitutes a driving factor for wildlife and forest crime. This subject is discussed further in part four of the *Toolkit*.

Any strategy aimed at eliminating the illegal trade in wild fauna and flora must address the demand for illegal animals and plants, dead or alive, including products and derivatives. However, most

<sup>84</sup> Jacqueline L. Schneider, “Reducing the illicit trade in endangered wildlife”, pp. 274-286.

countries, especially those with the highest consumption, have only recently introduced mechanisms to address, let alone prohibit, the demand for illegal wild fauna and flora. The major importing countries of wildlife products have made few reforms. While some mechanisms exist to control the trade in species protected under CITES, these measures address only a small aspect of the trade and not the wider issues.

In comparison to other aspects of trade in wild fauna and flora, demand and consumption are the least researched and the least regulated aspects. There are generally no requirements to hold permits to obtain or purchase certain material unless protected species are involved. In addition, few countries prohibit the purchase of plant or animal products that come from an illegal source or involve protected species, and there are generally no penalties for the possession of illegally acquired specimens of wild fauna or flora. For the most part, the consumers of illegal wild fauna and flora are immune from any penalties, prosecutions and seizures. Article VIII, paragraph 1, of CITES is among the few provisions that require States Parties to penalize the possession of any of the species listed in the CITES Appendices.



### Tool 1.22 Offences relating to possession

- Are the following activities criminalized pursuant to domestic law?

Possession and purchasing of any specimens of CITES-listed species that have been imported, introduced from the sea or taken from the wild without the required permits;

Possession and purchasing of unlawfully imported specimens; and

Obtaining, consuming and using illegally sourced/imported wild fauna and flora.

- Pursuant to which legislation are these activities criminalized? Are these criminal or administrative offences?
- What types of offences are included?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- What are the penalties for these offences?

## 3.7 Penalties

There are considerable differences among countries as to the nature and level of penalties that may be imposed for wildlife and forest offences. In some countries, only small fines and short prison terms are handed out. In others, fines can be very severe and prison terms can be long. In extreme cases, wildlife and forest offences can attract life imprisonment or even capital punishment.<sup>85</sup>

CITES does not prescribe specific penalties for illegal trade in protected species under article VIII and, accordingly, Parties to the Convention are free to determine the fines or sentences imposed on the illegal trade. In several countries, the penalties may be limited to fines, and few countries have lengthy periods of imprisonment included in possible penalties. In other countries, the penalties are

<sup>85</sup> Cyrille de Klemm, "Guidelines for legislation to implement CITES", p. 65.

purely administrative. In general, the deterrence factor for criminal offences is significantly lessened if courts cannot, or do not, impose realistic fines or other forms of punishment. Low or inadequate penalties may also restrict the use of investigative techniques such as surveillance, the interception of communications, access to bank accounts and other financial records, and controlled deliveries, which in general are only applicable to serious crimes.

The discrepancies among countries regarding the penalties imposed can also create challenges in multilateral efforts to effectively combat wildlife and forest crime. Countries with comparatively lower penalties may be seen as soft targets and may thus be more vulnerable to illegal activity. It would therefore seem desirable to achieve a certain degree of harmonization of the penalties incurred so that some perpetrators could be more easily deterred if they knew they would face the prospect of similar penalties wherever they operate.<sup>86</sup> States should also ensure that pecuniary penalties remain relevant and keep their deterrent power over time, for example by indexing them to inflation rates where appropriate.<sup>87</sup>

Calls for sanctions for wildlife and forest crime to be greatly increased and to be made mandatory for all detected illegal activities should, however, be answered with caution. Particularly severe penalties should be reserved for serious offences that are committed intentionally, for second or multiple offences, and for offences that cause harm or death to another person. While it is necessary to ensure that offenders are fairly and systematically convicted, it is important to note that increasing the fines and penalties for illegal activities is not always an effective deterrent. In some instances it may be counterproductive, as it can increase the willingness to pay bribes and may lead to higher levels of corruption. Stiffer penalties will thus only act as a deterrent where overall governance of the wildlife and forestry sectors is improved.<sup>88</sup>

Penalties for the many offences identified in previous sections will vary depending on the different types of conduct involved and the circumstances and consequences of that conduct. It is, of course, impossible to recommend specific penalties as this is a matter that should be clearly left to the judgement of individual jurisdictions. Penalties should, on the one hand, be fair and commensurate with the harm caused and, on the other hand, be severe enough to constitute an effective deterrent. They must also be socially acceptable, as otherwise the courts may often feel bound not to apply them.<sup>89</sup>

The following tool is designed to identify the types of penalties available as well as the maximum and minimum penalties provided for wildlife and forest offences in the legislation. These will often differ from the actual penalty imposed on an offender. The full spectrum of available sanctions, along with the principles of sentencing, are further analysed in part three, section 4, below.

Some of the consequences of wildlife and forest offences may not be “penalties” in the strictest sense of the word. For example, in Liberia, the 2005-2006 concession review assessed all alleged logging concessions to analyse whether they met legal requirements and were established through the proper legal process. The result was that none of the concessions was found to have been awarded in compliance with the legislation. As a result, each and every concession agreement was declared null and void—not cancelled in the legal sense—with notable economic loss to the alleged concessionaires.<sup>90</sup>

<sup>86</sup> Ibid.

<sup>87</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 47.

<sup>88</sup> Ibid.

<sup>89</sup> Cyrille de Klemm, “Guidelines for legislation to implement CITES”, p. 103.

<sup>90</sup> Arthur G. Blundell, “The financial flows that fuel war”, in *Forests, Fragility and Conflict*, Program on Forests (Washington, DC, World Bank, 2010).





### Tool 1.23 Penalties for wildlife and forest offences

- What types of sanctions are provided for wildlife and forest offences in the statute (such as fines or imprisonment)?
- Does the legislation set out maximum terms of imprisonment or maximum fines?
- Does the legislation set out minimum terms of imprisonment or minimum fines?
- Does the severity of the penalty adequately reflect the severity of the harm caused by the perpetrator and his/her guilty mind?
- How do these penalties and their severity compare to those for other types of criminal offences?
- Is there any forfeiture statute or provisions on general or special forfeiture?
- Is there an appropriate recurrent process to review the compliance of concession and other utilization agreements with national legislation?

## 4. Related offences

In addition to the specific offences explored in section 3 above, wildlife and forest crime frequently involves a range of other associated offences that are used to facilitate the principal offence or that are committed in the aftermath of a wildlife and forest crime. The *Toolkit* does not examine the myriad of offences that can conceivably be associated with wildlife and forest crime. Instead, the following sections focus on those offences that are most frequently connected to wildlife and forest crime. These include document fraud (the omission of material facts, with the intention to mislead), money-laundering, corruption and bribery, tax evasion and the non-payment of fees and tariffs, as well as participation in criminal organizations.

### 4.1 Document fraud and related matters

Document fraud is frequently used to disguise the authenticity, legality, quantity, volume, origin and destination of wild fauna and flora. Fraud takes place at the source points, at transit points and destination points. Fraud may be committed by filling in a document with false information or by forging the document itself. There are a myriad of ways in which genuine documents can be tampered with and in which false documents can be created.

Document fraud involves not only paper-based fraud; it can involve the removal, alteration, defacing or erasure of marks affixed to animals, plants and parts thereof. Fraud may occur when false information is given or when misrepresentations are made to government officials who issue the relevant permits, licences, concessions and other documents, with the intention to omit or mislead. For example, false declarations of the captive breeding of animals or the artificial propagation of plants are a common means of fraudulently obtaining genuine CITES permits and certificates.

Document fraud can also be linked to corruption if government officials are bribed to issue false documents. The theft and sale of blank documents similarly undermine the system.

The overreliance on documents, marks and stamps is seen by many as a fundamental vulnerability of trade in wild fauna and flora. The documents, marks and stamps themselves are often traded illegally and recycled in multiple transactions. At the international level, CITES and other organizations also lack a comprehensive and independent system for monitoring and verifying the issuance and use of permits and the central reporting of data.<sup>91</sup>

The ingenuity of those engaging in the ever-changing patterns of document fraud needs to be matched by penalties that are, on the one hand, general enough to capture the great diversity of criminal conduct and, on the other hand, specific enough to adequately penalize particularly serious forms of document fraud. The following activities should be established as criminal offences pursuant to a country's legislation: (a) any violation of the conditions attached to permits and licences; (b) the making of false or misleading statements in, or in connection with, applications for permits and licences; (c) the making of false or misleading statements to enforcement officers; and (d) the forging of permits or security stamps. The removal, alteration, defacement or erasure of marks affixed to specimens should also be included, pursuant to regulations. In addition, the failure to keep records, the keeping of incomplete records, and the falsification of records, where the keeping of records is required, should also be established as criminal conduct.<sup>92</sup>

Pursuant to Economic and Social Council resolution 2004/26 of July 2004, the United Nations Office on Drugs and Crime commissioned a study on fraud and the criminal misuse and falsification of identity,<sup>93</sup> which was released in 2007 as a result of the work of an open-ended intergovernmental expert group. The findings of the study were based on the information provided by 46 Member States. The study tackled differences and deviations in definitional and conceptual approaches at the national level with regard to the criminal misuse and falsification of identity, and shed light on various aspects revealing the complexity of the problem and its criminal diversity.



### Tool I.24 Document fraud and related offences

- Are the following activities criminalized pursuant to domestic law? What types of offences are included?

Forging of government-issued documents, security stamps and markings;

Theft of blank documents;

Providing false information, including making false statements and misrepresentations, to government officials;

Violation of the conditions attached to permits and licences related to wildlife and forests;

Unauthorized removal, defacement, erasure and alteration of stamps and marks;

Falsification of records and failure to keep records;

Omission of material facts;

Carrying out fraud to deprive citizens or the government of the honest and faithful services of its employees.

<sup>91</sup> Brack Duncan, Kevin Gray and Gavin Hayman, "Controlling the international trade", p. 16.

<sup>92</sup> Cyrille de Klemm, "Guidelines for legislation to implement CITES", p. 103.

<sup>93</sup> United Nations, Economic and Social Council, "Results of the second meeting of the Intergovernmental Expert Group to Prepare a Study on Fraud and the Criminal Misuse and Falsification of Identity", report of the Secretary-General, 2 April 2007 (E/CN.15/2007/8 and Add.1-3).

- Pursuant to which legislation are these activities criminalized? Are these general fraud offences, identity-related offences or offences specific to wildlife and forest crime? Are these criminal offences or administrative offences?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? What are the applicable evidentiary standards for the prosecution of such offences?
- Does liability for the offences extend to participation in, attempts to, conspiring to, aiding, abetting, facilitating and counselling the commission of these offences?
- What are the penalties for these offences? Do such offences include criminal or administrative sanctions or both?
- Are there sufficient data, statistics or other information to effectively and conclusively prove a case of fraud or identity-related crime?

## 4.2 Money-laundering

Wildlife and forest products can generate vast amounts of profit that need to be laundered to disguise their illegal origin. There are many examples of how wildlife and forest crime is linked to money-laundering and to the avoidance of currency control and other financial regulations. In few countries are wildlife and forest offences predicate (or underlying) offences for money-laundering. To date, there have been very few attempts to “follow the money trail” by freezing and ultimately confiscating the proceeds of wildlife and forest crime, and identifying and criminalizing those who fund wildlife and forest offences or profit from them. Moreover, most of these attempts have been in relation to illegal logging and have thus far only been made within one country and not internationally.

Most countries now have laws against money-laundering that directly or indirectly criminalize the transferring, receiving, concealing and possession of proceeds of a crime. In some countries, however, these laws are not well developed, not often used and frequently overlooked as a tool to prevent and suppress wildlife and forest crime. On the other hand, other countries have set up creative ways to specifically target the proceeds from activities such as illegal logging, the illegal processing of timber, the export and import of illegal logs, and other activities related to wildlife and forest crime.

A number of international frameworks can be utilized to criminalize and investigate the laundering of wildlife and forest crime proceeds. The Convention against Transnational Organized Crime, for instance, contains a provision to comprehensively criminalize money-laundering insofar as it relates to organized crime and other serious offences. It also sets out a range of other measures to prevent and detect money-laundering.<sup>94</sup> Article 23 of the United Nations Convention against Corruption includes a money-laundering offence that is modelled after the Convention against Transnational Organized Crime. In simplified form, Article 6, paragraph 1, of the Convention against Transnational Organized Crime and Article 23, paragraph 1, of the United Nations Convention against Corruption define laundering of the proceeds of crime as:

- (a) (i) The conversion or transfer of property, knowing that such property is the proceeds of crime, for the purpose of concealing or disguising the illicit origin of the property...;

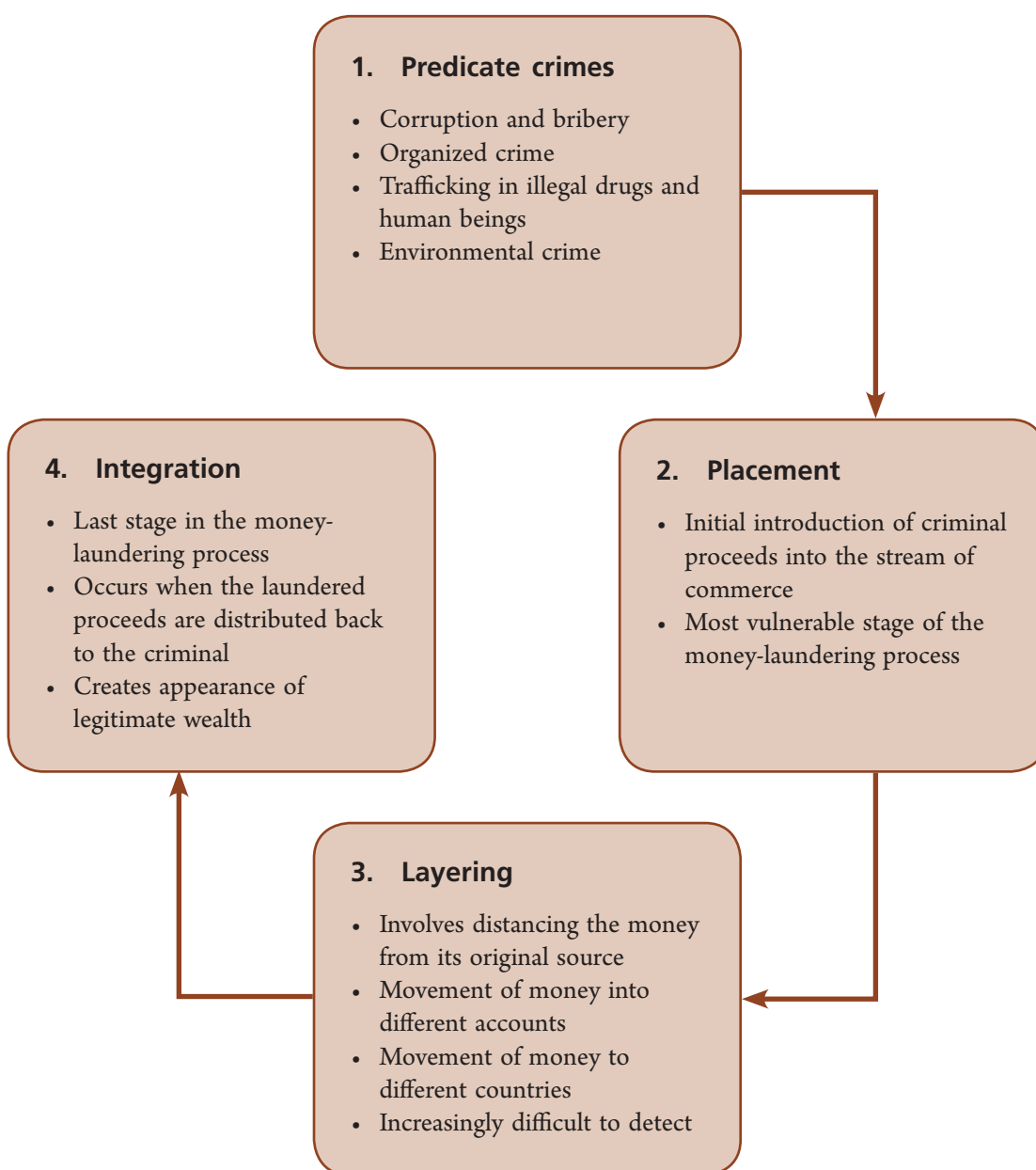
<sup>94</sup> United Nations Convention against Transnational Organized Crime, art. 6 and art. 7. See further David McClean, *Transnational Organized Crime*, pp. 68-108.

(a) (ii) The concealment or disguise of the true nature, source, location, disposition, movement or ownership of or right with respect to property, knowing that such property is the proceeds of crime;

(b) (i) The acquisition, possession or use of property, knowing at the time of receipt, that such property is the proceeds of crime.

These conventions also state that the application of relevant provisions shall extend to participation in, association with or conspiracy to commit, attempts to commit and aiding, abetting, facilitating and counselling the commission of these money-laundering offences.<sup>95</sup>

Figure III. Money-laundering circle



<sup>95</sup> United Nations Convention against Transnational Organized Crime, art. 6, para. 1 (b) (ii); United Nations Convention against Corruption, art. 23, para. 1 (b) (ii). See also UNODC, *Criminal Justice Assessment Toolkit* (New York, United Nations, 2006), pp. 5-6.





## Tool 1.25 Money-laundering offences

- Does domestic law criminalize the conversion, transfer or concealment of property, or the disguise of its true nature, source, location, disposition, movement or ownership, knowing that such property is the proceeds of crime?
- Does domestic law criminalize the acquisition, possession or use of property, knowing that such property is the proceeds of crime?
- Do these offences apply to the proceeds derived from all serious crimes? Are relevant wildlife and forest offences predicate crimes<sup>a</sup> to which money-laundering provisions apply? If so, do predicate offences include offences committed both within and outside the national territory? If committed outside the national territory, does the double criminality requirement apply?
- Are there specific money-laundering offences relating to wildlife and forest crime? Where are the offences defined (such as the penal code or specific criminal laws)? What are their constituent elements, both objective and subjective (*mens rea*)?
- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be prosecuted without proof of fault?
- Does liability for the offences extend to participating in, attempting to commit, conspiring to commit, aiding, abetting, facilitating, and counselling the commission of these offences?
- What are the penalties for these offences?
- Are the money-laundering provisions applicable to the persons who committed the predicate offence (self-laundering) or are predicate offences and money-laundering punished separately?

<sup>a</sup> Article 2 (*h*) of the United Nations Convention against Transnational Organized Crime states: “‘Predicate offence’ shall mean any offence as a result of which proceeds have been generated that may become the subject of an offence as defined in article 6 of this Convention.”

Additional tools relating to financial investigations and the seizure of assets are explored in part two, sections 5.8 and 5.9.

## Financial Action Task Force Recommendations

The Financial Action Task Force (FATF) was set up in 1989 as an intergovernmental body specifically to address the problem of money-laundering and to enhance multilateral judicial assistance in that field. FATF currently has a membership of 34 States and two regional organizations, which together represent most major financial centres in the world. It has now been recognized by 170 countries, of which 110 have established Financial Intelligence Units (FIUs). These countries have agreed to enact domestic laws to implement the FATF Recommendations and to be assessed against them. More than 120 assessments have been carried out against the June 2003 revised Recommendations. FATF is currently engaged in another revision process of its standards. Based on the continuous assessment of the scale and methods of money-laundering and terrorist financing,

FATF offers 40 Recommendations and 9 Special Recommendations to comprehensively combat money-laundering and terrorist financing.<sup>96</sup> These Recommendations, while not legally enforceable, have found nearly global acceptance, and FATF monitors compliance with the standards set by the Recommendations in Member and non-Member States. These Recommendations are not designed for a particular type of crime and are thus easily adaptable to combat the laundering of proceeds derived from wildlife and forest offences. To assist countries in their efforts to assess and enhance domestic anti-money-laundering laws, FATF, in partnership with international financial institutions (the World Bank and the International Monetary Fund), has developed a detailed handbook on anti-money-laundering and counter-terrorism financing evaluations and assessments.<sup>97</sup>

A number of regional organizations have been set up to complement the work of FATF. These are referred to as “FATF-style regional bodies”, and they include the Asia/Pacific Group on Money Laundering, the Caribbean Financial Action Task Force, the Eastern and Southern Africa Anti-Money Laundering Group, the Eurasian Group on Combating Money Laundering and Financing of Terrorism, the Inter Governmental Action Group against Money Laundering in West Africa, the Middle East and North Africa Financial Action Task Force, and the Financial Action Task Force of South America against Money Laundering. The Gulf Cooperation Council, the Council of Europe, the Economic Community of West African States and other regional organizations also have regional initiatives, including treaties, with a focus on money-laundering.



### Tool 1.26 FATF 40 Recommendations

- Is the country a member of FATF?
- Is the country a member of another regional anti-money-laundering group?
- Has the country undergone a mutual evaluation by its peers (in the context of FATF or an FATF-style regional body)? If so, when was the assessment carried out and what was its outcome? What deficiencies were identified and what steps have been taken to remedy these deficiencies?

## Reporting of suspicious transactions

Reporting requirements placed on financial institutions, especially on banks, are of particular importance in detecting the laundering of the proceeds of crime, including assets derived from wildlife and forest crime. The FATF 40 Recommendations and many domestic laws that comply with the international standards mandate that financial institutions exercise care in the conduct of financial transactions, and require the reporting of suspicious transactions to designated government agencies and to the relevant FIUs.<sup>98</sup> Non-compliance with such reporting obligations may be punished in a number of countries.<sup>99</sup>

<sup>96</sup> FATF, *FATF Standards: 40 Recommendations* (Paris, 20 June 2003, incorporating the amendments of 22 Oct 2004). Available from [www.fatf-gafi.org/dataoecd/7/40/34849567.PDF](http://www.fatf-gafi.org/dataoecd/7/40/34849567.PDF) (accessed 30 Mar 2010); FATF, *FATF Standards: FATF IX Special Recommendations* (Paris, 2003, incorporating the amendments of 22 Oct 2004). Available from [www.fatf-gafi.org/dataoecd/8/17/34849466.pdf](http://www.fatf-gafi.org/dataoecd/8/17/34849466.pdf) (accessed 20 May 2010).

<sup>97</sup> FATF, *AML/CTF Evaluations and Assessments: Handbook for Countries and Assessors* (Paris, Organization for Economic Cooperation and Development, 2009). Available at [www.fatf-gafi.org/dataoecd/7/42/38896285.pdf](http://www.fatf-gafi.org/dataoecd/7/42/38896285.pdf) (accessed 30 March 2010).

<sup>98</sup> FATF, *FATF Standards: 40 Recommendations*, Recommendations 5, 7, 11, 12 and 13; See further, Bambang Setiono and Yunus Hussein, “Fighting forest crime and promoting prudent banking for sustainable forest management: the anti-money-laundering approach”, CIFOR Occasional Paper, No. 44 (Bogor, Indonesia, Center for International Forestry Research, 2005), pp. 15-17.

<sup>99</sup> Cf. FATF, *FATF Standards: Forty Recommendations*, Recommendation 17.

Article 14, paragraph 1 (a), of the United Nations Convention against Corruption requires that States Parties establish a regulatory and supervisory regime within their competence to prevent and detect money-laundering activities. This regime must be comprehensive, but the precise nature and particular elements of the regime are left to the States, provided that they require, at a minimum, banks and non-bank financial institutions to ensure:

- Effective customer identification;
- Accurate record-keeping;
- A mechanism for the reporting of suspicious transactions.

This means that reporting entities doing business with forestry or hunting companies should be aware of the general scale of their client's legitimate operations, and should be properly suspicious when transactions are conducted that are inconsistent with the client's normal, customary and legitimate business operations. Thus, a logging enterprise depositing revenues from wood sales that are far in excess of what would seem consistent with the company's licensed harvest volume ought to generate suspicion by a responsible bank.<sup>100</sup>

FATF Recommendation 6 on politically exposed persons (PEPs) may be useful as it provides a further mechanism for enhanced due diligence by financial institutions conducting transactions on behalf of senior government officials, who may include wildlife and forestry officials. On this basis, financial institutions should, in relation to PEPs and in addition to performing normal due diligence measures:

- Have appropriate risk management systems to determine whether the customer is a PEP;
- Obtain senior management approval for establishing business relationships with such customers;
- Take reasonable measures to establish the source of wealth and source of funds; and
- Conduct enhanced ongoing monitoring of the business relationship.

According to the interpretative note of this Recommendation, the requirements of Recommendation 6 should be extended to individuals holding "prominent public functions in their own country".

Furthermore, under article 52, paragraph 1, of the United Nations Convention against Corruption, States Parties are required to take the necessary measures, in accordance with their domestic law, to oblige financial institutions within their jurisdiction:

- To verify the identity of customers;
- To take reasonable steps to determine the identity of beneficial owners of funds deposited into high-value accounts; and
- To conduct an enhanced scrutiny of accounts sought or maintained by or on behalf of individuals who are, or have been, entrusted with prominent public functions and their family members and close associates.

Such enhanced scrutiny must be reasonably designed to detect suspicious transactions for the purpose of reporting to competent authorities and should not be so construed as to discourage or prohibit financial institutions from doing business with any legitimate customer.

<sup>100</sup> Bambang Setiono and Yunus Hussein, "Fighting forest crime", pp. 14-15.

Moreover, in accordance with article 58 of the United Nations Convention against Corruption, States Parties must cooperate with one another for the purpose of preventing and combating the transfer of proceeds of offences established in accordance with the Convention and of promoting ways and means of recovering such proceeds. To that end, article 58 requires States Parties to consider the establishment of an FIU to serve as a national centre for the collection, analysis and dissemination of reports of suspicious financial transactions to the competent authorities.



### Tool 1.27 Reporting of suspicious transactions

- What customer due diligence measures do reporting institutes employ to establish customer and beneficial owner identities?
- What reporting entities are covered in the country?
- Are reporting entities, including banks, required to report suspicious transactions? Such an obligation applies to, inter alia, the following:
  - Proceeds of all offences that are required to be included as predicate offences under Recommendation 1 of the FATF 40 Recommendations;
  - Funds suspected to be linked or related to terrorism purposes; and
  - All suspicious transactions, including attempted transactions, regardless of whether the transaction involves tax matters.
- Has the country established an FIU?
- Does the FIU have, on a timely basis, access to financial, administrative and law enforcement information to achieve its objectives in assessing the suspicious transaction?
- Are the reporting entities required to report any suspicious transactions to the FIU?
- Does the FIU provide them with adequate guidance or instructions on reporting a suspicious transaction? (See FATF Recommendations 13, 14 and 26.)
- Are enhanced customer due diligence measures in place for dealings with PEPs? If so, are domestic or international PEPs covered?
- Does the country have policies and procedures in place to address the risks associated with non-face-to-face business relationships or transactions?
- Are measures in place to detect the physical cross-border transportation of currency and bearer negotiable instruments, including a declaration system or other disclosure obligation?

## 4.3 Other corruption-related offences

Corruption may occur prior to operation (granting permits, certificates, quotas or licences), during operation (control of activity) and after operation (granting permits and licences for the export or commercialization of products).<sup>101</sup>

<sup>101</sup> Debra J. Callister, "Corrupt and illegal activities in the forest sector", p. 8.



Corruption can involve low-ranking game wardens and forest officials who accept bribes and then turn a blind eye to illegal wildlife and forest activities.<sup>102</sup> However, it can also reach the highest levels of government officials who are involved in policy decisions and law-making in the wildlife and forestry sectors. High-level or “grand” corruption is the most damaging form of corruption as it causes significant financial losses and encourages petty corruption at the lower levels of government.<sup>103</sup> The Food and Agriculture Organization of the United Nations and the International Tropical Timber Organization also note that, in some cases, corruption in the forestry sector may be an intrinsic part of the patronage systems that sustain the power of a country’s ruling elite.<sup>104</sup> Political manipulation is a major issue in persistent illegal activities in the wildlife and forestry sectors, and it often leads to a breakdown of law and order and hampers private and foreign investment in these sectors.

Further encouraging corrupt behaviour is the fact that the risk of being caught is often low. Most of the relevant crimes are committed far from public view, in remote regions where monitoring and media scrutiny are low. Another generating factor is the absence of effective and dissuasive sanctions; it has been observed that the penalties are commonly minimal compared with the potential returns. Furthermore, a lack of transparency in public forest administration and other agencies, including law enforcement authorities, unclear accountability structures and a lack of public disclosure of key documents are all conducive to the flourishing of corrupt practices.

There are numerous ways in which bribes can be offered and paid in the wildlife and forestry sectors, not only to government officials but also to commercial enterprises and individuals that exercise control over areas such as industries and materials. Generally, corruption in the wildlife and forestry sectors involves:

- Payment of bribes to government officials or politicians for preferential treatment (for example, the award of a procurement contract, a logging or hunting concession, or a subsidy);
- Extortion by officials from operators to artificially legalize illegal operations (such as transportation permits, harvesting and hunting licences, forest land-use conversion);
- Official decisions that favour certain groups (for instance, when allocating logging or hunting concessions with the tacit understanding that the group will eventually repay the favour);
- Hunting groups or timber companies evading national regulations with relative impunity, thanks to the protection of powerful patrons;<sup>105</sup> and
- Bribing Customs or other border control officials to ignore smuggling or facilitate trafficking.

While most, if not all, countries have laws that criminalize corruption and bribery, these laws are not often an adequate deterrent because (a) they are rarely enforced, (b) prosecutions are not often successful due to, among other things, difficulties in gathering adequate evidence and (c) penalties are low. Elsewhere, domestic offences do not cover the bribery of foreign officials. As long as the risk of being caught and sanctioned is low, those working in the wildlife and forestry sectors—in official or private capacities—have little to lose from corruption.

<sup>102</sup> See further Nalin Kishor and Richard Damania, “Crime and justice in the Garden of Eden: improving governance and reducing corruption in the forestry sector”, in *The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level*, J. Edgardo Campos and Sanjay Pradhan, eds. (Washington, DC, World Bank, 2007), pp. 89-99.

<sup>103</sup> See further Debra J. Callister, “Corrupt and illegal activities in the forest sector”, pp. 9-10; Nalin Kishor and Richard Damania, “Crime and justice in the Garden of Eden”, pp. 89-97.

<sup>104</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 12; Cf. Esa Puustjärvi, *Proposal for Typology of Illegal Logging*, p. 24.

<sup>105</sup> Ibid, p. 11; Nalin Kishor and Richard Damania, “Crime and justice in the Garden of Eden”, pp. 89-97.

Article 15 of the United Nations Convention against Corruption defines bribery of national public officials as follows:

- (a) The promise, offering or giving, to a public official, directly or indirectly, of an undue advantage, for the official himself or herself or another person or entity, in order that that official act or refrain from acting in the exercise of his or her official duties.
- (b) The solicitation or acceptance by a public official, directly or indirectly, of an undue advantage, for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties.

Apart from the bribery of national public officials, this Convention sets out a comprehensive set of other criminalization provisions to combat corruption more efficiently and effectively and to foster international cooperation in this field.<sup>106</sup> The Convention requires that States Parties adopt legislation and other measures to establish as criminal offences activities related to corruption. These could then be used across all government sectors and be adapted to the unique characteristics of corruption in the wildlife and forestry sectors. These offences include:<sup>107</sup>

- Bribery of foreign public officials and officials of public international organizations (article 16);
- Embezzlement, misappropriation or other diversion of property by a public official (article 17);
- Trading in influence (article 18);
- Abuse of functions (article 19);
- Illicit enrichment (article 20);
- Bribery in the private sector (article 21);
- Embezzlement of property in the private sector (article 22);
- Laundering of proceeds of crime (article 23);
- Concealment (article 24); and
- Obstruction of justice (article 25).

Moreover, article 26, paragraph 1, of the Convention requires that States Parties adopt such measures as may be necessary, consistent with their legal principles, to establish the liability of legal persons for participation in the offences established in accordance with the Convention. States Parties are required to include in their legislation the liability of legal entities, to the extent that this is consistent with each State's legal principles. Subject to these legal principles, the liability of legal persons may be criminal, civil or administrative (article 26, paragraph 2), which is consistent with other international initiatives that acknowledge and accommodate the diversity of approaches adopted by different legal systems. Thus, there is no obligation to establish criminal liability, if this is inconsistent with a State's legal principles. In those cases, a form of civil or administrative liability will be sufficient to meet the requirement. Article 26, paragraph 3, provides that this liability of legal entities must be established without prejudice to the criminal liability of the natural persons who have committed the offences. The liability of natural persons who perpetrated the acts is therefore in addition to any corporate liability and must not be affected in any way by the latter. When an individual commits crimes on behalf of a legal entity, it must be possible to prosecute and sanction them both. The Convention requires States Parties to ensure that legal persons held liable in accordance with article 26 are subject to effective, proportionate and dissuasive criminal or non-criminal sanctions, including monetary sanctions (article 26, paragraph 4).

<sup>106</sup> See further part one, section 1.3.

<sup>107</sup> United Nations, *Treaty Series*, vol. 2349, No. 42146. Adopted on 31 October 2003, entered into force on 14 December 2005.

To assist countries in their efforts to curb corruption across all sectors of society, the United Nations Office on Drugs and Crime, in 2004, released *The Global Programme against Corruption: UN Anti-Corruption Toolkit*. The *Anti-Corruption Toolkit* provides an inventory of measures for analysing the nature and extent of corruption, for deterring, preventing, and combating corruption, and for integrating the information and experience gained into successful national anti-corruption strategies.<sup>108</sup>

Tool I.28 is designed to identify and analyse general corruption offences under domestic criminal law and specific corruption offences pertaining to the wildlife and forestry sectors (insofar as they exist). Enforcement measures relating to corruption investigations, including measures to combat the corruption of prosecution services and the judiciary, are explored in other parts of the present *Toolkit*.<sup>109</sup>



### Tool I.28 Corruption and bribery offences

- Are the following activities criminalized pursuant to domestic law? If so, under which laws are these activities criminalized (penal code, specific laws or other)? What types of offenses are included, both objective and subjective (*mens rea*)?

Active and passive bribery, complicity in bribery offences and other forms of corruption;

Embezzlement, misappropriation or other diversion of property by a public official;

Bribery of foreign public officials and officials in public international organizations;

Trading in influence;

Abuse of functions;

Illicit enrichment;

Bribery in the private sector; and

Obstruction of justice.

- Are there special offences pursuant to wildlife and forestry sector laws to criminalize the following?

Payment of bribes to government officials and politicians for preferential treatment (for example, to receive a timber concession, hunting permit or processing licence; or to avoid reporting restrictions, overlook petty infringements, ignore illegal logging, harvesting and poaching activities);

Payment of bribes to avoid prosecution or administrative intervention for non-compliance with wildlife and forest laws and regulations;

Financial extortion by wildlife and forestry officials;

Favouritism (that is, favourable decisions by wildlife and forestry officials with the tacit understanding that the favour will be returned, financially or otherwise);

<sup>108</sup> UNODC, *The Global Programme against Corruption: UN Anti-Corruption Toolkit*, 3rd ed. (Vienna, 2004).

<sup>109</sup> See further part two, section 9, and part three, section 1.5.

Cronyism (that is, favourable decisions by wildlife and forestry officials for friends and relatives); and

Manipulating bidding processes or leaking bidding information to preferred contractors.

- Does liability for the offences cover intentionally, knowingly or negligently (without due care) engaging in the prohibited conduct? Can the offences be committed without proof of fault (strict liability)?
- Does liability for the offences extend to participation in, attempting to, conspiring to, aiding, abetting, facilitating and counselling the commission of these offences?
- What are the penalties for these offences?
- Is the liability of legal persons for the relevant offences established domestically? What is the nature of such liability?
- Has the country become a Party to the United Nations Convention against Corruption?

## 4.4 Tax evasion and non-payment of duties and other fees

Tax evasion, and the non-payment of duties, tariffs and other fees are common phenomena that are not unique to the wildlife and forestry sectors. Isolated instances of such activities may seem insignificant and tolerable. However, when seen in context and in combination, the failure to pay the relevant duties, taxes and fees deprives governments and local communities of important revenues and can seriously undermine economic development. Unfair competition also poses a serious challenge to those operators that comply with the relevant laws and regulations and pay the relevant fees as their products may be more expensive at wholesale and retail stages. Moreover, tax evasion and the non-payment of fees are frequently linked to money-laundering and corruption, especially when government officials are bribed to avoid the paying of fees.



### Tool 1.29 Tax evasion and non-payment of fees

- Are the following activities punishable pursuant to domestic law? Are they punishable as criminal or administrative offences? Pursuant to which laws are these crimes punishable (penal code, specific criminal laws, administrative laws or regulations, or other)? What are the elements of these offences?

Declaring animal and plant material or products below market prices or value;

Overvaluing services received from related companies to reduce declared profits and corporate income taxes;

Avoiding royalties and duties by underreporting or undervaluing animal and plant material or products;

Non-payment of licence fees, royalties, taxes and other government charges relating to activities in the wildlife and forestry sectors; and



Concealing of profits and manipulating revenue flows for services to avoid duties and taxes.

- What are the penalties for these offences?

## 4.5 Criminal organizations

Many forms of wildlife and forest crime are directly or indirectly associated with organized crime. Some criminal organizations systematically engage in illegal activities in the wildlife and forestry sectors and employ many assistants in their criminal undertakings. They frequently operate across borders, giving rise to the term “transnational organized crime”.

The traditional extensions of criminal liability, such as inchoate offences and secondary liability,<sup>110</sup> are often ill-suited to criminally charge individuals in criminal organizations, especially those who direct and lead criminal groups without physically executing any criminal offences. In the case of larger syndicates, some individuals may make contributions to the group generally, and may well be aware that the group regularly engages in criminal activities, but they have no specific knowledge about individual offences. A person may, for instance, deliberately provide a criminal organization with firearms, other equipment or funds, but may not be aware of the specific individual offences these would be used for. Participants of this kind do not meet the threshold required for accessorial liability.

In addition, conspiracy charges cannot be used against low ranking members of criminal organizations who are not privy to the conspiracy and are not involved in the planning of criminal activities. Furthermore, some criminal organizations engage in a diverse range of illegal transactions that cannot be tied together as a single common conspiracy. In some jurisdictions, it is difficult, if not impossible, to target high ranking members of criminal organizations who mastermind and finance the criminal activities, but who are not involved in executing their plans and thus do not engage in any overt acts: leaders of organizations create a “corporate veil to insulate them from liability”.<sup>111</sup>

Typically, those at the higher end of the hierarchy will attempt to dissociate themselves from direct participation in criminal activity, especially crimes which carry a high risk of arrest. As these higher-echelon figures often receive much of their income from taxes, tribute, or dues paid by their subordinates, they are effectively insulated from indictment.<sup>112</sup>

To address these problems and widen the scope of criminal liability, the United Nations Convention against Transnational Organized Crime sets out a separate offence for participating in an organized criminal group. Article 5, paragraph 1 (a) (ii), of the Convention attaches liability to deliberate, purposeful contributions to criminal organizations. The application of this offence is significantly broader than existing inchoate offences as it allows for the criminalization of persons who are more remotely connected to criminal activities.

This offence described in article 5, paragraph 1 (a) (ii), requires that an accused must have taken “an active part in” certain activities of an organized criminal group.<sup>113</sup> The participation has to be “active” in the sense that it makes an actual contribution to the group’s activities and is not completely

<sup>110</sup> Explored in part one, section 2.3.

<sup>111</sup> Christopher L. Blakesley, “The criminal justice system facing the challenge of organized crime” *International Review of Penal Law*, vol. 69 (1999), p. 78.

<sup>112</sup> Peter B.E. Hill, *The Japanese Mafia: Yakuza, Law, and the State* (Oxford, Oxford University Press, 2003), pp. 148-149. See further Andreas Schloenhardt, *Palermo in the Pacific*, pp. 15-23.

<sup>113</sup> Organized criminal group is defined in article 2, paragraph (a), of the United Nations Convention against Transnational Organized Crime.

unrelated to them. The participation of the accused may be (a) in the group's criminal activities or (b) in other, non-criminal activities if the accused knows that his/her contribution would contribute to achieving a criminal aim.<sup>114</sup> Proof of membership or of any ongoing role in the organization is not required for the activity to be considered an offence.

Pursuant to article 5, paragraph 1 (a) (ii), liability is restricted to persons who intentionally participate in the above-mentioned activities and who have actual knowledge of the aims and activities or the criminal intentions of the organized criminal group. This excludes from liability any person who may unwittingly contribute to a criminal organization or who is recklessly indifferent about the nature and activities of the group.<sup>115</sup> Article 5, paragraph 2, facilitates the proof of the mental elements as the intention and knowledge required under article 5, paragraph 1 (a) (ii), may be inferred from objective factual circumstances.<sup>116</sup>

This legislation, which has found widespread acceptance among Parties to the Convention, covers a great variety of criminal activities. This is a useful tool to target those who lead, direct, finance or help in other capacities criminal organizations involved in wildlife and forest crime.



### Tool I.30 Participation in criminal organizations

- Does the country criminalize participation in a criminal organization or other organized criminal group? If so, under which legislation can this offence be found? What are its elements?
- Does this offence extend to all serious offences? Are wildlife and forest offences considered serious offences pursuant to domestic law?
- Does this offence extend to those who lead, direct, finance or help in other capacities criminal organizations?
- Does liability for this offence extend to attempting to, aiding, abetting, facilitating and counselling the commission of this offence?
- What are the penalties for this offence?

## 5. Regional and specialized initiatives

In addition to the international frameworks and bilateral treaties discussed in part one, section 1 of the *Toolkit*, there have emerged specialized initiatives that seek to tackle specific aspects of wildlife and forest crime, or that focus on particular geographical areas.

<sup>114</sup> Roger S. Clark, "The United Nations Convention against Transnational Organized Crime" *Wayne Law Review*, vol. 50 (2004), pp. 161-172.

<sup>115</sup> Parties are, however, at liberty to lower the *mens rea* requirement and expand liability to recklessness, negligence or even strict liability without proof of a fault requirement (art. 34, para. 3); cf. David McClean, *Transnational Organized Crime*, p. 62.

<sup>116</sup> See further Andreas Schloenhardt, *Palermo in the Pacific*, pp. 50-54.

## 5.1 Forest Law Enforcement and Governance

Forest Law Enforcement and Governance (FLEG) processes are regional initiatives coordinated by the World Bank and organized in cooperation with governments and consumer countries. The first regional FLEG initiative was launched in South-East Asia in 2001, and similar processes have since been developed in Africa, Europe, Latin America and North Asia.

The objectives of the FLEG processes are to improve governance in the forest sector and to foster international dialogue and cooperation to fight illegal logging and trade between wood producer and consumer countries by improving linkages and harmonizing regulations. Broadly speaking, the FLEG processes emphasize support for developing an understanding between producing and consuming countries and for developing schemes designed to ensure that only legal timber enters the markets of consumer countries. On the supply side, the FLEG processes address the underlying causes of illegal logging and corruption. On the demand side, the processes recognize the responsibility of consumer countries to place controls on imports and consumption.<sup>117, 118</sup>

The regional FLEG processes have been widely recognized for mobilizing political commitment to undertake remedial actions in the countries participating in the processes. They created partnerships between various donors and development agencies sharing a common concern with improving forest governance. This has led to country action by national governments, the private sector and civil society, often with support from bilateral and multilateral donors. These actions are often integrated into other national and regional development processes. The ministerial processes and global attention paid to forest sector legality has led to a situation in which FLEG issues are no longer seen as a separate item but are embedded as integral parts of sustainable forest management.

The FLEG Declarations are “soft legislation”, that is, aspirational policy declarations. However, several countries have introduced national legislation to address the issue. In consumer countries, the best known examples are the revised Lacey Act in the United States in 2008 and the European Union’s FLEGT Action Plan, which ultimately led to European Union legislation in 2010 and binding agreements with producer countries.

All FLEG processes define priority issues of forest law enforcement and governance and a list of actions to address both illegal logging and illegal timber trade throughout the respective regions.<sup>119</sup> In summary, the FLEG processes have led to a number of concrete, albeit nascent, outcomes, including:

- Multi-stakeholder technical meetings where experiences with FLEG issues are shared;
- Intergovernmental negotiations for the drafting of a ministerial declaration and action plan to improve forest governance and combat illegal logging and associated trade; and
- Other regional stakeholder meetings both prior to and as a follow-up to the ministerial declarations.<sup>120</sup>

A number of governments of countries with an important role in the forest products production and marketing chain are still only marginally committed to addressing this issue. A portion of the industries operating in the countries affected by illegal logging and other forest crime export products to less environmentally sensitive markets or they are used for domestic consumption. Much more needs to be done to fully capitalize on the opportunities available under FLEG.<sup>121</sup>

<sup>117</sup> European Forest Institute, FLEGT Team, *Forest Law Enforcement, Governance and Trade*; and Nalin Kishor and Richard Damania, “Crime and justice in the Garden of Eden”, pp. 89-107.

<sup>118</sup> See part four of the *Toolkit* for further information.

<sup>119</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, pp. 69 and 106.

<sup>120</sup> World Bank, “Strengthening forest law enforcement and governance”, p. 19.

<sup>121</sup> *Ibid.*, p. 20.

## South-East Asia

The first regional FLEG process was launched in South-East Asia with the Forest Law Enforcement and Governance East Asia Ministerial Conference, held in Bali, Indonesia, from 11 to 13 September 2001. This Conference resulted in a Ministerial Declaration that pledges to fight forest crime by strengthening bilateral, regional and multilateral collaboration. The Declaration broke the traditional reticence to discuss the problems of illegal logging and trade. The programme of regional and national activities represents an innovative, comprehensive and integrated effort to tackle illegal logging and trade practices.<sup>122</sup>

The Declaration expresses, *inter alia*, the need to:

- Take immediate action to intensify national efforts, and to strengthen bilateral, regional and multilateral collaboration to address violations of forest law and forest crime, in particular illegal logging, associated illegal trade and corruption, and their negative effects on the rule of law;
- Develop mechanisms for effective exchange of experience and information;
- Undertake actions, including cooperation among law enforcement authorities within and among countries, to prevent the movement of illegal timber; and
- Explore ways in which the export and import of illegally harvested timber can be eliminated, including the possibility of a prior notification system for commercially traded timber.

The indicative list of actions for the implementation of the Declaration further recommends the development of harmonized Customs commodity codes, protocols for sharing export/import data, and prior notification systems.

In 2002, the Regional Task Force and Advisory Group proceeded to analyse concrete ways to give operational meaning to the Ministerial Declaration.

The Bali Declaration and the follow-up discussions it spawned have led to agreements on the specific national and regional efforts needed to address forest threats. The Association of Southeast Asian Nations (ASEAN) has established regional bodies and work programmes to implement the Declaration. While progress in the field has been slow in some cases, this clearly demonstrates regional ownership. In addition, several bilateral agreements have been signed to address the issues.<sup>123</sup> In May 2011, Indonesia signed a VPA with the European Union, and negotiations or pre-negotiation technical work is ongoing with a number of countries in the region.

## Africa

The Africa Forest Law Enforcement and Governance Ministerial Conference took place in October 2003 in Yaoundé, Cameroon, and resulted in the Africa Forest Law Enforcement and Governance Declaration and Action Plan. In the Declaration, governments pledged to mobilize financial resources for FLEG, promote cooperation between law enforcement agencies within and among countries, involve stakeholders in decision-making, and explore means of demonstrating the legality and sustainability of forest products. The Africa Forest Law Enforcement and Governance Support Group of active producer, consumer and donor governments was established in May 2004, with the purpose of maintaining momentum for action to implement the Declaration, especially through national-level

<sup>122</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 106.

<sup>123</sup> One example is an MOU between Indonesia and the United Kingdom to improve FLEG and combat illegal logging and international trade in illegally logged timber. Other examples are MOUs between Indonesia and Japan, between Indonesia and Malaysia, and between Indonesia and China, with similar objectives.



action plans.<sup>124</sup> However, since then, most action has taken place at the national or subregional level (for example, in the Congo Basin).

The first countries to sign VPAs with the European Union were in Africa (Cameroon, the Central African Republic, the Congo, Ghana and Liberia).

## Latin America

In 2005, the World Bank, in collaboration with the European Union, initiated a similar FLEG process in Latin America. However, the process in this region did not lead to a ministerial declaration as it did in other regions. In Latin America, most FLEG work has been done through national action (for example, in Brazil) or with the support of international organizations at both the country and subregional levels, particularly in Central America. CITES has been active in the region due to the importance of the sustainable management of mahogany and its role in international trade.

## Europe and North Asia

Concerned about rampant illegal logging, the Russian Federation announced in May 2004 its interest in initiating a FLEG process for Europe and North Asia in collaboration with regional partners. An international steering committee was established to provide advisory inputs to the process. A preparatory conference on FLEG was held in June 2005, and a ministerial conference was held in November of that year.<sup>125</sup>

Much of the implementation of FLEG in Europe and North Asia has been supported by the European Union through a collaborative arrangement with national Governments and other stakeholders, the World Bank, the International Union for Conservation of Nature and the World Wildlife Fund.



### Tool I.31 Regional FLEG processes

- Does the country participate in any of the regional FLEG processes?
- Have declarations and other resolutions by the regional FLEG processes been taken into account in domestic policies, laws, regulations and so forth?

## 5.2 Wildlife enforcement networks

A number of regional wildlife enforcement networks have emerged to facilitate cross-border cooperation among agencies involved in preventing and suppressing wildlife crime. These include the North American Wildlife Enforcement Group and the European Union Wildlife Trade Enforcement Group.

In South-East Asia, the ASEAN Wildlife Enforcement Network coordinates the regional response to illegal trade in protected species, which threatens biodiversity, endangers public health and undermines economic well-being. It provides a mechanism by which countries can share information and learn best practices from each other. Through annual meetings, workshops and training sessions, the ASEAN Wildlife Enforcement Network facilitates increased capacity and the better coordination

<sup>124</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 106; Nalin Kishor and Richard Damania, "Crime and justice in the Garden of Eden", pp. 89-108.

<sup>125</sup> Nalin Kishor and Richard Damania, "Crime and justice in the Garden of Eden", pp. 89-108.

and collaboration of law enforcement agencies among South-East Asian countries, regionally and globally. Links with CITES offices, INTERPOL, the United States Fish and Wildlife Service, the United States Department of Justice and other wildlife law enforcement groups have broadened the Network's reach.<sup>126</sup>

The South Asia Wildlife Enforcement Network was formally launched in January 2011. A network for Arabic-speaking countries is under construction, as is one for Central America.

The Lusaka Agreement on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora is intended to encourage and facilitate wildlife law enforcement in Africa. It currently has six signatory Parties, primarily in East Africa. The Agreement has a task force of officers seconded by Parties, which is based in Nairobi.<sup>127</sup>



### Tool 1.32 Regional wildlife enforcement networks

- Does the country participate in any of the regional wildlife enforcement networks?
- Have the declarations and best practice guidelines developed by regional wildlife enforcement networks been integrated into domestic policies, laws, regulations, administrative procedures and so forth?

## 5.3 Certification systems and schemes, and private and voluntary standards

The forestry sector in particular has several private and voluntary standards that are used to demonstrate to consumers of wood products that the product is of legal origin or is produced in a sustainable way. The best known schemes are voluntary sustainability standards, such as the Forest Stewardship Council or the Programme for the Endorsement of Forest Certification, which are international umbrella organizations that have endorsed certification schemes for sustainable forest management.<sup>128</sup>

Certification systems help to identify, document and prove the sustainability of the certified forest products. Certified forests are considered to be sustainably managed, and consequently, environmental, social and economic values are maintained.<sup>129</sup> According to the World Wildlife Fund and World Bank Global Forest Alliance, certification and accreditation has to be in compliance with international frameworks and compatible with global applicable principles that balance economic and ecological dimensions. Additionally, major stakeholder groups should participate in governance and standard setting, which has to be based on objective and measurable performance standards that are adapted to local conditions. To ensure support from local communities and main stakeholders, certification and accreditation procedures need to be transparent and disclosed to the public.<sup>130</sup>

Sustainable forest management standards are aimed at a level higher than what is required by legislation by introducing elements to verify social and environmental sustainability. Other sets of standards deal with the legality of wood and wood products. There are also different levels of compliance

<sup>126</sup> For further information visit [www.asean-wen.org](http://www.asean-wen.org) (accessed 1 Apr 2010).

<sup>127</sup> Further information can be obtained from the task force's website: [www.lusakaagreement.org/](http://www.lusakaagreement.org/).

<sup>128</sup> For more information, see [www.pefc.org/](http://www.pefc.org/) and [www.fsc.org/](http://www.fsc.org/).

<sup>129</sup> The website of the Forest Stewardship Council can be visited at [www.fscus.org/](http://www.fscus.org/).

<sup>130</sup> WWF and World Bank Global Forest Alliance, *Forest Certification Assessment Guide (FCAG): A Framework for Assessing Credible Forest Certification Systems/Schemes* (2006), p. iii.

ranging from verified legal origin to more extensive legality verification. The Rainforest Alliance, a provider of forest-related verification services, defines the concepts as follows:

### Verification of Legal Origin

The Verification of Legal Origin verifies that timber comes from a source that has a documented legal right to be harvested, pursuant to the laws and regulations of the government of the jurisdiction. Suppliers of such timber must follow and maintain documented chain-of-custody systems.

### Verification of Legal Compliance

Verification of Legal Compliance expands upon the basic component of the Verification of Legal Origin by verifying that timber harvesting complies with a broader range of applicable and relevant laws and regulations related to forestry.

It is important to recognize that “legal origin” is not the same as “legal compliance”. Legal origin refers to meeting the administrative requirements of permitting, planning, taxes or fees, and harvesting in defined areas. Legal compliance encompasses a broader range of laws on environmental protection, wildlife, water and soil conservation, harvesting codes and practices, worker health and safety, and fairness to communities.”<sup>131</sup>

In recent years, there has been a proliferation of public and private initiatives to improve and verify the sustainability or legality—or both—of forest production. A recent mapping by the Dutch NGO Tropenbos found 127 different initiatives launched by the public or private sector or by NGOs. Their number has grown exponentially in the past 10 years; in 2000, there were less than 40 schemes.<sup>132</sup>



### Tool I.33 Certification systems and schemes, and private and voluntary standards

- Does the country have national sustainable forest management standards endorsed by the Forest Stewardship Council or the Programme for the Endorsement of Forest Certification?
- Do all major stakeholder groups participate in governance and standard setting?
- Do certification systems cause unnecessary obstacles to trade?
- Are standards adapted to local conditions? Are they based on objective and measurable performance?
- Are procedures and decision-making processes transparent and reported to the public?
- Do complaint and appeal mechanisms exist?
- Is there adequate national certification capacity to implement sustainable forest management certification?
- Are voluntary and private standards known and widely applied?

<sup>131</sup> See [www.rainforest-alliance.org/forestry/verification/legal](http://www.rainforest-alliance.org/forestry/verification/legal) (accessed on 15 July 2011).

<sup>132</sup> Jinke Van Dam and Herman Savenije, *Enhancing the Trade in Legally Produced Timber: A Guide to Initiatives* (Wageningen, Netherland, Tropenbos International, 2001).



# Part two.

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# Enforcement

Law enforcement can be one of the main tools to reduce wildlife and forest crime. Enforcement involves any government action or intervention taken to determine or respond to non-compliance. It is the most immediate and often the most visible way to suppress wildlife and forest crime. It influences the costs to perpetrators through the probability of being caught, the probability of conviction and the sanctions that apply if convicted. Accordingly, well-regarded and highly skilled police, wildlife and forestry enforcement, and border control services are prerequisites for the proper functioning and positive perception of justice.<sup>133</sup>

The enforcement of natural resource law is best understood as an extension and integral part of resource management. Therefore, all those involved in resource management—from the setting of management objectives for specific resource systems, to the conduct of resource assessments and inventories, to the design and support of regeneration systems and habitat restoration works, and to the specific investigation and pursuit of criminal violators—are components of an enforcement system. The specific roles and responsibilities of the many actors vary among different systems of public administration and they can be structured in many different ways to take into consideration local needs and circumstance. However, the underlying continuity and inclusiveness of the enforcement system need to be recognized.

Wildlife and forest crime often involves complex offences comprising a multitude of criminal elements, with incidents frequently crossing national borders. This can make appropriate and effective enforcement challenging. Investigating wildlife and forest crime involves different proactive, disruptive and reactive investigation methods. These are time- and resource-intensive processes that often require domestic and international cooperation among different agencies, as well as parallel financial (and sometimes environmental) investigations.

Approaches to law enforcement vary greatly among different jurisdictions. Policing the wildlife and forestry sectors frequently involves a myriad of agencies with different mandates, objectives, powers, investigative techniques and procedures. In some jurisdictions, law enforcement is highly centralized, while in other places it may be decentralized and involve local communities. The way in which law enforcement in these sectors is delivered depends on a host of variables, including the prevailing political, economic and cultural doctrines, as well as the social infrastructure and local tradition.<sup>134</sup> Law enforcement mechanisms based upon national custom or culture, or on alternative social hierarchies, may also be present, especially where a lack of faith in the fairness and efficiency of the official system is prevalent.<sup>135</sup>

## 1. Enforcement agencies

The role policing agencies play in the enforcement of wildlife and forest laws and regulations requires analysis and understanding if better practices and policies are to be developed. Before such analysis is possible, it is necessary to identify the role and responsibility of different stakeholders, both nationally and locally.<sup>136</sup> Therefore, the first step in analysing law enforcement capacities in relation to wildlife and forest crime involves an understanding of law enforcement macro-structures. It is

<sup>133</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.

<sup>134</sup> Ibid.

<sup>135</sup> Ibid.

<sup>136</sup> Kevin Tomkins, “Police law enforcement and the environment”, *Current Issues in Criminal Justice*, vol. 16, No. 3 (March 2005), p. 294.

important to bring clarity to the “who is who” and “who does what” in wildlife and forest law enforcement as doubts about who has authority to enforce the relevant laws may lead to difficulties, discrepancies or duplication.<sup>137</sup>

Wildlife and forest crime is a phenomenon that usually involves a variety of government sectors. Accordingly, in most jurisdictions, there is more than one entity with responsibility for enforcing the many aspects of the relevant wildlife, forest, Customs and other criminal laws. There are often several national agencies, organizations or institutions and regional or local agencies offering either complementary or similar coverage. Even in jurisdictions with a single national police force, there are likely to be additional law enforcement organizations with either highly specialized skills or with specific functions, such as wildlife and forest enforcement units, Customs, border police and so forth.

In some jurisdictions, wildlife, forestry and Customs officials may have no enforcement power under criminal law at all, and must hand suspects and contraband over to the police as soon as they are apprehended. By contrast, in other countries, Customs officials are authorized to exercise the powers of police, or vice versa. There may also be a mixture of public and private policing services, where private companies franchise certain functions from the State.<sup>138</sup>

Jurisdictions with federal structures often have multiple layers of law enforcement, with a single federal law enforcement agency that complements local, provincial or State police forces. Federal/national police forces are generally authorized to address criminal issues of national concern or those with inter-State implications. Import and export offences, including those involving wildlife and plants (dead or alive), also usually fall into this category. However, the terms of reference and mandate for the different jurisdictions and areas of competence involved may not always be as clear as they should be, and there is potential for a clash between local and federal approaches.<sup>139</sup>



## Tool II.1 Law enforcement structures

- How is law enforcement structured nationally?
- Which agencies have responsibility for national, state/provincial and local policing?
- Are there any inter-agency task forces or other agencies that work on environmental or related offences?
- Which government ministries are involved in law enforcement?

### 1.1 Enforcement mandates

Once the macrostructures of law enforcement have been identified, it is necessary to explore the various agencies charged with combating the relevant wildlife, forest, Customs and other criminal offences.<sup>140</sup> In some jurisdictions, the general police force may be responsible for investigating wildlife and forest offences. Elsewhere, forestry, agriculture or treasury departments, Customs, coast guards or environmental agencies may carry out this function. The enforcement of legislation established in accordance with the Convention on International Trade in Endangered Species of Wild

<sup>137</sup> Cyrille de Klemm, “Guidelines for legislation to implement CITES”, p. 10.

<sup>138</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.

<sup>139</sup> Ibid.

<sup>140</sup> Cf. Ibid.

Fauna and Flora (CITES) is sometimes vested in Customs services and, elsewhere, in other specialized agencies.<sup>141</sup> In some jurisdictions, the enforcement mandate is determined by the seriousness of the offence, so that the police force is tasked with the investigation of (serious) crimes, while wildlife and forestry officials handle (less serious) misdemeanours. It may also be the case that enforcement functions are delegated or outsourced to private security firms.<sup>142</sup>

General police agencies are constrained by limited budgets and may not be able to adequately prioritize the investigation of wildlife and forest offences vis-à-vis, for instance, homicide or other violent crime.<sup>143</sup> As a general point, the presence of specialized wildlife and forest crime enforcement units is crucial to ensure that wildlife and forest offence investigations receive levels of attention similar to those of mainstream criminal investigations. Creating specialist teams of enforcement personnel also allows for the pooling of resources and expertise into small units rather than attempting to achieve a broad and general level of enforcement across the country.

In this context, the CITES Secretariat also encourages the creation of specialized, multiagency wildlife law enforcement units to combat illegal trade in CITES-listed species,<sup>144</sup> a view that is supported by many experts and scholars in this field.<sup>145</sup> To that end, CITES offers “guidance for specialized wildlife law enforcement units”.<sup>146</sup> In some countries, primary responsibility for the enforcement of CITES has been assigned to the CITES Management Authority itself.<sup>147</sup>



## Tool II.2 Enforcement mandates

- Which organizations, agencies or bodies are involved in investigating wildlife and forest offences? Is the jurisdiction of each agency clear or is there disjuncture?
- What are the duties and responsibilities of each agency? Are the duties of the relevant agencies clearly defined and understood by their staff and the agencies with which they interact? Do these agencies have adequate authority or discretion to properly undertake their functions?
- Are the agencies part of one government ministry or several? Which ministries are involved?
- How are the agencies financed? Are the budgets they receive sufficient to carry out their functions?
- Who has control over these agencies? Who examines their function?
- If specialized agencies or departments exist, are they made up of individuals from a number of different agencies?

<sup>141</sup> Cf. Andreas Schloenhardt, “The illegal trade in timber”, p. 22.

<sup>142</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.

<sup>143</sup> Adrian Linacre, “Nature of wildlife crimes, their investigations and scientific processes”, in *Forensic Science in Wildlife Investigations*, Adrian Linacre, ed. (Boca Raton, Florida, CRC Press, 2009), pp. 1-2.

<sup>144</sup> CITES Secretariat, “Notification to the Parties concerning: CITES Tiger Enforcement Task Force”, Notification, No. 2001/047 (9 July 2001).

<sup>145</sup> Jonathan P. Kazmar, “The international illegal plant and wildlife trade: biological genocide?” *University of California Davis Journal of International Law and Policy* (Winter 2000), pp. 105-125; Sara Oldfield, ed., *The Trade in Wildlife: Regulation for Conservation* (London, Earthscan Publications, 2003), p. xxi.

<sup>146</sup> CITES Secretariat, “Notification to the Parties”, CITES Resolution Conf. 12.5 (Rev. CoP 15), annex 3.

<sup>147</sup> Cyrille de Klemm, “Guidelines for legislation to implement CITES”, p. 61.



- Are there agencies dedicated exclusively to wildlife and forest crime, including the enforcement of CITES, or do they also have responsibilities for other types of crime (for example, illegal drugs, organized crime or money-laundering), or non-tariff commodities?
- Are there any unofficial or private groups or organizations involved in delivering a policing role in the wildlife and forestry sectors? If so, what do they do? How are they perceived by official policing agencies? To whom are they accountable?

In countries with a federal system, additional questions may arise about how state/provincial and local investigators cooperate with federal law enforcement officers. Are there clear agreements or protocols that define the respective jurisdictions? How often do they combine their investigations? Who has precedence? How often do national-level investigators take over investigations that began at the local level?<sup>148</sup>

Generally, the mandate for policing is set out in legislation or ordinances that assign the enforcement of certain laws to the relevant agencies. For example, a Customs statute may empower border and Customs administration, the department of homeland security or similar agency with enforcing actions against border offences.<sup>149</sup>



### Tool II.3 Legislation for enforcement mandates

- Is there legislation assigning the responsibilities of policing wildlife, forest and related crimes to specific agencies?
- Does the legislation assign and distinguish between the roles of different agencies in delivering policing?

There are significant variations in the ways in which criminal or administrative investigations can be instigated. In some systems, only prosecutors or investigating judges can launch, manage and oversee investigations, while in other systems police officers or other enforcement authorities have the power to do so. If border, Customs, wildlife and forest offences are concerned, agencies outside the traditional criminal justice sphere may have special investigative authority.<sup>150</sup> In some countries, these stipulated duties may not exist or may not be endorsed by the government, depending on the political and social context of the country.<sup>151</sup>

<sup>148</sup> UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.

<sup>149</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.

<sup>150</sup> UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.

<sup>151</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.



## Tool II.4 Management of investigations

- Who is responsible for managing a criminal investigation involving wildlife and forest offences: a prosecutor, investigating judge, police officer, wildlife or forestry agency, or a border control or Customs agency?
- Who is responsible for managing investigations involving Customs, import/export and border control offences?
- Who is responsible for managing investigations of CITES offences?
- Is the responsibility for managing an investigation unambiguous so as to ensure a coordinated investigation and avoid the loss of evidence?
- Are the results of investigations, prosecutions and court decisions shared among the relevant enforcement agencies, in particular the agencies that handed over the case in question?

### CITES Management Authority

An important element of the CITES framework is the creation or identification of national agencies charged with the administration and execution of CITES obligations. Specifically, the Convention requires that, at the time of accession to CITES, Parties identify the relevant agencies (CITES article IX). This information is then made available to the Secretariat and to all other Parties, thus creating a directory.

Article IX, paragraph 1 (a), specifies that each Party to the Convention is required to designate a domestic agency mandated with the management of CITES. Its responsibilities include:

- The authorization and issuing of permits and certificates of approval;
- The communication of information to other Parties and the CITES Secretariat; and
- The reporting on CITES compliance matters.

The way in which the Management and Scientific Authorities are designed and designated is left to the discretion of the individual Party. In most countries, they have been appointed by a simple administrative decision, while some countries have established these authorities through legislation.<sup>152</sup> In some countries, the CITES Management Authority is also charged with the enforcement of law and regulations relating to species protection, but in most countries, CITES enforcement remains within the jurisdiction of Customs services. Elsewhere, other wildlife and forestry agencies carry out the CITES management functions.

<sup>152</sup> See further Cyrille de Klemm, "Guidelines for legislation to implement CITES", pp. 22-24.



## Tool II.5 CITES Management Authority

- Which national agency is the designated CITES Management Authority (if the country is a Party to CITES)?
- Does the CITES Management Authority have enforcement functions? If not, which agency is charged with enforcing CITES obligations?
- How does the CITES Management Authority operate with other enforcement agencies and ministries?

## 1.2 Community policing

Community policing has emerged in recent years as an effective and productive strategy for enforcing law at the local level. Especially in the wildlife and forestry sectors, some government agencies deploy local rangers, guards and other officers to patrol game reserves, monitor logging activities, and ensure compliance with the relevant laws and regulations. Some countries have instituted “bush watch” schemes, similar to Neighbourhood Watch programmes, designed to prevent wildlife theft and to protect native fauna and flora.<sup>153</sup>

One of the characteristics of community policing is the use of decentralized decision-making. This engages and employs the community and community structures in a partnership approach to diagnose, identify, respond to and solve the problems of wildlife and forest offences affecting the local area. Community policing is reliant on an effective working relationship between law enforcement agencies and the community. Establishing partnerships among wildlife and forest law enforcement agencies, civil society and the private sector to monitor compliance directly and indirectly may help to limit the arbitrary or capricious use of powers and increase transparency. A close relationship between agencies and the community can also foster better information sharing and intelligence gathering, and can facilitate the investigation of crime. Law enforcement structures may require adaptation to become more consultative and inclusive to ensure that close relationship.<sup>154</sup>

As a strategy to prevent and suppress wildlife and forest offences, community policing is not a universal panacea. However, it may be particularly useful at points of origin where the local community is affected by or involved in the wildlife and forestry industries, such as nature and game reserves, and in areas with commercial logging and hunting activities. In these places, community policing helps to eliminate misunderstandings, suspicion and conflict among industry, law enforcement officers and the communities in which they operate.<sup>155</sup>

<sup>153</sup> See further Kevin Tomkins, “Police law enforcement and the environment”, pp. 294-302.

<sup>154</sup> See further FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 60; Jacqueline M. Drew and Lorraine Mazerolle, “Eras of policing”, in *Policing in Context*, Roderic Broadhurst and Sara E. Davies, eds. (Melbourne, Oxford University Press, 2008), pp. 32-41.

<sup>155</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.



## Tool II.6 Community policing

- Is there a community policing strategy related to wildlife and forest offences? If so, what is included in it? Are local priorities and performance measures set?
- Are there formally defined mechanisms in place by which the public, or their representatives, are consulted on local policing issues? How often does this happen and under which circumstances? Who is involved? What are the outcomes of such consultations?
- How is community policing perceived by other criminal justice agencies and the public?

## 1.3 Partnerships

The investigation of wildlife and forest offences is a challenge for a whole community and is not limited to law enforcement agencies. It usually involves a great variety of government departments, private industry and civil society organizations, each of which helps to bring an additional dimension to the response. Accordingly, dealing with wildlife and forest offences in isolation, especially without the buy-in of enforcement agencies such as police and Customs, affects the ability to efficiently address the causes and consequences of this phenomenon.

It is crucial that key stakeholders consult one another and build partnerships to combat wildlife and forest offences effectively. An environment should be created where seizures and arrests for wildlife and forest offences do not end in themselves but are linked to the wider fight against serious criminality. This requires close collaboration between wildlife and forestry officials and the wider law enforcement community dealing with both criminal intelligence and the criminal justice system as a whole.

Collaboration among various agencies—often with conflicting or opposing mandates and objectives—is not always easy. Organizations and agencies are sometimes reluctant to help law enforcement because of concerns that they may alienate their constituents, because their priorities may be different, because sufficient resources may not be available or because there are legal constraints (for instance, in the case of classified information and data protection).<sup>156</sup>

Consultation and partnership building can occur at various levels and may be formalized in memorandums of understanding (MOUs) or committees. They may also be ad hoc and informal, based on changing needs and developments. In some jurisdictions, interdepartmental committees have been set up to coordinate control and enforcement measures across government sectors. Elsewhere, regular meetings between government and industry representatives take place to consider commercial and other economic interests in enhancing law enforcement. Some communities organize local events that bring together concerned individuals, community groups, local administrators and representatives of central authorities to consult with law enforcement agencies about the best ways to prevent and suppress local wildlife and forest offences.

<sup>156</sup> UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.





## Tool II.7 Partnerships

- What partnerships to prevent and suppress wildlife and forest offences currently exist (a) among law enforcement agencies and (b) between enforcement agencies and other public service departments?
- Are there mechanisms in place to enable and facilitate cooperation among wildlife and forestry administration, law enforcement officers, prosecutors' offices and judicial entities?
- Are there partnerships with other formal groupings in the public, private or non-governmental sector?
- How do these partnerships work in practice? Are there written protocols, MOUs, committees and so forth? Does collaboration operate without undue delay?
- Are there concerns that the relevant units or individuals are getting too close to certain industries or interest groups? Is there any suggestion that such partnerships create unequal service delivery, that is, are there fears of favouritism?
- Are resources shared in partnership arrangements? Are joint operations undertaken?
- Are there public-private partnerships that provide financial, logistical or other support for the suppression of wildlife and forest offences?
- Are there legal provisions permitting cross-deputation?
- Can joint task forces be convened?
- Does the military play any role in law enforcement in the wildlife and forestry sectors?

## 2. Human resources

Adequate training and staffing levels are essential to control and curtail wildlife and forest offences. A lack of law enforcement personnel and the poor training of staff may result in many wildlife and forest offences going unnoticed, with offenders evading detection and arrest. Furthermore, salaries must be commensurate with the workload and responsibilities of enforcement officers. Recruitment processes need to be fair and transparent in order to prevent corruption and nepotism and to ensure that staff feel responsible and motivated.

### 2.1 Staffing

In many countries, agencies charged with enforcing wildlife and forest laws lack the human resources to fulfil their diverse duties. In other countries, the relevant agencies suffer from severe staff shortages; posts remain unfilled for years, and salaries and allowances may be months overdue. In some cases, agencies are purposely underfunded so that they fail in undertaking their tasks and functions.

An assessment of enforcement capacities requires a basic stocktaking of the human resources available to police wildlife and forest offences. This involves identifying staffing levels, locations and hierarchies.<sup>157</sup>



## Tool II.8 Staffing levels

- How many individuals work in the units charged with enforcing wildlife and forest laws? Are staff drawn from multiple agencies or are they recruited independently?
- Are agencies sufficiently staffed? Do staff receive appropriated training?
- Do the police units tasked with enforcing wildlife and forest laws have a full complement of staff? If not, what reason is given for this?
- Within the relevant units, what proportion of enforcement officers is in supervisory or management ranks? What is the ratio of officers with less than two years of service to those with more than two or more years of service? How long on average do officers stay in the relevant units?
- Within the relevant units, what proportion of staff is full-time/part-time, administrative/investigative?
- Are enforcement officers deployed strategically in important locations such as game and forest reserves, national parks, ports, border crossings and so forth? Is there an appropriate balance between staff working in the field and those working in central offices?
- Is there a tenure system in which staff are moved to different departments or agencies after a set period of time?
- Is there provision for drawing upon other agencies to supplement staff needs for operational requirements or during times of shortages?
- Are there funds to travel, hire experts and purchase equipment (such as vehicles, radios and electronic surveillance equipment)?

## Salaries and benefits

The salaries and other entitlements of enforcement officers need to be reflective of their seniority, responsibilities, education and experience. Inadequate salaries, or the failure to pay salaries regularly, may reduce staff motivation. If pay is low, especially in relation to the crucial duties that law enforcement officers perform, the likelihood of corruption increases. While reforms such as salary increases can be costly, public officials in all the relevant agencies must be assured of an adequate standard of living, and their status and salary levels should be commensurate with their workloads, functions and levels of responsibility.<sup>158</sup>

Associated with salaries and benefits are issues of parity. Few of the forest guards, game wardens, game scouts, wildlife wardens and others working in wildlife and forest law enforcement enjoy parity

<sup>157</sup> UNODC, "Public safety and police service delivery", in *Criminal Justice Assessment Toolkit*.

<sup>158</sup> UNODC, *The Global Programme against Corruption*, p. 245.

with their counterparts in agencies such as Customs and the police. This applies in relation to pay but also in relation to authority and powers provided in domestic legislation, training and equipment. Wildlife and forestry officials are often regarded as “second class” enforcement officers by their counterparts. This regularly makes it difficult for wildlife and forest law enforcement agencies and officers to obtain support from their counterparts and it restricts their ability to engage in multi-agency operations. This lack of parity flows into the wider community, so that wildlife and forestry officials may lack the respect of the general public. It may also contribute to their presenting an image of limited deterrence to criminals.

Some countries operate reward schemes for enforcement officers as incentives for apprehensions and seizures relating to wildlife and forest offences. These schemes have the potential to raise detection rates for wildlife and forest offences and may also dilute the influence of corruption. They may be problematic, however, as they may create the risk of evidence being planted and some suspects being unduly targeted.<sup>159</sup>



## Tool II.9 Salaries and benefits

- What is the salary structure for law enforcement officers and other staff? What is the average salary, including overtime, for each level? How does this compare to the national average wage? How does it compare to those of other official enforcement agencies?
- Are salary levels adequate or do enforcement officers engage in additional employment or private enterprise to supplement their income?
- Are salary levels commensurate with the responsibilities and risks involved?
- Do wildlife, forestry and police officers and other staff receive their pay? Do they receive it on time?
- What is the expected workload for wildlife, forestry, and police officers and unsworn staff in the relevant units?
- Do reward schemes for seizures and arrests exist? How do they operate?

## 2.2 Recruitment

Recruitment procedures for enforcement personnel need to be fair and transparent in order to ensure professionalism and integrity, and to avoid nepotism and corruption. The selection of staff at all levels must be based on merit, experience and education, and selection criteria need to be clearly articulated.<sup>160</sup> Especially in larger agencies, recruitment should occur at junior, mid-level and senior levels. Internal policies can assist in balancing the need to maintain expertise and experience with the desire to rotate staff and bring in new ideas, fresh perspectives and generational change.

<sup>159</sup> Cf. FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 55.

<sup>160</sup> UNODC, “Public safety and police service delivery”, “The integrity and accountability of police” and “Crime and investigation”, in *Criminal Justice Assessment Toolkit*.



## Tool II.10 Recruitment

- What are the selection processes and recruitment procedures for joining the units and agencies tasked with enforcing wildlife and forest laws, rules and regulations? How are staff selected?
- What levels of qualification, skills and professional experience are required to join these units? What are the basic educational requirements for recruitment (such as the level of literacy and numeracy)?
- Is there a vetting procedure for applicants? Is recruitment based on objective assessment and interviews? Does the selection process appear fair and objective?
- Do staff complete a probationary period before being confirmed as officers?

## 2.3 Training

A recent report noted that, in some countries, “poachers, smugglers, and dealers are likely to be better armed, better equipped, better educated, better paid, and better organized than many wildlife enforcement officers.”<sup>161</sup> In short, it is crucial that staff at all levels be adequately trained and skilled to meet the many challenges and hazards associated with combating wildlife and forest offences. If the alleged wildlife or forest offence is investigated by officers not sufficiently familiar with the relevant background, techniques, processes and legal requirements, it is possible that the integrity of the investigations may be compromised, with potential implications for subsequent prosecutions and trials.<sup>162</sup>

An analysis of enforcement capacities should therefore involve a comprehensive review of training programmes, their delivery and content, and the types and depth of training available to specialized units, general law enforcement agencies, new recruits, senior investigators and so forth. To assist in the training of enforcement officers working in wildlife, forestry and other sectors, the CITES Secretariat, with the support of the European Commission, created in 2008 a computer-based course for enforcement officers and an information module for prosecutors and the judiciary. This course, which can be taken in multiple languages, is designed to build awareness about CITES, to outline the resources available in the Convention and to provide law enforcement officers with practical advice. A separate guide for enforcement officers entitled “Combating ivory smuggling” was also produced as a DVD by the Environmental Investigation Agency in conjunction with the CITES Secretariat. Since 2007, the World Customs Organization (WCO) has also been providing an Internet-based interactive “Customs and fauna and flora” e-learning programme to enable the self-directed learning of Customs officers.

Some agencies may also offer opportunities for secondments to other agencies, professional development and higher education outside the agency, thus enhancing their knowledge base and skill set.<sup>163</sup> Training programmes can also be designed to build new enforcement networks and partnerships if

<sup>161</sup> John M. Sellar, “Illegal trade and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)”, in *Forensic Science in Wildlife Investigations*, Adrian Linacre, ed. (Boca Raton, Florida, CRC Press, 2009), pp. 11-16.

<sup>162</sup> UNODC, “The integrity and accountability of police”, in *Criminal Justice Assessment Toolkit*; Adrian Linacre, “Nature of wildlife crimes”, pp. 1-2.

<sup>163</sup> UNODC, “Public safety and police service delivery” in *Criminal Justice Assessment Toolkit*.



they involve participants from a variety of backgrounds and agencies, both domestic and international. This is particularly important when developing effective responses to wildlife and forest offences, which involves multiple government departments and spans international borders.

Furthermore, even where comprehensive training programmes exist, it is important that syllabuses and curricula be reviewed regularly to ensure they remain up to date and keep pace with the ever-changing nature of wildlife and forest offences.<sup>164</sup>

While those specifically tasked with responding to wildlife offences may very well require specialized training, it is equally important that the primary law enforcement agencies in each country, such as Customs and the police, have a basic awareness of applicable national legislation, of CITES, and of the role they may be called upon to play in enforcement and implementation. Customs and police academies and colleges are encouraged to include a module or modules on wildlife offences in the curricula of basic training courses for new recruits. Seaport and airport security personnel would also benefit from receiving such awareness-raising as they are ideally placed to discover the smuggling of wildlife during their work in screening passengers, baggage and cargo. This is particularly important in countries where Customs officials are not routinely placed to control export flows.

Equally, the inclusion of basic money-laundering and financial crime modules in general training for Customs, police and other enforcement institutions helps to enhance the awareness and understanding of the different links in the wildlife and forest crime chain.



## Tool II.11 Training: delivery

- What basic training is given to persons joining the relevant wildlife and forestry enforcement units?
- What is the annual capacity for the training of recruits and for specialized training?
- How often do officers receive refresher training? What specialized training courses are available? How are training needs assessed?
- How is the training delivered (for example, classroom, self-study or computer-based)?
- Who delivers the training? What measures are taken to assess the qualifications of trainers?
- Who develops the syllabuses for the training? Do partner agencies contribute to syllabus development?
- When were training programmes last updated?
- Does the training involve participants from multiple agencies (domestic and foreign)? How is new staff introduced to counterparts in partner agencies?
- Is there any assistance from international or regional organizations?
- Is there a measure of accreditation applied to ensure the quality and standardization of training?
- What other training opportunities are available (such as further study, professional development, secondments or attachments to central units or to other agencies)?

<sup>164</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*.

- What training on the relevant wildlife and forest crime issues is available for Customs and police agencies? Is the subject of wildlife offences included in the basic training of all Customs and police officers?
- Is the subject of wildlife smuggling included in seaport and airport security staff training?
- Is there a cross-agency training programme?

Law enforcement in the wildlife and forestry sectors requires an understanding of the relevant investigative powers and procedures, as well as technical knowledge of the operation of these sectors, environmental issues, land and property rights, and commercial and trade issues. Moreover, personnel at border control points have to be familiar with import, export and CITES requirements, species identification, Customs and quarantine procedures, and the relevant international obligations.

The content of the available training programmes necessarily varies among jurisdictions and depends on the level and type of staff trained, and their seniority and duties. Accordingly, there is no single template for the training of wildlife and forest law enforcement officers. The following tool provides some simple indicators of the variety and type of content that can be included in the relevant training programmes.



## Tool II.12 Training: content

- Does the training of wildlife and forest law enforcement officers cover the following issues?

Domestic wildlife and forest laws, including procedures and offences

Levels and characteristics of criminal activity in these sectors

Species protection and relevant environmental issues

Trade, correct documentation and Customs procedures

Information gathering and dissemination

Identification of commodities

Investigation techniques, procedures and the handling of seized wildlife

Availability and limitations of enforcement powers

Use of equipment, technology and forensic procedures

International cooperation

Partnership building and collaboration with domestic and international agencies

Prevention, education and awareness-raising.

- Does the training involve elements related to accountability, ethics, human rights, integrity and corruption?
- Is the training supplemented by manuals summarizing these issues?

### 3. Intelligence

Law enforcement is increasingly led by intelligence. This involves, *inter alia*, the collation, analysis and dissemination of information, and provides a systematic approach to critical thinking, which, in turn, can assist in the prevention and suppression of criminal activities. Well-managed, intelligence-led investigations can often prove more resource- and cost-effective than speculative or reactive methods.

In the field of wildlife and forest offences, intelligence relating to perpetrators, smuggling routes, logging and poaching patterns, markets, consumers and so forth is often missing or non-existent. In many countries, the subject of intelligence, including its gathering, collation, analysis and dissemination, is poorly understood and few countries dedicate staff to this subject. Where intelligence related to wildlife crime is taken into account, it can be done in a stand-alone manner so that it is not incorporated into intelligence regarding other types of offences. This restricts the ability to coordinate responses to individual cases or to establish strategies, policies or general operational guidance.

#### 3.1 Intelligence gathering and exchange

Information gathering and the exchange of intelligence among the relevant authorities are crucial to the success of measures aimed at curtailing wildlife and forest offences. To be of maximum value, information gathering activities should focus simultaneously on the strategic, tactical and operational levels.

- Strategic intelligence enables an accurate analysis of the levels and patterns of wildlife and forest offences at local, national and international levels. Strategic intelligence facilitates law reform, international cooperation, and the development of prevention strategies, education and awareness campaigns.
- Tactical intelligence supports national and local managers of front-line units in planning activities and deploying resources to achieve operational objectives.
- Operational intelligence is intelligence on the activities of specific individuals or groups. It can help to identify criminals, provide advance information about their activities, and help to plan proactive, disruptive and further intelligence-led investigations. In the context of wildlife and forest offences, operational intelligence can involve issues such as methods of sourcing wildlife and plants, methods of transportation, methods of document fraud, means of communication, financial transactions, motives, markets, prices and so forth.

While it is important to gather information from a wide range of sources, it is likely that the information will vary in quality, and the sources will vary in reliability and motivation. It is essential that information be subjected to some form of analysis and processing before it is disseminated or used.

The gathering of information is not in itself sufficient. It is essential that, once gathered and analysed, intelligence be transmitted to the individuals and departments that are able to use it. A vital factor in the expeditious and effective exchange of intelligence is the speed at which material can be transmitted to the relevant agencies or investigators who may be in a position to respond to it. Even excellent intelligence is of little consequence unless its consumers or users believe in its accuracy and usability.

Figure IV. Sources of information

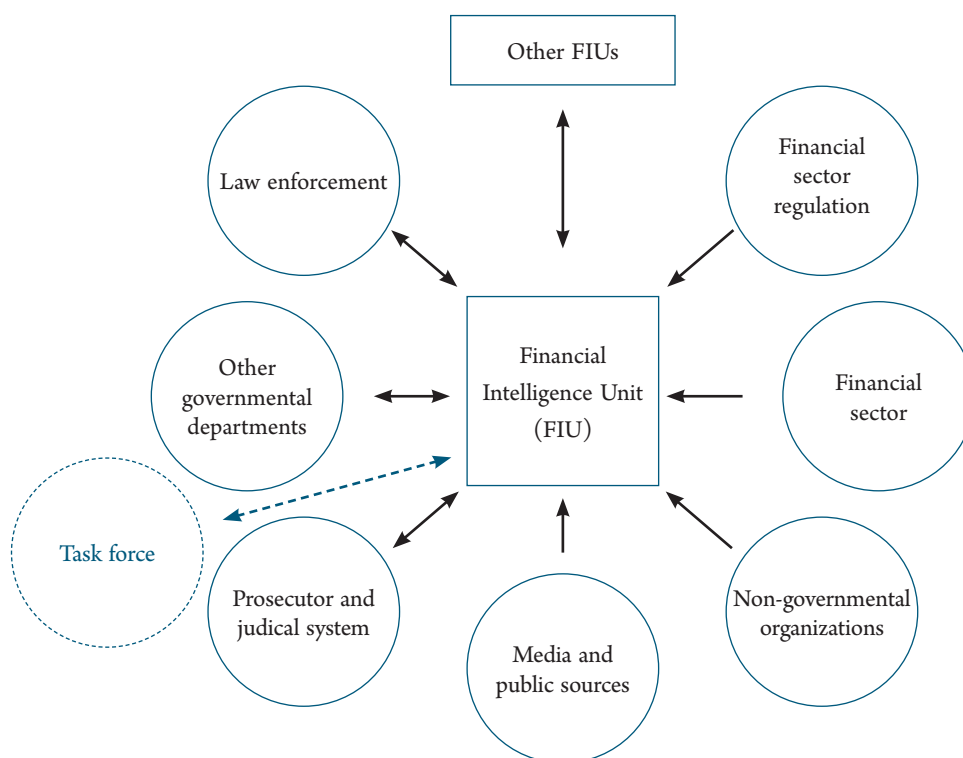
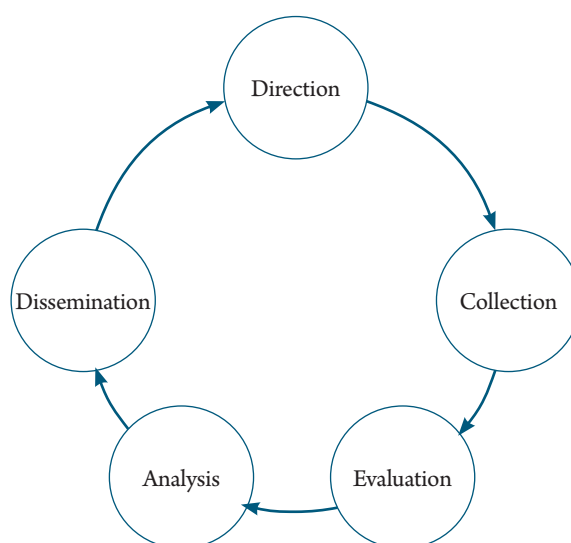


Figure V. Intelligence cycle



Source: World Bank. Combating money laundering and the financing of terrorism: a comprehensive training guide. Workbook Part 4: Building an Effective Financial Intelligence Unit, p. 6.





### Tool II.13 Intelligence gathering

- Is there legislation or other (written) frameworks on the gathering, storage, analysis and dissemination of criminal information or intelligence for the purpose of enforcing wildlife and forest laws?
- What do existing laws and frameworks allow? What are the constraints and limitations?
- Who gathers information? How is it gathered?
- Who oversees how information and intelligence is gathered, managed and exchanged?
- Where and how is intelligence and information stored? Are specific national or regional databases and analysis tools used? Is information recorded manually or electronically?
- How is information recovered, analysed and disseminated?
- Are officers encouraged to collect information, write reports and file them in a central location? If not, why not?
- Are agencies allowed or required to exchange information and intelligence with other countries?

## 3.2 Covert techniques

In the investigation of wildlife and forest offences, which are often very sophisticated and frequently involve a great number of criminal elements, covert investigation techniques may be extremely useful and, in some cases, the only method of investigation. They may involve, for instance, the controlled delivery of prohibited plant or animal material, the use of false company identities, or the use of technical, photographic and video surveillance. The United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption also encourage, insofar as possible and permissible under domestic law, the appropriate use of special investigative techniques, such as electronic or other forms of surveillance, and undercover operations by competent authorities for the purpose of effectively combating organized crime and corruption.<sup>165</sup> Furthermore, in 2006, the International Cooperation Review Group, as a new surveillance process adopted by the Financial Action Task Force, was set up to identify, examine and engage with vulnerable jurisdictions that fail to implement effective anti-money-laundering and counter-terrorist financing systems.<sup>166</sup>

Routine surveillance of the Internet is an additional and emerging method to uncover wildlife and forest offences. This usually involves an examination of online advertisements for fauna and flora, including animal and plant parts and material. Internet surveillance has shown that online websites are frequently used to sell or seek contraband that is not otherwise available legally. It often involves examining popular websites where private individuals offer new or used goods for sale, or post advertisements for sought-after items.<sup>167</sup>

Covert surveillance is, however, a particularly intrusive method for collecting evidence. The use of covert investigation techniques involves the careful balancing of a suspect's right to privacy against

<sup>165</sup> United Nations Convention against Corruption, art. 50; United Nations Convention against *Transnational Organized Crime*, art. 20. See further David McClean, *Transnational Organized Crime*, pp. 241-247.

<sup>166</sup> Financial Action Task Force, *Financial Action Task Force Annual Report 2008-2009* (2009), p. 25.

<sup>167</sup> Erika Alacs and Arthur Georges, "Wildlife across our borders", pp. 147-151.

the need to investigate serious criminality. Consequently, most jurisdictions require a number of strict safeguards against abuse, including the requirement that the offence be serious, that the use of the technique be vital to the case, and that essential evidence cannot be secured by less intrusive means. Judicial or independent oversight is common and is required under international human rights law.



### Tool II.14 Covert investigation techniques

- Do investigators use covert investigation techniques? If so, which ones?
- Are investigators of wildlife and forest offences aware of the use of covert investigation techniques, including the following techniques?

Interception of telecommunications, e-mail traffic and post/mail

Listening devices, and tracking and positioning devices

Mobile surveillance teams, and photographic and video surveillance

False personal and company identities

Covert search of premises, letters, packages, containers and vehicles

Simulated or test-purchase of an item

Internet surveillance

Simulation of a corruption offence or “integrity test”

Covert real time monitoring of financial transactions

Undercover infiltration of networks through operatives posing as criminals or buyer

- Are investigators permitted to use such methods?
- What are the preconditions for the use of covert investigation techniques? Does their use require authorization from a judicial or other independent source? What are the limits and conditions on orders for covert surveillance?
- Do investigators run undercover “buying” operations in which they pose as criminals? If so, how and how often is this done? In which cases is this permitted? Is there a legal concept of entrapment?
- Is there training in the use of undercover techniques? Are there guidelines for the use of undercover officers (for example, guidelines concerning the Federal Bureau of Investigation undercover committee)? If so, are these guidelines public?

When law enforcement authorities physically detect or gather intelligence on wildlife or plants that are being smuggled, it is not unreasonable for their first reaction to be to intercept and seize such a shipment in order to ensure that the contraband cannot enter into trade. However, in the case of cross-border trafficking, such action would often frustrate the identification of suspects and would certainly make it significantly harder to gather sufficient evidence to prosecute such persons and their associates.<sup>168</sup>

<sup>168</sup> INTERPOL and CITES Secretariat, *Controlled Deliveries: A Technique for Investigating Wildlife Crime* (Lyon, France, and Geneva, 2007), p. 7.

A controlled delivery is a covert investigation technique used by law enforcement to track the route of a commodity to identify persons connected with criminal activities and to gather evidence against them. This method has been employed extensively in relation to trafficking in narcotics, but it can be used equally with regard to wildlife and forest offences.<sup>169</sup> In some countries, legislation covers the use or prohibition of controlled deliveries, although it may not relate specifically to wildlife and forest offences.<sup>170</sup> It may also be possible to obtain the agreement of prosecution authorities to use such a technique. The United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption also encourage, insofar as possible and permissible under domestic law, the appropriate use of controlled delivery by competent authorities for the purpose of effectively combating organized crime and corruption.<sup>171</sup>

As with other covert investigation techniques, particular responsibilities are required of agencies that engage in controlled delivery operations. These responsibilities differ depending upon the stage at which an agency is involved. For example, a controlled delivery operation may have to be sanctioned or authorized by an officer of a certain rank, or approval may be first sought from a prosecutor or a judge.<sup>172</sup> Controlled deliveries require careful coordination and cooperation particularly when several agencies and countries are involved.

The International Consortium on Combating Wildlife Crime is implementing a project entitled “Establishing national controlled delivery units” in over 20 countries with funding support from the World Bank’s Program on Forests (PROFOR). Activities include a workshop, experimental controlled delivery operations and the establishment of national controlled delivery units within participating countries. The spin-off and knock-on benefits for each country in terms of all other forms of trafficking and organized crime could also be significant. Experiences gained through the project will be replicated in a global network of controlled delivery in the future.



## Tool II.15 Controlled delivery

- Is there a legal basis to conduct controlled delivery operations? If so, is this law specific to investigations of wildlife and forest offences?
- Are investigators of wildlife and forest offences permitted to conduct controlled deliveries, based on national legislation?
- Have investigators undertaken controlled deliveries?
- In the absence of a legal basis, is it possible to conduct controlled delivery operations with the agreement of prosecution authorities?
- Does the national legislation or regulations allow substituting the detected contraband before an actual controlled delivery is conducted? If so, can the records be accepted for the purpose of evidence in court?
- Which agency should take the lead with regard to the controlled delivery?
- What are the preconditions for the use of controlled delivery? Is authorization from a judicial or other independent source required? What are the limits and conditions for orders for a controlled delivery?
- Have standard operation procedures been developed to support speedy and efficient controlled deliveries?

<sup>169</sup> Ibid., p. 5.

<sup>170</sup> Ibid., pp. 10-11.

<sup>171</sup> United Nations Convention against Corruption, art. 50; United Nations Convention against Transnational Organized Crime, art. 20. See further David McClean, *Transnational Organized Crime*, pp. 241-247.

<sup>172</sup> INTERPOL and CITES Secretariat, *Controlled Deliveries*, p. 11.

### 3.3 Informants

The information provided by informants can be vital—and sometimes the only way—to prevent or solve a crime. The effective recruitment and handling of informants can prove significantly more resource- and cost-effective compared with other covert methods of investigation. Indeed, the CITES Secretariat encourages the development of a network of informants. This can be facilitated by means of reward schemes and confidential information hotlines to allow the supply of information.<sup>173</sup>

However, many informants are themselves criminals with a variety of motivations for providing information and they therefore require careful management. It is thus important to examine the systems employed for using, managing and supervising informants, and the payments made to them.



#### Tool II.16 Informants

- To what extent are informants used by authorities in the investigation of wildlife and forest offences?
- How are informants managed? In particular, what procedures are in place for contacting informants and recording information?
- Are investigators trained in the management of informants?
- Is the identity of informants protected throughout the criminal justice system? If so, how?
- What systems exist to manage the payment of informants? Are such payments subject to external auditing by another government agency?
- What are the rules regarding payments to informants? For example: Who authorizes the payment? How is the amount determined (fee or percentage)? How are funds paid? Which audit procedures are used? Is there any relationship between informant payments and rewards to informants?
- Do rules, procedures and supervisory guidelines establish a difference between the handling of witnesses and informants, and how to cooperate with them?
- Are there standard operating procedures on the handling of informants?

### 3.4 Patrols and checkpoints

Forests and wildlife habitats are often remote, large and inaccessible areas that are difficult, if not impossible, to patrol regularly and comprehensively. Forestry officials, game wardens, park rangers, police and other law enforcement officials can usually patrol only small areas and, as a result, rarely see wildlife and forest offences in progress or are rarely the first to observe evidence of criminal activity in these areas.

Risk management and systematic patrols with routes set out to optimize the coverage of those areas are basic methods to improve intelligence gathering and detection. In addition, checkpoints along

<sup>173</sup> CITES Secretariat, “Notification to the Parties”, CITES Resolution Conf. 12.5 (Rev. CoP 15), annex 3..



main roads, rivers, trade routes and interchanges, and at seaports, airports, and key entry points to national parks and other protected areas can also assist in detecting and preventing wildlife and forest offences.



### Tool II.17 Patrols and checkpoints

- How are wildlife habitats and forests patrolled? How frequently?
- Who patrols these areas (forestry officials, game wardens, police or others)?
- What system is used to determine patrol routes and the frequency of patrols?
- Are there specific checkpoints along main trade routes, roads, rivers, ports, natural sites or others?
- How are these checkpoints staffed and what inspections are carried out at these checkpoints?

## 3.5 Proactive investigations

Proactive investigations seek to target prominent and emerging crime threats to reduce the harm they cause, rather than respond to crimes after they have been committed. It is also a method used in response to intelligence regarding ongoing or planned criminal activity. In such cases, the methodologies for investigators remain similar to those for other forms of investigation, but the offences are identified through research and intelligence gathering. Proactive investigations are particularly useful against organized crime and may be of great assistance in curtailing wildlife and forest offences.



### Tool II.18 Proactive investigations

- Are wildlife and forest offence investigators deployed (individually or in teams) to investigate pre-identified targets, individuals or groups rather than in response to crime reports?
- Do investigators use analysis and profiling to build a case against a target? If so, how are targets chosen?
- Is there a criminal intelligence cell or unit that collects, collates and analyses information related to wildlife and forest offences and criminals?
- Is there a written requirement that all investigations and prosecutions be properly predicated on the law and lawfully obtained evidence?

## 4. Enforcement powers

For law enforcement to be meaningful, investigators of wildlife and forest offences, and the police, Customs, and other agencies need to be equipped with the powers that enable them to conduct searches, interview witnesses and suspects, enter premises, seize assets and make arrests.<sup>174</sup> In some countries, wildlife and forestry departments do not have the power to engage in coercive methods of environmental law enforcement and rely upon the police for coercive interventions as required. Elsewhere, wildlife and forestry enforcement officers are sworn officers with statutory authority to conduct investigations, carry firearms, make arrests, and execute and serve warrants.<sup>175</sup> As these powers are intrusive and may violate another person's rights, they need to be limited and monitored in order to prevent abuse of power and unnecessary infringements of human rights and civil liberties.

Investigation tools relating to wildlife and forest offences are set out in the following sections. Data and other performance management information pertaining to the number of investigations, arrests, seizures and so forth are further explored in part five of the *Toolkit*.

### 4.1 Sources of enforcement powers

Law enforcement functions, powers and procedures are usually set out in—and limited by—statute. Usually, police authorities under statutes have broader powers that at times overlap or support the enforcement legislation applicable to other agencies. Relevant legislation may include a police powers and responsibilities act, a code of criminal procedure or a criminal code. Specific police powers acts usually encompass organizational elements as well as the relevant powers of a police force, particularly in the public order realm. Police powers relating to criminal investigation are likely to be found in the domestic criminal procedure code.<sup>176</sup>

Even in jurisdictions where general or codified police legislation has been enacted, these statutes are usually not the sole source of enforcement powers. New statutes are continuously enacted in response to emerging issues (such as offences related to the environment or organized crime); they often give additional or expanded powers to law enforcement in order to assist them in dealing with these issues or to clarify their roles.<sup>177</sup>

If other agencies and specialized units are involved in the investigation of wildlife and forest offences, such as wildlife enforcement units, forestry departments, Customs, serious crime agencies and so forth, their investigative powers are equally set out in the relevant statutes, such as a wildlife, forestry or Customs statute.

The control over and management of the movement of all goods, means of transport, and persons and their luggage across international borders are generally vested in Customs. As a government agency, Customs is usually empowered by legislation to enforce the regulations of other agencies when the clearance for export or import of goods is required. With the power to investigate and recover goods illegally exported and imported, Customs agencies can be of significant value to wildlife and forest offence investigations.

<sup>174</sup> Cf. CITES Secretariat, *Model Law on International Trade*, p. 4.

<sup>175</sup> Kevin Tomkins, "Police law enforcement and the environment", pp. 294-299.

<sup>176</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*.

<sup>177</sup> Nigel Stobbs, "Police power and duties", in *Policing in Context*, Roderic Broadhurst and Sara E. Davies, eds. (Melbourne, Oxford University Press, 2009), pp. 69-76.



### Tool II.19 Sources of enforcement powers

- Is there legislation that empowers an agency in the investigation of wildlife and forest offences?
- Are the relevant enforcement powers set out in a forestry and wildlife statute or legislation, Customs law or other special legislation, or are they set out in general criminal procedure laws or police law?
- What laws, rules or regulations exist to govern the powers and conduct of law enforcement officers?
- When were the relevant laws last updated?
- Who oversees the proper application of enforcement powers?
- Are there differences in rules of evidence or procedures when the money-laundering law is used?

## 4.2 Types of investigative powers

In some cases, enforcement agencies rely on coercive powers to demand compliance with the relevant wildlife and forest laws. Accordingly, the enforcement powers of officers should be clearly specified. The main powers traditionally exercised by law enforcement agencies in relation to the investigation of offences include the search and seizure of property, arrest and questioning, and covert operations (such as surveillance, controlled delivery and undercover activities). In some instances, special investigative powers have been created for the investigation of wildlife and forest offences.<sup>178</sup>



### Tool II.20 Types of investigative powers

- Are agencies involved in enforcing wildlife and forest laws authorized to carry out the following activities?

Stop, question, inspect and conduct searches of goods, people, premises and conveyances;

Gather information on people, places, means of transport and so forth if they are suspected of being involved in wildlife and forest offences;

Make arrests;

Seize property;

Seize vessels, vehicles, aircraft and other means and equipment used to transport wildlife or plants;

Investigate wildlife and forest offences; and

Carry firearms or other weapons.

<sup>178</sup> Cf. Cyrille de Klemm, "Guidelines for legislation to implement CITES", p. 102.

- Are these powers sufficient to prevent or disrupt wildlife and forest offences?
- Is it an offence to obstruct wildlife and forest crime officers?
- What is admissible as evidence, and what is the procedure for having evidence admitted (for example, photographs, summary documents, computer evidence, DNA evidence and charts)?

### 4.3 Exercise of power, and checks and balances

Virtually all enforcement powers are matters for discretion. While most valid police powers are created by law, it is rare for a law to prescribe that a certain power must be exercised. The decision about whether or not to exercise a certain power, as well as the factors that influence discretion, are important issues in understanding how law enforcement affects people and communities.<sup>179</sup> It has been noted that:

An appreciation of the nature and limits of particular [enforcement] powers is obviously necessary if police are to act fairly, effectively, and according to law. An inappropriate or unlawful exercise of power can result in the conviction of innocent people, the acquittal of people who have in fact committed offences, and erosion of public confidence in the administration of justice. The effectiveness of law enforcement agencies in societies that are governed by the rule of law depends to a large degree on the extent to which that society trusts those who are tasked with enforcing and applying the law. The intersection of public confidence and trust and the lawful exercise of power are thus particularly important for a stable society.<sup>180</sup>

Relevant laws usually include a range of procedural checks and balances that are implicit in the granting of a particular power. In fact, it is rare that law enforcement agencies are granted a power that does not have some express limitations and delineations.<sup>181</sup>



#### Tool II.21 Exercise of enforcement powers

- Does the law define the grounds and threshold for the application of coercive powers (for example, the concept of “reasonable grounds”, “reasonable belief” or “probable cause”)?
- Is the application of enforcement powers limited to the use of minimum or reasonable force (or similar) such that officers should apply only the level of force necessary to achieve their lawful purpose?
- What enforcement actions require the issue of a warrant? Who issues these?
- What other express and implied limitations for the use of enforcement powers exist?
- What records are required to be made regarding the use of enforcement powers?

<sup>179</sup> UNODC, “Public safety and police service delivery” and “The integrity and accountability of police”, in *Criminal Justice Assessment Toolkit*; Mark Findlay, *Introducing Policing: Challenges for Police and Australian Communities* (Melbourne, Oxford University Press, 2004), pp. 70-85; Nigel Stobbs, “Police power and duties”, pp. 69-76.

<sup>180</sup> Nigel Stobbs, “Police power and duties”, pp. 69-70.

<sup>181</sup> *Ibid.*, pp. 69-80.



## 4.4 Facilities and equipment

Powers and responsibilities assigned to government agencies in the wildlife and forestry sectors often bear little relationship to their ability to fulfil their responsibilities. Investigators of wildlife and forest offences require certain basic facilities and may also need special equipment to carry out their tasks. Their requirements may include the very basics (such as offices, stationery, transportation, access to motor vehicles and handcuffs) or more sophisticated equipment (such as computers, radios for communication, equipment for forensic procedures, laboratories and firearms). Investigators also require sufficient funding to carry out day-to-day functions as well as specialized operations.<sup>182</sup>

The facilities and equipment that are available or needed vary greatly among jurisdictions and agencies. A needs assessment would have to take into account the role, training, responsibility and seniority of investigating officers and their units. The availability of the facilities and equipment also depends on the local socio-economic conditions, available resources, and access to financial aid and technical assistance.



### Tool II.22 Facilities and equipment

- What are the physical facilities of the relevant units? Where are they accommodated? Are the buildings structurally sound?
- Is there a steady and reliable source of electricity? Is there a working backup generator?
- Is the office equipment (furniture, stationery, photocopiers and so forth) adequate?
- Does the public have access to these offices?
- Is the supervisor or manager of the unit located in the facility or nearby? If prosecutors lead the investigation, where are they located? Do they have easy access to the investigators?
- What communication and word-processing technology is available (such as computers, the Internet, telephones, mobile telephones, walkie-talkies and fax machines)?
- Can seized property and other assets be stored securely?
- Other than Customs, the police or other enforcement agencies, who assists in handling and storing seized fauna and flora (alive or dead)?
- Are front-line officers adequately funded, sufficiently equipped and trained in equipment use?
- Do officers have access to personal protective equipment such as batons, handcuffs, Tasers, firearms or other weapons? Are they issued and stored in a secure manner?
- Do investigators have access to vehicles, vessels and other means of transport? How many vehicles or vessels are available? Are they marked or unmarked? Are they armoured? Is there sufficient fuel available?
- Are there other non-operational demands placed upon these resources (such as shared vehicles)?
- What maintenance and replacement provisions are in place for the equipment?

<sup>182</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*.

## 5. Investigation procedures and techniques

Investigating wildlife and forest offences and the management of investigations may be complex and require a variety of methods and approaches. The following sections set out some core elements of investigation procedures and techniques; the list is, however, by no means exhaustive.

### 5.1 Reporting offences

The initial reporting of an offence and the action taken immediately thereafter are considered extremely important. The commission of a wildlife and forest offence can come to the attention of the police or other enforcement unit in a number of ways. For example, they may be reported by victims or witnesses, they may be referred by another agency, or they may be detected during routine patrols or inquiries. Complicating the process is the fact that various agencies have some responsibility in relation to the wildlife and forestry sectors, and that it may take time for reports to go to the relevant investigation unit.

To increase the number of reports, some countries have instituted reward schemes, sometimes referred to as “whistle blower schemes”, as an incentive for individuals to furnish information about wildlife and forest offences. Such systems have thus far received only mixed support, with many critics arguing that rewards increase only the quantity and not the quality of crime reporting, as well as create the danger of false allegations.<sup>183</sup>

Some countries and some local communities have established “watch groups” as an alternative avenue to improve and increase the reporting of wildlife and forest offences. These systems, which are modelled after the Neighbourhood Watch schemes operating in many countries, are tools for a community to work together in order to reduce crime and enhance community safety. They encourage residents and businesses to join together in small informal groups for the purpose of improving the safety of their local area and creating a shared sense of responsibility among individuals, neighbours and communities for preventing, reporting and reducing wildlife and forest offences.

As with other criminal offences, it is essential that any reports about wildlife and forest offences be accurately and comprehensively recorded. To that end, the CITES Secretariat has developed a preliminary report form to be used for reporting incidents of wildlife crime, illegal trade, the poaching of endangered species or significant intelligence.<sup>184</sup>

As soon as a wildlife or forest offence is reported, a supervisor should review the allegation together with any supporting facts and then allocate sufficient and appropriate resources to deal with it. This decision can be made more difficult when there are competing priorities and only limited resources to deal with them.<sup>185</sup>

<sup>183</sup> Arnoldo Contreras-Hermosilla, “Law compliance in the forest sector”, p. 22; Jonathan P. Kazmar, “The international illegal plant and wildlife trade”, pp. 105-127.

<sup>184</sup> CITES Resolution Conf. 12.5 (Rev. CoP15), annex 1.

<sup>185</sup> UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.



### Tool II.23 Reporting offences

- How do wildlife and forest offences come to the attention of authorities?
- Is contact information (such as telephone numbers, fax numbers and e-mail addresses) available to the public to enable them to report crime?
- Which steps are taken when a wildlife or forest offence is reported? Who records it? Are procedures in place for processing such reports?
- How and where are reports recorded? Are they recorded on paper or electronically? How are reports stored and filed?
- Is there a set format for recording initial crime reports? If so, does the format include information about the date, species involved, type of event or offence, and suspect?
- How is immediate action identified and managed? Who has to be notified about the offence?
- Is the person who reported the offence kept up to date regarding the progress of the investigation?
- Is there a reward scheme for persons who report wildlife and forest offences?
- Are there local “watch groups” comprised of individuals and businesses who collaborate to prevent, report and reduce wildlife and forest offences?

## 5.2 Information and evidence gathering

The outcome of a criminal case depends on the quality and the weight of the evidence. The decision regarding what information or material should be collected or recorded needs to be made by someone competent in evidence gathering. This will ensure that no evidence is compromised or lost at the scene, thus jeopardizing further investigations and prosecution. Accordingly, it is important that evidence be collected and recorded thoroughly and systematically.

The rules of evidence adopted by a justice system may preclude some types of information from being considered by the trier of fact if the evidence’s prejudice to the defendant (and its tendency to bias the trier of fact assessing the evidence) may outweigh its usefulness (probative value). Other types of evidence, such as hearsay, may be precluded because they are considered by some systems to be inherently unreliable.<sup>186</sup>



### Tool II.24 Information and evidence gathering

- Are all the relevant wildlife and forest crime enforcement officers (not only police and investigators) trained in the rules of evidence? Are they trained in what to look for and how to protect evidence?
- For major cases, is an officer designated to ensure continuity and preserve the integrity of evidence and exhibits?
- Is progress in an investigation recorded electronically or on paper? Who maintains these records? Are they updated regularly?

<sup>186</sup> Ibid.

### 5.3 Wildlife and forest crime scene work

In wildlife and forest crime scene work, as in other forms of forensic endeavours, it is vital that the investigations be meticulous, that detailed records be kept and that a proper chain of custody (the continuity of evidence) be maintained for each item of evidence. Such a chain minimizes the chance of loss, contamination or substitution of material, and helps to prove the origin and veracity of specimen or exhibits.

Wildlife and forest crime scene work involves proper preparation for and rapid preservation of the wildlife and forest crime scene. It requires special equipment, ranging from protective clothing to specimen containers, as well as personnel familiar with crime scene management and record keeping. Complicating the work further is that fact that many wildlife and forest offences take place away from urban centres, where enforcement agencies are usually based and where laboratory and scientific expertise are most likely be found.<sup>187</sup>



#### Tool II.25 Wildlife and forest crime scene work

- Are there special laws or operating procedures for wildlife and forest crime scene work?
- Are there specialist personnel for wildlife and forest crime scene management?
- Are all staff aware of the importance of securing and preserving a crime scene in order to facilitate a thorough examination of it?
- Are the relevant staff properly trained in establishing a crime scene, forensic evidence gathering, record keeping, electronic data collection, the use of equipment, photography and so forth?
- Are the relevant staff aware of potential cross-contamination issues? Do they know how to bag, label and record evidence and exhibits?

### 5.4 Identification of suspects

The investigation process is aimed at identifying the perpetrator of a crime, and a case will be greatly strengthened by strong identification evidence. However, the procedures by which a suspect can be identified have to be strictly controlled to prevent a miscarriage of justice. Poor identification procedures can lead to unacceptable bias and to all resulting evidence being ruled inadmissible.<sup>188</sup>

<sup>187</sup> See further John E. Cooper, Margaret E. Cooper and Paul Budgen, "Wildlife crime scene investigation", pp. 1-6.

<sup>188</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*.





## Tool II.26 Identification of suspects

- Which laws and procedures are in place to enable and facilitate the identification of suspects? Are there special procedures for perpetrators of wildlife and forest crime?
- Do investigators have the means to take fingerprints and DNA from suspects of crime for the purposes of identification?
- Do investigators have ledgers, files or databases containing photographs, fingerprints or other biometrical information of known criminals? How is this information stored and organized? Is it updated regularly?
- Do investigators have access to identification facilities and equipment, such as “identification suites” and cameras?

## 5.5 Interviewing

Interviewing is a cornerstone of any investigation—and this skill is lacking in wildlife and forest investigations. For that reason, the CITES Secretariat, the International Criminal Police Organization (INTERPOL) and WCO have published an interview guide for wildlife and forest crime investigators, intended to assist them when questioning smugglers.

There are two basic types of interviews conducted by investigators: interviews with victims and witnesses, and interviews with suspects. Investigators often record the recollections of a witness or victim (assuming they are cooperative). Suspects, on the other hand, usually try to avoid giving truthful answers to investigators’ questions and such interviews are therefore more adversarial and may require skilful techniques.<sup>189</sup>

International law and standards, along with many domestic laws, limit the use of coercive interviewing techniques and strictly prohibit the use of torture. It is therefore important that investigators have a clear understanding about the boundaries of permissible interviewing techniques.



## Tool II.27 Interviewing

- Do investigators of wildlife and forest crime receive training in interviewing techniques? If so, what does the training consist of?
- Are interviews of the persons affected, witnesses and suspects recorded? If so, where and how?
- What are the rules for the interviewing of witnesses? Does the interviewer inform the witnesses of their right to freedom from self-incrimination during the interview? Does a witness have the right to have a lawyer present during the interview?
- Who takes a witness’s statement? Do witnesses have the opportunity to read their statements and certify that each page is accurate?

<sup>189</sup> See further UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.

- Are there guidelines or codes of practice for interviewing suspects? Do these guidelines reflect international standards?
- Are suspects entitled to refuse to answer questions? Is there protection from self-incrimination? Do suspects have the right to have a lawyer present during the interview? Are suspects informed of that right?
- Are investigators aware of the risk of interviewing vulnerable persons? Are special provisions made for such persons?
- Do investigators adhere to international (and national) standards, or is there evidence that inappropriate interviewing techniques or torture is used?

## 5.6 Witness and victim protection

Many witnesses and victims of wildlife and forest offences fear intimidation and retaliation if they cooperate with law enforcement agencies or testify in court. These fears are particularly acute when there is a close relationship between the witness and the offender (for example, the witness is an employee of the offender), or when the offender is part of an organized criminal group. In the case of victims of corruption or abuse of power, the fear of intimidation or retaliation is often linked to a distrust of government officials, law enforcement and the judiciary.

Hence, it is important that effective measures be taken to protect the safety of victims, witnesses and their families. Ensuring the protection of the privacy of victims and witnesses is another concern.<sup>190</sup>

The United Nations Convention against Transnational Organized Crime includes a number of provisions requiring States Parties to take measures to protect witnesses, to assist and protect victims, and to cooperate with other enforcement authorities to offer protection to victims and witnesses.<sup>191</sup> These provisions, however, extend only to those offences involving organized criminal groups and do not extend to general wildlife and forest offences. The United Nations Convention against Corruption contains similar provisions concerning the protection of victims and witnesses of corruption.<sup>192</sup>



### Tool II.28 Witness and victim protection

- Is the intimidation of witnesses and victims criminalized? Do these offences extend to the intimidation of witnesses and victims of wildlife and forest offences?
- What measures are available to protect witnesses and victims of wildlife and forest offences (such as protective orders, no-contact orders, conditions of bail, escorts for victims and witnesses, and testimonial aid)?
- What capacity is there to offer effective physical protection to victims and witnesses?

<sup>190</sup> UNODC, “Victims and witnesses” and “International cooperation”, in *Criminal Justice Assessment Toolkit*.

<sup>191</sup> United Nations Convention against Transnational Organized Crime, arts. 24–26. See further David McClean, *Transnational Organized Crime*, pp. 259–274.

<sup>192</sup> United Nations Convention against Corruption, art. 32.

- What kind of physical protection is available for a witness? For example, do witnesses stay at police stations, or are they offered protection or safe accommodation elsewhere? Is protection available for police officers, prosecutors and judges?
- Does national law allow the use of alternative methods of providing evidence?
- Does national law establish limitations on the disclosure of information concerning the identity or whereabouts of victims and witnesses, and in exceptional circumstances, protecting the anonymity of the person giving evidence?

## 5.7 Forensics and crime scene investigation

The use of science and technology is a vital part of investigating wildlife and forest offences. These offences are “essentially no different from any other form of criminality, and the full range of forensic science, expertise, and support can potentially be brought to bear from one end of the illicit trade chain to the other”.<sup>193</sup> Knowledge of the use of forensic techniques in wildlife and forest offence investigations can also have relevance to crime prevention as it may deter some would-be offenders.<sup>194</sup> Unfortunately, few officials charged with enforcing wildlife and forest laws in developing countries have access to forensic support or are even aware of it.

The provision of forensic services is affected by the legal framework in place and includes issues related to the entering of the crime scene, the conducting of the investigation, the handling, analysis and disposal of evidence and others.<sup>195</sup>

Broadly speaking, for wildlife and forest offences, the use of forensics can be divided into two areas: forensic techniques to assist in the identification or origin of species; and forensic techniques to link suspects or physical items to a crime.

The type of forensic examination employed in an investigation varies depending on the nature of the alleged offence. Wildlife poaching and illegal logging, for instance, can be tracked through the use of DNA testing at points of origin, transit and final sale. Identification and morphological studies can be used to determine the species of a particular animal by using bones, hair, feathers, scales, and other organs and tissues. This can help to establish whether a protected species has been taken illegally. Microscopy or elemental analysis can be used, for example, to identify ivory. Pathological studies involving the examination of carcasses, organs, tissues and other samples from dead animals assist in establishing the cause of an animal's death.<sup>196</sup>

Illegal logging and other forms of illegal land clearance, including felling protected trees, can be monitored through satellite technology. Land clearance and compliance with—or transgression of—logging restrictions, for example, can be subjected to aerial surveillance and satellite remote sensing.<sup>197</sup>

<sup>193</sup> John M. Sellar, “Illegal trade”, pp. 11-14.

<sup>194</sup> Rob White and Santina Perrone, *Crime, Criminality and Criminal Justice* (Melbourne, Oxford University Press, 2010), pp. 341-342.

<sup>195</sup> UNODC, “Policing, forensic services and infrastructure”, in *Criminal Justice Assessment Toolkit*.

<sup>196</sup> Adrian Linacre, “Nature of wildlife crimes”, pp. 1-4. See further John E. Cooper, Margaret E. Cooper and Paul Budgen, “Wildlife crime scene investigation”, pp. 1-8; John M. Sellar, “Illegal trade”, pp. 11-15; Duncan Brack, Kevin Gray and Gavin Hayman, “Controlling the international trade”, p. 60; Erika Alacs and Arthur Georges, “Wildlife across our borders”, pp. 147-156.

<sup>197</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 81; Robyn L. Bartel, “When the heavenly gaze criminalises: satellite surveillance, land clearance regulation and the human-nature relationship”, *Current Issues in Criminal Justice*, vol. 16, No. 3 (March 2005), pp. 322-324; Robert Douglas White and Santina Perrone, *Crime, Criminality and Criminal Justice*, p. 342.

A number of techniques can be used to link suspects or physical items to a crime. Bullets recovered from carcasses can be linked to firearms seized from suspects through ballistics. The hands, fingerprints, hair and clothing of suspects may contain debris or blood from animals or plants, or firearms residue. Minute traces of a suspect's DNA or fingerprints can be left at or on items connected to the scene of a crime, including seized wildlife. Vehicles and premises may contain remnants of material from a scene. Documents can reveal a suspect's handwriting, fingerprints or DNA. Carved or cut items can reveal physical marks that may be linked to tools.

As wildlife and forest offenders expand their use of technology, an important area of forensic work is the examination of such technology, including the analysis of mobile telephones, computers and storage devices. These can reveal valuable links among individuals, financial transactions and Internet-surfing history.

The types of examinations that can be conducted further depend on the capability of the forensic scientist involved and the available laboratory facilities and equipment. If, for instance, the laboratory does not have equipment for DNA testing then such testing cannot be performed. Equally, if the laboratory is not staffed by someone competent in, for example, microscopy, then, notwithstanding the availability of the necessary equipment, the relevant examination cannot be conducted.<sup>198</sup> Consequently, in locations where requisite forensic experts, or forensic equipment or facilities are temporarily or permanently unavailable, mechanisms to obtain or gain access to such expertise or equipment should be developed. In some countries, Customs laboratories have also started to support frontline enforcement with their forensic examination. Several organizations, as well as the world's leading wildlife forensic laboratory (operated by the United States Fish and Wildlife Service), have offered to provide forensic science support, but so far relatively few countries have made use of it. INTERPOL, through its Environmental Crime Programme, can also assist in providing access to international forensic capabilities.<sup>199</sup>



## Tool II.29 Forensics and crime scene investigation

- What is the situation in the country with respect to forensic examination? Are dedicated crime scene investigation services available?
- Whom is called first when a potential offence is discovered?
- Do investigators preserve crime scenes so that they remain suitable for forensic examination?
- Are investigators trained in what to look for and are they aware of the potential of forensic examinations and evidence? Are investigators familiar with forensic evidence gathering procedures?
- Are there facilities and personnel to collect and analyse DNA evidence? Do wildlife and forest enforcement officers, Customs, and the police have access to DNA testing?
- Are satellite images of illegal logging and land clearance activities available? If so, who uses them and how?
- What other forensic support is available (for example, microscopy, ballistics, isotopic profiling, morphology, pathology and toxicology)?

<sup>198</sup> Adrian Linacre, "Nature of wildlife crimes", pp. 1-3.

<sup>199</sup> INTERPOL, *Environmental Crime Programme*, p. 5.



- Are forensic staff trained in the mechanisms of prosecutions and the presentation of evidence in court?
- Which agency conducts analyses? Is there laboratory certification by appropriate experts? Are there outside reviews and audits of scientific work in order to ensure proper techniques?
- Are there national databases for forensic data from wildlife and forest offences?

## 5.8 Financial investigations

Financial investigation plays a crucial role in the successful investigation of wildlife and forest offences. The financial aspects of the crime present themselves in at least two distinct ways, as described below.

- Wildlife and forest offences are driven by financial gain. In addition to the initial investment necessary to commit the offence, the ongoing management of the proceeds of the crime, and the laundering and movement of the profits are essential parts of wildlife and forest offences.
- Wildlife and forest offences, especially if conducted regularly, can become a lifestyle crime. Lifestyle pursuits such as travel, luxury items (for example, cars and jewellery), and leisure activities (for example, restaurants and casinos), all require means and methods of purchase.

Consequently, the investigation of financial transactions and the analysis of the results provide important information that can be used to ensure that the operation progresses efficiently.<sup>200</sup> For example, an investigation of the purchase of travel tickets can reveal details of travel arrangements, and an analysis of credit card expenditure can reveal details about airlines, hotels, restaurants or other venues regularly used by perpetrators. This information can be the basis for the allocation of surveillance resources and may be valuable evidence.

It is possible to coordinate the arrest phase with financial sequestration procedures in order to arrive at the optimal situation of a synchronized arrest of offenders and a confiscation of their assets.

Many countries, however, still do not have adequate legislation to conduct thorough financial investigations and to combat money-laundering effectively. A number of international instruments can guide and assist such nations in creating and improving the relevant mechanisms. The United Nations Convention against Transnational Organized Crime, for example, advocates instituting adequate financial regulations, including enforcement measures, to deter and detect all forms of money-laundering.<sup>201</sup>

<sup>200</sup> Cf. Bambang Setiono and Yunus Hussein, "Fighting forest crime", pp. 17-18.

<sup>201</sup> United Nations Convention against Transnational Organized Crime, art. 7. See further David McClean, *Transnational Organized Crime*, pp. 92-108.



### Tool II.30 Financial investigation

- Does the jurisdiction have a Financial Intelligence Unit (FIU)? What are its resources? How does it operate? To which agencies does it disseminate information?
- Have measures been implemented to establish a regime for banks and financial institutions to deter and detect money-laundering?
- Are there special anti-money-laundering provisions in relation to wildlife and forest offences?
- Are wildlife and forest offence investigators authorized, trained and equipped to conduct financial investigations? Do they cooperate with FIUs?
- Have measures (such as a compulsory declaration of cash or other bearer negotiable instruments exceeding a threshold amount) been implemented to ensure that the authorities dedicated to combating money-laundering have the ability to cooperate and exchange information at both the national and international levels? Is the FIU a member of the Egmont Group of Financial Intelligence Units?
- Have other measures been implemented to detect and monitor cross-border cash flows?

## 6. Border control and Customs

Land border crossings, seaports and airports play a crucial role in the trafficking of wildlife, dead or alive. Many borders are porous; archipelagic coastlines and mountainous and remote borders are difficult to patrol and are thus easily penetrated by international traffickers. Remote border crossing points without routine patrols can be easily exploited by traffickers. At the same time, border crossings and ports can constitute important points for intervention by Customs and other law enforcement officers.

Customs administrations are tasked with enforcing a large number of national laws covering physical movement across borders. On the one hand, they are faced with the rising volume and growing complexities of international trade, increased security threats and organized crime, while on the other hand, they have to facilitate the cross-border trade, including wild fauna and flora. Awareness and basic knowledge in botany and zoology are imperative to enforce wildlife and forest legislation. Customs officers also need to be familiar with the various types of fraud and irregularities that are currently being carried out. Many officers lack experience in checking whether international standards and CITES requirements on the humane treatment of live specimen during transport are actually complied with.<sup>202</sup> Accordingly, it is crucial that Customs authorities and other border control agencies are adequately equipped and trained to detect and disrupt the cross-border trafficking of wild fauna and flora. It is also crucial that they have access to the practical assistance of experts from CITES Management Authorities.

It has to be remembered that even well-trained and highly resourced border and Customs authorities can physically inspect only a small fraction of the enormous volume of shipments and number of

<sup>202</sup> Cyrille de Klemm, "Guidelines for legislation to implement CITES", pp. 52-56.

persons that cross international borders. It is therefore important that Customs and other border control agencies operate on a targeted risk management basis by acting on information or suspicions that suggest that illegal commodities are being shipped.<sup>203</sup> This approach requires comprehensive data and intelligence systems, and timely information exchange among agencies and with other countries, which is explored elsewhere in the *Toolkit*.<sup>204</sup>



### Tool II.31 Border control and Customs

- Are importers and exporters required to declare animals and plants intended for import and export? Are importers and exporters required to present CITES documents? Do Customs authorities have to be notified in advance regarding, for example, cargo information?
- What specialized staff, technical equipment, detector dogs and facilities are available at land border crossings, seaports and airports?
- Are all Customs units (such as goods classification, duty collection, passenger control and cargo control) tasked with the responsibility of enforcing the relevant wildlife and forest regulations?
- Are there formalized cooperation agreements between Customs and wildlife and forestry agencies? What is the daily working relationship between them?
- Are Customs officers and other border officers trained in CITES requirements, the identification of specimen and so forth?
- What percentage of shipments is inspected prior to export or import?
- Are shipments and passengers in transit also targeted and inspected?
- Are the existence and validity of documents for all imports and exports checked? Is their authenticity always verified? Are documents cross-checked against the actual contents of shipments?
- Have measures been implemented to prevent commercial carriers (airlines, shipping lines, trucking companies) from being used for trafficking purposes?
- Have measures been implemented to establish that cargo is properly documented, including sanctions for non-compliance with such obligations?
- Is a risk assessment technique applied to target high-risk wildlife shipments? Are risk indicators related to wildlife and forests developed and integrated into risk assessment systems?

### Cooperation between Customs and CITES

On 4 July 1996, an MOU was signed to increase cooperation between WCO and the CITES Secretariat in fields such as staff training and information exchange. To foster closer collaboration

<sup>203</sup> Duncan Brack, Kevin Gray and Gavin Hayman, "Controlling the international trade", pp. 28-29.

<sup>204</sup> See further part two, section 3, and part five, section 2.

between national Customs authorities and CITES Management Authorities, WCO and the CITES Secretariat encourage their members to set up an MOU programme as part of their overall strategy for combating wildlife and forest offences. To that end, the *Guidelines on Co-operation between Customs Administrations and CITES Management Authorities Managing the Trade in Animals and Plants (CITES)* were developed.

National MOUs between Customs and the CITES Management Authority give Customs an appropriate framework for obtaining information and technical assistance from the Management Authority to target high-risk consignments and travellers. Such MOUs also enable Customs to help the Management Authority by indicating the existence of suspicious circumstances or consignments. The increased quantity and frequency of information provided by the Management Authority enables Customs to distinguish and target high-risk traffic more effectively, while permitting the majority of legitimate traffic to move freely.



### Tool II.32 Cooperation between Customs and CITES Management Authority

- What cooperation, if any, exists between Customs and the CITES Management Authority?
- Has a national MOU between Customs and the CITES Management Authority been established? If so, what is stated in it?
- Does the MOU reflect the *Guidelines on Co-operation between Customs Administrations and CITES Management Authorities Managing the Trade in Animals and Plants (CITES)*?

## ENVIRONET

On 5 June 2009, WCO launched ENVIRONET as a new global real-time communication tool for use in the fight against cross-border environment-related offences. ENVIRONET provides a secure, Internet-based platform for Customs officials, other law enforcement authorities and international organizations, as well as their regional networks, to cooperate with one another and share information in the course of their daily operations. Information related to all commodities that have the potential to damage the environment and that are covered by trade-related multilateral environment agreements can be exchanged via ENVIRONET. This includes endangered wild fauna and flora, and issues such as ozone-depleting substances, hazardous waste and materials, pesticides, chemical weapons and living modified organisms.



### Tool II.33 ENVIRONET

- Do Customs and other law enforcement agencies have access to ENVIRONET?
- Do Customs and other law enforcement agencies share information such as new trends and routings, and concealment methods via ENVIRONET?
- What have the outcomes and experiences been?



## Customs Enforcement Network

Since July 2000, WCO has been operating the Customs Enforcement Network (CEN), which is a global network for gathering Customs-related data and information. CEN enables Customs officers around the world to exchange information on Customs offences and to share intelligence in a timely, reliable and secure manner with direct access available 24 hours per day. CEN is Internet-based and uses effective database protection norms. It relies on encryption technology to protect communication and data transfers.

Currently, the following features are available on CEN:

- The CEN database records Customs seizures and offences classified under 13 different headings covering the main fields of Customs enforcement activity, including the trade in endangered species of wild fauna and flora under CITES. Pictures illustrating concealment methods and X-ray images are also available. All pictures can be downloaded and used for training purposes.
- The CEN website contains alerts on enforcement-related issues, as well as intelligence needed by Customs services. It comprises a reference system, alert messages, situation sheets, dedicated pages for regional liaison offices, links to other organizations and so forth.
- The communication application is a tool that facilitates the exchange and use of any information in a timely, reliable and secure manner.

The CEN system electronically links Customs administrations through the WCO network of regional intelligence liaison offices. WCO members and regional intelligence liaison offices can report seizure information to the CEN database. They in turn benefit by being able to use the database to conduct national, regional and interregional analysis and publish alerts. Each participating WCO member nominates a national contact point that acts as a hub between the national Customs administration and the relevant regional intelligence liaison offices.

The success of CEN rests squarely on its ability to function as a vital enforcement resource. This is only possible, however, if WCO members regularly provide quality information, particularly statistics relating to all seizures, and any relevant pictures and intelligence. This will strengthen CEN, making it an essential resource for all users.<sup>205</sup>



### Tool II.34 WCO Customs Enforcement Network

- Do Customs agencies report seizures to CEN and make use of information exchanged via CEN?
- Has a national contact point been nominated to liaise between the national Customs administration and the relevant regional intelligence liaison office?
- How and by whom is CEN used? What have the outcomes and experiences been?

<sup>205</sup> See further WCO, *CEN: Sharing Information for a More Effective Network* (2009). Available from [www.wcoomd.org/home\\_wco\\_topics\\_epoverviewboxes\\_tools\\_and\\_instruments\\_epcengien.htm](http://www.wcoomd.org/home_wco_topics_epoverviewboxes_tools_and_instruments_epcengien.htm) (accessed 8 Feb 2010).

## 7. International cooperation in criminal matters

Wildlife and forest offences transcend national borders. While law enforcement is generally confined to one country, criminals are not. The trade in plants and animals—dead or alive, legal or illegal—frequently involves multiple countries. The globalization of trade and travel, and, more specifically, the emergence and expansion of transnational crime create new challenges for law enforcement systems. Criminal offenders are mobile and often seek to evade detection, arrest and punishment by operating across international borders. They avoid being caught by taking advantage of those borders and playing on the frequent reluctance of law enforcement authorities to engage in complicated and expensive transnational investigations and prosecutions. The weak capacity of any one country to address some of these threats effectively translates into an overall weakness in the international regime of criminal justice cooperation. For countries with a relatively limited criminal justice capacity, these challenges can sometimes appear insurmountable.<sup>206</sup> Accordingly, many instances of wildlife and forest offences remain undetected, and many offenders are never prosecuted.

For these reasons, comprehensive, multiagency and flexible cross-border cooperation is essential for ensuring the appropriate investigation and prosecution of wildlife and forest offences. The international community recognizes international cooperation in criminal matters as an urgent necessity, especially for trafficking offences that are transnational in nature. As discussed in part one of the *Toolkit*, this demands national efforts to comply with new international standards and to encourage the convergence and compatibility of respective national legislation. Avenues for international judicial cooperation are discussed in part three. The United Nations Convention against Transnational Organized Crime, apart from providing international cooperation mechanisms, can also serve as a basis for law enforcement cooperation and information sharing.

Effective international cooperation may also require complex procedural reforms to develop greater investigation and prosecution capacity at the national level. For some countries, building capacity for international cooperation within their own criminal justice system is difficult, especially if they lack the necessary human resources, expertise or other resources.<sup>207</sup>

Nevertheless, international cooperation should be seen as an opportunity rather than an obstacle. If implemented and executed properly, law enforcement cooperation contributes to the effectiveness of international judicial cooperation, enabling countries to seek legal assistance, extradition, the transfer of prisoners, the transfer of proceedings in criminal matters, and cooperation for the purposes of the confiscation of criminal proceeds and assets,<sup>208</sup> which is discussed in part three. Cooperation opens avenues to obtain additional evidence, access information, recover assets, freeze funds, confiscate property, and arrest and return fugitives that would otherwise be immune to prosecution.

### 7.1 Legal frameworks

International cooperation—judicial or between law enforcement authorities—requires domestic or international frameworks that provide a legal basis for seeking assistance from another country and articulate the ways in which such assistance may be sought. Most jurisdictions have domestic laws that identify the requirements and mechanisms for mutual legal assistance in criminal matters, extradition, the transfer of prisoners and so forth.<sup>209</sup> Bilateral treaties may be in place to make requests to or receive requests from particular countries. While at present there is no specific international

<sup>206</sup> UNODC, “International cooperation”, in *Criminal Justice Assessment Toolkit*.

<sup>207</sup> Ibid.

<sup>208</sup> Ibid.

<sup>209</sup> UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.

treaty to prevent and suppress wildlife and forest offences, instruments such as the United Nations Convention against Corruption and the Convention against Transnational Organized Crime may serve as platforms for seeking assistance in matters involving organized criminal groups or bribery.<sup>210</sup>

The absence of domestic and international frameworks for cooperation may encourage some offenders to relocate themselves, their activities and their assets to those countries. This may protect them from prosecution and shelter their assets from confiscation. An analysis of wildlife and forest offence enforcement measures should therefore not only involve an inquiry into existing cooperation arrangements but also identify those jurisdictions between which no avenues for formal cooperation exist.



### Tool II.35 Frameworks for international cooperation

- Is there legislation concerning the investigation of crimes with international components? If so, does this legislation cover wildlife and forest offences?
- Is the country a party to bilateral or multilateral treaties that make it possible to seek enforcement cooperation or take enforcement requests from another country?
- Is the country a party to any international agreement concerning international police cooperation (for example, a bilateral agreement based on the Model (Bilateral) Police Co-operation Agreement of INTERPOL)?<sup>a</sup>
- With which countries are there no formal (or informal) avenues for international cooperation?

<sup>a</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*.

## 7.2 INTERPOL

INTERPOL is in a unique position to facilitate cross-border law enforcement and assist countries in gathering evidence and locating offenders and their assets. Moreover, INTERPOL has established a range of tools designed specifically to combat wildlife and forest offences. INTERPOL currently has 188 Member States, most of which have established a national central bureau to act as a focal point for cooperation with the General Secretariat and other national central bureaux. These bureaux can also act as liaison points between national wildlife and forest enforcement units and the General Secretariat of INTERPOL.<sup>211</sup>

As early as 1976, an INTERPOL resolution was adopted to combat the illegal traffic in wild fauna and flora. The Environmental Crime Programme of INTERPOL, established in 1992, is designed to assist Member States in the effective enforcement of national and international environmental laws and treaties. The Environmental Crime Programme also works towards enhancing and developing the abilities of INTERPOL Member States at the national level concerning, for example, the deterrence, apprehension, investigation and prosecution of environmental criminals. The Programme helps to coordinate the actions of multiple countries in cases with international implications.<sup>212</sup>

<sup>210</sup> See further part one, section 1.

<sup>211</sup> See INTERPOL and CITES Secretariat, Wildlife Crime Working Group, *Practical Guide for the Use of the CITES Management Authorities in Collaboration with the International Criminal Police Organization (INTERPOL)* (2005), pp. 1-7 and 23.

<sup>212</sup> INTERPOL, *Environmental Crime Programme*, p. 2; Cf. Kevin Tomkins, "Police law enforcement and the environment", pp. 294-296.

The INTERPOL Wildlife Crime Working Group (formerly the Subgroup on Wildlife Crime) focuses on the expertise and experience of law enforcement officers on the poaching, trafficking or possession of legally protected wild fauna and flora. The Working Group carries out measures to improve the exchange of information on:

- Persons or companies involved in illegal trade in wild fauna and flora;
- Organizations involved in illegal trade in wild fauna and flora; and
- Methods of illegal trade in wildlife, including the use of false CITES documents, forgery, means of transport, organized crime, and activities related to organized crime (such as money-laundering and trafficking in narcotics) and associated trends.

Participation in the Wildlife Crime Working Group is open to all INTERPOL Member States and regional representatives, as well as observers from the CITES Secretariat and WCO.<sup>213</sup> The Conference of the Parties of CITES has also encouraged its Parties, if they have not already done so, to nominate officials from the relevant national enforcement and prosecution agencies to participate in the INTERPOL Wildlife Crime Working Group.



### Tool II.36 INTERPOL

- Is the country a member of INTERPOL? Has it established a national central bureau?
- Does the country participate in the Wildlife Crime Working Group and Environmental Crime Programme? Do representatives from the relevant wildlife, forestry and law enforcement agencies attend the Working Group meetings?
- Are the country's agencies responsive to requests made through INTERPOL?

### Ecomessage

In the 1990s, the INTERPOL Wildlife Crime Working Group developed a system called Ecomessage, the standard format for reporting cases related to illegal trade in endangered species, other infractions of CITES, and other forms of environmental crime. Ecomessage was developed as a tool to assist investigators in collecting information from widely scattered sources, to create uniform reporting methods and to assist in identifying which law enforcement agencies or persons to contact in other countries. The purpose of Ecomessage is to improve the exchange of information on international environmental crime cases, including wildlife and forest offences, and to enhance the collection, storage, analysis and circulation of such information.

Within INTERPOL, the General Secretariat in Lyon, France, acts as the central collection and dissemination point for information supplied by the national central bureaux using Ecomessage. Ecomessage is a standard form that can be either transmitted over the INTERPOL I-24/7 global communication system network or sent by mail or fax. The General Secretariat has prepared guidelines for using Ecomessage to ensure that the relevant information is entered and exchanged as accurately and expeditiously as possible.<sup>214</sup>

<sup>213</sup> INTERPOL and CITES Secretariat, Wildlife Crime Working Group, *Practical Guide*, p. 9. See further Rosalind Reeve, *Policing International Trade in Endangered Species*, pp. 227-229.

<sup>214</sup> Ibid, p. 10. See also Duncan Brack, Kevin Gray and Gavin Hayman, "Controlling the international trade", p. 37; and Rosalind Reeve, *Policing International Trade in Endangered Species*, pp. 228-229.





### Tool II.37 Ecomessage

- Does the country's INTERPOL national central bureau use Ecomessage to share information on wildlife and forest offences? If not, why not?
- Are the relevant staff adequately trained in using Ecomessage?
- What are the country's experiences in using Ecomessage? What obstacles have been encountered?
- Does the country use an alternative method of exchanging information on wildlife and forest offences?

## 7.3 Operation, procedures and administration

Effective and efficient international cooperation requires a consistent and clear operational and administrative system to issue and receive requests for cooperation to and from foreign jurisdictions.<sup>215</sup> In most countries, departments of justice and attorneys-general act as the central authority to manage criminal justice cooperation with other countries. In the wildlife and forestry sectors, it is also conceivable that the relevant ministries, government departments, and specialized agencies and units liaise directly with their counterparts abroad. This may be the case, for instance, among national CITES Management Authorities. Multilateral cooperation is also often conducted via international frameworks such as those of INTERPOL and WCO.

Below the central level of government, individual agencies should have mechanisms to prepare and manage cases involving international cooperation. Larger agencies may have designated staff to prepare international requests before transferring them to the central authority. For these mechanisms to function properly, investigators and other front-line staff need to be aware of the possibilities and opportunities involved in international cooperation.<sup>216</sup>



### Tool II.38 Procedures for international cooperation

- Does the country have a central authority for international cooperation? Has another agency been delegated this responsibility?
- Are there special arrangements for wildlife and forestry departments and their enforcement units to liaise directly with their foreign counterparts?
- Do the central authority and other agencies involved in international cooperation have sufficient resources to achieve their mandates (skilled and trained staff, communication equipment, ongoing training and so forth)? Are they able to collaborate and exchange information with other central authorities abroad?
- Within the relevant agencies, who manages wildlife and forest cases that involve an international criminal dimension?
- Are investigators aware of how to request assistance from law enforcement and judicial authorities in other countries?

<sup>215</sup> UNODC, "International cooperation", in *Criminal Justice Assessment Toolkit*.

<sup>216</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*.

## 7.4 Law enforcement cooperation and information sharing

International law enforcement cooperation can be enhanced through the development of more effective systems of information sharing at the bilateral, regional and international levels. The United Nations Convention against Transnational Organized Crime<sup>217</sup> and the United Nations Convention against Corruption<sup>218</sup> contain specific provisions to facilitate law enforcement cooperation for the offences these treaties cover.

In many instances, international cooperation is hindered by the absence of clear channels of communication. In other cases, channels exist but their inefficiency prevents the timely exchange of both operational information (data useful in responding to specific offences, offenders or criminal groups) and general information (data on criminal networks, on trends and patterns of trafficking, the extent of known criminal activity in a particular sector and typical *modus operandi*). The largest obstacle, however, may be the strict limitation to information exchange with foreign countries in the national legislation for the sake of privacy protection, or that of commercial interest.

The establishment of joint investigative teams represents a major new trend in the development of effective capacity to investigate and prosecute transnational crimes of all sorts, including wildlife and forest offences. The United Nations Convention against Corruption and the Convention against Transnational Organized Crime also encourage States Parties to conclude bilateral or multilateral agreements to establish cross-jurisdictional joint investigative bodies.<sup>219</sup> This offers one of the most promising new forms of international cooperation, even if there are some remaining issues in terms of making them fully functional on a broad scale. There are legal issues, as well as issues of attitude and trust among law enforcement agencies, and procedural questions. In addition, some practical problems exist in the organization of joint investigations, including a lack of common standards and accepted practices, issues regarding the supervision of the investigation, and the absence of mechanisms for quickly solving these problems. For joint investigative teams to become an effective tool for international cooperation, States must put into place the required legal framework, at both the national and international levels, although such a framework need not necessarily be very complicated.

Another effective form of international cooperation is engagement in regional or international joint operations with specific targets, such as illegal trade in wild fauna and flora for a certain period of time. Apart from increasing the number of seizures, participating agencies may also benefit from enhanced mutual understanding, trust, the establishment of effective mechanisms of cooperation and the capacity-building of officers.

More and more countries have law enforcement officials stationed in their embassies and high commissions around the world. Such officials may be Customs officers, drug enforcement officers, police liaison officers or legal attachés. Law enforcement liaison officers provide direct contact with the law enforcement and government authorities of the host State. They can develop professional relationships, build confidence and trust, and generally facilitate liaison among law enforcement agencies in the States involved. When the legal systems of the States concerned are very different, liaison officers can also advise law enforcement and prosecutorial authorities, both in their own State and in the host State, on how to formulate a request for assistance. The role of such liaison officers can be enhanced by ensuring that the officers have access, in accordance with the law of the host country, to all agencies in that country with the relevant responsibilities.<sup>220</sup> At the same time, they can be

<sup>217</sup> United Nations Convention against Transnational Organized Crime, arts. 26 and 27.

<sup>218</sup> United Nations Convention against Corruption, art. 48.

<sup>219</sup> United Nations Convention against Corruption, art. 49; and United Nations Convention against Transnational Organized Crime, art. 19. See also David McClean, *Transnational Organized Crime*, pp. 238-240.

<sup>220</sup> UNODC, "International cooperation", in *Criminal Justice Assessment Toolkit*.

very good resource personnel for training activities held in the host countries, as many of them are highly experienced officials in their respective areas.

Regarding Customs, most mutual assistance is administrative in nature, under the framework of, or in line with the principles of, the International Convention on Mutual Administrative Assistance for the Prevention, Investigation and Repression of Customs Offences (Nairobi Convention).<sup>221</sup>

Furthermore, multilateral administrative assistance may cover a number of areas such as control, surveillance and analysis of duties, witness interviews on behalf of another party, information exchange, the presence of officers before the court of another party, participation in investigations abroad and so forth.



### Tool II.39 Law enforcement cooperation

- Does the country have the capacity to establish joint investigation teams with other countries? Is this possible in the field of wildlife and forest crime? If not, what are the obstacles?
- Does the country have arrangements with other countries for the exchange of police liaison officers?
- Is the country involved in arrangements with other countries for the exchange of information and intelligence? If so, which ones?
- Have law enforcement agencies been involved in international joint investigation teams? If so, what was the experience?
- Has the country entered into bilateral or multilateral agreements on law enforcement cooperation?
- Has the country participated in regional or international joint operations? If so, what were the results?
- Does the country have law enforcement liaison officers in other countries?
- Are there foreign police liaison officers in the country? If so, from what country or countries? How do they work with the national police? What is their view on the quality of the existing law enforcement cooperation with the country?
- Does the national police cooperate (formally and informally) with police agencies in other countries in the collection, exchange and analysis of criminal intelligence information?
- Do specialized wildlife and forest law enforcement units cooperate effectively at the bilateral, regional and international levels?

<sup>221</sup> Adopted at Nairobi on 9 June 1977. The International Convention on Mutual Administrative Assistance in Customs Matters (Johannesburg Convention) was adopted by the WCO Council in June 2003 but has yet come into force due to poor ratification numbers by countries. Available from [www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/Conventions/MAA%20Legal%20Text%20FINAL%20VERSION\\_publish%20E.PDF](http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/Conventions/MAA%20Legal%20Text%20FINAL%20VERSION_publish%20E.PDF).

## 8. Technical assistance and aid

### 8.1 International and regional assistance

Many countries have limited resources to investigate thoroughly wildlife and forest offences and may not have the technical know-how, expertise or equipment to carry out some elements of an investigation. To assist nations with technical equipment, expert personnel or financial aid, international and regional organizations, along with individual donor countries, offer avenues through which countries can request assistance, training and aid.<sup>222</sup> In recent years, a number of schemes have been created to offer technical assistance and aid specifically in relation to wildlife and forest offences. Furthermore, the United Nations Convention against Transnational Organized Crime<sup>223</sup> and the United Nations Convention against Corruption<sup>224</sup> contain provisions on economic development and technical assistance regarding the offences covered by these treaties.



#### Tool II.40 International and regional assistance

- What type and level of technical assistance and aid is available from international and regional organizations to enhance the enforcement of wildlife and forest offences?
- How can this assistance and aid be requested? Have requests been made in the past? Were they successful? If not, why not?
- Are there (or have there been) initiatives funded by international or regional organizations aimed at developing aspects of policing and law enforcement in the wildlife and forestry sectors? What are the objectives of these projects? Are they being achieved?
- Do (or did) these initiatives offer training? If so, are trainers being trained to deliver cascade training programmes or to train individuals?
- Do (or did) these initiatives provide equipment? If so, was the need for this equipment identified through an independent evaluation or was it determined by a government list?
- What difficulties have international and regional agencies typically encountered in trying to offer technical assistance? Are some kinds of assistance more problematic than others?

<sup>222</sup> UNODC, "Crime investigation", *Criminal Justice Assessment Toolkit*.

<sup>223</sup> United Nations Convention against Transnational Organized Crime, arts. 29 and 30. See further David McClean, *Transnational Organized Crime*, pp. 285-292.

<sup>224</sup> United Nations Convention against Corruption, arts. 60 and 62.



## 8.2 Bilateral and multilateral donors

Several bilateral and multilateral donors support schemes to enhance enforcement efforts in the wildlife and forestry sectors. Donor agencies, such as the Australian Agency for International Development, those of the European Union and its Member States, the Norwegian Agency for Development Cooperation, regional development banks, United Nations agencies, the United States Agency for International Development and the World Bank, among others, play an important role in some countries and, along with other aid agencies and non-governmental organizations, can offer expertise, equipment, grants, financial aid or other forms of assistance to support national authorities. This can take place as a standalone activity or as part of other rural development and natural resource management projects and programmes.



### Tool II.41 Bilateral and multilateral donors

- What type and level of technical assistance and aid are available from other countries (and their agencies) to enhance the enforcement of wildlife and forest laws and regulations?
- How can this assistance and aid be requested? Have requests been made in the past? Were they successful? If not, why not?
- Are there (or have there been) initiatives funded by bilateral or multilateral donors aimed at developing aspects of policing and law enforcement in the wildlife and forestry sectors? What are the objectives of these projects? Are they being (or have they been) achieved?
- Do (or did) these initiatives offer training? If so, are they training trainers to deliver cascade training programmes or are they training individuals?
- Do (or did) these initiatives provide equipment? If so, was the need for this equipment identified through an independent evaluation or was it determined by a government list?
- What difficulties have agencies typically encountered in trying to offer technical assistance? Are some kinds of assistance more problematic than others?

## 8.3 Donor coordination

The provision of technical assistance and aid is not always unproblematic as it can sometimes create donor dependence and long-term reliance on external contributions. Fluctuations in foreign aid can also jeopardize domestic efforts. Furthermore, there can be a duplication of efforts if technical assistance and aid is not properly coordinated and administered.<sup>225</sup>

<sup>225</sup> UNODC, “Public safety and police service delivery”, in *Criminal Justice Assessment Toolkit*.



### Tool II.42 Donor coordination

- How are the implementation, delivery and receipt of technical assistance and aid coordinated by the receiving country?
- Is there evidence of duplication?
- Are multiple donors providing the same or similar assistance, aid or equipment?
- Are there plans for the maintenance and replacement of equipment? Are there examples of the same or similar equipment being provided, and then not being used or being misappropriated?
- Are mechanisms in place to ensure the sustainability of any sponsored activity?
- In terms of any technical assistance and aid received, were there any post-implementation reviews that helped to identify good practices that could be replicated elsewhere? Are the results of such initiatives collated and coordinated to inform future planning?

## 9. Accountability and integrity

Officers working in wildlife and forest law enforcement and other parts of wildlife and forest administration are responsible for protecting resources of high commercial value. They often work in remote areas, far from public scrutiny. In some systems, unsupervised wildlife and forestry officials have broad discretionary powers and a great deal of latitude. If they work for meagre salaries, they may be vulnerable to corruption or may otherwise collude with persons and organizations involved in illegal activities.<sup>226</sup> Furthermore, conflicts of interest may arise if an officer's enforcement duties conflict with personal interests—for example, if relatives or friends have interests in the wildlife or forestry sector or if they appear to have committed an offence. It is thus important that government officials be accountable for their decisions and that action and clear codes be established to ensure the integrity of officials and their departments.

Enforcement officers may be held accountable in a number of different ways. They may be accountable in management or business terms for their performance and productivity, perhaps against government or community-set targets and objectives. More importantly, they must be accountable for the way in which they exercise the powers entrusted to them. The following analytic tools address the degree to which, and mechanisms with which, enforcement in the wildlife and forestry sectors is monitored, along with the ways in which dishonesty and corruption, as well as a lack of integrity, may manifest themselves.<sup>227</sup> Corruption clearly facilitates the illegal trafficking of wildlife across borders, which is an area that also requires further awareness-raising and capacity-building.

Project GAPIN (Great Apes and Integrity), a project implemented by WCO between October 2010 and March 2011, aimed to enhance the Customs integrity in 15 African countries regarding the enforcement of CITES. This was the first CITES-related project concerning issues of integrity. A

<sup>226</sup> Nalin Kishor and Richard Damania, "Crime and justice in the Garden of Eden", pp. 89-93.

<sup>227</sup> UNODC, "The integrity and accountability of police" and "Public safety and police service delivery", in *Criminal Justice Assessment Toolkit*.

few incidents of corruption were reported during the two-week joint operation GAPIN carried out early 2011. A follow-up Project GAPIN is being planned in collaboration with the original donor country.



### Tool II.43 Accountability and integrity

- Does the law establish mechanisms for the monitoring and oversight of the conduct and performance of wildlife and forest law enforcement officers? If so, what are these mechanisms?
- Are there clear codes of conduct for wildlife and forest law enforcement units? If so, what is their content? Have there been cases of violation of their principles? How have these cases been handled?
- Are officers expected and entitled to report colleagues for failures to maintain integrity and professional standards? Are officers who make such reports protected from victimization or harassment by the law and with practical support?
- Are there avenues for civilians to lodge complaints against the police and those involved in wildlife and forest offences? Is there independent oversight of the complaints system?
- How are wildlife and forest law enforcement officers viewed by other agencies and by the general public? Are they trusted and well respected? If not, why not?



### Tool II.44 Corruption and bribery

- Are there any allegations that officials involved in wildlife and forest law enforcement take or solicit bribes to ignore the relevant offences?
- Are officials from wildlife and forestry agencies adequately paid?
- Do the relevant wildlife and forest laws contain specific provisions regarding corruption and bribery? If so, what are they and how are they enforced?
- Is there a national strategy or plan to combat corruption in the wildlife and forestry sectors? If so, what is included in it? When was it written? Is there a comprehensive integrity or anti-corruption action plan for the police force and Customs? If so, what is included in it? Who is responsible for its implementation? What evidence is there of its being implemented, both nationally and locally?
- Are there allegations that enforcement officers receive unofficial payments or gratuities from business people in the community? If so, what reasons are given for this? What are the implied consequences if payments are not made?
- Are wildlife, forestry, Customs, and police officers permitted to accept personal gifts, benefits or rewards? If so, on what basis is this allowed? Who authorizes the receipt of gifts? Is there a record of gifts received? What happens to gifts that have been received? Are the families of police staff permitted to accept gifts, benefits or rewards related to the work of that staff member? If not, how is this prevented?



## Part three.

### Judiciary and prosecution

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# Judiciary and prosecution

Effective wildlife and forest law enforcement requires a well-functioning and efficient prosecution service and an independent judiciary, both to hold offenders accountable for their actions and to protect the legal rights of various stakeholders. It is important that prosecutors, judges and their support staff be properly trained and resourced and that their departments be adequately staffed. As with every aspect of a criminal justice system, the integrity and accountability of prosecutors and judges must be ensured, and their independence and impartiality protected. This requires measures to shield officers from corruption, nepotism and coercion.

The reality in many countries, however, is that prosecution authorities and courts function poorly for a variety of reasons. They are often understaffed and under-resourced, and face caseloads that greatly exceed their financial and human capacity to cope efficiently. The training of prosecutors and judges may be weak in general and does not usually involve specific training in wildlife and forest law.<sup>228</sup> In some countries, corruption is rife, and prosecutors and judges operate under the influence of politicians or other branches of government.

It has to be noted that, in the context of wildlife and forest crime—and environmental crime in general—criminal prosecutions and the initiation of judicial proceedings are seen by most countries as a last resort. This is partly due to the high commitment of human and financial resources required for court action, partly because of the likelihood of penalties being imposed, and partly because it is often more efficient to reach a solution through negotiation and the use of administrative orders where necessary and possible.<sup>229</sup>

Part three, sections 1 to 3, of this *Toolkit* explores avenues designed to ensure the proper functioning, staffing and resourcing of prosecution authorities and the judiciary, and contains tools to protect their independence. The analysis then describes frameworks for international judicial cooperation in criminal matters. Measures relating to sentencing, including custodial and non-custodial punishment, are set out in part three, section 4. Tools relating to restitution and compensation for victims of wildlife and forest crime are identified in section 5.

## 1. Judiciary

A functioning court system is an integral part of any criminal justice system and is an important element of efforts to effectively prevent and suppress wildlife and forest offences. Even if the capacity to detect and investigate wildlife and forest offences is high, the potential deterrent effects of prosecutions are close to non-existent so long as the judicial system is weak and prone to corruption and delays.<sup>230</sup> Accordingly, the management of the courts must be efficient and effective so that the criminal caseload can be adjudicated fairly, appropriately and promptly.

The judiciary is relevant to the prevention and suppression of wildlife and forest offences in two ways. First, the judiciary plays a significant role in protecting wild fauna and flora in relation to the enforcement of the relevant laws. Second, the judiciary has an inherent supervisory function to review the decisions of the executive where these threaten wildlife or forests.

<sup>228</sup> FAO and ITO, *Best Practices for Improving Law Compliance*, p. 48.

<sup>229</sup> Gerry Bates, *Environmental Law in Australia*, 6th ed. (Sydney, Lexis Nexis, 2006) para. 9.3.

<sup>230</sup> Nalin Kishor and Richard Damania, "Crime and justice in the Garden of Eden", pp. 89-97.

An analysis of the judiciary usually involves a much broader approach than what is within the scope of this *Toolkit*. To that end, the *Criminal Justice Assessment Toolkit*, published by the United Nations Office on Drugs and Crime, provides the relevant assessment tools in two sections—“The courts”<sup>231</sup> and “The independence, impartiality and integrity of the judiciary”.<sup>232</sup>

The following sections contain general tools to provide a basic analysis of the organization and operation of the judiciary, along with certain specific tools that relate to the particular problem of wildlife and forest offences.

## 1.1 Structure and organization of the judiciary

### Legal framework

An understanding of the legal and regulatory framework for the management of the courts is essential for any assessment of the judiciary. In most countries, the national constitution contains provisions delineating the general structure of the courts and the administration of justice. This is supplemented by legislation and regulations that spell out the specific functions of individual courts and other branches of the judiciary. Furthermore, court rules and government policy documents may provide additional details about the operation of the courts.<sup>233</sup>



#### Tool III.1 Judiciary: legal frameworks

- In which statutes are the functions and organization of the judiciary set out? What is written in these statutes?
- Does the constitution set out the general structure of the court system?
- What other government document or policy documents provide information on the organization of the judiciary?

### Criminal court system

For the criminal justice system, the principal focus of the analysis will be on the structure and operation of the criminal court system. This involves identifying and assessing the various levels of the court system charged with hearing primary cases, appeals, and judicial reviews involving wildlife and forest offences.<sup>234</sup>

<sup>231</sup> UNODC, “The courts”, in *Criminal Justice Assessment Toolkit*.

<sup>232</sup> UNODC, “The independence, impartiality and integrity of the judiciary”, in *Criminal Justice Assessment Toolkit*.

<sup>233</sup> Ibid.

<sup>234</sup> UNODC, “The courts”, in *Criminal Justice Assessment Toolkit*.



### Tool III.2 Criminal court system

- What levels of hierarchy does the criminal court system have? What powers does each level have?
- How do appeal and review processes operate across the different levels of the court system?
- Before which courts are cases involving wildlife and forest offences first heard? Which courts hear appeals? Are there at any level courts, judges and other judicial officers that focus solely on wildlife and forest offences?
- Does the law make provisions for a jury system in criminal cases? Are charges involving wildlife and forest offences heard by a jury or a single judge? How does the system work in practice?
- Are there specialized courts provided for by statute or via administrative arrangement that bear any relevance for wildlife and forest offences (such as anti-corruption courts)?
- Is there a system of assessors who sit with a judge? If so, are they lay assessors? Do they sit in cases involving wildlife and forest offences?

## Independence of the judiciary

In some countries, a lack of separation of the State's judiciary function from the functions of the executive and legislative branches is a common problem, leading to widespread interference in the affairs of the judiciary and corruption at all levels, including in the wildlife and forestry sectors.<sup>235</sup>

While the relationship between the wildlife and forest law enforcement unit and a country's judiciary should be maintained at an appropriate distance, it is very important that the unit raise awareness among the judiciary about wildlife and forest offences and promote their participation in the appropriate sentencing and deterrent responses. The unit should also seek information and feedback from the judiciary on the relevant decisions and issues that have arisen in civil and criminal cases, as well as any problems with evidence or the manner in which investigations have been conducted.<sup>236</sup>



### Tool III.3 Independence of the judiciary

- What is the relationship between the judiciary and the executive and legislative branches of government? Where are these relationships articulated? How clear are they?
- Does the organization and structure of the judiciary ensure its independence?
- Are court proceedings and the appointment of judges transparent?
- How is the judiciary accountable to the public?
- What interaction and communication, if any, occurs between wildlife and forest law enforcement units and the judiciary?

<sup>235</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 48.

<sup>236</sup> CITES Secretariat, "Notification to the Parties", CITES Resolution Conf. 12.5 (Rev. CoP 15), annex 3.



Achieving judicial independence to ensure the impartiality of the judiciary is a complex undertaking. There are various ways in which countries have sought to attain this goal, and the following general guidelines can assist in such a process:

- Build broad support for reforms;
- Promote independent organizational and structural arrangements for the judiciary;
- Clarify the relationship between the judiciary and the rest of the government;
- Improve the terms and conditions and training of individual judges (see below);
- Ensure transparent procedures; and
- Promote accountability of the courts to the public.

It should be recognized that initiating or leading broad reforms to the judicial system are well beyond the mandate of wildlife and forestry governance institutions, but they can be effective lobbyists in such a process.<sup>237</sup>

## 1.2 Resources of the judiciary

The quality of the court system depends on, among other things, the human and material resources, such as staffing levels of judicial authorities, staff qualifications and training, facilities and equipment available to judges and their staff.

### Staff and salaries

To function properly, courts need to be adequately staffed, and the salaries and other entitlements of judges need to be reflective of their responsibilities, qualifications and experience. Many courts, however, lack the human resources to fulfil their duties. Elsewhere, judicial authorities suffer from severe staff shortages. Posts remain unfilled for years, and salaries and allowances may be months overdue. Inadequate salaries, or the failure to pay salaries regularly, may reduce staff motivation and increase the risk of corruption.<sup>238</sup>



### Tool III.4 Judiciary: staff and salaries

- How many judges are currently employed to hear criminal cases? Is the number sufficient to handle the caseload?
- To which courts/judges are cases involving wildlife and forest offences referred? On what basis are they referred?
- Do criminal courts have a full complement of staff? If not, what reason is given for this?
- What types of support staff are involved in the preparation of criminal trials (administrative, paralegal or others)? How are they supervised and to whom do they report?

<sup>237</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, pp. 48-49.

<sup>238</sup> UNODC, "The independence, impartiality and integrity of the judiciary", in *Criminal Justice Assessment Toolkit*; UNODC, *The Global Programme against Corruption*, p. 245.

- What is the salary structure for judges and support staff? What is the average salary, including overtime for each level? How does this compare with the national average salary?
- Are salary levels commensurate with the responsibilities and risks involved?
- Do judges and their staff receive their pay? If so, do they receive it on time?

## Recruitment and training

Court systems that hire qualified applicants through a transparent selection process, that view and compensate staff as professionals, and that develop and strengthen their skills and functions with continuing training, can in turn demand integrity and excellence from their staff. Conversely, inefficiency, poor service and corruption are more likely to be issues challenging justice systems and its users if court staffing is not viewed as a priority and if the function of staff as public servants is not communicated by leadership.<sup>239</sup>

As with those involved in investigating and prosecuting wildlife and forest offences, it is crucial that judges and their staff be adequately trained. If cases are heard by judges not sufficiently familiar with the relevant background, techniques, processes and legal requirements, it is possible that the integrity of the trials may be compromised.

To assist countries in their efforts to train judges and judicial officers for cases involving illegal trade in endangered species, the CITES Secretariat provides prosecutors and the judiciary with a training module that is available on CD-ROM.<sup>240</sup>



### Tool III.5 Recruitment and training of judges

- What are the selection processes and recruitment procedures for judges? What level of qualification is needed? How are judges selected for higher and specialized courts?
- What foundation training is given to new judges and other employees? Is specialized training on wildlife and forest offences offered to new or existing staff members?
- How often do judges and other employees receive refresher training? What ongoing and specialized training courses are available? How are training needs assessed? How is training delivered?
- Does training involve participants from other agencies?
- Are there mechanisms in place to provide judges who come across cases of wildlife trafficking only occasionally with access to relevant expertise?

<sup>239</sup> UNODC, "The courts", in *Criminal Justice Assessment Toolkit*.

<sup>240</sup> CITES Secretariat, "Interactive training course for enforcement officers and information module for prosecutors and the judiciary", CD-ROM (Geneva, 2008).

## Facilities and equipment

Judges and their support staff require certain basic facilities and may also need special equipment to carry out their tasks. Basic facilities include offices and stationery, and more specialized equipment include computers and legal databases. Judges and their staff require access to libraries, as well as sufficient funding to carry out day-to-day functions.

Analyses of available and required facilities and equipment vary greatly among jurisdictions. The role, training, responsibility and seniority of judges must be taken into account. An analysis also depends on the local socio-economic conditions, the resources available, and access to financial aid and technical assistance. The *Criminal Justice Assessment Toolkit* contains additional tools to assess the adequacy and security of court facilities and equipment.<sup>241</sup>



### Tool III.6 Judiciary: facilities and equipment

- What are the facilities of the judiciary? Where are courts located? What is the physical condition of the court buildings?
- What security measures are in place in and around court buildings?
- Is the office equipment (such as furniture, stationery and photocopiers) adequate? Are courtrooms adequately equipped and furnished?
- What communication and word-processing technology is available (such as computers, the Internet, telephones, mobile telephones and fax machines)?
- Can files, evidence and electronic information be stored securely?
- Do judges and their staff have access to the relevant legislation, including criminal laws, and wildlife and forest laws?
- Where can judges access current legal material (such as statutes, case reports and other literature)? Are courthouses equipped with libraries? Do judges have access to the relevant electronic databases?

## 1.3 Information management

The recording, maintenance and storing of information, including case files, court reports and so forth, are essential to the integrity and functioning of the judiciary. Proper and thorough information management also serves an important function for people outside the court system and the public at large, and is not limited to court processes involving wildlife and forest offences. The following tool sets out various basic mechanisms relating to record keeping and court reporting. A more comprehensive set of tools can be found in the *Criminal Justice Assessment Toolkit*.<sup>242</sup>

<sup>241</sup> UNODC, "The courts", in *Criminal Justice Assessment Toolkit*.

<sup>242</sup> Ibid.



### Tool III.7 Court records and court reporting

- Is there a court registry? Are staff trained in record keeping? How is the integrity of the staff responsible for the maintenance of court information ensured?
- Under the current law, which court records are open to the public and which records must be kept confidential?
- For how long are different types of court records kept? Are there clear rules about the keeping and disposal of records? Are records sometimes lost, damaged or stolen?
- How are files created, identified and kept up to date? Can files be tracked as they move about the court?
- Does the current law or court rules provide for the recording of court proceedings and the manner in which this is to be done? Are all court proceedings recorded? How are they recorded? How, where and for how long are court recordings kept?
- Are law reports compiled? If so, who is responsible for the compilation and how often are law reports issued? How are law reports disseminated?

## 1.4 Accountability and integrity of the judiciary

A serious impediment to the success of any effort to combat wildlife and forest offences is a corrupt judiciary. If the judges are corrupt, the legal and institutional mechanisms designed to curb wildlife and forest offences—however well targeted, efficient or honest—remain crippled. Moreover, judicial integrity is severely compromised if judges and judicial officers collude with individuals or organizations involved in illegal activities, or if their duties conflict with personal interests (for example, if relatives or friends are involved in the wildlife or forestry sectors or if they are accused of an offence).

It is thus important that all members of the judiciary be accountable for their decisions and their actions, and that clear codes be established to ensure the integrity of the judiciary.



### Tool III.8 Accountability and integrity of the judiciary

- Does the current law establish mechanisms for the monitoring and oversight of the conduct and performance of judges and judicial officers? If so, what are those mechanisms? How is the performance of the judiciary evaluated?
- Are there clear codes of conduct and ethical guidelines for judges and judicial officers? If so, what is written in these codes and guidelines? How do they work? How are they enforced and implemented?
- Are there avenues for civilians to lodge complaints against judges? Is there independent oversight of the complaints system? How are allegations of misconduct handled? Who handles them?
- How is the judiciary viewed by other agencies and by the general public? Are judges trusted and well respected? If not, why not?
- Are there allegations that judges take or solicit bribes to ignore the relevant offences?
- Is there a national strategy or plan to combat corruption in the judiciary? If so, what measures does this strategy contain?



## 2. Prosecution

Public prosecutors play a unique role in criminal cases in that they appear on behalf of the government as the representative of the people rather than of an individual victim. A prosecutor has the broad obligation to uphold the rule of law, with an attendant ethical and professional duty to ensure that a person accused of a crime receives a fair trial. Where prosecutors fail to fulfil these obligations, miscarriages of justice ranging from malicious prosecutions to wrongful convictions may result, damaging the integrity of the justice system and violating the public's trust.<sup>243</sup> The inadequate or non-existent prosecution of wildlife and forest offences also sends the message that this type of crime is victimless and less serious than other crimes.<sup>244</sup>

The design and delivery of prosecution services differ greatly among countries and are frequently influenced by common law, civil law or hybrid traditions. Due to the diversity of prosecution structures and approaches, it is difficult to address all potential issues in the tools set out in the following sections. Moreover, many issues do not specifically relate to the prosecution of wildlife and forest offences, and are better assessed across all types of criminal activities. The *Criminal Justice Assessment Toolkit* contains a specific section on "The prosecution service", which can be used to assess all elements of a prosecution authority comprehensively.<sup>245</sup> Furthermore, the International Association of Prosecutors adopted the "Standards of professional responsibility and statement of the essential duties and rights of prosecutors",<sup>246</sup> which should be integrated into any comprehensive analysis of prosecution services. The following sections focus exclusively on the analysis of the principal features of public prosecutions of wildlife and forest offences.

### 2.1 Source, organization and delegation of the prosecution authority

#### Legal framework

The first step in assessing the prosecution system involves the identification of the source of prosecutorial authority. In many countries, the national constitution contains provisions delineating the general organization of who is responsible for the prosecution of criminal cases, in what branch of government that authority resides, and the general powers and obligations of the prosecution authority. In addition, laws and regulations usually contain additional details about the functions and operations of the prosecution authority. In some countries, these are set out in the general administration of justice acts, criminal codes or criminal procedure acts. In other countries, specific acts dealing exclusively with the prosecution or investigation authority exist.

<sup>243</sup> UNODC, "The prosecution service", in *Criminal Justice Assessment Toolkit*.

<sup>244</sup> Mara E. Zimmerman, "The black market for wildlife", pp. 1657-1676.

<sup>245</sup> UNODC, "The prosecution service", in *Criminal Justice Assessment Toolkit*.

<sup>246</sup> International Association of Prosecutors, "Standards of professional responsibility and statement of the essential duties and rights of prosecutors" (April 1999). Available from [www.iap-association.org/ressources/Standards\\_English.pdf](http://www.iap-association.org/ressources/Standards_English.pdf) (accessed 4 March 2010).



### Tool III.9 Source of prosecution authority

- In which statutes or laws are the functions and organization of the prosecution authority set out?
- Does the constitution set out the branch of government responsible for prosecutions?
- What are the (statutory) functions of the prosecution authority? How does it relate to other branches of government?

## Organization and delegation of prosecution authority

Once the legal framework for the prosecution of criminal offences, including wildlife and forest offences, has been identified, it is necessary to examine the organization and delegation of authority for prosecutions and associated investigative functions. While some countries have specialized wildlife and forest crime prosecution units,<sup>247</sup> very few systems have prosecutors that focus solely on these offences. Moreover, it is rare for countries to spell out specific procedures applicable exclusively to the prosecution of wildlife and forest offences. In their absence, the general procedures for the prosecution of criminal offences apply.<sup>248</sup>



### Tool III.10 Prosecution: organization and delegation

- Where does the prosecution authority reside in the criminal justice system? Is it independent or part of the judiciary? Do the police or other enforcement agencies conduct prosecutions?
- Is the prosecution authority vested in a prosecutor, an investigative judge or both?
- How is the prosecution authority organized? Does the prosecution authority have specialized staff or units for prosecuting wildlife and forest offences?
- Pursuant to the law and the procedures of the criminal justice system, how does a criminal case involving violations of wildlife or forest laws proceed from the allegation or suspicion of an offence to advice to investigators, to formal charging, to adjudication and disposition?

In an effort to enhance the prosecution of wildlife and forest offences, some countries—albeit a very small number—place prosecutors within wildlife and forest law enforcement units. Even where a prosecutor is not included in the wildlife and forest law enforcement unit, every effort should be made to establish the closest working relationship possible between the enforcement unit and prosecution authorities. Awareness-raising among such authorities should be given priority, and their support to the unit should be established. The unit may well be able to provide prosecutors with

<sup>247</sup> Cf. CITES Secretariat, “Interactive training course”, module II.2.

<sup>248</sup> UNODC, “The prosecution service”, in *Criminal Justice Assessment Toolkit*.

training. Case reporting and evidential requirement standards should be established. Prosecutors can also assist in identifying priorities and targets for the unit.<sup>249</sup>



### Tool III.11 Partnerships between law enforcement and prosecution

- What working relationship exists between wildlife and forest law enforcement units and prosecution authorities? How do these agencies communicate and exchange information?
- Are one or more prosecutors placed in the wildlife and forest law enforcement unit? If there are none, would such a placement be feasible?



### Tool III.12 Role of the prosecutor

- What is the role of the prosecutor in relation to wildlife and forest offences? What is the prosecutor's role at trial, at sentencing and on appeal?
- Do prosecutors (of wildlife and forest offences) undertake or oversee investigations?
- Does the prosecutor have the power to instigate a prosecution? If so, how is this done? If not, who instigates prosecutions? Are prosecutors legally bound by the result of a police (or other agency) investigation?
- Do citizens (or other individuals) have the right to make private requests for a prosecution?
- Does the prosecutor have discretion to pursue charges, decline to proceed, dismiss a charge or divert cases to alternatives to criminal prosecution and so forth?
- Does the prosecutor have the legal authority to negotiate plea agreements?

## 2.2 Operation and workload of the prosecution authority

In many countries, the prosecution authority is significantly understaffed and ill-resourced to function properly. This can result in long delays and, in some instances, cases falling apart (if witnesses die, evidence disappears and so forth). In addition, prosecutors are often pressured to prioritize other serious offences over the prosecution of wildlife and forest offences.

Accordingly, in analysing a prosecution system, it is integral to obtain information, including statistics, on the basic operation of the prosecution authority and the workload of prosecutors. When this information and data are analysed, it is important to understand the terminology used in that jurisdiction as the meaning of terms such as “criminal case”, “filing”, “resolution” and “outcome” may vary.<sup>250</sup>

<sup>249</sup> CITES Secretariat, “Notification to the Parties”, CITES Resolution Conf. 12.5 (Rev. CoP 15), annex 3.

<sup>250</sup> UNODC, “The prosecution service”, in *Criminal Justice Assessment Toolkit*.



### Tool III.13 Operation and workload of prosecutors

- In jurisdictions where the police file the original charging documents, how many criminal cases involving wildlife or forest offences are received annually by the prosecutor's office? In jurisdictions where the prosecutor is responsible for the filing of charges in court, how many such cases are filed annually? Where are these cases filed?
- How many criminal cases involving wildlife and forest offences are resolved annually by the prosecutor's office? Are they resolved, for example, via trial or guilty pleas?
- How many cases result in a conviction of guilt to at least one of the charges? How many cases are withdrawn or dismissed? How many cases are diverted?
- Are cases involving wildlife and forest offences assigned to particular prosecutors? If so, what is their average annual caseload? How many pending cases are the prosecutors handling at any one time?
- Is there a backlog of cases involving wildlife and forest offences? Is it possible to determine how long a case assigned to a prosecutor has been pending without examination?

## 2.3 Resources of the prosecution authority

The effectiveness of prosecuting wildlife and forest offences depends, to a large degree, on the quality of prosecution services. That quality in turn depends, *inter alia*, on the available human and material resources, such as prosecution authority staffing levels, staff qualifications and training, and the facilities and equipment available to prosecutors.

### Staff and salaries

To function properly, prosecution authorities need to be adequately staffed, and prosecutors and their support staff need to be appropriately paid. Salaries and other entitlements of prosecutors need to be reflective of their responsibilities, education and experience. Many prosecution units, however, lack the human resources required to fulfil their duties. In some countries, prosecution units suffer from severe staff shortages. Posts remain unfilled for years and salaries and allowances may be months overdue. Inadequate salaries, or the failure to pay salaries regularly, may reduce staff motivation and increase the risk of corruption.<sup>251</sup>



### Tool III.14 Prosecution: staff and salaries

- How many prosecutors are currently employed by the prosecution authority? Is the number sufficient to handle the caseload?
- How many prosecutors and support staff are involved in prosecuting wildlife and forest offences? Is this their sole responsibility or do they also prosecute other types of offences?

<sup>251</sup> UNODC, "The prosecution service", in *Criminal Justice Assessment Toolkit*; and UNODC, *The Global Programme against Corruption*, p. 245.



- Do prosecution authorities and their specialized units have a full complement of staff? If not, what reason is given for this?
- What types of support staff are involved in the prosecution of wildlife and forest offences (administrative, paralegal or other)? How are they supervised and to whom do they report?
- What is the salary structure for prosecutors and support staff? What is the average salary, including overtime for each level? How does this compare with the national average salary?
- Are salary levels commensurate with the responsibilities and risks involved?
- Do prosecutors and their staff receive their pay? If so, do they receive it on time?

## Recruitment and training

Recruitment procedures for prosecutors need to be fair and transparent in order to ensure professionalism and integrity, and to avoid nepotism and corruption. The selection of staff at all levels must be based on merit, experience and education, and selection criteria need to be clearly articulated.

As with those involved in investigating wildlife and forest offences, it is crucial that prosecutors be adequately qualified and trained. They require an in-depth understanding of the relevant legal frameworks and case law, and the technical elements of wildlife and forest law, as well as the function and operation of every aspect of the criminal justice system. If offences are prosecuted by persons not sufficiently familiar with the relevant backgrounds, techniques, processes and legal requirements, it is possible that the integrity of prosecutions may be compromised, with potential implications for trials and convictions.<sup>252</sup>

An analysis of prosecution capacities should therefore involve a comprehensive review of training programmes, including their delivery and contents, and of the types and depth of the training available to prosecutors. Furthermore, even where comprehensive training programmes exist, it is important that syllabuses and curricula be reviewed regularly. This must be done in order to ensure that they remain up to date and keep pace with legislative and jurisprudential developments, and with the ever-changing nature of wildlife and forest offences.

To assist countries in their efforts to effectively prosecute cases involving illegal trade in endangered species, the CITES Secretariat provides prosecutors and the judiciary with a training module, which is available on CD-ROM.<sup>253</sup>

<sup>252</sup> UNODC, "The prosecution service", in *Criminal Justice Assessment Toolkit*.

<sup>253</sup> CITES Secretariat, "Interactive training course".



### Tool III.15 Recruitment and training of prosecutors

- What are the selection processes and recruitment procedures for joining the prosecution authority? What level of qualification is needed? Are prosecutors required to hold law degrees?
- Where specialized units are charged with prosecuting wildlife and forest offences, how are staff selected for these units?
- What foundation training is given to persons joining the prosecution authority? Is specialized training in wildlife and forest offences offered to new or existing staff members?
- How often do prosecutors receive refresher training? What ongoing and specialized training courses are available? How are training needs assessed? How is training delivered?
- Are there mechanisms in place to provide prosecutors who come across cases of wildlife trafficking only occasionally with access to relevant expertise?
- Does training involve participants from multiple agencies (domestic and foreign), such as the police, judiciary or other?

## Facilities and equipment

The responsibilities assigned to prosecution authorities often bear little relationship to their ability to fulfil them. Prosecutors of wildlife and forest offences require certain basic facilities and may also need special equipment to carry out their tasks. Basic facilities may include offices and stationery, and more specialized equipment may include computers and legal databases. Access to libraries and sufficient funding are also required to carry out day-to-day functions.<sup>254</sup>

Analyses of available and required facilities and equipment vary greatly among jurisdictions and agencies. They must take into account the role, training, responsibility and seniority of prosecutors. An analysis also depends on the local socio-economic conditions, the resources available, and access to financial aid and technical assistance.



### Tool III.16 Prosecution: facilities and equipment

- What are the physical facilities of the prosecution authority? Where are they located?
- Is the office equipment (such as furniture, stationery and photocopiers) adequate?
- Do prosecutors have easy access to the investigation agencies and to the courts?
- Which communication and word-processing technology is available (such as computers, the Internet, telephones, mobile telephones and fax machines)?

<sup>254</sup> UNODC, "The prosecution service", in *Criminal Justice Assessment Toolkit*.

- Can files, evidence and electronic information be stored securely?
- Do prosecutors have access to the relevant legislation, including criminal laws, and wildlife and forest laws?
- Does the prosecution authority have a library, or can prosecutors access law libraries elsewhere nearby? Do prosecutors have access to the relevant electronic databases?

## 2.4 Accountability and integrity

Prosecutors, as others involved in the criminal justice system, may be vulnerable to corruption or may collude with persons or organizations involved in illegal activities. Furthermore, conflicts of interest may arise if a prosecutor's duties conflict with his or her personal interests (for example, if relatives or friends are involved in the wildlife or forestry sector or if they are accused of an offence). It is thus important that prosecutors—as all government officials—be accountable for their decisions and their actions, and that clear codes be established to ensure the integrity of the prosecution authority and its staff. The International Association of Prosecutors' "Standards of professional responsibility and statement of the essential duties and rights of prosecutors" contains further guidelines pertaining to the accountability and integrity of prosecutors.<sup>255</sup>

Prosecutors may be held accountable in a number of different ways. They may be accountable in management or business terms for their performance and productivity, perhaps against government- or community-set targets and objectives, but, more importantly, they must be accountable for the way in which they exercise the powers and discretion entrusted to them.<sup>256</sup>



### Tool III.17 Accountability and integrity of prosecutors

- Does the law establish mechanisms for the monitoring and oversight of the conduct and performance of prosecutors? If so, what are these mechanisms? How is the performance of prosecutors evaluated?
- Are there clear codes of conduct and ethical guidelines for prosecutors? If so, what do they say? How do they work? How are they enforced and implemented?
- Do prosecutors receive training on codes of conduct and ethical guidelines? If so, when do they receive such training? Is this training required in order to obtain a degree or licence to practice? Are prosecutors required to undergo periodic training on codes of conduct and ethics?
- Are there avenues for civilians to lodge complaints against prosecutors? Is there independent oversight of the complaints system? How are allegations of misconduct handled? Who handles them?

<sup>255</sup> International Association of Prosecutors, "Standards of professional responsibility".

<sup>256</sup> UNODC, "The prosecution service", in *Criminal Justice Assessment Toolkit*.

- How are prosecutors viewed by other agencies and by the general public? Are they trusted and well respected? If not, why not?
- Are there allegations that prosecutors take or solicit bribes to ignore the relevant offences?

### 3. International cooperation in criminal matters

As discussed in part two, section 7, of the *Toolkit*, transnational wildlife and forest crime must be met with a criminal justice response that also crosses borders. A variety of tools pertaining to international cooperation between law enforcement agents are outlined in that section. This section explores modalities of international judicial cooperation in criminal matters, namely extradition, mutual legal assistance, cooperation for the purpose of confiscation, the transfer of proceedings and the transfer of sentenced persons. These modalities are defined in international treaties such as the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption. For each country, the involvement of administrative authorities in the procedures described in this section may vary, and law enforcement agents are frequently involved in the execution of judicial orders following requests by competent authorities.

#### 3.1 Extradition

Extradition is the process whereby one State (the requested State) will surrender a person to another State (the requesting State) for the purpose of criminal prosecution or for the enforcement of a criminal sentence in relation to an extraditable offence. The extradition of the person is facilitated through a formal judicial process, often requiring an evidentiary basis for the extradition, although the final decision on surrender generally rests with the executive.

Multilateral conventions dealing with extradition have been developed within the framework of various regional and other international organizations. The United Nations Convention against Transnational Organized Crime<sup>257</sup> and the United Nations Convention against Corruption<sup>258</sup> contain extradition provisions that may be used in relation to some wildlife and forest offence investigations. These conventions set basic minimum standards for extradition for the offences they cover and also encourage the adoption of a variety of mechanisms designed to streamline the extradition process.<sup>259</sup>

Furthermore, most jurisdictions have numerous bilateral treaties that enable extradition to and from selected countries. Domestically, in some countries, extradition acts or similar laws set out the requirements for the administration of extradition requests to and from other countries.

There are still numerous situations where existing legal instruments—domestic and international—are insufficient or do not encompass offences relating to wildlife and forest crime. Even when available, extradition processes can be cumbersome, and there remain numerous obstacles to quick and predictable extradition. To address these issues, model treaties such as the United Nations Model

<sup>257</sup> United Nations Convention against Transnational Organized Crime, art. 16. See further David McClean, *Transnational Organized Crime*, pp. 173-190.

<sup>258</sup> United Nations Convention against Corruption, art. 44.

<sup>259</sup> UNODC, “International cooperation”, in *Criminal Justice Assessment Toolkit*.



Treaty on Extradition, which was adopted by the General Assembly, have been made available to countries wishing to enter into new bilateral agreements. A Model Law on Extradition has also been developed.<sup>260</sup>



### Tool III.18 Extradition

- Is there a national law governing extradition? If so, does it cover forest and wildlife offences?
- What bilateral extradition treaties has the country entered into? Are there countries not included but with which a treaty would be important?
- Do existing treaties cover offences relating to wildlife and forest crime, as well as offences described in the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption (if the country is a State Party)?
- Does the country require a treaty, under domestic law, to extradite an individual? Is the lawful extradition of an individual to another country possible without a treaty?
- What are the main requirements of the country for granting an extradition request? Is there a dual criminality requirement under domestic law and bilateral treaties?
- Does the country recognize the legal value of arrest warrants of other countries?
- According to national legislation, on what grounds can extradition be refused? Are there exceptions based on certain types of offences or punishment, on the political nature of the offence or on the prohibition of extraditing nationals?
- Who or what agency deals with extradition requests? How is this process coordinated? Has the relevant personnel been trained in the legal requirements of extradition?
- What kind of response is the country currently receiving to its requests for extradition?
- Is the country typically able to ensure that requests for extradition are executed within the deadlines specified by the requesting State?

## 3.2 Mutual legal assistance

Mutual legal assistance is a mechanism that allows one State to provide another State with assistance during an investigation or a prosecution. The types of assistance that may be provided through mutual legal assistance are subject to applicable treaties and domestic laws, and may include compulsory or coercive measures.<sup>261</sup>

<sup>260</sup> See [www.unodc.org/unodc/en/legal-tools/model-treaties-and-laws.html](http://www.unodc.org/unodc/en/legal-tools/model-treaties-and-laws.html).

<sup>261</sup> For instance, article 18, paragraphs 3 and 8, of the United Nations Convention against Transnational Organized Crime sets out the types of mutual legal assistance that may be requested. They may include any other type of assistance that is not contrary to the domestic law of the requested Party. See article 18, paragraph 3 (i).

Mutual legal assistance may be conducted on the basis of multilateral or bilateral agreements, as well as national legislation that either gives full effect to the relevant treaties or enables mutual assistance in the absence of such treaties. International instruments such as the United Nations Convention against Transnational Organized Crime<sup>262</sup> and the United Nations Convention against Corruption<sup>263</sup> include detailed provisions concerning mutual legal assistance.

Mutual legal assistance may be hindered by the fact that the procedural laws of cooperating countries can vary considerably. To facilitate these efforts, the United Nations General Assembly has adopted the Model Treaty on Mutual Assistance in Criminal Matters. A model law on mutual legal assistance has also been prepared.<sup>264</sup>



### Tool III.19 Mutual legal assistance

- Are there national laws governing mutual legal assistance in criminal and administrative matters? If so, what are they? Do they cover relevant wildlife and forest offences?
- What bilateral treaties or agreements on mutual legal assistance does the country have with other countries? Are there countries with which there are no treaties but with which a treaty would be important?
- Do existing treaties cover offences relating to wildlife and forest crime, as well as offences described in the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption (if the country is a State Party)?
- Pursuant to domestic law, does the country require a treaty for mutual legal assistance in criminal matters? Is assistance possible without a treaty?
- What are the country's main requirements for granting a request for assistance? Is there a dual criminality requirement under domestic law and bilateral treaties?
- Pursuant to national legislation, on what grounds can mutual legal assistance be refused?
- Who or what agency deals with mutual legal assistance requests? How is this process coordinated? Have the relevant personnel been trained in the necessary legal requirements?
- What kind of response is the country currently receiving to its requests for mutual legal assistance?
- Is the country usually able to ensure that requests for mutual legal assistance are executed within the deadlines specified by the requesting State?

In the absence of a treaty or agreement, or of national legislation providing otherwise, some countries use letters rogatory (sometimes referred to as *commissions rogatoire* or rogatory letters) as the customary method of obtaining assistance from abroad. A letter rogatory is a request from a court of one country to the judiciary of a foreign country requesting an action or information. Letters

<sup>262</sup> United Nations Convention against Transnational Organized Crime, art. 18; David McClean, *Transnational Organized Crime*, pp. 195-238.

<sup>263</sup> United Nations Convention against Corruption, art. 46.

<sup>264</sup> See [www.unodc.org/unodc/en/legal-tools/model-treaties-and-laws.html](http://www.unodc.org/unodc/en/legal-tools/model-treaties-and-laws.html).

rogatory may be used in countries where multilateral or bilateral treaties on assistance are not in force to effect service of process or to obtain evidence if permitted by the laws of the foreign country.<sup>265</sup> This may be done on the basis of reciprocity or comity.



### Tool III.20 Letters rogatory

- Who deals with letters rogatory for international assistance? Who is responsible for receiving and issuing such requests for mutual legal assistance?
- On average, how long does it take for letters rogatory to be issued?
- Are letters rogatory used in relation to wildlife and forest offences? If so, how and in which cases? If not, why not?

To identify the strengths and weaknesses of existing international cooperation measures, it may be helpful to review the patterns of international cooperation for individual jurisdictions. Some jurisdictions may have close and smooth working relationships with other jurisdictions, allowing for requests to be submitted and dealt with swiftly, while cooperating with other jurisdictions may be more difficult.<sup>266</sup> An analysis of current case flows and the relevant data can assist in identifying best practices and in overcoming obstacles. It should be noted, however, that international cooperation is frequently influenced by geographical, historical and political factors that may be beyond the scope of the analysis.



### Tool III.21 Patterns of international cooperation

- From which countries has international assistance most frequently been requested?
- How frequently, under which circumstances and for what offences have agencies been involved in seeking cooperation from another country in cases involving wildlife and forest offences?
- What were the results of these requests?
- What delays and difficulties have agencies typically encountered in trying to seek the assistance of other countries?

## 3.3 Confiscation of assets

Effective action against wildlife and forest offences must include measures to deprive perpetrators of the proceeds of crime, especially if the specimens involved have a high market value. The ability of law enforcement agencies, and judicial and prosecutorial authorities to identify, investigate, sequester and confiscate assets derived from wildlife and forest offences sends a message to criminals that this activity is not high profit.

<sup>265</sup> UNODC, "Crime investigation", in *Criminal Justice Assessment Toolkit*; United States, Department of State, "Preparation of letters rogatory", available from [http://travel.state.gov/law/info/judicial/judicial\\_683.html](http://travel.state.gov/law/info/judicial/judicial_683.html) (accessed 13 Jan 2010).

<sup>266</sup> UNODC, "International cooperation", in *Criminal Justice Assessment Toolkit*.

Accordingly, most jurisdictions have mechanisms to enable the tracing, freezing, seizing and confiscation of assets and proceeds of crime. As a general rule, the relevant officers should be authorized to exercise the power to confiscate whenever they have reason to suspect that wildlife or forest material, dead or alive, is being obtained, traded, imported or exported in contravention of the law. The costs incurred for the custody of seized specimen, for transporting and disposing of them, or for maintaining live animals or plants during the time of seizure should also be recoverable from the person who was in possession at the time, or from the owner, transporter, importer or exporter.<sup>267</sup>

Furthermore, it is important that seized items be stored securely to ensure that they are available as evidence in prosecutions and other proceedings and that they do not re-enter the illegal market. In addition, when and where these items are no longer of value as evidence, disposal methods need to ensure that seized goods are not used for future criminal activities.

The proceeds of the related offences, and the property or instrumentalities used in their commission are frequently located in two or more jurisdictions. As such, international cooperation for the purpose of confiscation is an essential tool. In these cases, it is very important that the States agree in advance about how any confiscated assets would be recovered or shared. Requests for international cooperation for the purposes of confiscation are essentially mutual legal assistance requests.

A number of international instruments, including the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption, establish comprehensive regimes that permit asset recovery across borders.<sup>268</sup> Article VIII, paragraph 1 (b), of CITES also seeks to ensure that endangered species traded illegally are confiscated or returned.<sup>269</sup> In practice, this “is often the only punishment suffered by individuals for violation of CITES requirements.”<sup>270</sup>

There are considerable differences among domestic laws as to which authorities, whether administrative or judicial, can order the confiscation of assets, the respective powers of these authorities and the procedures they must follow. In some countries, for instance, confiscation may be imposed by a judgement rendered by a court of law. Confiscation by court order may be either mandatory under the law or left to the discretion of the court itself. Elsewhere, confiscation can be ordered by administrative authorities.<sup>271</sup>



### Tool III.22 Confiscation of assets

- What is the legal framework regarding criminal and non-criminal asset recovery, confiscation and forfeiture? Are there special provisions in relation to wildlife and forest offences?
- Do relevant forfeiture provisions authorize the confiscation of all illegally imported, exported, transported, sold, received, acquired or purchased wild fauna and flora?
- Is the seizure of specimens mandatory whenever there are reasonable grounds to believe a transaction is in violation of CITES?

<sup>267</sup> Cyrille de Klemm, “Guidelines for legislation to implement CITES”, p. 62.

<sup>268</sup> See further UNODC, “International cooperation”, in *Criminal Justice Assessment Toolkit*.

<sup>269</sup> Cf. CITES Secretariat, *Model Law on International Trade*, p. 4.

<sup>270</sup> David S. Favre, *International Trade in Endangered Species*, p. 215.

<sup>271</sup> Cyrille de Klemm, “Guidelines for legislation to implement CITES”, pp. 66-68.



- Do forfeiture laws also extend to the vessels, vehicles, aircraft and other equipment used to facilitate wildlife and forest offences?
- Are these frameworks adequate?
- Can the costs for the custody, transporting, disposing and maintaining of the seized items be recovered from the owner or transporter?
- What mechanisms exist to identify, trace, seize or freeze property and other assets, including bank, financial or commercial records, as well as the equipment and other instrumentalities used in, or destined to be used in, the commission of crimes?
- Are there any data on the confiscation of assets related to wildlife and forest offences? Are there any data on the value of assets seized or recovered?
- Where are seized items kept? Are they stored securely? Are there allegations that illegal assets re-enter the market?
- Who pays for the handling, storage and feeding of live wildlife? Is there a special government budget for this purpose?
- How are seized assets disposed of, distributed or returned?
- Which multilateral treaties to which the State jurisdiction is a party create asset confiscation and forfeiture obligations?
- Has the country entered into bilateral treaties or other agreements in relation to asset sharing among countries involved in tracing, freezing and confiscating assets originating from wildlife and forest offences?

### 3.4 Transfer of proceedings

Having the option to transfer criminal proceedings from one country to another can increase the likelihood of the success of a prosecution when, for example, another country appears to be in a better position to conduct the proceedings. This can also assist the prosecution in a country that is initiating proceedings in lieu of extradition. Finally, it can be a useful method of concentrating the prosecution in one jurisdiction and thereby increasing its efficiency and the likelihood of its success in cases involving several jurisdictions.<sup>272</sup>

The United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption also contain specific provisions to encourage the transfer of criminal proceedings for the prosecution of offences under the conventions “in cases where such transfer is considered to be in the interests of the proper administration of justice, in particular where several jurisdictions are involved, with a view to concentrating the prosecution.”<sup>273</sup>

<sup>272</sup> UNODC, “International cooperation”, in *Criminal Justice Assessment Toolkit*.

<sup>273</sup> United Nations Convention against Transnational Organized Crime, art. 21; United Nations Convention against Corruption, art. 47. See further David McClean, *Transnational Organized Crime*, pp. 248-251.



### Tool III.23 Transfer of criminal proceedings

- Is the country a party to any treaty (multilateral or bilateral) that enables the transfer of proceedings in criminal matters to and from another country?
- Is the transfer of criminal proceedings to a foreign jurisdiction possible and permissible under domestic law? What restrictions does domestic law impose on such transfers?
- Does the country receive and make requests for the transfer of criminal proceedings? If so, do any of these requests involve wildlife and forest offences? How are these requests processed? What difficulties have been encountered?

## 3.5 Transfer of sentenced persons

The transfer of sentenced persons allows for a person who is convicted and sentenced in one State to serve his or her sentence in another State to which he or she has ties, usually by virtue of being a national of that State. The United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption contain specific provisions to encourage States Parties to enter “into bilateral or multilateral agreements or arrangements on the transfer to their territory of persons sentenced to imprisonment or other forms of deprivation of liberty for offences established in accordance with [the conventions]”<sup>274</sup>



### Tool III.24 Transfer of sentenced persons

- Is the country a party to any treaty (multilateral or bilateral) that enables the transfer of sentenced persons to and from another country?
- Is the transfer of sentenced persons to a foreign jurisdiction possible and permissible under domestic law? What restrictions does domestic law impose on such transfers?
- Does the country receive and make requests for transfers of sentenced persons? If so, do any of these requests involve persons sentenced for wildlife and forest offences? How are these requests processed? What difficulties have been encountered?

## 4. Sentencing and sanctions

Wildlife and forest offences are seen by many, including investigators, researchers and, most importantly, perpetrators, as a high-profit, low-risk activity. This is because penalties for wildlife and forest offences are often lenient in relation to the crime committed. Accordingly, countries should take the

<sup>274</sup> United Nations Convention against Transnational Organized Crime, art. 17; United Nations Convention against Corruption, art. 45. See further David McClean, *Transnational Organized Crime*, pp. 191-194.

measures necessary to ensure that the relevant offences (set out in part one, section 3, of the *Toolkit*) are punishable by effective, proportionate and dissuasive criminal penalties.<sup>275</sup> Furthermore, convictions need to be followed by sentences that adequately:

- Punish the offender to an extent or in a way that is justified in all circumstances;
- Provide conditions that will help the offender to be rehabilitated;
- Deter the offender and other persons from committing the same or a similar offence;
- Make clear that the community, acting through the court, denounces the sort of conduct in which the offender was involved; and
- Protect the community from the offender, where necessary.

In addition, the court, in imposing a penalty for a wildlife or forest offence, may also take into account:

- The extent of harm caused or is likely to be caused to the environment (including the natural habitat, species and biodiversity) by the commission of the offence;
- The practical measures that could have been taken to prevent, control, abate or mitigate the harm;
- The extent to which the person committing the offence had control over the causes that gave rise to the offence and the extent to which he or she could have reasonably foreseen the harm; and
- Whether, in committing the offence, the person was complying with orders from an employer or supervisor.<sup>276</sup>

## 4.1 Principles of sentencing

In determining sentences, the court should be guided by the gravity of the offence, which is determined by the harm caused, and the culpability of the offender. The harm may be reflected in the damage that is caused by the offence to the environment or individual species, plants or animals, in the injuries, loss or other harm caused to individuals, and any detriment, loss or damage caused to local communities or the public at large. The culpability of the offender is generally reflected in his or her mental state at the time the offence was committed. Generally, higher penalties are reserved for those acting intentionally, knowingly or recklessly, while lower penalties (or no punishment) are appropriate for offenders acting negligently or with no fault of their own.

The severity of the sentence will be further determined by evidence of mitigating or aggravating circumstances presented to the sentencing judge(s). For example, the commission of an offence for financial gain or on behalf of a criminal organization is a common circumstance that may aggravate a sentence. Recurrent offenders also often face higher penalties. Repeated breaches of the law can also be followed by the “blacklisting” of companies.<sup>277</sup>

Another important factor is that the courts tend to be lenient if, in their subjective judgement, they believe that wildlife and forest offences are less serious offences than other types of crime. Some

<sup>275</sup> See also part one, section 3.7.

<sup>276</sup> Gerry Bates, *Environmental Law in Australia*, para. 9.30.

<sup>277</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 47.

organizations and individuals have recommended the requirement of minimum penalties as a possible way to counter this belief.<sup>278</sup> These suggestions have, however, only very limited support as they may infringe upon the independence of the judiciary and limit the courts' ability to take into account all relevant circumstances when determining a sentence.



### Tool III.25 Sentencing

- What sentences does the current law impose for wildlife and forest offences? What are the maximum terms of imprisonment and maximum fines for the relevant offences?
- Are there minimum penalties for wildlife and forest offences?
- Who determines the sentence (for example, sentencing courts or individual judges)?
- What are the principles of sentencing? Where are they articulated?
- Is it possible to impose higher penalties for repeat offenders?
- Are there formal or informal sentencing guidelines or criteria for wildlife and forest offences?
- Do law enforcement units, including wildlife and forest law enforcement units, participate in sentencing hearings? Are victims heard?

## 4.2 Sanctions

Most convictions for wildlife and forest offences presently result in the confiscation of illegally acquired property and assets, and the payment of fines and damages. Other types of sanctions include warnings, incarceration, territory bans, the deprivation of civic rights, bans on continuing the trade or the occupation in the course of which the offence was committed, licence or permit revocations, restrictions on being in possession of wildlife or forestry that is related to the offence or of specific tools and instrumentalities related to the offence, the publication of the offence, remediation and restoration. In practice, a combination of these sanctions may often be appropriate.<sup>279</sup>

Territory bans can be useful, for instance, in denying an offender access to an area or population of species which in turn may prevent illegal harvesting or poaching, and thus also break the illegal trade chain to transit and destination points. Bans on continuing the trade or the occupation in the course of which the offence was committed may equally be an effective means of preventing future violations. The same can be said for the suspension of logging and hunting licences, trade permits and so forth.

In determining the appropriate sentence, it is pertinent that courts consider the whole range of sanctions provided for under current laws. Imprisonment should be reserved for the most serious offences. The imposition of sentences involving corporal or capital punishment should be discouraged.<sup>280</sup>

<sup>278</sup> Cf. Cyrille de Klemm, "Guidelines for legislation to implement CITES", p. 65.

<sup>279</sup> Arlene Kwasniak, "Enforcing wildlife law", p. 9; Gerry Bates, *Environmental Law in Australia*, para. 9.34.

<sup>280</sup> Cf. CITES Secretariat, "Interactive training course", module II.2; Cyrille de Klemm, "Guidelines for legislation to implement CITES", p. 65.



Administrative penalties (sanctions) are generally carried out by enforcement agencies, with the possibility of judicial review by aggrieved parties. Civil and criminal penalties usually require judicial involvement and depend upon the law and practice of the particular State. Certain penalties, such as fines, can apply to administrative, civil or criminal contexts.<sup>281</sup>



### Tool III.26 Sanctions

- What types of sanctions are permissible under domestic law (such as imprisonment, fines, corporal or capital punishment or community service)?
- What sanctions generally follow convictions for wildlife and forest offences?
- Which authorities have the legal power or discretion to impose sanctions?
- Does the law permit sentencing courts to order territory bans, the revocation and suspension of licensing and trade permits, and to prohibit the offender from engaging in certain types of occupations or trades?

## 5. Restitution, compensation and restoration

Offenders should, where possible and appropriate, make restitution to victims. The restitution should include the return of property or payment for the harm or loss caused, the reimbursement of expenses incurred as a result of the victimization, the provision of services and the restoration of rights. In the context of wildlife and forest offences, restitution is particularly important where property rights of the victim(s) have been infringed or where environmental degradation has caused damage to the victim's property or reduced or destroyed the victim's legitimate source of income.

In many instances, restitution would be paid to the State on behalf of the wildlife or forest and not to a specific victim. In such cases, restoration should also be considered for the time and cost of the clean-up, and for the medical treatment and rehabilitation of wildlife. The housing of confiscated live animals or plants, often over lengthy periods prior to court hearings or trials, can be extremely expensive, and prosecution authorities are encouraged to seek court orders requiring the offenders to pay these costs. Following the disposal of cases, consideration may have to be given to repatriating live animals to their countries of origin. This, too, can be highly costly and courts should consider imposing orders requiring that the offender bear such expenses.

Courts in a number of countries require fines and other monetary penalties to be paid into funds established for this purpose, which are used for conservation purposes or to help subsidize enforcement activities. Courts should also consider handing the ownership of the items that were forfeited during sentencing to enforcement agencies for their subsequent use. This could include, for example, vehicles, boats or even aircraft.

Restitution can be implemented in a number of ways and at various points in the system: as a condition of probation, as a sanction in itself or as an additional penalty. It can also be an outcome of a traditional court or an alternative mechanism, such as a victim-offender mediation process, or other restorative justice process. Some jurisdictions also enable victims to commence civil suits against perpetrators of wildlife and forest offences.<sup>282</sup>

<sup>281</sup> UNEP, *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements* (2006).

<sup>282</sup> See, for example, the Endangered Species Act of 1973 (US), 16 USC §1540 (g).

In some cases, when the offender does not have the means to pay restitution, it can be offered in kind or in the form of services offered to the victim or to the community. As with all measures, it is crucial that restitution orders be effectively enforced and that the offenders face consequences should they not comply with the restitution orders.<sup>283</sup>



### Tool III.27 Restitution

- Do current laws and regulations allow restitution to be ordered as part of a sentence? Does this extend to wildlife and forest offences?
- Are victims able to commence civil suits against perpetrators?
- Are victims aware or made aware of these laws and regulations? Can victims of wildlife and forest offences request restitution?
- How are restitution orders enforced?

States should also endeavour to provide financial compensation where restitution or other compensation is not fully available from the offender or other source. In cases where the offender was an agent of the State or was acting on behalf of the State, the State has the responsibility to compensate victims for the harm that was caused to them as a result of the victimization. Some States have adopted legislation and established special mechanisms for providing victim compensation.<sup>284</sup>

If the harm caused by the offence results in environmental damage to public or private lands, it may also be possible for a court to order restoration or other remedial measures. Whether restoration is desirable or indeed possible depends on a number of factors, including the severity of the damage, the risk posed by that damage, the likely pace of natural regeneration, and the feasibility of artificial restoration and regeneration. In some cases, restitution may not be possible, for example for the felling of trees or killing of endangered animals. Preventive and monitoring activities should therefore be given higher priority.



### Tool III.28 Restitution and remedial measures

- Can a court order restoration and remedial measures in response to wildlife and forest offences?
- What restoration and remedial measures can be ordered? Do they include, for example, the time and costs for clean-ups, or the medical treatment of wildlife?

<sup>283</sup> UNODC, "Victims and witnesses", in *Criminal Justice Assessment Toolkit*.

<sup>284</sup> Ibid.





# Part four.

## Drivers and prevention

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# Drivers and prevention

Wildlife and forest offences can be driven by a variety of factors, including rural poverty, food insecurity, unequal distribution of available agricultural lands, economic interests, legal markets of timber and non-timber products, as well as social upheavals such as war and famine.<sup>285</sup> Engagement in illegal wildlife and forest trade can be a regular source of income for some, a safety net to meet sudden needs for others, and in some cases a lucrative opportunity to gain large profits.<sup>286</sup> Although actions in the illegal activities are linked (for example, poor farmers that are employed as harvesters and suppliers by traffickers), it is still critical to differentiate between activities driven by need and poverty, and those driven by greed and the lure for high profit.<sup>287</sup> In developing countries, poverty can be a factor that drives wildlife and forest offences, and in many countries, traditional practices of agricultural slash and burn are condemned as arson. In this connection, formal criminalization can be harmful for people depending on wildlife and forest resources for their livelihoods.<sup>288</sup> Keeping this in mind, social, political, economic, ecological, developmental and cultural dimensions need to be considered to design effective strategies to dissuade individuals from engaging in activities associated with wildlife and forest crime and to prevent wildlife and forest offences overall.

Effective law enforcement, credible penalties and a functional legal system are crucial to control and prevent wildlife and forest crime. However, the problems of wildlife and forest law enforcement cannot be solved by these mechanisms alone. They must be concurrent with an improvement in natural resource management, industrial restructuring, rural development services and poverty reduction for wildlife and forest-dependent communities.<sup>289</sup> A special feature of crimes related to natural resource is that they can arise from underlying problems in resource policy and management and may best be managed as resource problems rather than as matters of criminal law enforcement alone.

In part four of the *Toolkit*, section 1 provides basic tools to assist users in identifying the factors that drive wildlife and forest crime. These tools can help users to better understand the scope of a given crime and to assist them in identifying access points for preventive interventions. Section 2 offers tools to assist users in analysing the existing capacities and effectiveness of natural resource management, particularly national wildlife and forest resources, and therefore provides a starting point for controlling illegal activities.

It is important to note, however, that this section cannot serve as a guideline for natural resource management or broad human development. Its primary objectives are awareness-raising and sensitization regarding the diverse factors and dynamics that drive wildlife and forest crime. Additionally, it provides references to relevant literature, guidelines and tools for the further analysis and design of specific and focused interventions.

<sup>285</sup> World Bank, "Strengthening forest law enforcement and governance", p. 7.

<sup>286</sup> TRAFFIC, "What's driving the wildlife trade? A review of expert opinion on economic and social drivers of the wildlife trade and trade control efforts in Cambodia, Indonesia, Lao PDR and Vietnam", East Asia and Pacific Region Sustainable Development Discussion Papers (Washington, DC, World Bank, 2008), p. 59.

<sup>287</sup> Marcus Colchester and others, *Justice in the Forest*, p. x.

<sup>288</sup> William B. Magrath and others, "Timber Theft Prevention. Introduction to security for forest managers". East Asia and Pacific Region Sustainable Development Working Paper. (Washington, DC, World Bank, 2007), pp. 6-7.

<sup>289</sup> World Bank, "Strengthening forest law enforcement and governance", p. xiv.

## 1. Context analysis

The identification of the diverse actors involved in the illegal activities and the various illegal usages of wildlife and natural resources and products can help to explain the scope and causes of a particular offence.

This section offers tools to analyse and identify the different links and the main actors in the wildlife and forest products supply chain.

Experience has shown that significant quantities of illegal-origin timber are laundered through licensed concessions, authorized operators, sawmills, exporters and so forth. Each year, significant amounts of such timber are exported using CITES or other certificate of origin documents that have been obtained fraudulently or corruptly. To combat such fraud, and to demonstrably indicate that the timber comes from a licensed and sustainably operated concession, it is vital that an effective chain of custody be maintained. This will inevitably involve the use of marking systems, such as barcodes, special paints and indelible ink, stamps and laser marking.

Such marking systems should be combined with documentation showing licensed logging, transportation and first-stage processing. For example, enforcement staff should be posted in forest areas and either man checkpoints on exit roads or conduct random inspections at such locations, where marking and documents should be compared against the timber being moved. Similar inspections should be conducted at sawmills and at ports of export.

It is absolutely essential that the chain of custody be maintained from where a tree is felled to where it is exported, and at any processing points along the way, such as sawmills or treatment centres, where raw timber is converted to sawn logs, timber sheets, veneer and so forth.

Many of the existing schemes do not involve a strict chain of custody of the timber itself but rather focus on the sustainability of specific areas of forest or specific concession operations. While important, some of these schemes do little to exclude the possibility of the laundering of illegal-origin timber.

It is essential that national authorities strictly regulate the phases of trade relating to such “raw” products. Without very costly (and probably impractical) scientific processes such as DNA profiling, it is almost impossible to determine the legal origin of timber once it has become a picture frame, paintbrush handle or garden seat. The very same applies to many other forms of wildlife, such as a crocodile skin watch strap or an elephant ivory name seal.<sup>290</sup>

### 1.1 Actors in the wildlife and forest supply chain

As previously stated, wildlife and forest crime is a complex phenomenon that can occur equally in countries of origin, at transit points and in destination countries.<sup>291</sup> As a consequence, the wildlife and forest product supply chain involves a wide range of actors and stakeholders.<sup>292</sup> These actors and stakeholders include, among others, subsistence users, commercial hunters and forest concessions on the supply side, and trophy hunters, middlemen and end-users on the demand side. In this way, different values, views and interests are placed on the same natural resources.<sup>293</sup>

<sup>290</sup> See also Dennis P. Dykstra and others, “Technologies for wood tracking: verifying and monitoring the chain of custody and legal compliance in the timber industry”, Environment and Social Development Department, East Asia and Pacific Region Discussion Paper (Washington, DC, 2003), p. 68.

<sup>291</sup> See further, part one, sections 3.1-3.6.

<sup>292</sup> TRAFFIC, “What’s driving the wildlife trade?”, p. ix.

<sup>293</sup> Andrew Zakharenka and William B. Magrath, *Governance and Anti-corruption for Sustaining Wildlife in East Asia and the Pacific* (World Bank, 2009), pp. 7 and 12.

To prevent and combat wildlife and forest offences effectively, it is important to identify the various actors in the wildlife supply chain as well as the motivations that drive their activities. The following tools are meant to assist users in identifying the main actors and their roles in the wildlife and forest supply chain.



### Tool IV.1 Actors in the supply chain

- What persons or organizations are involved in wildlife hunting?
- What persons or organizations are involved in forest harvesting or logging?
- What role do farmers and herders play in the activities under review?<sup>a</sup>
- Are hunting and forest harvesting groups or organizations present in the activities under review?
- Do these actors work independently or do they have informal contracts with middlemen?<sup>b</sup>
- Are landowners affected by the activities under review?
- Are commercial hunters and users involved?
- Does the country have sufficient and appropriate legislation to prevent these activities? Are government-sanctioned organizations active in the area of interest?<sup>c</sup>
- Are the activities under review associated with conflicts? Are insurgent groups involved?
- Does the police or the military play a role in the activities under review, either in enforcing or in acting against the rules?

<sup>a</sup> To enable a neutral and non-stigmatizing approach to understanding the motives of the various actors involved, the term “activity under review” is used in place of “offence”, “crime” or “criminal act”.

<sup>b</sup> TRAFFIC, “What’s driving the wildlife trade?”, p. 26.

<sup>c</sup> For the purpose of the *Toolkit*, the term “area of interest” is used to refer to the geographically or naturally defined area where (illegal) activities toward wildlife and forests have occurred or are presumed to occur.

## Local communities and indigenous people

In developing countries, there is a high likelihood that indigenous groups and poor communities depend upon wildlife and forests for their livelihood. An estimated 350 million people worldwide live in and around forests, and in many regions, forest resources serve as safety nets for poor and marginalized communities during difficult times.<sup>294</sup> Effectively, in all developing countries, the poorest and most vulnerable forest-dwelling communities depend largely or entirely on forest resources for their livelihoods and food security.<sup>295</sup> These vulnerable groups are particularly impacted by wildlife and forest crime such as wildlife hunting, illegal logging and the removal of timber and non-timber products from forests.

<sup>294</sup> World Bank, “Strengthening forest law enforcement and governance”, p. xi.

<sup>295</sup> World Bank, *East Asia Region Forestry Strategy: Draft for Comment* (Washington, DC, 2006), pp. 42-43.



In many countries, current laws related to wildlife and forests limit the rights and livelihoods of forest-dependent communities. These communities often have difficulty obtaining land ownership rights, and their access to and use of wildlife and forest resources are often not reflected in forest management programmes. Furthermore, forest law enforcement measures often reinforce social injustice, limit rural livelihoods and in consequence exacerbate the non-sustainable use of forest and non-timber forest products.<sup>296</sup>

Against this background, the role and involvement of poor local communities and indigenous groups should be analysed properly. The criminalization of these groups will not prevent further wildlife and forest crimes. Here, a different approach, for example through addressing poverty and understanding traditional habits, may be more appropriate.

A concrete example of local use is the consumption of meat from wildlife—the so-called “bushmeat” that has long played an important role in the livelihoods of people living in tropical forests and savannahs in Central Africa, such as the Congo Basin, where bushmeat has been consumed for 40,000 years.<sup>297</sup> Bushmeat has always been an important source of protein for rural people, and it is estimated that 80 per cent of Central Africans have a diet that includes bushmeat.<sup>298</sup> Additionally, bushmeat is becoming a more and more important component of income generation because it supplies a flexible cash income from its sale to traders and local consumers.<sup>299</sup> Criminalizing groups that depend on bushmeat is a quick way to address the issue. However, a sustainable approach needs to include development-oriented strategies and not law enforcement alone.

The same issue applies to other forest products as well. For example, chainsaw milling is often a form of micro- or subsistence enterprise, which may be legal or illegal, sustainable or unsustainable. It is essential that all enforcement operations take into account the livelihood and social impact of criminalizing the relevant activities.<sup>300</sup> In a post-conflict situation (in Liberia, for example), chainsaw milling is also seen as alternative livelihood for ex-combatants.



## Tool IV.2 Local communities and indigenous groups

- Which local communities live in the area of interest?
- Do indigenous groups live in the area of interest?
- What is the socio-economic situation of these communities and groups?
- What are the livelihoods and incomes of the local communities based on?
- To what extent do the livelihoods depend on wildlife and forest products?
- What is the food security situation of these communities and groups? What are their coping strategies to overcome food shortages?
- How do the communities and groups protect their wildlife and forest resources? Are there any community control and prevention initiatives for wildlife hunting and forest logging?

<sup>296</sup> Marcus Colchester and others, *Justice in the Forest*, p. x.

<sup>297</sup> See Serge Bahuchert, “History of the inhabitants of the central African rain forest: perspectives from comparative linguistics” in *Tropical Forests, People and Food: Biocultural Interactions and Applications to Development*, Claude M. Hladik and others, eds. (Pearl River, New York, Pantheon Publishing Group, 1993).

<sup>298</sup> See Fred Pearce, “The protein gap”, *Conservation in Practice*, vol. 6, No. 3 (July 2005), pp. 117-123.

<sup>299</sup> Environmental Ethics, “Wild meat and biodiversity” (March 2010). Available from <http://environmentalethics.posterous.com/wild-meat-and-biodiversity>.

<sup>300</sup> Marieke Wit and others, “Chainsaw milling: supplier to local markets—a synthesis”, *ETFRN News*, No. 52 (December 2010).

- Does national legislation respect the local customs and (property) rights of local communities and indigenous groups? Do the communities and groups have access to wildlife and forests?
- Do local communities and indigenous groups participate in the decision-making and drafting legislation relevant to the wildlife and forests on which their livelihoods rely?
- Are social assessments of enforcement operations part of standard practice?

## Insurgent groups

Insurgent and rebel groups may target wildlife to raise funds for their war activities. An example of this kind of activity has been reported in the Great Lakes region of Africa, where rebel groups often attack protected game parks and reserves to kill wildlife for food or “trophy” (animal parts and derivatives) they can sell in order to earn money to support the insurgency.<sup>301</sup> Revenues from illegal logging have also been used to finance armed insurgencies or repressive governments.<sup>302</sup>



### Tool IV.3 Insurgent groups

- Are there any insurgent or rebel groups involved in illegal hunting and logging?
- To what extent are insurgents or rebel groups involved in trade in wildlife and forest products? What are the destinations of the trading chains?
- How are these groups equipped (such as guns and machinery)?

## Police and military

In some regions, the police and military may be involved in illegal activities that negatively affect wildlife and forest resources or endanger protected species.



### Tool IV.4 Police and military

- Are the police and military involved in the activities under review?
- What are their primary roles and responsibilities in the field of operation?
- What control and monitoring mechanisms have been enforced by the police and military?

<sup>301</sup> See The East African, “Militant groups fuel poaching in East Africa”, 14 October 2010. Available from [www.theeastafrican.co.ke/news/-/2558/1033020/-/onjxouz/-/index.html](http://www.theeastafrican.co.ke/news/-/2558/1033020/-/onjxouz/-/index.html).

<sup>302</sup> See Program on Forests, *Forests, Fragility and Conflict: Overview and Case Studies* (Washington, DC, World Bank, 2010).

## Forest rangers and wardens

Enticed by lucrative gains or bribed, forest rangers and wardens may be active in enabling the illegal taking, trading or trafficking of wildlife and forest products.



### Tool IV.5 Forest rangers and wardens

- Are there volunteers, forest rangers or wardens in the areas under review? If so, what are their roles and responsibilities?
- What control and monitoring measures have been enforced by forest rangers or wardens?
- How do they contribute to the control and prevention of the activities under review?

## Commercial users

The demand and wealth of (urban) consumers of wildlife and forest products can be a strong driver of illegal wildlife and forest activities.<sup>303</sup> This can be illustrated with the example of bushmeat in parts of Africa.<sup>304</sup> While bushmeat constitutes subsistence for some, it has become a luxury item for others.<sup>305</sup> Especially in urban areas, the consumption of bushmeat is associated with a higher socio-economic status.<sup>306</sup> As a consequence, this increasing urban demand for bushmeat leads to both the extinction of vulnerable primate species and the starvation of people who depend upon a limited amount of bushmeat for protein.<sup>307</sup>



### Tool IV.6 Commercial users

- Is there a high demand for wildlife and forest products for commercial use?
- What persons or commercial enterprises buy wildlife and forest products from local villagers or local communities?
- How do persons or commercial enterprises contact local villagers, local communities or indigenous groups?
- How do the villagers sell wildlife and forest products? How are wildlife and forest products delivered?
- Who are the end-users of the wildlife and forest products from the area of interest?
- What is the destination of the wildlife and forest products from the area of interest?
- Are wildlife and forest products sold in local markets or served in restaurants?
- To what extent are the wildlife and forest products traded across national borders?

<sup>303</sup> TRAFFIC, "What's driving the wildlife trade?", p. xiv.

<sup>304</sup> See further part four, section 1.1.

<sup>305</sup> Elizabeth L. Bennett, "Is there a link between wild meat and food security?", *Conservation Biology*, vol. 16, No. 3 (June 2002).

<sup>306</sup> Evan Bowen-Jones, D. Brown and E.J.Z. Robinson, "Economic commodity or environmental crisis? An interdisciplinary approach to analyzing the bushmeat trade in central and west Africa", *Area*, vol. 35, No. 4 (December 2003), pp. 390-402.

<sup>307</sup> Environmental Ethics, "Wild meat and biodiversity".

## 1.2 Uses of wildlife and forest resources

Wildlife and forest products are used in various ways and serve as the source of a wide range of goods, including food, medicine, cultural and household items, fashion and display, and industrial resins and extracts. Wildlife products may be used locally (for example, for direct consumption), or they may pass a complex processing and trade chain from supplier to end-user.<sup>308</sup> Analysing the trail and the use of wildlife and forest resources can be helpful in identifying the factors that drive illegal activities related to wildlife and forests.<sup>309</sup>

One main differentiation regarding the use of wildlife and forest products can be made between subsistence use and commercial poaching. The motives that drive traditional hunting for subsistence and local consumption are different from those that drive large-scale commercial hunting to serve bigger, often international, markets.<sup>310</sup> The same applies to illegal logging, for which it is necessary to distinguish the poverty-driven illegal logging of wood mainly for fuel, from commercial illegal logging.<sup>311</sup>

No matter the driver, the result of the illegal logging may be the same: illegal logging in protected areas threatens endangered species, whether it is traded within criminal structures or used as firewood. The killing of a protected species is illegal, no matter if it is conducted to sell the animal's fur or to protect a farmer's livestock. However, to effectively prevent wildlife and forest crime, it is crucial to identify and then to address the underlying motivation that drives the action.

The following tools identify and analyse various uses of wildlife and forest products and thus help users to understand the diverse factors that may drive the illegal activities associated with wildlife and forests. In some cases, these factors may be beyond the wildlife and forest sectors.

### Subsistence

In many cases, the use of wildlife and forest products must be recognized as a means for subsistence for communities and groups that depend on wildlife and forests for their livelihoods and food security. The lack of alternative sources of food and income, and in a broader sense, the lack of rural and economic development force these vulnerable groups to rely on wildlife and forest resources for their existence. In these cases, activities that are considered to be illegal are driven by basic needs or traditional ways of living.

A household economic survey conducted in communal areas of Zimbabwe identified approximately 100 different subsistence uses of forest resources, which included primarily firewood use, the consumption of wildlife, livestock grazing and cash income from the sale of non-timber products.<sup>312</sup>

With regard to timber and forest products, it is often the chronic imbalance between a high demand for timber, especially fuel wood, and its low (legal) supply that fosters illegal logging. In addition, a lack of affordable alternative sources of energy is forcing the rural poor in many countries to become involved in illegal activities. Interventions that address the improvement of economic conditions in rural areas and economic development in general could help to decrease the current massive illegal fuel wood extraction.<sup>313</sup>

<sup>308</sup> TRAFFIC, "What's driving the wildlife trade?", p. ix.

<sup>309</sup> Ibid.

<sup>310</sup> Andrew Zakharenka and William B. Magrath, *Governance and Anti-corruption*, p. 13.

<sup>311</sup> Savcor Indufor Oy, "Ensuring sustainability of forests and livelihoods through improved governance and control of illegal logging for economies in transition", Working Document: Serbia, for the World Bank (World Bank, 2005), p. vii.

<sup>312</sup> Sara J. Scherr, Andy White and David Kaimowitz, *A New Agenda for Forest Conservation and Poverty Reduction: Making Forest Markets Work for Low-income Producers* (Washington, DC, Forest Trends, 2003), p. 6.

<sup>313</sup> Savcor Indufor Oy, "Ensuring sustainability of forests", p. 33.





### Tool IV.7 Subsistence

- Are the wildlife and forest products under review used by local (and poor) communities?
- Are the wildlife and forest products used for food, firewood, construction, tools or other? What are the main uses of these products?
- Do livelihoods of local communities depend on wildlife and forest products?
- To what extent do livelihoods depend on the wildlife and forest products under review?
- Could sustainable substitutes be used instead of the wildlife and forest products under review? What kinds of livestock and agriculture could be introduced to substitute the rare wildlife species and forest products?
- Does a high demand for fuel wood and a lack of sustainable alternatives force local communities to (illegally) use forest products (from protected areas)?
- Does a lack of access to forests force local communities to hunt and harvest in protected areas?

## Income generation

Gains made through participation in illegal wildlife and forest activities vary. In some cases they serve as a regular source of income, and in other cases they provide occasional sources of income or safety nets in times of hardship. Illegal activities in wildlife and forest activities can also be lucrative and generate large profits.<sup>314</sup> Therefore, it is crucial to analyse the motivation and reason for the activity under review. The following analytic tool explores income generation from activities that are considered to be wildlife and forest crime.



### Tool IV.8 Income generation

- Do the incomes of users depend on wildlife and forest products?
- To what extent do incomes depend on wildlife and forest products?
- Are wildlife and forest products used to supplement agricultural incomes of local farmers?
- Do other (legal) streams of income exist?
- Do wildlife and forest products serve as a regular or occasional source of income?
- Are the activities under review conducted to meet unforeseen or emergency needs for cash income?

<sup>314</sup> TRAFFIC, "What's driving the wildlife trade?", pp. ix-x.

## Commercial use, trade and markets

The hunting, logging and trading of some protected species is stringently restricted and in some cases fully prohibited.<sup>315</sup> Other timber and non-timber products, however, are to a certain extent traded legally on local, national and international markets. In these cases, it is not always easy to identify clearly the line between legally and illegally supplied and traded products.

An imbalance between the limited legal supply and the high demand for commercial products such as timber, combined with the high cost of imported products, increases illegal markets and therefore the attractiveness to engage in illegal logging.<sup>316</sup>



### Tool IV.9 Commerce, trade and markets

- Are wildlife and forest products sold in local markets?
- Do domestic markets for wildlife and forest products exist?
- Do international markets for wildlife and forest products exist?
- Are wildlife and forest products exported?
- Are the products traded and shipped in live, raw or semi-processed form?
- What forms are the final consumers receiving?

## Enjoyment, leisure and tourism

As previously mentioned, different values, views and interests can be placed on the same natural resources.<sup>317</sup> Besides the users on the supply side, such as local subsistence users, commercial hunters and forest concessionaires, a diverse group of users exists on the demand side. These include consumptive end-users in markets and restaurants, and non-consumptive users, such as tourists.

Some resources can be adversely affected by the impacts of recreational use and tourism (for example, through the collection of corals, the disturbance of nesting sites and trophy hunting). Laws or regulations may address some of these activities and criminal penalties may be relevant, but prevention through education, and the planning and positioning of tour routes, services and amenities to direct tourists away from fragile areas may offer better prospects. In this way, wildlife and forest crime can be prevented through an elaborated and meaningful environmental design.

<sup>315</sup> See part one, section 1.1.

<sup>316</sup> Savcor Indufor Oy, "Ensuring sustainability of forests", p. 34.

<sup>317</sup> Andrew Zakharenka and William B. Magrath, *Governance and Anti-Corruption*.



### Tool IV.10 Enjoyment, leisure and tourism

- Which leisure activities involve wildlife and forest products?
- Which rare wildlife and forest products are collected to keep at home or sold as pets or ornaments?
- Is trophy hunting prevalent in the area of interest?
- What impact do tourist activities have on wildlife and forests in the area under review?

## Culture and tradition

Cultural uses of wildlife and forest products include medicinal and ceremonial uses. Such consumption can also be based on certain beliefs in the product's effect on one's power and strength. In the case of bushmeat, the trade is mainly driven by cultural proclivity.<sup>318</sup>



### Tool IV.11 Culture and tradition

- What kinds of wildlife are consumed as delicacies?
- Are wildlife and forest products used for traditional ceremonies or medicine?
- Could sustainable substitutes be used instead of the wildlife and forest products under review?
- Are certain beliefs and social or wealth status linked with wildlife and forest products?
- Is the possession of wildlife and forest products socially accepted, priced or stigmatized?

## Community land use conflict

Land use conflicts usually occur as a consequence of a population increase leading to competitive demands for the use of the land.



### Tool IV.12 Community land use conflict

- How do people obtain rights to use the community common land?
- How is the public land of the community distributed for use?
- Have there been any disputes or conflicts on land use in the community? How are such problems solved and agreements achieved?

<sup>318</sup> Environmental Ethics, "Wild meat and biodiversity".

## Land cover change

Land cover change refers to the human modification of the earth's terrestrial surface. For thousands of years, humans have been modifying land to obtain food and other essentials. However, current extents and intensities of land cover change are far greater than ever before. They are driving unprecedented changes in ecosystems and environmental processes, which pose a great risk for wildlife and natural resources.



### Tool IV.13 Land cover change

- Has the land cover changed over time?
- Is deforestation occurring in the area of interest?
- Is land under cultivation increasing?
- Has the use of agro-industrial crops (such as rubber, palm oil and timber plantations) changed over time?
- How do cross-border investment, transnational agribusiness and contract farming affect the local land use and forest cover?

## Herding and farming

The killing of endangered and protected species, such as tigers and snow leopards, can be motivated by the lucrative revenue gained through the selling of the animal's body parts. Additionally, there are other factors and human behaviours that threaten the existence of protected species. For example, overgrazing by domestic livestock can lead to a reduction or loss of the predator's prey source, and as a consequence the predators are forced to attack domestic livestock as prey. As a result, the predator puts itself at risk of being killed—in retaliation or prevention—by the herders as the loss of livestock poses a serious threat to the subsistence and income of herding communities.<sup>319</sup>

Livestock depredation by predators, however, often corresponds with inappropriate herding techniques and a lack of precautions, such as poorly constructed corrals, too many livestock watched by too few guards or those that are too young, or insufficient night-time enclosures.<sup>320</sup>

Once an animal is killed, its body parts may be sold, even though the prime motive for killing is not trade. This shows that different types of wildlife-threatening actions are related, which makes it difficult to differentiate between baseline causes and effects. It is therefore important to identify and analyse the factors that lead to the killing of protected species. Especially when commercial gain is not the prime motive, it is crucial to identify contextual and contributory factors that are linked with illegal activities and to address these causes adequately to prevent wildlife crime.<sup>321</sup>

<sup>319</sup> Stefanie Theile, *Fading Footprints: The Killing and Trade of Snow Leopards* (Cambridge, United Kingdom, TRAFFIC International, 2003), pp. 19-21.

<sup>320</sup> *Ibid.*, p. 23.

<sup>321</sup> *Ibid.*, p. 24.



### Tool IV.14 Herding and farming

- Are there conflicts between herders and wildlife?
- Are animals killed for livestock protection or retribution for depredation?
- Are animals killed to protect agriculture? Is adequate guarding material available and used (corrals, stables, shelters and so forth)?
- Is a loss of habitat or natural prey base through fragmentation or overgrazing prevalent?
- Is fire used to enlarge grazing areas?

## Hunting and non-selective killing

Non-selective killing (for example, by using traps or poisoned bait) is a hunting technique that can lead to the killing of species other than the one targeted. Such accidental killings can affect endangered species as is the case for the protected snow leopard.<sup>322</sup>



### Tool IV.15 Hunting and non-selective killing

- What are common hunting techniques in the area of interest?
- Do the hunting techniques used in the area of interest cause accidental by-catch (for example, by hunting with nets, traps, poison or fire)?
- Do hunting associations exist?
- Is legal hunting organized (trophy hunting, hunters associations and so forth)?
- Is access to and possession of guns regulated?
- Does the problem of overhunting exist? If so, to what extent?

## 2. Wildlife and forest management

The scope of action to prevent wildlife and forest crime includes the management of wildlife and forest resources so that opportunities for illegal activities are reduced. The sustainable management of a region's natural resources is an important complementary element to wildlife and forest law enforcement.<sup>323</sup> Sustainable resource management seeks to strike a balance between the protection and conservation of natural resources, and economic and developmental demands.<sup>324</sup>

<sup>322</sup> Ibid.

<sup>323</sup> William B. Magrath and others, *Timber Theft Prevention*, p. 1.

<sup>324</sup> See further part one, section 1.



Part four of the *Toolkit* provides an analysis of preventive wildlife and forest management mechanisms. It should be used prior to or concurrently with the analyses of the legal, enforcement, judiciary and prosecution mechanisms. An analysis of a country's resource management helps users to design an adequate and effective response to wildlife and forest crime. This response could focus either on the building of protective structures such as resource management or rural development programmes or on the strengthening of law enforcement and criminal justice measures.

This part, however, cannot offer concrete recommendations to be applied to all wildlife and forest areas in a given country. Rather, it underscores the importance of wildlife and forest crime prevention and associated measures in the discussion of wildlife and forest legislation and law enforcement. For detailed recommendations and an in-depth analysis of a country's natural resource management, the reader is directed to the references mentioned.

## 2.1 Wildlife and forest management systems

It is estimated that less than 4 per cent of the world's tropical forests are managed and protected by forest management systems, whereas only 1 per cent of these systems can be considered to be sustainable.<sup>325</sup> It is widely recognized that illegal activities associated with wildlife and forests are facilitated by disorganized and dysfunctional natural resource management. This includes, among other factors, the absence of basic surveys and inventories, unsafe working conditions and a lack of standardized business practices. On the contrary, natural resource management mechanisms with clear objectives, socially accepted tenure arrangements, public participation and benefit sharing with groups depending on the natural resources can help to prevent wildlife and forest crime.<sup>326</sup>

The following section helps users to analyse the existence and robustness of natural resource management systems in a given country, and highlights the linkages between natural resource management planning and the prevention of wildlife and forest crime.

Domestic wildlife and forest law lays the ground for effective natural resource management. In this regard, laws pertaining to the wildlife and forestry sectors should, at a minimum, set out rules for ownership, management and administration, hunting areas, licence systems and so forth.<sup>327</sup> In addition to these elements, the World Wildlife Fund and World Bank Global Forest Alliance recommends that the following standards be part of any effective and sustainable wildlife and forest management system:<sup>328</sup>

- Compliance with all laws relevant to wildlife and forests
- Respect for tenure and use rights
- Respect for indigenous people's rights
- Respect for community relations
- Respect for workers' rights
- Delivery of multiple benefits from the forest
- Assessment and mitigation of environmental impact
- Maintenance of critical forest areas

<sup>325</sup> William B. Magrath and others, *Timber Theft Prevention*, p. 7.

<sup>326</sup> Ibid., p. 13.

<sup>327</sup> See further part one, sections 2.1 and 2.2.

<sup>328</sup> WWF and World Bank Global Forest Alliance, *Forest Certification Assessment Guide*, p. 1.

- Specific provisions for plantations
- Implementation of a management plan
- Effective monitoring and assessment.

*The Framework for Assessing and Monitoring Forest Governance*<sup>329</sup> was developed by the World Bank Program on Forests together with the Food and Agriculture Organization of the United Nations (FAO). It presents a comprehensive framework for stakeholders to use when analysing the status of forest governance in a given country and when planning reforms. It consists of three pillars: (a) policy, legal, institutional and regulatory frameworks; (b) planning and decision-making processes; and (c) implementation, enforcement and compliance. Each pillar consists of between three and five components. The framework is designed to be used in national or subnational forest governance assessments.



### Tool IV.16 Wildlife and forest management

- Is wildlife and forest management in compliance with all the relevant wildlife and forest laws in a given country?
- Does management respect tenure and use rights?
- Does management respect indigenous people's rights?
- Does management respect community relations?
- Does management respect workers' rights?
- Does management deliver multiple benefits from the forest?
- Does management assess and mitigate environmental impacts?
- Does management maintain protected forest areas?
- Does management provide specific provisions for plantations?
- Are management plans implemented?
- Is effective monitoring and assessment conducted?
- Has the country or region undergone a holistic natural resource governance assessment (for example, one based on the framework developed by the Program on Forests and FAO)?

## Institutions and responsibility

Wildlife and forest resources have local value through their consumptive use but they also provide an income by attracting non-residents, such as trophy hunters or tourists. There are also notable local and global public goods and public services provided by forests and wildlife (for example, biodiversity, carbon sequestration and watershed protection). Therefore, different and sometimes

<sup>329</sup> Program on Forests and FAO, *Framework for Assessing and Monitoring Forest Governance* (Rome, FAO, 2011).

opposing interests need to be managed by a higher-level institution. These institutions should have a mandate to define, implement and control the use of wildlife and forest resources and the distribution of benefits associated with them. These institutions create the basis for the effective and sustainable management of natural resources. On an institutional level, wildlife and forest management should include the regulation and control of tenure and property rights, natural resource economics and legal enforcement. On a sectoral level, wildlife management organizations should have a mandate to manage habitats and boundaries, wild populations (species, population structure and dynamics) and human impact (stakeholders, manipulation of habitat and population).<sup>330</sup>



### Tool IV.17 Institutions and responsibility

- What institutions or agencies are responsible for wildlife and forest management?
- Does a forestry, wildlife or environment department or unit exist?
- Do management mechanisms and structures cover the entire area of interest?
- What is the management structure and its chain of command? What is the coordinating mechanism among these agencies?
- Do local people and communities participate in these mechanisms and structures?
- Do local communities have the authority to manage their natural resources? Are they empowered to protect their wildlife and forests?
- Do civil society organizations or non-governmental organizations participate in the management process?

## 2.2 Wildlife and forest management plans

The effective and sustainable management of natural resources is founded on legislation, regulations and policies. In practice, these are summarized and combined with biophysical data in management plans that have been developed and agreed upon by all the main stakeholders. The plans should include the following aspects:<sup>331</sup>

- Inventory of resources and values to define the area of interest, and categories of land use and zoning (such as protected area, limited access, access for indigenous communities and commercial);
- Well-defined and socially accepted arrangements on land tenure and land ownership, including the rights and obligations of key stakeholder groups such as local communities and indigenous groups;
- Determination and regulation of productivity and sustainable yield, and designing hunting and harvesting plans to set limits regarding the amount or the species that can be cut or hunted legally in a certain period of time;

<sup>330</sup> Andrew Zakharenka and William B. Magrath, *Governance and Anti-Corruption*, p. 18.

<sup>331</sup> William B. Magrath and others, *Timber Theft Prevention*, pp. 16-28.

- Consultation with stakeholders, including local communities and the wildlife and forestry sectors;
- Clearly defined and sustainable objectives of management based on agreement and consensus among key stakeholder groups;
- Codes of practice that translate management objectives into site-specific operational plans and standards;
- Planning and regulation of access by locating roads, barriers, gates and checkpoints to avoid sensitive areas; facilitating surveillance, monitoring and control; and
- Consultation with the public (such as landowners and community groups) and involving them as “watch dogs” to report illegal activities, and providing them with educational, awareness-raising programmes and incentives to change attitudes and behaviours.



### Tool IV.18 Wildlife and forest management planning

- Do inventories and surveys of resources exist? If so, are they carried out on a regular basis?
- Are boundaries marked clearly on maps and on the ground, using secure markers or easily identifiable features such as roads or streams?
- Do hunting and harvesting plans exist? If so, are they based on information from inventories and surveys carried out in the area of interest?
- Are management objectives clearly defined?
- Are the roles, rights and responsibilities of all parties clarified? Are key stakeholders, such as the local community and wildlife and forestry sectors, consulted?
- Do codes of practice exist? If so, how do they translate management objectives into operational plans and standards?
- Is access to sensitive areas regulated, monitored and controlled, for example, by the location of roads, gates and checkpoints?
- Are key stakeholders involved and encouraged to serve as “watch dogs”?
- Are programmes and incentives available to educate and train stakeholders to raise awareness and change attitudes and behaviour?
- Do local communities have knowledge and understanding of the area’s zoning? Are they aware of the restrictions and regulations?

## Legal and policy frameworks

Legislation and policies that govern wildlife and forest management should clearly delineate the terms of land tenures, ownership and use in order to remove ambiguity or doubts about the legality of activities. This includes the rights and duties of key stakeholders such as wildlife and forest

managers and workers, and local communities. Legislation and policies relating to wildlife and forest management are discussed in detail in part one of the *Toolkit*. The key aspects of an effective and functional legal framework to prevent wildlife and forest crime are summarized in the following tool.



### Tool IV.19 Legal and policy frameworks

- Is the area of interest delineated in terms of land tenures, ownership and use?
- Are land tenure and boundaries clearly defined and identified?
- Does the legal framework specify the rights of key stakeholders, including local communities and indigenous groups?
- Does the legal framework prescribe the scope of the objectives of forest management?
- Do codes of practice exist?
- Is all legislation relevant to wildlife and forest considered (for example, legislation relating to conservation, biodiversity and water management issues)?<sup>a</sup>

<sup>a</sup> William B. Magrath and others, *Timber Theft Prevention*, p. 16.

## Natural resource inventory

Conducting a proper inventory of wildlife and forest resources—indicating the range of endangered and protected species in a given country or region—is crucial to drafting effective responses to wildlife and forest crime. The inventory serves as a baseline to identify occurring activities and to measure the impact and sustainability of interventions.



### Tool IV.20 Natural resource inventory

- What are the region's wildlife and forest resources?
- What ecosystems are prevalent in the region (such as rainforest or desert)?
- Do protected areas such as natural parks exist? How are national forest areas classified by national law?
- To what extent are these areas under a functioning resource management plan?
- What key wildlife species exist in the area under review?
- Are these areas zoned (for example, open for commercial logging, tourism, research or reserved for indigenous groups)?
- What species are concerned by the activity under review?
- Are the species concerned by the activity under review endangered?
- Are the species concerned by the activity under review listed in CITES or other relevant lists for endangered species?
- Does the country have a national or regional endangered species list?



## Protected areas

Protected areas are essential for biodiversity conservation and constitute essential elements in many national and international conservation strategies.<sup>332</sup> The World Commission on Protected Areas provides a framework for the development and analysis of protected areas. This framework includes the following elements: understanding the context of existing values and threats; the planning and allocation of resources; the management of actions; the development of products and services; and evaluating resulting impacts. Tool IV.21 lists important factors concerning the management of protected areas. For a detailed and exhaustive list of assessment questions, refer to the Management Effectiveness Tracking Tool put out by the World Wildlife Fund and the World Bank.<sup>333</sup>



### Tool IV.21 Protected areas

- What are the potential threats to the protected area (such as commercial development, agriculture, mining, transportation, tourism, war, pollution, severe weather and specific cultural threats)?
- Does the protected area have a legal status or is it covered by a covenant?
- Do management plans, objectives and enforcement measures exist? Can staff enforce the rules for the protected area well?
- Does the protected area have the right size and shape to protect all species of concern?
- Does boundary demarcation exist? If so, what is it?
- Are visitor facilities available? If so, are they sufficient?
- Do commercial tourism operators respect and contribute to protection?

## Certification systems and schemes

Certification systems help to identify, document and prove the sustainability of certified forest products.<sup>334</sup> Certified forests are considered to be of high environmental, social and economic value and help to guarantee the maintenance of adequate wildlife habitat and water quality protection. According to the World Wildlife Fund and World Bank Global Forest Alliance, certification and accreditation have to be in compliance with international frameworks and compatible with globally applicable principles that balance economic and ecological dimensions. Additionally, major stakeholder groups should participate in governance and standard setting, which must be based on objective and measurable performance standards that are adapted to local conditions. To ensure support from local communities and main stakeholders, certification and accreditation procedures need to be transparent and disclosed to the public.<sup>335</sup>

<sup>332</sup> Nigel Dudley, ed., *Guidelines for Applying Protected Area Management Categories* (Gland, Switzerland, International Union for Conservation of Nature, 2008), p. 2.

<sup>333</sup> WWF and World Bank, *Management Effectiveness Tracking Tool: Reporting Progress at Protected Area Sites*, 2nd ed. (Gland, Switzerland, WWF International, 2007), p. 3.

<sup>334</sup> The certification system of the Forest Stewardship Council is one example of such a system. See [www.fscus.org/](http://www.fscus.org/).

<sup>335</sup> WWF and World Bank Global Forest Alliance, *Forest Certification Assessment Guide*, p. iii.



### Tool IV.22 Certification systems and schemes

- Do certification and accreditation systems exist? If so, are they in compliance with international frameworks for certification, accreditation and standard setting?
- Do all major stakeholder groups participate in governance and standard setting?
- Do certification systems cause unnecessary obstacles to trade?
- Are standards adapted to local conditions? Are they based on objective and measurable performance?
- Are procedures and decision-making processes transparent and reported to the public?
- Do complaint and appeal mechanisms exist?

## Land tenure and property rights

Often, forest management programmes do not adequately reflect forest-dependent communities' access and use of wildlife and forest resources.<sup>336</sup> As a result, these groups have difficulties in obtaining land ownership and property rights.



### Tool IV.23 Land tenure and property rights

- Who owns the natural resources under review?
- Do national laws respect the property rights of local communities?
- How do people own land? How are people granted land ownership and entitlement?
- How are land inheritance and ownership transfer carried out?

## Access to area of interest

Forest management programmes should be carefully designed so as to reflect the livelihoods and rights of forest-dependent people and therefore ensure their adequate access to and use of wildlife and forest resources.

<sup>336</sup> See further part four, section 1.



### Tool IV.24 Access

- Who has access to natural resources such as wildlife, forests and land? How is access regulated?
- What are the national policies and legislation for the personal and commercial utilization of forests and other natural resources?
- To what extent does the government grant concessions to domestic and international companies for the commercial use of forests and other natural resources?

## Security measures

Natural resource management plans should include security measures to protect managing personnel from potential threats occurring as a result of their daily work.



### Tool IV.25 Security

- What risks and threats do protecting and managing personnel receive as a result of their work?
- With which capacities, tools and equipment are personnel provided?
- With which safety and insurance services are personnel provided?
- What monetary and non-monetary rewards are offered to the personnel?

## 3. Social capacity-building

As previously stated, many indigenous groups and poor communities depend upon wildlife and forests for their livelihoods. In many cases, forest resources serve as safety nets for poor and marginalized communities. It is usually the poorest and most vulnerable forest-dwelling communities that depend entirely on the forest for their livelihoods and food security. Additionally, in many countries, laws related to forests and wildlife limit the rights and livelihoods of these vulnerable communities. They often have difficulties obtaining land ownership rights, and their access to and use of wildlife and forest resources are often not a part of forest management programmes.<sup>337</sup> Furthermore, traditional hunting for subsistence may fall under a national law that protects wildlife and forests, therefore leading to the criminalization of their activities.

Against this background, the prevention of wildlife and forest crime should take into consideration the condition and needs of rural and poor communities that depend on wildlife and forests for their living. The following tools help users to analyse the existence and robustness of preventive measures that address rural development and social capacity-building in the field of wildlife and forest protection.

<sup>337</sup> World Bank, *East Asia Region Forestry Strategy*, p. 43.

In many cases, interventions aimed at reducing and preventing wildlife and forest crimes have to consider factors and fields that lay outside the wildlife and forest sectors. Such interventions and programmes could address issues such as the promotion of alternative sources of energy, namely by providing rural areas with solar and wind energy, mains gas or electricity to improve the balance between the demand for and the supply of fuel wood.<sup>338</sup>

### 3.1 Poverty reduction

For an estimated 90 per cent of the 1.2 billion people living in extreme poverty globally, forest resources directly contribute to their livelihoods. In many developing countries, forests are central to development and economic growth through trade and industrial development.<sup>339</sup>

Interventions and long-term programmes aimed at reducing poverty and promoting rural development can help to addressing the poverty-related drivers that cause wildlife and forest crimes. In this sense, poverty reduction interventions targeted at wildlife- and forest-dependent communities that are involved in illegal activities could be an effective and sustainable approach to preventing wildlife and forest crime in the long term. These interventions and measures must take into consideration the relevant laws and legislation that are biased against poor forest-dependent communities. Additionally, they should include issues connected to land tenure arrangements, access rights, transparency and stakeholder participation in decisions directly affecting the livelihoods of the communities concerned.<sup>340</sup>



#### Tool IV.26 Poverty reduction

- Do poverty reduction programmes or rural development programmes exist?
- Do these programmes link poverty reduction with the sustainable use of natural resources or wildlife and forest products?

### 3.2 Participative approaches

The participation of civil society, the private sector, and national and international non-governmental organizations is important to establish and maintain the management of natural resources and the protection of wildlife and forests. Their involvement in wildlife and forest crime prevention includes, among other things, raising awareness about the extent and impact of illegal activities, research and analysis contributing to an understanding of the scope and causes of wildlife and forest crimes, and the provision of potential solutions for wildlife and forest crime.<sup>341</sup>

The importance of the main stakeholders' participation in the decision-making and law-making processes is outlined in the natural resource management planning, as well as other, sections of the *Toolkit* referring to domestic wildlife and forest law.<sup>342</sup>

<sup>338</sup> Savcor Indufor Oy, "Ensuring sustainability of forests", pp. 33-34.

<sup>339</sup> World Bank, *Sustaining Forests*, p. 1.

<sup>340</sup> World Bank, "Strengthening forest law enforcement and governance", p. xi.

<sup>341</sup> Ibid., p. 25.

<sup>342</sup> See further part one, section 2.



## Tool IV.27 Participation of local communities

- How do local communities explain their actions in connection with wildlife and forest use?
- How are local communities represented and organized?
- Do local communities have equal property rights?
- Are local communities involved in law-making processes?
- Do local communities have their own resource planning, management and protection initiatives?
- To what extent are local communities involved in monitoring and protecting their natural resources?
- Are there community-based awareness-raising and prevention campaigns?

## 4. Trade and legal markets

Lucrative gains from illegal trade in wildlife and forest products make the activities involved in this trade attractive. High prices may exist due to the imbalance between the legal supply of and the high demand for commercial timber and non-timber products, and imported timber is expensive. A market-based intervention could be appropriate to address illegal activities, and increasing the legal allowable cut may function better than increasing the capacity of law enforcement. Additionally, lowering import duties could be effective in increasing the supply of wood, and as a result, in reducing the demand for illegal domestic logs.<sup>343</sup> Consumer countries and industry should take advantage of these possibilities in order to reduce incentives for illegal logging. They can include market reforms and public procurement policies that discriminate against stolen material.<sup>344</sup>

Market-based approaches address the demand for and supply of wildlife products. They target markets and prices of wildlife products, as well as those of their substitutes, such as sustainable harvested resources. However, the application of financial and economic instruments to the wildlife trade is relatively recent and not yet widespread. Additionally, these instruments typically rely on clearly established property rights and relatively open competitive markets—conditions that do not exist in most of the countries where wildlife trade occurs.<sup>345</sup>

Common market-based strategies to prevent illegal trade in wildlife products include the following tactics:

- Imposing taxes or other levies to raise consumer prices or reduce producer profitability;
- Lowering tax rates on (sustainable) substitute products; and
- Increasing the profitability of sustainable-harvested production through subsidies, value adding, certification and labelling.<sup>346</sup>

<sup>343</sup> Savcor Indufor Oy, “Ensuring sustainability of forests”, p. 34.

<sup>344</sup> World Bank, “Strengthening forest law enforcement and governance”, p. xiii.

<sup>345</sup> TRAFFIC, “What’s driving the wildlife trade?”, p. 63.

<sup>346</sup> Ibid., p. 21.





### Tool IV.28 Trade and legal markets

- Do legal timber markets exist?
- Where are the sources and destinations of the timber?
- Is legal timber production controlled?
- Does price policing create or promote illegal markets?

## 5. Awareness-raising

The difference between “legal” and “illegal” activities should be clear, especially for key stakeholders such as wildlife and forest workers, wildlife and forest managers, and local communities, as well as for the judicial system. Legal and policy frameworks cannot be implemented effectively unless their regulators have a clear understanding of their contents and procedures. It is therefore important to provide the key stakeholders and interest groups involved in wildlife and forest matters with education and training to establish an appropriate level of awareness.<sup>347</sup> They must have a clear understanding of the requirements of legislation and the sanctions for non-compliance, as well as the negative impacts of wildlife and forest crime on nature and society.



### Tool IV.29 Awareness-raising

- Are stakeholders aware of the extent, consequences and impact of the activity under review?
- Do stakeholders have an understanding of existing legislation, remedies and sanctions?
- What is the level of knowledge of the local authorities and the general public regarding legislation and prosecutions related to wildlife and forest crime?
- Are there regular situation updates and reports of the activities under review?

## 6. Concluding remarks

Given the ecological, economical and ethical complexities of wildlife and forest offences, a variety of responses are needed. Some of these responses may directly concern wildlife and forest protection through the sustainable and fair management of natural resources, while others focus primarily on legislation concerning wildlife and forests, and on law enforcement measures and procedures. Other

<sup>347</sup> William B. Magrath and others, *Timber Theft Prevention*, p. 17.

responses may lie beyond the forest and wildlife sectors, addressing rural poverty, promoting alternative sources of income, raising public awareness, and changing inappropriate techniques and habits. The World Bank has developed a framework for assessing drivers and adequate responses to various wildlife and forest crimes, such as illegal logging, wildlife poaching, arson, encroachment and others.<sup>348</sup>

The primary goal of this part of the *Toolkit* was to analyse different links in the wildlife and forest crime chain and to point to the main factors that drive the illegal activities. In regard to the complexity of the issue and to the limited scope of this *Toolkit*, neither an exhaustive list of analytic tools nor concrete and specific recommendations could be given. Depending on a country's situation, different aspects of the wildlife and forest crime chain need to be focused upon and addressed. The user of the *Toolkit* is therefore advised to consult literature and initiate consultative partnerships and cooperation with leading organizations, associations and experts in the respective fields.

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<sup>348</sup> World Bank, "Strengthening forest law enforcement and governance", p. 69.



# Part five.

## Data and analysis

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# Data and analysis

To this day, very few reliable measurements of wildlife and forest crime have been conducted at national, regional and international levels. The scale of the problem, the volume of the illegal trade and the number of people involved in it are largely unknown and often impossible to calculate. The clandestine nature and the lack of comprehensive enforcement and research make it impossible to know the true size of the phenomenon. Indeed, many figures circulated in various reports and articles are the result of guesswork rather than of systematic analysis.

Information and statistics on the levels and patterns of wildlife and forest crime are essential to the proper planning of justice reforms and capacity-building, as well as technical assistance initiatives. Successful strategies to improve law enforcement in the wildlife and forestry sectors also depend on a solid knowledge of the wildlife and forest resource base and its utilization, which governments and the general public in many countries do not possess. In most places, data and knowledge about the location, extent and nature of legal and illegal operations in the wildlife and forestry sectors are, at best, fragmented. Good information is, however, essential for preventing, detecting, monitoring, reporting and investigating illegal operations.

Analysing a criminal justice system can be quite challenging, particularly when there is very little quantitative information available on the system itself, on the problems and the types of crime that it is confronted with, or on the resources at its disposal. Part five of the *Toolkit* identifies a range of measures that explore the availability and quality of relevant crime statistics and other data, performance measures, databases and the existence of independent scholarly research on wildlife and forest crime. Part five provides tools that help users to create or enhance a knowledge base that will allow the formulation of informed policies, relevant laws and enforcement measures to prevent and suppress wildlife and forest crime more effectively.

In assessing forest and wildlife law enforcement systems, information on two broad matters is critical. One relates to law enforcement efforts as indicated by, for example, arrests, prosecutions, seizures, penalties, fines and other forms of restitution, as discussed further below. The other matter concerns the incidence of crime, such as the numbers of animals taken illegally, the volume of timber stolen, areas of encroachment, and geographic locations of crime or “hot spots”. The data typically available for either matter are almost always limited by and subject to interpretation and misuse, but when properly organized and analysed, they can provide important insights and lead to useful policy recommendations.

Information on the incidence of natural resource crime is subject to many of the same limitations as criminal victimization data generally. These include the failure of victims to report crime and incomplete record keeping by agencies. In the case of natural resource crimes, these limitations are compounded for the following reasons: it is often unclear who the particular victim is; resource management agencies and their staff may have strategic, political, accountability and budgetary motivations for underreporting crime; and many crimes may simply be unnoticed. Generally, detection and therefore the data on natural resource crime originate from the routine conduct of natural resource management activities. Vital resources for natural resource crime analysis include natural resource inventories, maps, population censuses and surveys, harvest and sales records, revenue records and so forth. Management plans for specific areas such as forests and parks, or wildlife populations also contain information that can be useful in assessing criminal threats and vulnerabilities.

In forestry and natural resource management, crime detection tends to revolve around the following methods: direct observation; recognition of losses (also referred to as shrinkage); and the



observation of discrepancies in records, statistics and transactions. Often, indicators related to one or more of these methods can be observed at the same time by different actors within the law enforcement system. A key to effective criminal intelligence processes is assembling, organizing and processing information. How—and how well—systems of crime detection work are key questions for analysing national responses to wildlife and forest offences.

Patrols by game wardens in wildlife conservation areas and road checkpoints in forest areas are among the direct observation methods used in many countries. However, as forests and wildlife habitat are usually large, remote and without roads, forest and wildlife officials are notoriously unable to monitor all areas of their responsibility. Some law enforcement authorities expand their ability to monitor resources and detect crime by using information from the general public or specially mobilized groups. In many countries, forest watch groups from local communities have been organized on either a voluntary or paid basis. Another approach to crime detection is to use the tools provided by laws against money-laundering.<sup>349</sup>

The recognition of losses is another method for crime detection used in wildlife and forest management; a reduction in an area of forest, populations or wildlife numbers can be the basis for estimates of losses due to crime. However, inventories and wildlife censuses are often out of date, inaccurate or imprecise and are therefore of little practical value in estimating losses due to crime. Some countries have developed explicit land-use development plans that specifically call for the conversion of forests to land for other uses. Technological advances in remote sensing and forest inventory practices have the potential to make a contribution to crime detection in forestry. In addition, forest cover change detection has become dramatically easier and less expensive over the last 25 years due to improvements in satellite imagery.

In order to estimate the extent of illegal logging, a point of comparison is an essential starting point. Analysts seeking to estimate the extent of crime in forestry can compare a number of indicators. Trade statistics have frequently been used for such a purpose.

## 1. Data collection

Efforts to effectively prevent and suppress wildlife and forest crime are severely hampered by the lack of comprehensive data collection. In spite of the widespread tendency to attempt to estimate the size of the illegal market for wild fauna and flora, there are few reliable statistics.

The absence of any comprehensive data on the scale and spread of wildlife and forest offences has a direct impact on the ability of those charged with enforcing current legislation. If the scale and nature of the problem are not known, it is unlikely that the appropriate measures and resources can be allocated to prevent and suppress it. Without accurate information on wildlife and forest offences, prevention strategies cannot be identified, and suppression activities are rendered useless because insufficient information will not lead to the effective prosecution of offenders.

Collecting data on the scale and patterns of wildlife and forest offences is important for evaluating the impact and efficiency of policy, legislation and enforcement programmes, and for providing feedback to policymakers and legislators. Without defensible and realistic baseline data, claims concerning the operation and impact of the strategies to combat wildlife and forest offences cannot be verified, and thus the credibility and commitment of government programmes are left subject to question.<sup>350</sup> Information gleaned from detection measures can also be used for effective campaigns

<sup>349</sup> See part one, section 5 of the *Toolkit*.

<sup>350</sup> *Ibid.*, p. 55.

against illegal activities.<sup>351</sup> Since 1994, the Wildlife Crime Working Group of the International Criminal Police Organization (INTERPOL) has emphasized the need to collect accurate and comprehensive data and specifically called for the creation of a global database designed to assist countries in their efforts to curtail wildlife and forest offences.

In some countries, government departments and individuals are reluctant to collect or release data on wildlife and forest offences for fear that such reports would be viewed as an indication of policy, law, enforcement or wildlife or forest management failings and as failure by staff to carry out their duties. Elsewhere, disingenuous governments and corrupt officials seem to find the absence of monitoring data and crime detection systems a convenient screen.<sup>352</sup> However, only by acknowledging the existence of wildlife and forest offences and by trying to qualify the scale of the phenomenon can the problem be tackled.<sup>353</sup>

The following sections identify the relevant analytic tools relating to data collection, statistics and reporting.

## 1.1 Crime statistics

Remarkably, few governments have systematic, if any, statistics on wildlife and forest offences. In many countries, statistics on wildlife and forest offences are not collected at all, and even if they are collected they are often fed into broad categories and become inseparable and indistinguishable. Few countries count the number of investigations, prosecutions and convictions under individual offences relating to the wildlife and forestry sectors. Even fewer countries separate the number of offences by, for example, type of offender, geographic location or severity of the offence.<sup>354</sup> Even if statistics exist, they are rarely published or otherwise openly available, which further hampers efforts to analyse and understand the levels and patterns of wildlife and forest offences and to design adequate strategies to fight them.

One of the difficulties in collecting statistics is the fact that wildlife and forest offences are often perceived as victimless crime because complainants will only contact the authorities to report a crime in rare and exceptional circumstances, usually when they experience personal loss or harm. Even where they exist, crime statistics alone do not necessarily provide a good indication of the prevalence of crime and victimization in a given country because they are greatly influenced by the willingness of victims to report the crime to the police. Victims and witnesses of crime are unlikely to report it to the authorities when they do not have much trust in them or cannot reasonably expect much help from them.<sup>355</sup>

Most offences are detected by enforcement agencies, either when they encounter someone engaging in illegal conduct, discover the scenes of illegal logging, illegal hunting, or illegal processing, or if they intercept the smuggling of contraband. In many cases, non-governmental organizations (NGOs) play a vital role in identifying illegal activities and bringing them to the attention of the authorities. Many government agencies tend to use information on seizures and arrests as indicators of wildlife and forest offences, but this is seriously biased to underestimate crime because it reflects law enforcement efforts and incidents that are successfully resolved rather than the accurate number of all cases.

<sup>351</sup> Esa Puustjärvi, *Proposal for Typology of Illegal Logging*, p. 28.

<sup>352</sup> World Bank, "Strengthening forest law enforcement and governance", p. 55.

<sup>353</sup> United Nations, Economic and Social Council, "Illicit trafficking in protected species of wild flora and fauna and illicit access to genetic resources", report of the Secretary-General, 4 March 2003 (E/CN.15/2003/8), para. 54.

<sup>354</sup> Cf. World Bank, "Strengthening forest law enforcement and governance", p. 54.

<sup>355</sup> UNODC, "Criminal justice information", in *Criminal Justice Assessment Toolkit*.

## Incidence of wildlife and forest offences

The first steps in examining the existence and availability of data and analysis pertaining to wildlife and forest offences is to identify the relevant crime statistics and to explore any data that reflect the incidence and levels of offences related to the environment. In some jurisdictions, statistics are collected for each individual criminal offence, while elsewhere data are clustered in broader categories such as forest offences, environmental crime and import/export offences.<sup>356</sup>

In most jurisdictions, separate statistics are collected for reported offences, investigations, prosecutions and convictions. If collected and reported consistently, such information makes it possible to review investigation and prosecution processes and to identify potential weaknesses in the criminal justice system that cause cases to collapse. Many jurisdictions also include in their crime statistics information about the offender, victims (if any), harm or damage caused, and the location of the offence, which is helpful in identifying trends and patterns of criminal activity.



### Tool V.1 Crime statistics

- Are crime statistics collected? If so, which agencies collect crime statistics?
- Do they separate wildlife and forest offences and other offences from environmental offences? Are individual wildlife and forest offences identified? Who collects these data?
- How many wildlife and forest offences are reported? How many are investigated?
- How many investigations result in prosecutions and convictions?
- Do these statistics contain information about the perpetrators, the location of the offence and any harm or damage caused?
- How regularly are crime statistics collected? How, how often, and where are they published?

## Unreported crime

Crime statistics generally count only those criminal offences that come to the attention of the police or other law enforcement agencies. For a variety of reasons, however, victims and witnesses of crime, including wildlife and forest offences, may not report offences to the authorities. The reporting rate, as it is usually referred to, may be affected by a number of factors, including access to law enforcement agencies and confidence (or lack thereof) in the police.

The difference between how much crime actually occurs and how much crime is reported to or discovered by the authorities is usually referred to as the “dark figure of crime”. Crime statistics are therefore a very imperfect measure of the number of wildlife and forest offences actually committed.

<sup>356</sup> UNODC, “Crime investigation”, in *Criminal Justice Assessment Toolkit*.



### Tool V.2 Unreported crime

- Do available crime statistics relate only to reported crime or is there an estimate of the crime level in general?
- Are there other official and unofficial estimates about the dark figure of wildlife and forest offences?



### Tool V.3 Police data and enforcement outcomes

- What number and types of wildlife and forest offences have been reported?
- What number and types of wildlife and forest offences have been investigated?
- How many suspects have been investigated? How many have been detained?
- How many investigations proceeded to prosecution or otherwise resulted in criminal charges being laid? How many persons have been charged?
- What proportion of reported and discovered wildlife and forest offences do authorities claim to have solved (that is, what is the “clear-up” rate)?
- How much and what type of property and other assets are seized annually in relation to wildlife and forest offences?

## Customs data

Customs data contain information on cross-border trade, including trade volumes and declared values. Data on imports and exports are collected by most Customs services around the world and are usually organized according to commodity types, often using the Harmonized Commodity Description and Coding System.<sup>357</sup>



### Tool V.4 Customs data

- What Customs data on imports and exports involving wild fauna and flora are available?
- Do Customs reports contain information on the species, volumes and declared value of wild fauna and flora imports and exports?

<sup>357</sup> Steven Broad, Teresa Mulliken and Dilys Roe, “The nature and extent of legal and illegal trade in wildlife”, pp. 3-7.

## Prosecution data and outcomes



### Tool V.5 Prosecution data and outcomes

- How many prosecutions involving wildlife and forest offences have been initiated?
- How many prosecutions resulted in charges being laid?
- How many persons have been prosecuted? How many have been convicted? How many have been acquitted?
- How many appeals involving wildlife and forest offences have been initiated by the prosecution service?

## Court data and outcomes



### Tool V.6 Court data and outcomes

- How many court proceedings involving wildlife and forest offences have been initiated? How many proceedings involved charges? How many involved appeals?
- How many cases resulted in convictions? How many resulted in acquittals?
- How many convictions for wildlife and forest offences have been overturned on appeal? What are the main reasons for appeal?
- How long do court proceedings generally take?

## 1.2 CITES reporting

Under article VIII, paragraph 6, of CITES, Parties are required to maintain records of trade in CITES-listed species. This mechanism is an important feature of effective control and enforcement and has been described as “the life blood of trade control”.<sup>358</sup> The information generated this way can potentially identify routes of the illegal trade and highlight some of the main source, transit and destination points. The CITES Secretariat has also established mechanisms to collect trade records from Parties to the Convention and other information about CITES implementation and compliance.<sup>359</sup> Reports are to be submitted annually to the Secretariat. CITES also requires Parties to submit biennial reports on legislative, regulatory and administrative measures taken to enforce the provisions of the Convention.

<sup>358</sup> David S. Favre, *International Trade in Endangered Species*, p. 215.

<sup>359</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora, art. VIII, para. 7, and art. XII.



Furthermore, the CITES Secretariat has attempted to gain an overview of specific forms of wildlife offences. For example, in recent years, its Monitoring the Illegal Killing of Elephants (MIKE) and Elephant Trade Information System (ETIS) schemes have gathered data on poaching and illegal trade.



### Tool V.7 CITES reporting

- Does the CITES Management Authority (or another agency) maintain records of trade in CITES-listed species? If so, are these records (publicly) available? Are trade records submitted to the CITES Secretariat annually? If so, are these records complete?
- Does the country submit biennial reports on legislative, regulatory and administrative measures taken to enforce the CITES provisions?
- If records are not maintained or reports are not submitted to the CITES Secretariat, what are the reasons for not doing so?

## 1.3 Resource analysis and monitoring

Where available, data on environmental issues such as forest areas and wildlife stock are helpful to identify human activities in the wildlife and forestry sectors and their impact on natural resources. This can, in some cases, assist in detecting illegal activities and the damage caused to natural habitats.

Forest resource analysis and monitoring can provide invaluable information to develop adequate forestry policies and legislation, and to assist in shaping appropriate enforcement measures. Some jurisdictions have established comprehensive wildlife and forest monitoring and tracking systems with standardized reporting procedures that assist in controlling legal trade in wild fauna and flora and in identifying illegal activities. These systems are designed to track plants or animals (as well as plant or animal material) from the source to the vendor and possibly beyond. Generally, these monitoring systems are based on stock inventories, marking and documentation. Every step of the trade requires proof that the animal, plant or material was obtained from a lawful source and is accompanied by the relevant permits, markings and receipts showing that the necessary duties and taxes have been paid.<sup>360</sup>

A growing number of countries use independent wildlife or forest monitors whose mandate is to assist governments in carrying out an informed and independent analysis of the efforts and achievements of the relevant agencies in investigating and suppressing wildlife and forest offences. These monitors make recommendations to improve the current system. Independent monitoring thus has the potential to strengthen calls for reforms and anti-corruption measures, which are welcomed by those officials with a genuine interest in their public duty. They can also help to reveal the political interests and relationships that underpin many illegal activities in the wildlife and forestry sectors.<sup>361</sup> The Food and Agriculture Organization of the United Nations (FAO) and the International Tropical Timber Organization (ITTO), among many other organizations and experts, recognize that, by and

<sup>360</sup> Esa Puustjärvi, *Proposal for Typology of Illegal Logging*, p. 31.

<sup>361</sup> See further Global Witness, *A Guide to Independent Forest Monitoring* (London, 2005).

large, independent monitors have been found to be very effective in increasing the levels of information about the wildlife and forestry sectors and the extent of law compliance within them.<sup>362</sup>



## Tool V.8 Resource assessment and monitoring

- Are there any records, data or other information on changes in forest cover or wildlife stock, or other environmental data relating to the wildlife and forestry sectors?
- Does the country, or parts of the country, use wildlife or forest monitoring systems? If so, how do these systems operate? Who carries them out?
- Do monitoring systems involve independent monitors? If so, who are they and how do they operate?

## 1.4 Economic data

Economic data and trade statistics can also be helpful in identifying the scale and patterns of illegal trade in wild fauna and flora. For example, data on revenue shortfalls and information on industrial capacities or utilization efficiencies are helpful in analysing the extent to which illegally acquired wild fauna and flora are being utilized.

“Shrinkage” is a term applied to an unexplained change in an inventory. In the absence of other obvious causes (such as spoilage and deterioration), shrinkage can usually be attributed to theft or other illegal activity. Similarly in forestry and wildlife management, reductions in forest area, populations and wildlife numbers can be used to estimate losses due to crime. Unfortunately, in many natural resource applications, resource assessments, inventories and wildlife and forest censuses are very out of date, or so inaccurate and imprecise as to be of little practical value in estimating losses due to crime.

Another method to identify illegal activity is to use comparisons of data on production, consumption and trade in wildlife and forest products. Comparing, for example, log deliveries and mill output, or export records in the sending country with import records in the receiving country can reveal disparities. These differences can indicate the potential magnitude of theft, smuggling and transfer pricing. Similar consistency checks between forest revenues and reported harvest can also be useful.<sup>363</sup>



## Tool V.9 Economic data

- What economic data on trade in wild fauna and flora are available?
- Do unaccounted changes in inventories reveal any illegal activity?
- Are there significant trade discrepancies between input-output and export-import that suggest the occurrence of illegal activity?

<sup>362</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, pp. 62-64.

<sup>363</sup> World Bank, “Strengthening forest law enforcement and governance”, p. 54.

## 1.5 Technology and information management

Access to information services, such as the Internet and mobile telephones, has increased rapidly in the 2000s. In 2009, mobile telephone access in developing countries passed 50 per cent for the first time, reaching 57 per cent of the population. Technological change has often been taking place at the same time as institutional reforms when former State-owned monopolies have been commercialized or privatized, and competition among service providers has been introduced. Increased access to information and communication technologies (ICTs) has led to the development of e-government and e-governance initiatives, that is, ICT applications for interaction between governments and citizens. The increased use of technology has improved public access to information. Despite the expansion of service networks, a digital divide continues to exist, and information services remain expensive for the average consumer in developing countries. However, there has been a declining trend in ICT costs.

Many natural resource management vulnerabilities can be addressed through the use of ICT. Effective law enforcement systems in the forestry sector consist of prevention, detection and suppression. Technology has an important role to play in each of these steps, in the efforts to curb the illegal logging, transportation and processing of timber, and trade in wildlife.

A variety of ICT applications can be used to improve deterrence and response, including the following:

- Prevention: crime mapping and corruption hotlines;
- Detection: timber tracking, chain of custody systems, checkpoints, satellite images, global positioning system surveillance; and
- Suppression: crime databases and case management systems.

ICTs can often be applied to identify discrepancies or other early signs of illegality (“red flags”) in a large volume of observation data. These data can be collected through remote sensing, administrative data source, crowd sourcing or various other means. The efficient use of technology makes this activity cost efficient and may have even been impossible through manual means.<sup>364</sup>

## 2. Databases

Information sharing among national agencies and across international borders is crucial in combating wildlife and forest offences. A variety of tools designed to initiate and facilitate cooperation within and among countries have been identified in earlier parts of the *Toolkit*. In addition, the creation and management of national and international databases can provide platforms to report and record information pertaining to wildlife and forest offences in standardized ways, and to share this information with domestic and international partners.

Some countries, albeit a very small number, maintain national databases that record all incidents of wildlife and forest offences, as well as the details of all successful and unsuccessful prosecutions.

<sup>364</sup> Tukka Castrén and Madhavi Pillai. *Forest Governance 2.0: A Primer on ICTs and Governance* (Washington, DC, Program on Forests, 2011).



## Tool V.10 National wildlife and forest crime databases

- Does the country maintain a national database that records incidents of wildlife and forest offences?
- Which agencies have access to that database?
- What information is recorded? How is information recorded and disseminated? Does legislation limit the use of forensic data in the database?
- Do the relevant authorities have adequate ICT infrastructure? What is the e-readiness of these authorities?

## 2.1 Customs Enforcement Network seizure database

The World Customs Organization (WCO) maintains an Internet-based seizure database on the Customs Enforcement Network (CEN), with a wildlife seizure database as one of the 13 commodities since 2002. The database contains non-nominal seizure information such as date, location, species, quantity, departure, destination, conveyance, concealment and CITES documentation. Customs services worldwide report their seizures on a voluntary basis. Regional intelligence liaison offices analyse the data and publish analytic reports on a regular basis. The data are also available to all WCO member Customs administrations for analytic purposes.



## Tool V.11 WCO Customs Enforcement Network seizure database

- Are wildlife seizures regularly reported to CEN?
- Is the available seizure information analysed? Is so, by whom?

## 2.2 Trade in Wildlife Information Exchange

The European Union Trade in Wildlife Information Exchange (EU-TWIX) is a tool developed to facilitate information exchange and international cooperation among law enforcement officials across the European Union. It has been operational since October 2005.

The EU-TWIX database centralizes data on wildlife trade seizures submitted by European Union enforcement agencies (police, Customs, environmental inspection services and CITES Management Authorities) in six European Union languages. WCO also regularly provides Customs seizure data from its CEN seizure database, which is populated by data from European Union Customs administrations. Access to the EU-TWIX database is Internet-based and granted exclusively to designated enforcement officials who are provided with access codes.<sup>365</sup> The database also contains information on forensic institutes, rescue centres and wildlife experts, as well as the prices of wildlife specimen being traded. The EU-TWIX electronic mailing list allows designated enforcement officials to share information quickly and efficiently, and to exchange experience and expertise on illegal wildlife trade matters.

<sup>365</sup> See [www.eutwix.org](http://www.eutwix.org).

While EU-TWIX mechanisms for information sharing are currently open to only European Union Member States, they provide a useful model for the creation of similar databases in other countries. They may also serve as a template for future regional and global wildlife and forest offence databases.



### Tool V.12 EU-TWIX

- Does the country have access to EU-TWIX?
- Which agencies have access to the database? How is information recorded and disseminated?

## 2.3 CITES Alerts

Using information and intelligence it receives from a variety of sources, the CITES Secretariat prepares Alerts that contain intelligence regarding current trends in wildlife offences or information about new *modi operandi* related to the illegal trade. CITES Alerts are available on the restricted-access enforcement authorities forum on the CITES website. Multilingual training materials and other enforcement-related bulletins can also be accessed via the forum, which can be used as a secure communication channel among officers globally.



### Tool V.13 CITES Alerts

- Does the national CITES Management Authority prepare its own Alerts and make use of CITES Alerts? If not, why not?
- Are the relevant staff trained in preparing Alerts?
- How are CITES Alerts acted upon? What obstacles have been encountered in using CITES Alerts?

## 3. Performance indicators

Few countries have in place the kind of data gathering processes necessary to collect data on the various aspects of their criminal justice system and develop indicators to monitor their performance. Every criminal justice agency, including those operating in the wildlife and forestry sectors, should be encouraged to identify approved performance targets for each of its functions, adopt performance-based indicators, and set in place the necessary data gathering mechanisms to monitor them. A good performance accountability system should focus on outcomes, represented by a few selected indicators for measuring performance, generating data consistently over time, providing information for both policy and programme management decisions, and reporting outcomes regularly and publicly.<sup>366</sup>

<sup>366</sup> UNODC, “Criminal justice information”, in *Criminal Justice Assessment Toolkit*.



## Police performance indicators

In law enforcement, the most frequently used indicator is perhaps the percentage of crimes solved by the police out of the total criminal incidents that came to their attention (reported crime). The total case burden, defined as “the number of criminal offences (excluding traffic) per authorized police strength”, is also used as a general measure of workload, and the percentage of crimes solved (by category of crimes) as a performance indicator.<sup>367</sup>

This indicator is not always based on very robust data because of (a) changes in crime reporting behaviour, (b) how the police define a “solved crime” (for example, charges have been laid, the offender has been identified, enough evidence has been accumulated to obtain a conviction or there has been a confession), or (c) all types of crimes may be included or only certain types (for example, only violent crimes). Another indicator that can be used is the percentage of crimes resulting in charges being instigated.<sup>368</sup>

With respect to patrolling, the performance indicators that are most commonly used include the number of calls received and responded to (by priority), the response time to different types of calls, and officer utilization time. Sometimes, the “blackout” indicator is used. This refers to the number of times there were no available officers to respond to a call. Each community is unique, and comparisons therefore have very limited value without further assessments of crime types, agency reporting practices, response and investigative policies, and solvability factors.<sup>369</sup>

## Customs performance indicators

Very few Customs agencies have adopted indicators that systematically address the issue of Customs performance in the area of enforcement. In its *SAFE Framework of Standards to Secure and Facilitate Global Trade*, WCO sets out a number of standards for the measurement of Customs performance. Some key performance indicators for Customs wildlife and forest enforcement include, but are not limited to:

- Wildlife as part of a national Customs strategy;
- Average time for the release of legitimate trade;
- Training of Customs officers;
- Quantity and quality of information and intelligence handling;
- Risk management and risk assessment, including application of risk indicators in daily operations;
- Number of specialized units or officers for wildlife enforcement;
- Number of physical controls based on risk assessment, and the percentage of interceptions following such controls;
- Number of seizures;
- Percentage of follow-up investigations into illegal trade;
- Cooperation with other agencies (for example, MOUs, information exchange, assistance from CITES Management Authorities, handing over of seizures for follow-ups);

<sup>367</sup> Ibid

<sup>368</sup> Ibid.

<sup>369</sup> Ibid.

- Cooperation at regional and international levels;
- Partnership with other stakeholders and assistance to raise public awareness; and
- Effectiveness of control over border crossing points without regular establishments.

## Prosecution performance indicators

Very few jurisdictions have adopted indicators that systematically address the performance of prosecutors. The most obvious indicators in this regard are:

- Average number of cases per prosecutor;
- Average number of appellate cases per prosecutor;
- Number of cases completed per year, per prosecutor;
- Number of cases in which a prosecution has been initiated and then abandoned or stayed;
- Proportion of cases per year in which the offenders pleaded guilty;
- Proportion of cases per year that went to trial;
- Proportion of cases per year in which a conviction was obtained;
- Proportion of cases that went to trial in which the offender was eventually acquitted;
- Number of cases of wrongful convictions per year;
- Proportion of cases that were diverted away from the formal criminal justice process; and
- Average cost per case prosecuted during a given period of time, usually one year.<sup>370</sup>

## Court performance indicators

For criminal courts, performance indicators include:

- Average number of cases per judge;
- Average length of time for the completion of a criminal case;
- Average number of trials per year;
- Average number of trials per judge; and
- Average length of a trial, and the average cost per case.<sup>371</sup>

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<sup>370</sup> Ibid.

<sup>371</sup> Ibid.



### Tool V.14 Performance indicators

- What performance targets, if any, have been identified for those government agencies operating in the wildlife and forestry sectors? What are the specific targets for enforcement, prosecutorial and judicial agencies?
- What performance indicators are used to measure the activities of the relevant agencies?
- Who conducts the performance measurements based on these indicators? How are the results reported back to individual agencies?
- Are the performance indicators regularly reviewed and updated?

## 4. Analytic research

One of the main obstacles to combating wildlife and forest crime more effectively is the lack of systematic and in-depth analytic research on the causes, concepts, circumstances and characteristics of this phenomenon. Presently, reports by government agencies, international organizations and NGOs constitute the vast majority of information on this topic, but there is very little scientifically based analytic research.<sup>372</sup>

Analytic research work is fundamental to understanding wildlife and forest offences, and to gaining a perspective on the functioning of the local, regional and global illegal market for wild fauna and flora in order to identify better ways of countering it. Only with a proper knowledge base can governments be encouraged and held accountable to take evidence-based policy action that would lead to altering the dynamics of wildlife and forest offences.

### 4.1 Scholarly and independent research

Independent scholarly research is a crucial step in understanding wildlife and forest offences. It can also assist in analysing existing and proposed government policies, legislation, administrative and enforcement measures, and in developing recommendations for law reform and policy change.

It is encouraging that a growing number of research institutions, universities, individual scholars and other experts are interested in researching the many aspects and facets of wildlife and forest offences, and make their findings available to the relevant audiences and the public at large. Such research can also give greater legitimacy to the relevant government initiatives.

While some governments are supportive of critical and independent research in this field, others are less open and do not collaborate with scholarly researchers for fear their policies, laws and administrative systems may be criticized. This attitude directly and indirectly benefits those engaged in wildlife and forest offences, and hampers domestic and international efforts to curtail illegal trade in wild fauna and flora.

<sup>372</sup> Cf. Jacqueline L. Schneider, "Reducing the illicit trade in endangered wildlife", pp. 274-281.



### Tool V.15 Scholarly and independent research

- What independent research on any aspect of wildlife and forest offences has been undertaken? What aspects have been researched and by whom?
- What are the key findings and research outcomes of the relevant analyses?
- What response, if any, have the relevant government agencies shown or given to scholarly and independent research on wildlife and forest offences?
- Are systems in place to evaluate and utilize information from academic research and from NGOs for policy development, law-making and enforcement purposes?

## 4.2 Diagnostic surveys

Accurate diagnostic surveys of illegal activities can be an effective instrument to estimate their magnitude, the procedures employed to commit and combat these offences, and the motivation of offenders and enforcers. These surveys can be aimed at businesses, government officials, communities and other major actors in the sector. In addition, they can provide a useful baseline for designing corrective action. These surveys are most useful if they are aimed at several different actors in order to cross-check the information received. Contrary to initial scepticism, experience shows that respondents can be quite honest and informative. Diagnostic surveys have been useful in obtaining information on the most secretive acts, such as the laundering of timber and wildlife, payments of bribes, and specific procedures used to break the law. Surveys can be aimed at measuring the extent of illegal acts, exploring the factors (including policy failures) that facilitate them, or investigating specific acts or actors.<sup>373</sup>

Diagnostic surveys require careful design to ensure objective and statistically valid results and therefore, in the final analysis, a high degree of credibility. They must also be carried out in a way that respondents are assured of the confidentiality of their responses, as needed. The employment of independent and reputable surveyors is an important condition to ensure objectivity and credibility.<sup>374</sup> These diagnostic surveys can also be done more openly, but then their nature is different. For example, the framework developed by the World Bank's Program on Forests and the United Nations Food and Agriculture Organization is based on a transparent multi-stakeholder process.<sup>375</sup>



### Tool V.16 Diagnostic surveys

- Have diagnostic surveys relating to wildlife and forest offences been undertaken?
- Who commissioned these surveys and who carried them out?
- What were the key findings of these surveys? How did the relevant agencies respond to these findings?

<sup>373</sup> FAO and ITTO, *Best Practices for Improving Law Compliance*, p. 78.

<sup>374</sup> Ibid.

<sup>375</sup> For a description of this framework, see part four, section 2.1.

## 4.3 Dissemination

A final point relates to the dissemination and publication of the relevant data, research and other information. In many countries and in individual agencies, large “stockpiles” of information relating to wildlife and forest offences exist, but this information is not often made publicly available. In some instances, agencies may not have the capacity or resources to present, publish and disseminate information more widely, while elsewhere cultures of secrecy, silence and suspicion prevent the sharing of information and expertise.

Greater transparency and communication are, however, important tools to prevent and suppress wildlife and forest offences more effectively. It is essential that all stakeholders engage in open dialogue and make information available that will help others in their efforts to curtail this phenomenon.



### Tool V.17 Dissemination

- How do the relevant government agencies publish, release and disseminate data and other information relating to wildlife and forest offences?
- What information is publicly available? What information is classified and available only to domestic agencies or international law enforcement agencies?
- Is the relevant information published online, or in annual or other periodic reports?



# Annex. List of tools



## Part one. Legislation

1. CITES
2. CITES reservations
3. United Nations Convention against Transnational Organized Crime
4. United Nations Convention against Corruption
5. Convention on Biological Diversity
6. Convention Concerning the Protection of the World Cultural and Natural Heritage
7. Bilateral agreements
8. Domestic wildlife laws
9. Domestic forest laws
10. Domestic CITES implementation
11. CITES Management Authority
12. Cooperation between Management Authority and Customs
13. Species protection outside CITES
14. Proof of subjective fault elements
15. Extensions to criminal liability
16. Liability of legal persons
17. Illegal logging and harvesting
18. Illegal hunting (poaching)
19. Illegal processing of animal and plant material
20. Trafficking, illegal trade, sale and supply
21. Import and export offences
22. Offences relating to possession
23. Penalties for wildlife and forest offences
24. Document fraud and related offences
25. Money-laundering offences
26. FATF 40 Recommendations
27. Reporting of suspicious transactions
28. Corruption and bribery offences

29. Tax evasion and non-payment of fees
30. Participation in criminal organizations
31. Regional FLEG processes
32. Regional wildlife enforcement networks
33. Certification systems and schemes, and private and voluntary standards



## Part two. Enforcement

1. Law enforcement structures
2. Enforcement mandates
3. Legislation for enforcement mandates
4. Management of investigations
5. CITES Management Authority
6. Community policing
7. Partnerships
8. Staffing levels
9. Salaries and benefits
10. Recruitment
11. Training: delivery
12. Training: content
13. Intelligence gathering
14. Covert investigation techniques
15. Controlled delivery
16. Informants
17. Patrols and checkpoints
18. Proactive investigations
19. Sources of enforcement powers
20. Types of investigative powers
21. Exercise of enforcement powers
22. Facilities and equipment
23. Reporting offences

24. Information and evidence gathering
25. Wildlife and forest crime scene work
26. Identification of suspects
27. Interviewing
28. Witness and victim protection
29. Forensics and crime scene investigation
30. Financial investigation
31. Border control and Customs
32. Cooperation between Customs and CITES Management Authority
33. ENVIRONET
34. WCO Customs Enforcement Network
35. Frameworks for international cooperation
36. INTERPOL
37. Ecomessage
38. Procedures for international cooperation
39. Law enforcement cooperation
40. International and regional assistance
41. Bilateral and multilateral donors
42. Donor coordination
43. Accountability and integrity
44. Corruption and bribery



### Part three. Judiciary and prosecution

1. Judiciary: legal frameworks
2. Criminal court system
3. Independence of the judiciary
4. Judiciary: staff and salaries
5. Recruitment and training of judges
6. Judiciary: facilities and equipment
7. Court records and court reporting

8. Accountability and integrity of the judiciary
9. Source of prosecution authority
10. Prosecution: organization and delegation
11. Partnerships between law enforcement and prosecution
12. Role of the prosecutor
13. Operation and workload of prosecutors
14. Prosecution: staff and salaries
15. Recruitment and training of prosecutors
16. Prosecution: facilities and equipment
17. Accountability and integrity of prosecutors
18. Extradition
19. Mutual legal assistance
20. Letters rogatory
21. Patterns of international cooperation
22. Confiscation of assets
23. Transfer of criminal proceedings
24. Transfer of sentenced persons
25. Sentencing
26. Sanctions
27. Restitution
28. Restoration and remedial measures



## Part four. Drivers and prevention

1. Actors in the supply chain
2. Local communities and indigenous groups
3. Insurgent groups
4. Police and military
5. Forest rangers and wardens
6. Commercial users
7. Subsistence
8. Income generation

9. Commerce, trade and markets
10. Enjoyment, leisure and tourism
11. Culture and tradition
12. Community land use conflict
13. Land cover change
14. Herding and farming
15. Hunting and non-selective killing
16. Wildlife and forest management
17. Institutions and responsibility
18. Wildlife and forest management planning
19. Legal and policy frameworks
20. Natural resource inventory
21. Protected areas
22. Certification systems and schemes
23. Land tenure and property rights
24. Access
25. Security
26. Poverty reduction
27. Participation of local communities
28. Trade and legal markets
29. Awareness-raising



## Part five. Data and analysis

1. Crime statistics
2. Unreported crime
3. Police data and enforcement outcomes
4. Customs data
5. Prosecution data and outcomes
6. Court data and outcomes
7. CITES reporting
8. Resource assessment and monitoring



9. Economic data
10. National wildlife and forest crime databases
11. WCO Customs Enforcement Network seizure database
12. EU-TWIX
13. CITES Alerts
14. Performance indicators
15. Scholarly and independent research
16. Diagnostic surveys
17. Dissemination

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# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: 16 May 2016

Submitted by (provide individual and STWG contact information):

WCS (Wildlife Conservation Society)

### 1. Issue:

- Organisation of Jurisdictional Institutions/Jurisdictional Issues
- Endangered species
- Wildlife trafficking offences
- Role and knowledge of IPs and local communities
- Overlapping BOOKs

### 2. Reference to Code Book and Chapter (if applicable):

BOOK 2: ORGANIZATION OF JURISDICTIONAL INSTITUTIONS/JURISDICTIONAL ISSUES

BOOK 8 – BIODIVERSITY CONSERVATION AND MANAGEMENT, Chapter #: Protection of endangered species

Article 2: Objective

BOOK 7: Chapter # - Preparation of management plans in accordance with national, regional or local environmental and natural resource management plan

### 3. Comparative Experience (including Cambodian and international examples and experience):

### 4. Recommendation:

Article 9: The Precautionary Principle

The precautionary principle, that in situations where the environment may be faced with threats of serious or irreversible damage, the lack of full scientific certainty shall not be used as a reason for postponing ~~cost-effective~~ measures to prevent environmental degradation.



Book 2:

Need a chapter on relevant interactions between Ministry of Economics and Finance - Department of Customs is an important stakeholder concerning wildlife trafficking.

Revenue generation and financing protected areas is also extremely important to include and presumably involves Economics and Finance too.

Chapter #: Protection of endangered species. Here there will need to be a determination of "endangered" or threatened species. The list of endangered species will need to be able to fluid, changing in response to species' statuses. The Prakas from the Law on Forestry which outlines the classification of wildlife species in Cambodia is a good starting point but needs to be reviewed as it is now a little out of date. Clear definitions need to be provided.

Should have "Chapter # - Tax Exemptions and Subsidies from government for sustainably harvested products from community managed areas" under BOOK 16: Community Management.

Should include "Chapter # - Role of relevant Ministries regarding Eco-tourism in Protected /Conservation Areas" under BOOK 21.

Should include following articles in chapter # - Financial incentives and taxation measures to promote community resource management (BOOK 26).

Article # Community-based activities aimed at improving livelihoods should not be taxed or should get a tax exemption. The activity must have the support of the community and a clear financial report showing how the community is benefiting from the activity

Article # Community must keep a record of all visitors entering the village if it is inside a protected area. Visitors are expected to follow all procedures when entering a PA. For eco-tourism activities, the community may collect park entrance fees and hand them over to the park with clear receipts and process.

BOOK 31 should include somewhere international wildlife trafficking offences (of species native and not native to Cambodia) and should refer to CITES. There are increasing cases of African elephant ivory and rhino horn, and presumably other products being trafficked through Cambodia (Cambodia is seen as a weak point for law enforcement in the region). Clear guidance needs to be in place to ensure the judiciary knows how to deal with these cases.

A separate chapter on Endangered species/wildlife/illegal hunting and trading would be beneficial (wildlife offense) and the above could be included within this.

The objective of Environmental Code should also include another objective which promote role and knowledge of Indigenous People and local communities in conservation of biology.

The BOOK 24: "reduction of greenhouse ....." should under the BOOK 23 "climate change". These two books are talking about climate change issues.

BOOK 7: "Chapter # - Preparation of management plans in accordance with national, regional or local environmental and natural resource management plan" should include mid term and long term management plan for all parks and conservation areas.

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

# Submission Form

## Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: **May 18, 2016**

Submitted by (provide individual and STWG contact information): **Thol Chantha**

1. Issues

2. Reference to Code Book and Chapter (if applicable):

3. Comparative Experience (including Cambodian and international examples and experience):

4. Recommendation:

- Change title of book 17 to Hazardous Substances and Waste Management.
- This book shall update and incorporate the provisions dealing with the Sub-decree on Electronic and Electrical Equipment Management No.16 ANRK.BK 2016.
- labeling of hazardous waste should address in chapter of hazardous waste management.
- Management of waste incinerators shall be addressed in chapter of hazardous waste management
- Hazardous waste management : In this chapter, there should be at provisions cover with the following issues include:
  - Hazardous waste determination (categories), collection, packaging, storage, recycling and treatment, disposal ( incineration, destruction and landfill)
  - Monitoring and inspection that will refer to operational requirements for all HW facilities (recycling, storage, treatment, and incineration facilities, and landfill..etc), administrative requirements(registration, licenses,...etc)
  - Specific and special waste management (asbestos, oil, paint,..etc)
  - Operation and responsibilities of national sub-national and provincial authority.
- In chapter, transportation of waste: suggest to include hazardous waste transportation into charter of hazardous waste management.
- For chapter import and export of waste: This should be addressed clearly between non-hazardous and hazardous waste. the issue is also to be addressed the export and transition of hazardous waste

- For chapter Management of Chemical Substances: this chapter should be included with the following:
  - Definition
  - Institutional Responsibility
  - Prohibition on Hazardous Substances
  - Research, Registration and Information Disclosure of Hazardous Substances
  - Inventory, Classification and Labeling of Hazardous Substances
  - Production, Distribution, Storage, Transportation, Usage and Disposal
  - Import and Export
  - Monitoring and Inspection of Hazardous Substances Safety Assessment
  - Accident Prevention, Preparedness and Responses
  - Application of International Convention on Hazardous substances
  - POPs Convention
  - Minamata Convention
  - International Agreements
  - Penalty

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

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- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

18 May 2016

Submitted by (provide individual and STWG contact information):

Mark Barash, US Department of Interior

### 1. Issue:

Comments on Draft 2 regarding Book 1 General Provisions: Objective, Principles, General Duty to Avoid Environmental Harm and Book 5 Making of National, Sub-National and Local Environmental and Natural Resources Plans

### 2. Reference to Code Book and Chapter Title (if applicable):

BOOK ONE- General Provisions

CHAPTER ONE- Objective

CHAPTER 2- Principles

CHAPTER 3- General Duty to Avoid Environmental Harm

BOOK FIVE- Making of National, Sub-National and Local Environmental and Natural Resources Plans

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

BOOK ONE- General Provisions

CHAPTER ONE- Objective

Article 1: Purpose

The purpose is currently framed as first and foremost the promotion of sustainable development, through protection of the environment and sustainable use. Although sustainable development is critical to both the government and people of Cambodia, I suggest the actual purpose is protecting the environment of Cambodia for the well being of the nation and its people. This is the Environmental Code of Cambodia, not first and foremost a blueprint for responsible development. Of course development is exceedingly important to Cambodia, and channeling development towards sustainability a highly desirable goal, but the promotion of



sustainable development is simply one mechanism towards achieving the broader and deeper purposes of the Code.

Accordingly, I strongly recommend broadening the purpose beyond just sustainable use to incorporate all the societal and national interests and concerns which are in fact behind having an environmental code. I understand the purpose is to preserve environment, eco system related resources, because the nation and its people value them, and benefit from them. Again, sustainability is of utmost significance in planning and managing development, but as I understand it the purpose of the environmental code is to achieve protection and enhancement of the natural environment for the betterment of the country now and in the future.

Additionally, I believe that the purpose and objectives of any country's legal code properly are a reflection of the underlying values of the country and its culture. Although this is a secular legal code, nonetheless 1) Cambodia is ~95% Buddhist, and 2) there are strong themes and elements throughout Buddhist beliefs which resonate strongly with both environmental protection, and ecological principles. I therefore think the Code through its purpose and onjectives should acknowledge and appropriately explicate Buddhist environmental understandings and sensitivities. I acknowledge that my proposing specific language designed to capture this may well be presumptuous, however, I wish to at least direct the Code drafting in this direction.

Proposed language, Article One-

The purpose of the Environmental Code is to preserve and protect the ecosystems, natural, historic and cultural resources, and environment of Cambodia for the benefit of the people of Cambodia, now and in the future. The people, ecosystems and natural resources of Cambodia constitute a single interdependent whole, valued by the Kingdom of Cambodia and its people with empathy and compassion.

Article 2: Objective

(b) Split out "Protect the environment from harm and damages" as b, make "sustainably manage ..." into a separate entry.

Article 3: Applicable entities

In sentence one I am concerned that 'with operations' in the phrasing "and individuals with operations in the territory" could prove too narrow. As worded, an event or activity which occurs outside the territorial boundary of Cambodia (such as an oil spill) but which causes injury or harm to Cambodia, might be viewed as beyond the scope of the Code. Accordingly, the Code should clearly state that it applies to any event adversely impacting the environment of Cambodia. I propose the language be revised as follows:

### **Applicable entities**

This Code applies to Cambodian State bodies, organizations, family households and individuals; to Cambodians residing overseas and "foreign organizations", ~~and~~ individuals with operations in the territory of the Kingdom of Cambodia, ~~and~~ individuals or entities whose actions otherwise adversely impact or effect the Cambodian environment or its natural resources. Where an international treaty of which the Kingdom of Cambodia is a member contains provisions, which are different from the provisions in this Code, the provisions of such international treaty shall prevail.

BOOK ONE, CHAPTER 2- Principles

I suggest addition of a new Article 1, written to capture the causal principle of the interdependence of the human and natural world, based in and stemming from empathic compassion.

Proposed Article 1: The Principle of the Shared Interdependence of All Aspects of the Human and Natural World

The principle of recognition of the interconnection between organism and environment. This principle (pratitya-samutpada in Sanskrit, paticcasamuppada in Pali), or dependent co-origination is basic to both the interdependent nature of ecosystems, communities, and food webs, and to maintaining and enhancing the quality of life of all the people. This principle embraces the artificiality of separating any living creature from its surroundings.

### CHAPTER 3- General Duty to Avoid Environmental Harm

Please keep in mind that the use of the phrase “must not” makes the precise definition of ‘environmental harm’ very significant.

### BOOK FIVE- Making of National, Sub-National and Local Environmental and Natural Resources Plans

I suggest the plans include identification of resources at risk, incorporation and evaluation of trends, and identification of resources of significance.

### Restoration as Remedy-

I recommend that a new BOOK, to be numbered between the current BOOK 30 (Investigation, Enforcement and Access to Remedies) and BOOK 31 (Environmental Offences) be added, to be titled Compensatory Restoration Damages. This book will cover the responsibility of parties to compensate for violations of the Code resulting in injuries or losses to the natural, cultural and historic resources by paying damages measured as the sums required to undertake restoration or otherwise compensate for the actual losses. This BOOK and its remedies will be solely compensatory, in the nature of a tort remedy analogous to the obligation to repair after a car accident, and non punitive. As such at both the conceptual and operational levels this is properly separated from Environmental Offences as the purpose of this BOOK is not to punish the violator, or discourage violative behavior (both of which are proper goals of Book 31 penalties) but merely to compensate fully the people of the Kingdom of Cambodia itself, through restoration, for adverse impacts to the ecosystems, habitats, and natural, cultural and historical resources and all losses caused thereby.

Currently, Book 14 contains ‘Restoration of damaged habitat or ecosystems’ as Chapter#, Book 15 contains ‘Restoration of damaged fisheries habitat or aquatic ecosystems’ as Chapter#, and Book 19 contains ‘Provisions for closure and remediation and restoration of extractive industry sites’ as Chapter#. There is no reference to a restoration remedy whatsoever in Books 17, 18, and 20. Instead of scattering restoration provisions though out the Code, it makes better sense and permits cleaner and clearer drafting to place them all under one Book heading.

Depending on the actual drafting approach chosen for the body of Book 30 (Investigation, Enforcement and Access to Remedies) significant additional chapters and sections may be appropriate to the pursuit of restoration compensation claims arising under this new Book.

### 5. Proposed Language to be Inserted into the Draft Code (if any):

See recommendation above.

### 6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

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Date of Submission: 18 May 2016

Submitted by (provide individual and STWG contact information): Chloe Hill, Altus Impact (STWG 3/5)

#### 1. Issue:

- Article 1: Purpose of the code is not absolutely crystal clear and doesn't make any reference to the social and economic pillars of sustainable development.
- Article 2d – dubious about how a code can “guarantee” somebody’s health. Better to make reference to improving human well being at the societal level
- Article 3: Scope of the code doesn't make sense. Have made some in text suggestions in track changes.
- Entire doc: I see no reference yet that has made to ELCs which I imagine would be fundamental in the Code...
- Book 11: Sustainable Cities. Would be good to incorporate language around Green Infrastructure in this book
- Book 24: GHG reduction and Green Growth. This is the first time I see reference to Green Growth which needs to be rectified, as I believe it needs to be discussed MUCH further up in the document and provide context to the whole code itself. It also links to/transcends through all the books as a cross-cutting thematic. Green Growth/Green Economy is really just a re-branded version of sustainable development itself, so makes sense to incorporate it in the background of the doc and then ensure that it features as a cross-cutting theme throughout the code.
- Book 24: Perhaps need to reconsider renaming this to “reducing cambodias carbon footprint”
- Book 26: needs to make reference to the importance of SMEs as a green growth driver.

2. Reference to Code Book and Chapter (if applicable):

3. Comparative Experience (including Cambodian and international examples and experience):

4. Recommendation:

See above and in text in the draft code itself.

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):



# ENVIRONMENTAL CODE OF CAMBODIA

*Second Draft - DRAFT 2.0 -- 1 May 2016*

## BOOK 1 – GENERAL PROVISIONS

### CHAPTER 1 – OBJECTIVE

#### Article 1: Purpose

The purpose of this Environmental Code is to promote the sustainable development and greener growth of Cambodia. It will accomplish this through protecting and enhancing –through the protectionthe-of-the environment and ensuring the sustainable use of natural resources; securing and improving the wellbeing of the country's people and; building sustainable economic growth.

#### Article 2: Objective

The Environmental Code has the following objectives:

- (a) Conserve Cambodia's biodiversity, ecosystems and ecosystem services;
- (b) Protect the environment from harm and damage, and sustainably manage natural resources, in accordance with Article 59 of the Constitution of the Kingdom of Cambodia;
- (c) Preserve and promote national culture, preserve ancient monuments and artifacts, and restore historic sites, in accordance with Article 69 of the Constitution of the Kingdom of Cambodia;
- (d) Ensure the Guarantee the health-wellbeing of the people, in accordance with Article 72 of the Constitution of the Kingdom of Cambodia;
- (e) Safeguard the individual and collective rights of indigenous people as postulated in Sub-decree No 83 (No 83 ANK.BK) and So Chor No 653 (653 So Chor No SR).
- (e)(f) Ensure that environmental protection and sustainable development objectives are fully integrated into national and regional economic planning and into natural resources planning and management;

Commented [BR1]: Per karina watkins

Commented [CJ2]: All citizens? If so, remove people and add all citizens. If not, specify which groups we are talking about here.

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Commented [BR3]: Per comment from Sao Sotheary, CI

- (f)(g) Implement the National Environmental Strategy and Action Plan;
- (g)(h) Promote a co-operative approach to the protection and management of the environment involving government, the community, land-holders, indigenous people and business;
- (h)(i) Assist the implementation of Cambodia's international environmental responsibilities;
- (i)(j) Implement the key principles of environmental law and policy as described in Chapter 2;

Article 3: **Scope of the Code**

This Code regulates environmental protection activities through; applying policies and measures that and regulate natural resources use for protection of the environment; The code also intends to regulate and the rights and obligations of organizations, community, family households and individuals with respect to protection of the environment.

**Commented [CJ4]:** How does the code regulate "resources"? Sentence doesn't make sense...

**Commented [CJ5]:** Again doesn't make sense, how does the code regulate this?

**Applicable entities**

This Code applies to Cambodian State bodies, organizations, family households and individuals; and to Cambodians residing overseas and "foreign organizations" and individuals with operations in the territory of the Kingdom of Cambodia. Where an international treaty of which the Kingdom of Cambodia is a member contains provisions, which are different from the provisions in this Code, the provisions of such international treaty shall prevail.

Article 4: **Definition/Glossary**

In this Code, the following terms shall be construed as follows:

*(This Article shall contain definitions of key terms used in the Code, such as "sustainable development", environmental standards", "best practices", and so on.)*

*(Definitions will be based on existing definitions in Cambodian legislation where applicable, and relevant international usage of key terms.)*

The Definition of Terminology shall be determined in the glossary section of this code.

## CHAPTER 2 – PRINCIPLES

This Environmental Code is premised on, and should be implemented and interpreted in accordance with, the following fundamental principles of environmental law and policy:

Article 5: The Principle of Public Participation

The principle of public participation, that those who may be affected by a decision shall be entitled to provide informed, timely and meaningful input prior to the decision being made. They shall also be able influence in a transparent, inclusive and accountable manner the decision-making process. Participatory decision-making enhances the ability of governments to respond to public concerns and demands, to build consensus and to improve acceptance of and compliance with environmental decisions because citizens feel ownership over these decisions.

Article 6: The Principle of Access to Information

The principle of access to information, that individuals, legal entities and civil society shall have appropriate access to information concerning the environment and development that is held by public authorities, including information on hazardous materials and activities in their communities. Information on natural resource management shall be made widely available and publically accessible in a manner that maximizes the opportunity for public participation in decisions affecting the environment and society.

Article 7: The Principle of Access to Effective Remedies

The principle of access to effective remedies, that people, legal organizations and entities shall have access to appropriate avenues, whether administrative or judicial, and to appropriate and effective remedies, to enable the resolution of environmental disputes. Effective and efficient procedures and remedies should exist to enforce procedural rights and to punish those responsible for environmental harm.

Article 8: The Polluter Pays Principle

The polluter pays principle, that all persons, including natural persons, private legal entities and public legal entities who have caused or will cause environmental pollution – such as pollution by noise, vibration, smell, smoke, draining of liquid waste or emission of all kinds of waste or causing damage to the

environment, health, economy or society or culture – shall bear the cost for repairing the damage and preventing, avoiding and mitigating the damage.

Article 9: The Precautionary Principle

The precautionary principle, that in situations where the environment may be faced with threats of serious or irreversible damage, the lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

**Commented [MB6]:** Amended to correct the definition of the precautionary principle

Article 10: The Prevention Principle

The prevention principle, that negative impacts to the environment should be stopped before they occur. In applying this principle, action should be taken at an early stage to reduce or prevent environmental damage rather than wait for potentially irreversible effects to occur. The prevention principle is based on the idea that it is better to prevent harm than employ measures to restore the environment after harm has occurred.

Article 10: The Principle of Intergenerational Equity

The principle of intergenerational equity, that the right to development, including decisions affecting natural resources and ecosystem services, must be fulfilled so as to equitably meet the developmental, social and environmental needs of both present and future generations.

Article 11: The Principle of Environmental Liability

Liability to compensate for environmental harm applies to environmental damage and imminent threat of damage resulting from developmental activities, where it is possible to establish a causal link between the harm and the activity in question. Liability should cover the cost of ecosystem or resource restoration or of replacing the damaged resources, the cost of assessing the damage, and the interim losses pending restoration or replacement. Liability includes personal injury or environmental harm to public natural resources. Liability can be strict-liability without the need for proof of fault and can be joint or several.

Article 12: The Principle of Evidence-Based Decision-Making

Environmental policy and natural resource decision-making should be open and evidence-based, utilizing the best available information. Information can be scientific and technical and can also be gathered from community and indigenous knowledge.

Article 13: Principle of Gender Equality for Natural Resources Decisions

The involvement of women is to be promoted in environmental decision-making at all levels. Impact assessments for development projects and environmentally relevant policies will include mechanisms to effectively assess the impacts on women. Gender concerns and perspectives will be integrated into policies and programs for sustainable development and into the implementation of this Code.

xxx

Commented [BR7]: Note comment from Raphaele Deau to insert User Pays and FPIC as Principles.

### CHAPTER 3 – GENERAL DUTY TO AVOID ENVIRONMENTAL HARM

Article #:

A person must not carry out any activity that causes, or is likely to cause, environmental harm, ~~unless the person takes all reasonable and practicable measures to prevent or minimize the harm~~ (the general environmental duty).

### CHAPTER 4 – INTERNATIONAL ENVIRONMENTAL AGREEMENTS

- *This Chapter will explain how the Environmental Code implements and is based upon existing international and regional agreements.*
- *It will also address future agreements and treaties and how these shall be integrated into the environmental responsibilities of the relevant Ministries.*

### BOOK 2 – ORGANIZATION OF JURISDICTIONAL INSTITUTIONS/JURISDICTIONAL ISSUES

- *This Book will establish the objective of inter-ministerial cooperation and the requirement for consultation and discussion between relevant line Ministries in order to achieve the objectives of the Code. Jurisdictional organization will examine the roles, duties and means of collaboration for the following ~~institution~~ Ministries:*



- *Ministry of Environment*
- *Ministry of Agriculture, Forests and Fisheries*
- *Ministry of Mines and Energy*
- *Ministry of Water Resources and Meteorology*
- *Ministry of Land Management, Urban Planning and Construction*
- *Ministry of Economics and Finance*
- *Ministry of Culture*
- *Cambodian Development Council for the Development of Cambodia*

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**Chapter # - Relevant environmental interactions between the Ministry of Environment and the Ministry of Agriculture, Forestry and Fisheries**

**Chapter # - Relevant environmental interactions between the Ministry of Environment and the Ministry of Mines and Energy**

**Chapter # - Relevant environmental interactions between the Ministry of Environment and the Ministry of Water Resources and Meteorology**

**Chapter # - Relevant environmental interactions between the Ministry of Environment and the Ministry of Land Management, Urban Planning and Construction**

**Chapter # - Confirming National Council for Sustainable Development (NCSD) role's and responsibilities**

**Chapter # - Confirming National Program for Sub-National Democratic Development (NCDD) role's and responsibilities**

**Chapter # - Role of authorities such as Apsara Authority, Preah Vihear Authority, Tonle Sap Authority and Cambodian National Mekong Committee**

**Chapter # - Establish mechanism to promote interdepartmental Committee**

**Chapter # - Establish a National Ecosystem Mapping and Planning Committee**

## **BOOK 3 – PUBLIC PARTICIPATION AND ACCESS TO ENVIRONMENTAL INFORMATION**

Commented [BR8]: Consider two separate books. One on pp; one on access to info per Group 7, 6 April workshop

- *This Book will clarify and detail the requirements for public participation and access to environmental information. The aim of this Book is to provide a consistent approach across all ministries and pertaining to the various decisions made under the Environmental Code.*

## **Chapter # - Public consultation a fundamental requirement for environmental decisions**

### **ARTICLE #**

The main objective of public participation is to ensure that project-affected persons and relevant stakeholders:

- are well informed about the project,
- have the opportunity to be involved in the discussion and decision-making process related to the project, and
- have the opportunity to participate in the project monitoring.

Project Proponents that are required to conduct an EIA shall include public involvement and consultation from local administrations, civil society, community representatives, the project-affected persons and other relevant stakeholders in the EIA process during project planning in order to:

- identify areas of significance of environment, economy, society and culture
- collect opinions of stakeholders and integrate such opinions into the decision making process
- review the project proposal and explain impacts on environment, economy, society, and culture.
- consider a wider range of alternatives and mitigation measures.

The public participation process in the stage of studying, consulting and reviewing the EIA report and project monitoring shall be determined by Prakas of MoE.

### **ARTICLE #.**

The EIA Report shall:

- record the public participation and the Project Proponent shall take this into account during the planning and conduct of EIA.
- focus on the issues raised by women and those most vulnerable potentially impacted by the proposed project.
- include the details of the project impacts on the public and the acceptance or rejection of the requests of the public.
- provide clear reasons why those concerns are rejected.

**Commented [BR9]:** The following articles in this Book are from the draft EIA Law and will be modified to broaden their scope beyond EIA, project-specific situations to all situations where public participation and access to information are relevant, consistent with the overall framework of the Code.

**ARTICLE #.**

MoE shall ensure that IEE and EIA reports and related documents, including the EIA Approval Letter and Certificate and EMP, shall be made publically available, and that stakeholders and project-affected communities have access to clear and sufficient information.

At a minimum the Project Proponent shall make available on publically accessible website copies of the IEE or EIA, any EMP for the project, maps and plans of the project and all proposed mitigation measures for the project.

The procedures for public participation and access to information shall be determined by a Prakas of MoE.

**Chapter # - Duty to consult with potential affected persons**

**Chapter # - Duty to consider concerns raised by the community**

**Chapter # - Identification of project affected persons and other stakeholders**

**Chapter # - Minimum time allowed for public consultation in natural resources matters**

**Chapter # - Minimum time allowed for public consultation in EIA matters**

**Chapter # - Minimum time allowed for indigenous people to provide comments**

**Chapter # - Free, prior and informed consent for indigenous people in natural resources and environmental impact assessment matters**

**Commented [BR10]:** Communities??? Per Raphaele  
Deau comment

**ARTICLE #.**

The public participation process shall ensure that the consent of the project-affected communities to the proposed mitigation measures is based on the free, prior, and informed consent principle (FPIC).

In the mitigation measures, the Project Proponent shall:

- identify measures to improve the livelihood and to assist project affected persons.
- ensure that project-affected persons are involved in any resettlement planning to minimise the adverse effects of resettlement, to ensure that compensation for lost assets is fair, suitable and acceptable as equivalent to the market price and that the mitigation measures are appropriate and sustainable.

In cases where the project-affected community disagrees with the mitigation measures proposed by the Project Proponent, the development project still continues; however, the Project Proponent shall seek other appropriate mitigation measures or provide resolution of the impacts to the affected community.

The procedure of resettlement and solution of compensation to the affected community shall be determined by Sub-decree.

The formalities and procedures of payment of compensation to the impacted community shall be determined by an Inter-Ministrial Prakas between MoE and the Ministry of Economy and Finance.

**Chapter # - Responding to public submissions**

**Chapter # - Taking into account public submissions**

**Chapter # - Publication of submissions on natural resources matters**

**Chapter # - Commissions of inquiry into EIA or natural resources decisions**

**Chapter # - Special provisions for project and activities with very significant impacts or controversial projects and activities**

**Chapter # - Access to information prior to decision being made**

**Chapter # - Reasonable time for access to information**

**Chapter # - Information to be made available**

**Chapter # - Protection of whistleblower for provision of information**

**Chapter # - Protection of journalists who publish information**

**Chapter # - Environmental monitoring**

**Chapter # - Environmental monitoring systems**

**Chapter # - Planning of environmental monitoring system**

**Chapter # - Environmental monitoring programs**

**Chapter # - Environmental indicators**

**Chapter # - Provincial level environmental status report**

**Chapter # - Environmental impact reports by industries and sectors**

**Chapter # - Public accessibility of all environmental reporting**

**Chapter # - National environment reports**

**Chapter # - Environmental statistics and achieving of environmental data and information**

**Chapter # - Publication and supply of information on environment**

**Chapter # - Publication of information and data on environment**

**Chapter # - Exercise of grassroots rights in protection of environment**

**BOOK 4 – ENVIRONMENTAL IMPACT ASSESSMENT**

**Commented [MB11]:** Additions to this Book from the draft EIA Law and to be further analysed for consistency within the overall Code framework.

- *This Book will establish the EIA process in Cambodia. It will replace the Sub-Decree on EIA 72 ANRK.BK 1999. It will incorporate the details and provisions of the Draft EIA Law.*
- *This Book will cover new projects as well as existing projects and will provide three levels of assessment:*

- *Environmental Impact Assessment;*
- *Initial Environmental Evaluation; and*
- *Environmental Permit.*

- *The aim of this Book on EIA is to require all development projects and activities that will have an impact on the environment or society to undertake some form of environmental assessment. The level of assessment will be determined according to the potential impact on the environment or society.*
- *An EIA Approval Certificate will be issued and any other permit will be issued in accordance with the EIA Approval Certificate.*
- *EIA will be required for all projects or activities likely to have a significant impact on the environment or society.*
- *IEE will be required for those projects or activities likely to have a minor impact on the environment or society.*



- *An Environmental Permit will be required for those projects or activities that do not require an EIA or IEE. These will be required to have permission to ensure that the project is not likely to cause harm or damage to the environment or society.*

#### Chapter # - Purpose of EIA

#### Chapter # - Scope of EIA in Cambodia

#### Chapter # - Objectives of EIA in Cambodia

#### Chapter # - Application to public and private development projects

#### Chapter # - Responsibility of Ministry of Environment in EIA

##### ARTICLE #

Officials of the EIA Unit of the Ministry of Environment have the following authorities:

1. - To inspect and monitor compliance with the laws and regulations in force, guidelines, Environmental Protection Agreement, standards, EMPs and other related environmental requirements. In necessary cases, EIA officials can order the project proponent to provisionally postpone activities or provisionally close the location of the project.
2. - To check documents and electronic data on environmental management and other records on development projects and project operations.
3. - To listen to and make minutes after listening to the answers of workers, employees, representatives of Project Proponents as well as other relevant persons.
4. - To order the workers, employees, managers, legal representatives, and agents of development projects to provide information, written documents, plans as well as minutes of all kinds that are related to the environmental management of a Project Proponent.
5. - To search the project site and seize evidence where a violation of laws or regulations on EIA or EMP is suspected to have been committed.
6. - To meet with Boards of Directors, legal representatives, workers, and employees of development projects at least once per year in order to assess the implementation of this law and other relevant regulations.
7. - To make minutes of searching and seizing of evidence in order to compile the case file of the commission of the offense against this or any other law in order to take measures in accordance with procedures in force.

**Commented [BR12]:** Special features of offshore projects needs to be carefully considered and integrated into the EIA book. Per Kris Energy comment

**Commented [BR13]:** Need to consider duration of EIA validity as compared to duration of project per Kris Energy

**ARTICLE #**

Capital and Provincial Environmental Departments of the MoE shall take part in implementing this law in accordance with the laws and regulations in force as well as the assignment of the MoE.

**Chapter # - Registration of EIA experts**

**Commented [MB14]:** A number of submissions have been raised to request international experts to be allowed to conduct EIA/IEE in Cambodia.

**ARTICLE 21.**

EIA Consultants, which could either be natural persons or legal entities, shall be under the management of the MoE.

EIA Consulting Firms shall have Khmer nationality with the project team leader who is the consultant accredited by the MoE.

All EIA consultants must be registered with MoE before professionally preparing EIA with an EIA consulting firm.

Registration of certificates of accreditation as an EIA Consultant shall be valid for a maximum period of 5 years and may be renewed.

**Chapter # - Levels of assessment will include EIA, IEE or environmental protection agreement**

**ARTICLE #.**

All development projects must properly assess the impacts on the environment, economy, society, health and culture with prior approval of the MoE before being sent to the government for decision.

Issuance of licenses or permission letters to development projects by Approval Ministry-Institution shall be done in accordance with conditions determined in the EIA Approval Letter and Certificate. Licenses, permission letters, or decisions that are in contradiction to the spirit of this provision are considered null and void.

**ARTICLE #.**

This law does not apply to State's development projects or State activities that have been approved by the government or the National Assembly and that are considered to be necessary and emergency projects relating to national security, territorial integrity, national sovereignty, or disaster management.

#### **ARTICLE #**

The MoE shall conduct screening to determine the type of development projects, to require the project proponent to prepare the following documents:

1. an IEE with an attachment of Environmental Protection Agreement;
2. an EIA with an attachment of Environmental Protection Agreement.
3. an Environmental Protection Agreement (EPA)

The projects that are required to prepare an EPA shall attach with it technical principles such as Environmental Protection Plan (EPP) in accordance with the requirements of the MoE,

#### **ARTICLE #**

The MoE can determine additional screening of the type of project based on the scale of environmental and social impacts that shall be determined by the MoE.

#### **ARTICLE #**

In cases where there is any transfer or changes to the Project Proponent by any reasons, then the IEE and/or EIA Approval Letter and Certificate as well as contract and all conditions provided for in this paragraph shall be automatically transferred to the new Project Proponent. The Contract of Transfer or the changes of the Project Proponent shall not be valid for implementation unless the transfer or the changes are done after MoE has received notification about the changes.

#### **ARTICLE 16.**

(2) IEE report shall be required for:

1. Projects listed in sub-decree.

(3)2. Projects that have prepared Environmental Protection Agreement and decided by MoE that they do IEE.

(4) When the proposed project is required to do an IEE, the Project Proponent shall cooperate with consulting firms in order to prepare the Terms of Reference (ToR) in accordance with the provisions and guidelines of MoE and submit to EIA Unit for final approval.

Project Proponent and consulting firms shall prepare IEE report based on the approved ToR.

#### **ARTICLE #.**

An Environmental Impact Assessment report shall be required for:

- 1- Projects listed in Annexure 1 or;

2- Projects that have received an IEE and the result of the study demonstrate serious impacts on environment and society and the MoE requires the project to conduct an EIA.

When the proposed project is required to undertake an EIA report, the Project Proponent shall collaborate with consulting firms to draft the Terms of Reference in accordance with any provisions and guidelines of MoE and submit to EIA Unit for final approval.

Project Proponent and consulting firms shall prepare EIA report based on the approved ToR.

#### **ARTICLE #.**

An Environmental Protection Agreement shall be entered into by all projects that are listed in sub-decree or projects with little negative impacts on environment and society.

When the proposed project is required to conduct an EPA, the project proponent shall enter into to the EPA by attaching with it the technical principles such as Environmental Protection Plan and relevant documents and submit to EIA Unit for final approval.

The form of EPA and EPP shall be determined by MoE.

### **Chapter # - Establishment of EIA Review Committee**

#### **ARTICLE #.**

All development projects that are required to perform an EIA are required to have technical comments from the Expert Review Committee.

The composition of the Expert Review Committee includes officials from MoE and relevant ministries and institutions, and independent experts with qualifications and appropriate experience in reviewing EIA reports. Members of an Expert Review Committee shall be selected on a project-by-project basis by MoE based on the technical aspects of the EIA report.

The organization and functioning of the Expert Review Committee shall be determined by Prakas of MoE.

The members of the Expert Review Committee shall be reimbursed for their services based on an agreement between MoE, each member, and Project Proponent.

## **Chapter # - Role of EIA Review Committee**

### **Chapter # - Timeframes for EIA and IEE procedure**

#### **ARTICLE #**

The MoE may only make a determination in accordance with this procedure after the IEE or EIA has been on public exhibition for at least the time period specified in the Code.

For the Environment Protection Agreement the minimum time period for public exhibition and comment is a 3 weeks.

For the IEE Report the minimum time period for public exhibition and comment is a 6 weeks.

For the EIA Report the minimum time period for public exhibition and comment is a 8 weeks.

#### **ARTICLE #.**

The MoE has a period of 30 (thirty) working days to review, comment, approve, reject, or require adjustment or correction to Environmental Protection Agreement and Environmental Protection Plan. The period is counted from the date of the submission of Environmental Protection Agreement, Environmental Protection Plan, and relevant documents.

#### **ARTICLE #.**

MoE shall review and comment on the IEE report within sixty (60) working days counting from the date of receiving the report. The period of sixty (60) days will expire when the Ministry of Environment has provided the comments regardless of whether the comment is in the form of rejection, approval, or an order to make modification or improvement on the reviewed report.

The period of sixty (60) days of working days for the review and comment shall always restart when MoE receives an application asking for review as well as the final EIA report which the Project Proponent has corrected in accordance with the order or instruction that MoE has provided previously.

The Project Proponent shall be liable for any damages caused by their own mistakes for the slowness or failing to make correction in accordance with the above order or instruction.



#### **ARTICLE 24.**

MoE shall review and comment on the EIA report within ninety (90) working days counting from the date of receiving the report. The period of the ninety (90) days will expire when the Ministry of Environment has provided the comments regardless of whether the comments are in the form of rejection, approval, or an order to make modification or improvement on the reviewed report.

The period of ninety (90) days of working days for the review and comment shall always restart when MoE receives an application asking for review as well as the final EIA report which the Project Proponent has corrected in accordance with the order or instruction that MoE has provided previously.

The Project Proponent shall be liable for any damages caused by their own mistakes for the slowness or fail to make correction in accordance with the above order or instruction

### **Chapter # - Preparation of EIA report**

#### **Chapter # - Preparation of environmental management plan**

#### **ARTICLE #.**

An Environmental Management Plan (EMP) shall be prepared by the Project Proponent.

The EMP shall include the protection, mitigation, monitoring and management requirements that were identified in the IEE and EIA reports.

The EMP shall be regularly updated to take into account any amendments in Environmental Standards, or changes in sector performance practices or other changing circumstances of the Project.

#### **ARTICLE #.**

All development projects and project operators shall establish and maintain an Environmental Management System (EMS) that shall ensure the self-monitoring procedures and methods as stipulated in their EMP.

In cases where the environmental impacts are greater than those estimated in the EIA report or EMP, then the MoE shall require immediate action to remedy the impact or an adjustment of the EMP.

The adjusted EMP and monitoring program shall be approved by MoE. A time limit to make adjustments or improvements shall be agreed upon in writing by all parties.

The Project Proponent shall prepare the environmental monitoring report every three (3) months and submit to EIA Unit for review and evaluation. The EIA Unit has the right to make site inspections and verify the monitoring data of the Project Proponent.

#### **ARTICLE #.**

Project-affected persons and all stakeholders shall have the right to report issues and grievances of environmental and social concerns to the Project Proponent and to petition competent authorities. Such issues will be addressed by a sub-national commission and it can continue to an inter-ministerial commission established as part of the EMP.

Relevant competent authorities shall respond to the grievance or petition and deal with concerned environmental and social issues within an appropriate time limit and inform the concerned persons accordingly.

The formalities and procedures of the grievance or petition shall be determined by Prakas of MoE.

## **Chapter # - Submission of EIA report**

### **Chapter # - Consideration and assessment of EIA report**

#### **ARTICLE 25.**

During the period for review and comment the MoE shall review and comment on the IEE or EIA report after:

- Listening to and considering the official presentation and defending of the report which is conducted by the Project Proponent and consulting firm;
- Considering the comments of direct or indirect project-affected people, opinion of the public and civil society;
- Considering the comments from relevant ministries or institutions, and
- Considering the proposed comments of the Expert Review Committee;

MoE is responsible for ensuring a fair public participation process by inviting representatives of relevant ministries or institutions, territorial authority, civil society, and project-affected persons to provide comments on the proposed project.

## **Chapter # - Revision of EIA report**

#### **ARTICLE #**

The provision of comments in the form of approval or rejection, or the ordering to make adjustments or corrections on IEE or EIA shall be done by taking into consideration the advantages and disadvantages of environment, economy, society, and culture by examining the scope of the project, geographical location, potential impact, other special features of each project, and effectiveness of the implementation of management measures, and/or the protection of environmental quality and social impact mitigation in accordance with the level of the development of technology and science.

In case where MoE approves any IEE or EIA report, MoE shall issue an EIA Approval Letter and Certificate for the project by attaching with it the Environmental Protection Agreement.

In case where the MoE rejects an IEE or EIA report, the MoE shall provide the reasons for the decision.

In case where the MoE provide comments of ordering to make adjustments or corrections of the IEE or EIA report, the MoE shall provide reasons and clearly demonstrate the points that need to be adjusted or corrected.

#### **ARTICLE #.**

Before the decision to grant an EIA Approval Letter and Certificate to development projects which are located in the areas where the indigenous people live, MoE, members of the Expert Review Committee and relevant stakeholders involved in the decision making must take strong heed and special consideration about the project in order to avoid negative impact on the culture, custom, tradition, livelihood, and the property of the indigenous people.

### **Chapter # - Approval or rejection of EIA report**

#### **ARTICLE #.**

MoE shall send the decision on the rejection or the order to make adjustment and correction in writing as well as the reasons or condition and/or the points that need to be adjusted or corrected to the Project Proponent and consulting firm in order to prepare the EIA report.

MoE shall send the EIA Approval Letter and Certificate as well as the Environmental Protection Agreement to the Project Proponent and relevant competent ministries and institutions such as Approval Ministries or Institutions, Council for Development of Cambodia, Capital and Provincial Departments of Environment and relevant Commune and Sangkat Councils.

### **Chapter # - Granting of EIA approval letter**

### **Chapter # - Prohibition of activities without EIA approval letter**

#### **ARTICLE #.**

Project Proponents shall not commence any construction activities or Project operations until after the EIA Approval Letter and Certificate has been issued for the Project. The Ministry of the Environment shall have the power to postpone all

construction activities or Project operations that do not have an EIA Approval Letter and Certificate.

All Concession Agreements that are granted by the Royal Government of Cambodia at both national level and Capital and Provincial level shall have an official EIA Approval Letter and Certificate with an attachment of Environmental Protection Agreement (EPA).

#### ARTICLE #.

The EIA Approval Letter and Certificate shall be valid for the life cycle of the project. In case where the MoE finds that there are changes to Master Plan or that the IEE or EIA reports are not adequate or effective for the implementation of impact mitigation measures, the MoE has the rights to require the project proponent to re-prepare an EIA report and/or to update the existing EIA report in order to receive a new EIA Approval Letter and Certificate in accordance with conditions determined by MoE.

### Chapter # - Existing projects

#### ARTICLE 31.

MoE in consultation with relevant Ministries or institutions shall prepare Guidelines based on project screening for the types of projects that have not conducted the EIA to require the Project Proponent to prepare an IEE or EIA report for existing projects or projects in operation.

The Guidelines shall be published within three (3) months after the MoE has made decision on these guidelines.

Project Proponents shall cooperate with consulting firms to complete their IEE or EIA reports and submit these documents to MoE for review and comments in a period determined by MoE.

MoE shall review, comment, and make a decision on these IEE or EIA reports in accordance with the provisions of the Code.

### Chapter # - Matters for consideration

#### ARTICLE #.

**Commented [MB15]:** Projects that are planned or existing that have completed the EIA process and Government approval processes shall not require further assessment. All existing projects will be required to comply with the Code and be subject to the appropriate penalties if the project causes harm to the environment or society.

**Commented [BR16]:** Potential clarification for existing projects with existing EIAs and operational licenses per Kris Energy.

**Commented [CJ17]:** Do you plan to incorporate ELCs into this Code? Maybe this could be a good area for it.

## **Chapter # - Cumulative impact assessment**

### **ARTICLE #.**

All EIAs must analyze and evaluate the cumulative impact caused by existing and future projects in the surroundings of the Project, which may trigger significant environmental or social impacts.

In the cumulative impacts assessment report, the Project Proponent must evaluate the capacity of physical, biological and social economic resources to accommodate additional effects based on their own time and space parameters and project activities surrounding the project sites.

Project Proponents must consider alternative mitigation measures to offset or avoid potential significant cumulative impacts.

## **Chapter # - Health impact assessment**

### **ARTICLE #.**

All IEEs and EIAs must include a Health Impact Assessment (HIA) that includes:

- baseline data on health in the project areas and of the affected populations;
- description of potential project impacts due to construction, population influx and changes to the environment;
- the mitigation measures to offset, reduce or even eliminate negative impacts of the project and measures that will be introduced by the Project Proponent to improve health of the local communities; and
- the issues related to monitoring health conditions and managing remaining impacts in the short and long-term for the project.

### **ARTICLE #.**

In assessing the health impacts, Project Proponents must:

- propose a safety and health management plan as part of the HIA for the working environment, analyzing relevant risks and specific classes of hazards in the proposed project areas, including physical, chemical, biological, and radiological hazards.
- identify and assess the risks to, and potential impacts on, the safety and health of affected communities during the design, construction, operation, and decommissioning of the project, and establish preventive measures and management plans for the impacts during these stages.

## **Chapter # - Environmental management and monitoring**



**ARTICLE #.**

The EIA Unit and Provincial/Capital Department of Environment are the monitoring authorities on Environmental Management Plans and following up on Environmental Management Plan implementation of Project Proponents by cooperation with the Ministry of Environment, relevant institutions, local authorities and stakeholders.

**Chapter # - Provision of information**

**Chapter # - Reporting requirements**

**ARTICLE #.**

Each development project shall prepare an Environmental Monitoring Report of the project as follows:

- A Quarterly Report (every three months) covering all environmental management and monitoring results shall be submitted to the EIA Unit;
- Within three (3) months after the financial year the Project Proponent shall prepare and submit an annual environmental report, including the environmental auditor's opinions;
- Provide copies of the Project's annual environmental report to the public on request without charge;
- Provide an electronic copy of the quarterly reports and annual environmental report that will be placed on the publicly accessible web-site of MoE and by the Proponent on a publicly accessible web-site.

**ARTICLE #.**

Each development project with an EIA Approval Letter and Certificate shall submit a quarterly and semi-annual report to the EIA Unit concerning its environmental management and monitoring;

Project Proponents have the obligation to promptly report a critical environmental problem to relevant and competent authorities and to the public to avoid negative impacts to the environment or society;

Project Proponents shall provide information related to environmental management of the project to MoE in accordance with the request of MoE.

**Chapter # - Fees and charges**

**ARTICLE #.**

The Project Proponent is liable for all expenses incurred in preparation of the Initial Environmental Examination (IEE) report or the Environmental Impact Assessment (EIA) report and for the expenses for project screening, for project scoping, for the public participation process, for the review and comment on the IEE or EIA report by MoE, for reviewing Environmental Monitoring Report, and for the work of the Expert Review Committee.

**ARTICLE #.**

The Project Proponent is liable for the expenses of the preparation and implementation of the Environmental Management and Monitoring Plan (EMP) and costs to cover implementation and monitoring of measures on reduction of the impacts on environment and society as delineated in the EMP and SDP.

The Project Proponent shall have a deposit [reserved] budget or insurance budget for the management of environmental and social risks which shall be determined by the MoE.

**ARTICLE #.**

A detailed budget of estimated costs for environmental impact mitigation measures that must be included in the EMP shall be borne by the Project Proponent.

The cost of making documents publically available, including web-site access, as stipulated in Article 40 of this law shall be borne by the Project Proponent.

All costs to adjust or improve the mitigation measures and project monitoring program as stipulated in Article 43 of this law shall be borne by the Project Proponents.

All expenses for dispute resolution in both inside and outside of the court system as stipulated in Article 65 of this law are the responsibility of the Project Proponent.

Service fees and other charges shall be determined by an Inter-ministerial Prakas between the MoE and the Ministry of Economy and Finance.

**ARTICLE #.**

When the Project Proponents submit application for review and comment on IEE or EIA report, MoE has the duty to collect fees and service charges as provided in an Inter-Ministerial Prakas between MoE and Ministry of Economy and Finance on Service Charges for reviewing EIA report.

**ARTICLE #.**

The Project Proponent shall make payment of fees and service charges for reviewing Environmental Monitoring Report to MoE to enable MoE to carry out its duties to review monitoring reports, respond to requests for investigation of environmental complaints, and to carry out routine compliance monitoring during both construction and operation phases of the project.

**ARTICLE #.**

An Environmental and Social Fund shall be created by the Ministry of Environment to provide finance for the restoration of environment, conservation of biodiversity and social development in and around the area where the project is located.

**ARTICLE #.**

The Project Proponent shall make payment of Environmental Endowment Fund based on the agreement between MoE and Project Proponent, on an annual basis until the end of business, based on the type and scale of development project.

**BOOK 5 – MAKING OF NATIONAL, SUB-NATREGIONAL AND LOCAL ENVIRONMENTAL AND NATURAL RESOURCES PLANS**

- *This Book will set out the procedures for the adoption of National, Sub-natRegional and Local Environmental and Natural Resources Plans. These Plans will be prepared for environmental and natural resources management, integrating food and water security issues and relevant materials exploitations certifications.*
- *This Book will establish a One Map process to require a single national consolidated environmental geographic information database, with open access and mandatory data sharing between ministries and the general public. This will be used to develop the National Environmental and Natural Resources Plans.*
- *It will detail the procedures for the creation of a national land and natural resources plan under which regional and local plans will be made and refer to Book 3 Public Participation and Access to Environmental Informaiton. The national plans will provide the clear policy and strategic direction. sub-national plans will provide for the specific measures to implement these national objectives.*

Commented [BR18]: Per Teng Rithiny

Commented [BR19]: Per Andeol Cadin comment

- *One option is to try to adopt a single method for the making and approval of management plans for protection and management (including exploitation) of heritages areas, marine and terrestrial protected areas and management plans for threatened and endangered species.*

**Chapter # - Establishment of the national One Map process; components of the One Map; roles of government and civil society in One Map process**

**Chapter # - Creation of a National Environmental and Natural Resource Management Plan (NEP)**

**Chapter # - Appointment of a commission to prepare the NEP**

**Chapter # - Draft NEP to be prepared with public participation**

**Chapter # - Approval of NEP**

**Chapter # - Preparation and approval of subnatregional and local NEP**

**Chapter # - Establishment of a National Land and Resources Geographic Information Database**

**Chapter # - Database to be publically available**

**Chapter # - Database to be used to make national, sub-natregional and local plans**

**BOOK 6 – URBAN LAND USE PLANNING AND  
MANAGEMENT**

- *This Book will examine land planning for urban areas. It will establish the creation of zoning plans and land classification for urban areas. It will also provide for the approvals process for developments in urban areas, in accordance with appropriate zonings. This may require the review of the Law on Land Management, Urban Planning and Constructions 1994.*
- *Urban areas and the development of towns and cities create significant burdens on the environment and the community. It is suggested that this be dealt with as a separate Book to focus on promoting sustainable urban development.*

**Commented [BR20]:** Potential combine with Book 11 per 6 April workshop group 1

- *The Book will establish the procedures for classifying land as urban land and the zone of urban land as housing construction zone, commercial zone and other relevant zones. It will provide the guidance for the sustainable development of cities in accordance with best practice planning principles. This will use the One Map process outlined in Book 5.*
- *This Book will also provide the minimum requirements for the management of urban land, including provisions for plans covering water, energy, storm water management, traffic, noise and construction.*
- *The roles of ~~different local~~ authorities in land use planning and management will be addressed, referencing Book 2.*
- *The Book will address the specific requirements for public participation, referencing Book 3.*
- *This Book will address social housing.*

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**Chapter # - Establishment of transparent zoning process at city and local level, including periodic timing, scope and stakeholders to be involved and how**

**Chapter # - Classification of urban land**

**Chapter # - Zoning of urban land**

**Chapter # - Minimum standards of urban zoning plans**

**Include specifications for delineation and co-existence of industrial, commercial and residential zones**

**Chapter # Buffer zones and prevention of encroachment of non-compatible uses**

Commented [BR21]: Per comment of M. Ramasamy

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**Chapter # - Urban infrastructure requirements**

**Chapter # - Public transportation, bicycle access, recycling, waste management, maintenance of urban green spaces, etc.**

**Including clarity on roles and responsibilities of different levels of authorities**

Commented [BR22]: Comment of R. Deau

**Chapter # - Special building requirements (example: open space set asides, parking space requirements, energy efficiency standards)**

**Addressing minimum parking place allocations, open space set aside requirements for urban developments, traffic flow management issues, public transportation, etc.**

Commented [BR23]: Per Raphaele Deau comment



**Chapter # - Other private sector provisions**

**Chapter # - Motor vehicle exhaust standards**

**Chapter # - Potential new tenure systems for social housing projects**

## **BOOK 7 – NATURAL RESOURCES PLANNING AND MANAGEMENT**

- *This Book will provide for a planning framework to set sustainable use limits and protections for Cambodia's commercial and non-commercial natural resources.*
- *The Book will also relate to Book 9 Strategic Impact Assessment that may be required prior to the adoption of plans and policies.*
- *This Book will review the role and functions of Economic Land Concessions and the implementation of projects using ELC.*
- *It will include provisions to require environmental protection considerations in the commercial and subsistence exploitation of natural resources and in any activities that may impact natural resources. This will include environmental controls on agricultural practices, including fertilizer, pesticide and herbicide use.*

**Chapter # - Preparation of management plans in accordance with national, regional or local environmental and natural resource management plan**

### **POTENTIAL INSERT -full contents of Book 13 Establishment of National Conservation Corridors????**

**~~Chapter # – Establishment of forestry reserves~~**

**Chapter # - Establishment of marine reserves**

**Chapter # - Establishment of freshwater fisheries reserves**

**Chapter # - Establishment of freshwater production zones**

**Chapter # - Conservation and rational utilization of natural resources**

**Chapter # - Procedures for granting, monitoring and terminating ELCs**

**Chapter # - Management of ELCs, including management plans, transparency, and relation to sustainable timber production and biodiversity restoration**

**BOOK 8 – BIODIVERSITY CONSERVATION AND MANAGEMENT**

- *This Book will examine the protection, conservation and management of biodiversity, and include different chapters on forests, wetlands, marine ecosystems, endangered species, invasive species and the management of protection areas.*
- *Specific Chapters could address key priority areas including Tonle Sap Lake and the Mekong River.*
- *A submission has been received from some combined NGOs on the policy of Wildlife (or Wild Animal Farming) in Cambodia. The discussion paper raises a number of significant issues and concerns about the possibility of introducing the farming of wild animals in Cambodia. Consideration is being given to the matters raised by the submission.*

**Chapter # - Protection of endangered species**

**Chapter # - Protection of wildlife animals**

**Commented [BR24]:** Relationship between these two chapters to be clarified, or chapter combined

**Chapter # - Protection of plants and plant communities**

**Chapter # - Protection of native plant and wildlife habitat and important ecological communities (including “critical habitat” for endangered plant and animal species)**

**Chapter # - Bioregional planning for biodiversity conservation**

**Chapter # - Prohibition of export or import of specified flora and fauna and products derived from plants and wildlife**

**Chapter # - Prohibition of trade trafficking, possession or sale of endangered species**

**Chapter # - Enforcement of CITES and other international agreement obligations**

**Chapter # - Scientific and educational uses**

**Chapter # - Establishing/classifying protected areas for biodiversity conservation**

**Chapter # - Restoration of damaged ecosystems**

**Chapter # - Endangered species protection and management plans  
(includes identifying key threatening processes and  
developing threat abatement plans and recovery plans)**

**Chapter # - Prohibition on damaging or destroying native vegetation and  
forest protected areas**

**Chapter # - Prohibition of hunting in certain areas**

**Chapter # - Prohibited activities in protected areas**

**Chapter # - Management of invasive species**

**Chapter # - Definition of genetically modified organisms**

**Chapter # - Prohibition of use of genetically modified organisms, including  
seeds**

**Chapter # - Management and approvals for use of genetically modified  
organisms**

## **BOOK 9 – STRATEGIC ENVIRONMENTAL ASSESSMENT**

*Suggested that this Books potentially reposition to follow the Book on EIA*  
*book*

- *This Book will outline the use of Strategic Environmental Assessment (SEA) for the assessment and development of plans and policies in Cambodia. The use of SEA can be for all types of policies and plans, including decisions that may have impacts on natural resources management.*
- *This Book will also provide the link between National Environmental and Natural Resources Plans, SEA and also EIA for specific projects.*

**Chapter # - SEA required for policies and plans**

ARTICLE #

**Commented [MB25]:** SEA is more a function of assessment for policies, plans and programs as compared to EIA, which is the assessment of projects. Although related there are separate tools for planning and assessment. SEA should come before EIA as a planning instrument.

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**Commented [BR26]:** Per R. Deau comment

The Ministry of the Environment is responsible for reviewing and assessing ~~sectoral~~ Strategic Environmental Assessment (SEA) of policies, programmes and strategic plans of the Royal Government as well as reviewing the comments received from relevant agencies and the public.

#### Chapter # - Zoning system

#### Chapter # - Formulation of Strategic Environmental Assessment (SEA) reports

#### Chapter # - Content of SEA reports

#### Chapter # - Appraisal of SEA reports

### BOOK 10 – ENVIRONMENTAL QUALITY STANDARDS AND ENVIRONMENTAL PROTECTION GUIDELINES

- *This Book will establish the procedures for the setting of National and Local Environmental Quality Standards (EQS) and Guidelines. It will provide details on the type and quantity of the emissions. It will also adopt existing standards and levels until it is possible to revise or amend the Environmental Standards and Guidelines.*
- *This Book will require that all relevant Ministries will be required to follow the Environmental Quality Standards and Guidelines.*
- *The Environmental Quality Standards and Guidelines in this Book will also extend to food safety principles and objectives.*

**Commented [MB27]:** There are already standards in Cambodia. This Book is to update the EQS and to provide for environmental protection guidelines. The establishment and setting of EQS and specific protection guidelines should be separate from the Books dealing with the application of the EQS. EQS will also be applied in the Book on EIA as well.

**Commented [MB28]:** From the Group 2 at the Workshop, the EQS should be referred to the international experts to help identify EQS that can be applied to Cambodia.

#### Chapter # - Setting of environmental Quality Standards (EQS)

#### Chapter # - Setting of ambient standards

#### Chapter # - Setting of discharge standards

#### Chapter # - Revision of EQS

#### Chapter # - Application of EQS in Cambodia

#### Chapter # - Provisional adoption of international standards

#### Chapter # - Definition of best available techniques

## Chapter # - Definition of good practices

### BOOK 11 – SUSTAINABLE CITIES

- *This Book will require that land use planning and management for urban areas be conducted to promote sustainable and resilient cities.*
- *It will ensure that planning takes into account long-term impacts on urban areas, including climate change, energy, water, population and economic development.*
- *It will also examine the management of trees along public roads and the development of people and nature friendly cities, including the promotion of renewable energy in urban areas.*
- *Establishment of special institution to promote capacity building and technical education on sustainable cities*

**Commented [BR29]:** Potential combine with Book 6 per 6 April workshop group 1

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**Commented [BR30]:** Per Andeol Cadin comment

**Commented [CJ31]:** Think about also incorporating some language around green infrastructure..

## Chapter # - Development of sustainable urban centers

## Chapter # - Making a sustainable city plan

## Chapter # - Establishment of recycling plans for urban areas

## Chapter # - Promoting energy efficiency

## Chapter # - Setting of energy efficiency standards

## Chapter # - Setting of standards for green buildings

## Chapter # - Interim adoption of international standards

## Chapter # - Creation of sustainable and better housing

### BOOK 12 – COASTAL ZONE PLANNING AND MANAGEMENT

- *This Book will provide a planning framework for the use and management of the coastal zone.*
- *It will provide details for the management of tourism and economic development in the coastal zone. It will adopt strong interim controls and safeguards to protect the coastal zone from poor development.*

**Commented [MB32]:** It has been suggested that this Book should include Coastal and Marine. This is under consideration although related the protection and management of the marine area has some different characteristics from the coastal zone.

**Commented [BR33]:** Group 3, April 6 workshop



- *This will include existing areas receiving special treatment and a system for designating new areas for development, including existing and proposed new institutional management.*

**Chapter # - Development of a draft Coastal Zone Management Plan (CZMP)**

**Chapter # - Overall objectives of coastal zone conservation and management**

Commented [BR34]: Per R. Deau comment

**Chapter # - Special provisions for mangrove conservation**

**Chapter # - Contents of a draft CZMP**

**Chapter # - Adoption of a CZMP**

**Chapter # - Implementation of a CZMP**

**Chapter # - Coastal zone mapping, including mapping of coral reefs**

**Chapter # - Amendment of the CZMP**

**Chapter # - Roles and responsibilities of Ministries**

**Chapter # - Roles of citizen and communities**

**Chapter # - Requirements for public consultation**

**Chapter # - Promotion of sustainable development in the coastal zone**

**Chapter # - Prohibition of activities in the coastal zone that are not in accordance with the CZMP**

**BOOK 13 – ESTABLISHMENT OF NATIONAL CONSERVATION CORRIDORS**

- *This Book will establish a system of national conservation corridors. These will be areas with specific legal status and protections. This could include:*

- *National parks*
- *Urban parks and tree corridors*

- *Private land with conservation agreements, including eco-resorts, organic agriculture*

Commented [BR35]: Per Andeol Cadin

**Chapter # - Establishment of National Conservation Corridors, including naming, location and boundary/map reference**

**Chapter # - Classification of zones within the National Conservation Corridors**

**Chapter # - Activities prohibited in the National Conservation Corridors**

**Chapter # - Preparation and approval of management plans for the National Conservation Corridors**

**Chapter # - Restoration of damaged habitat or ecosystems in the National Conservation Corridors**

**Chapter # - Procedures for adjustments to the boundaries of the National Conservation Corridors**

## **BOOK 14 – SUSTAINABLE FORESTRY MANAGEMENT**

Commented [MB36]: Changed from timber to forestry as recommended at the April Workshop.

- *As part of the planning framework, this Book will allow for the designation of areas with specific legal status and protection to allow for sustainable timber management.*

**Chapter # - Establishment of a sustainable ~~forestry~~~~timber~~ sector; objectives and limitations of sustainable timber management**

**Chapter # - Prohibition of the cutting, removal, export and use of timber without a permit granted in accordance with the Code**

**Chapter # - Assessment of applications to harvest timber or export of timber**

**Chapter # - Prohibition of removal of timber on Economic Land Concessions without a permit**

**Chapter # - Permit to cut or remove timber only to be granted following environmental assessment of the activity**

**Chapter # - Sustainable harvesting of timber, fuel wood and non-timber forest products in Forest Production Zones; including international certification mechanisms**

Commented [BR37]: Per Andeol Cadin

Chapter # - Sustainable harvesting of timber, fuel wood and non-timber forest products from Community Forests, Community Zones and Indigenous Communal Titled Lands

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**Chapter # - Government and citizen roles in monitoring and oversight of sustainable timber management operations**

**Chapter # - Restoration of damaged habitat or ecosystems**

## **BOOK 15 – SUSTAINABLE FISHERIES MANAGEMENT**

- As part of the planning framework, this Book will allow for the designation of areas with specific legal status and protection to allow for sustainable fisheries management.*
- Consider a relevant certification system*

Commented [BR38]: Per andeol cadin

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**Chapter # - Establishment of a sustainable fisheries industry**

**Chapter # - Provision for capture fisheries and aquaculture and fisheries protection areas**

**Chapter # - Protection of fisheries and aquatic ecosystems**

**Chapter # - Tenure of fisheries and aquaculture operations**

**Chapter # - Identification of aquatic organisms**

**Chapter # - Prohibition on commercial fishing that is not sustainable**

**Chapter # - Assessment of applications for commercial fishing**

**Chapter # - Community fisheries**

**Chapter # - Prohibition of export of fish or aquatic organisms without a permit**

**Chapter # - Permit to export fish or aquatic organisms only to be granted if sustainable**

**Chapter # - Sustainable management of fisheries and fish breeding areas**

**Chapter # - Government and citizen roles in monitoring and oversight of sustainable fisheries management operations**

**Chapter # - Restoration of damaged fisheries habitat or aquatic ecosystems**

**Chapter # - Management of activities that impact on fisheries and aquatic ecosystems**

**BOOK 16 – COMMUNITY MANAGEMENT**

- *The Book would examine options for community use of natural resources, hunting, community fishing and use of land for sustainable community needs.*
- *To include a revision of current CF and CPA procedures*

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**Chapter # - Promotion of Community Forests and Community Protected Areas under a unified management framework**

**Chapter # - Establishment of co-management as a multi-stakeholder conservation tool**

**Chapter # - Mechanisms and elements of co-management**

**Chapter # - Procedures to establishment a co-management zone**

**BOOK 17 – WASTE MANAGEMENT AND POLLUTION CONTROL**

- *The Book will reexamine the provisions of the Sub-Decree on Solid Waste Management 36 ANRK.BK 1999. It will update the relevant provisions about solid waste and hazardous waste management. It will also update and incorporate the provisions dealing with the Sub-Decree on Water Pollution 27 ANRK.BK 1999 and the Control of Air Pollution and Noise Disturbance 42 ANRK 2000.*
- *Fees and charges will be provided in accordance with ~~Book 25~~Book 26.*
- *Reporting and monitoring requirements, including public disclosure, will be dealt with in a Book 29*
- *Procedures for investigation on breaches and offences will be dealt with in Book 30. The aim is that investigations and proceedings for all waste management and pollution offences will be the same as for other offences and breaches of the Environmental Code.*

**Commented [MB39]:** A recommendation has been made to divide Book 17 into 2 Books. The first dealing with Waste and Hazardous Substances Management and the second dealing with Environmental Pollution Control. Once the Code has been reordered this will be adopted.

**Chapter # - Promoting waste avoidance and reduction**

**Chapter # - Encouraging and facilitating recycling (including regulating recycling businesses)**

**Chapter # - Roles and responsibilities of government, private sector and citizens in recycling, waste reduction, and waste management**

Commented [BR40]: Per R. Deau comment

**Chapter # - Labeling of waste**

**Chapter # - Identification, management and clean up of contaminated land**

**Chapter # - Regulation of waste management facilities, including rubbish dumps**

**Chapter # - Standards for classification of waste**

**Chapter # - Management of waste incinerators**

**Chapter # - Solid Waste management and disposal**

**Chapter # - Hazardous waste management**

**Chapter # - Transportation of waste**

**Chapter # - Public drainage system, rain water drainage**

**Chapter # - Sewage treatment system**

**Chapter # - Import and export of waste**

**Chapter # - Application of international conventions on waste**

**Chapter # - Pollution control issues, including air, water, noise, smell, smoke, haze, vibration, light, ozone, radioactivity and contaminated land**

**Chapter # - Vehicular emissions/[Motor Vehicle](#)**

**Chapter # - Transboundary pollution**

**Chapter # - Haze pollution**

**Chapter # - Management of Chemical Substances**

**General Provision**

Commented [MB41]: New Chapters inserted from Draft.

Commented [BR42]: The following text, Articles 1-36, is from a draft law on the management of chemical substances. This text will be carefully reviewed for any possible amendments and overall coherence within the overall framework of the Code.



#### Article 1.

This Law has the following objectives:

1. To promote effective management and safe use of hazardous chemical substances and hazardous chemical products in the Kingdom of Cambodia;
2. To ensure proper registration, classification and labeling of chemical substances and chemical products in order to prevent misuse and to promote safe handling in the work place;
3. To enhance public awareness and access to information on safety and mitigation of risks throughout chemical life cycle, including production, storage, transportation, use and disposal;
4. To set up appropriate institutional coordination mechanism and information system for effective management and control of hazardous substances and hazardous chemical products in all stages of chemical life cycle;
5. To ensure an operational national system to incorporate cleaner production solutions in all manufacturing and service sectors, as well as in households.

(5)

#### Article 2.

This law has the goal of protecting the social infrastructure, human life, animals and environment from risks and hazards caused by misuse and mishandling of hazard chemical substances and hazardous chemical products throughout chemical life cycle;

#### Article 3.

This law covers all hazardous chemical substances or hazardous chemical products and applies to all organizations or individuals that purchase, sell, use, store, release or discard these chemical substances and their chemical derivatives at different stages of their life cycles.

~~eyele.~~

This law does not apply to radioactive substances, pharmaceuticals, cosmetics, food additives, food products and household appliances or toys ~~which~~ that are governed by separate law and regulations.

#### Article 4.

The definitions of the main technical terms related to hazardous chemicals are provided in the annex 1.

## Chapter 2 Institutional Responsibility

#### Article 5

The Ministry of Environment is responsible for administration and implementation of this law in cooperation with relevant ministries and institutions, and in harmonization

**Commented [BR43]:** Need to address periodic review of emission standards M Ramasamy

with existing laws and regulations related to the management of chemicals and chemical wastes in the Kingdom of Cambodia.

#### **Article 6**

The Royal Government of Cambodia shall set up appropriate mechanisms for effective management and control of hazardous chemicals through its life cycle, especially for information sharing, inspection, classification, and hazard communication and risk assessment of registered and new hazardous chemicals circulating in the Kingdom of Cambodia.

#### **Article 7**

The Ministry of Environment shall coordinate implementation of international treaties or conventions relevant to hazardous chemical substances.

#### **Article 8**

No person shall undertake the following activities:

- (a) The introduction or delivery of any misbranded hazardous substance or banned hazardous substance.
- (b) The alteration, destruction, or removal of the whole or any part of the label of any hazardous substance during shipment or sale (whether or not the first sale).
- (c) The receipt of any misbranded hazardous substance or banned hazardous substance and the delivery or proffered delivery thereof for pay or otherwise.

#### **Article 9**

No person can manufacture, use and distribute persistent organic pollutants (POP) totally banned by Stockholm Convention as listed in the annex 2 of this Law. This list shall be updated according to the revised decision of COP under the Stockholm Convention to which the Royal Government of Cambodia is a party.

#### **Article 10**

Any misbranded hazardous substance or banned hazardous substance when introduced into the Kingdom of Cambodia shall be subject to confiscation and seizure, but is not applicable for any substance intended for export to other countries.

#### **Article 11**

No person shall manufacture, possess, handle, store, transport, import, distribute or use a hazardous substance that is not registered under Sub-decree dated October 2009 on “Management of Classification and Labeling of Chemicals”.

#### **Article 12**

No person shall store, import, export or distribute a hazardous chemical that is not packaged in accordance with the regulations and the conditions of registration.

#### **Article 13**

No person shall package or advertise a hazardous chemical in a way that is false, misleading or likely to create an erroneous impression regarding its character, value, quantity, composition, safety or registration.

#### **Article 14**

No person is allowed to use chemical substances such as acid, gasoline, or toxic chemicals that can cause corrosion, burn, oxidation, injury and destruction of human organs implicating health and human life.

### **Chapter 4**

#### **Registration and Information Disclosure**

#### **Article 15**

Organization and individual shall have the duty to apply for official registration of any hazardous chemical substances and hazardous chemical products intended for distribution, sale and use in the Kingdom of Cambodia.

#### **Article 16**

An application for registration shall be submitted to the respective agencies with at least a minimum information on the manufacturing company, name of chemicals, hazard classification, amount, purpose of import or use, safety data sheets, hazard statement, potential risks to human health and address of delivery.

#### **Article 17**

Information on hazardous chemicals shall be reviewed and endorsed by the Ministry of Environment before submission to the respective ministry for approval. The Ministry of Environment in cooperation with respective agencies may conduct additional tests and consultation to verify the correctness of information provided.

#### **Article 18**

The relevant ministries having the mandate to approve registration shall provide information on all hazardous chemical substances and products to the Ministry of Environment for inventory, monitoring, risk assessment and inspection purposes.

#### **Article 19**

Following official registration, organization or individual shall prepare appropriate action plan for prevention, emergency response, mitigation, monitoring and risk management for hazardous chemical substances. He or she shall act in good face to provide accurate information on hazardous chemical substances to the responsible agencies when requested.

### **Chapter 5**

### **Classification and Labeling**

#### **Article 20**

Classification and labeling of hazardous chemical substances shall follow regulations specified by the Sub-decree No 180 dated 20 October 2009 on Management of Classification and Labeling of Chemicals.

#### **Article 21**

Hazard criteria for physical hazards, health hazards and environmental hazards shall be specified by an inter-ministerial task force with members designated from line agencies and universities following the Globally Harmonized System for Classification and Labeling (GHS). Role and functions of this inter-ministerial task force shall be specified by a sub-decree.

#### **Article 22**

Organization or individual involved in packaging, distribution, transportation, and sale of hazardous chemical substances or products shall put correct labeling on hazard substances and chemical products following regulations specified in the Sub-decree No 180 dated 20 October 2009 before distribution, transportation or sale.

#### **Article 23**

Organization or individual shall publish brochures or newsletters on safety data sheet, hazards prevention and mitigation, and health risks for all hazardous substances intended for distribution and sale in the Kingdom of Cambodia.

## **Chapter 6 Transportation**

### **CHAPTER 1 ARTICLE 24**

An organization or individual that transports hazardous chemicals shall abide by the provisions on transportation of hazardous chemical substances or products as prescribed in this Law and other relevant laws.

Transport operators and transport owners shall prepare staff health and safety plans and response plans for substance specific hazardous materials incident response plans in order to: Identify and take necessary measures to minimize potential incidents and remedy consequences if they take place, and  
Identify and notify the nearest local authorities and concerned ministries about the incident if an incident occurs en route – either on road, inland waterway, railway, air or sea transport.

#### **Article 25**

The Ministry of Environment shall coordinate with the Ministry of Public Works and Transport, concerned ministries and competent agencies to formulate additional technical regulations on transportation of hazardous chemical substances or hazardous chemical products.

## **Chapter 7**

### **Use and Disposal**

#### **Article 26**

All Cambodian people have the rights to use hazardous chemicals according to regulations stipulated by this law and shall follow technical specifications, labeled description and safety instructions of any hazardous substance.

#### **Article 27**

Organization or individual that uses hazardous substances for manufacturing or production of goods and products shall be responsible for compensation or rehabilitation of the social infrastructure, human health, animal health and the environment damage caused by chemical hazards and accidents for which they have been deemed responsible.

#### **Article 28**

No person can burn and dispose of any part or whole of chemical substances or chemical wastes into the environment, including water, soil and air without the approval of the Ministry of Environment.

Disposal of any part of hazardous chemical and its package shall follow regulations and guidelines specified by the sub-decree No 36 ANRK.BK dated 27 April 1999 on Solid Waste Management and the Sub-decree No 27 ANRK.BK dated 06 April 1999.

Additional guidelines on disposal of hazardous chemical substances and chemical wastes shall be specified by a Prakas of the Ministry of Environment.

#### **Article 29**

Organization or individual using hazardous chemicals for scientific research shall have the following duty:

- Use of hazardous chemical substances following regulations stipulated by this Law;
- Laboratory shall have sufficient equipments for safe storage and handling of hazardous chemical substances and personal protective equipment for workers;
- Hazardous substances shall have correct labeling according to the regulations specified by the Sub-decree dated October 2009;
- The Laboratory shall have an appropriate filing systems and records of hazardous chemical substances being used;
- Disposal of hazardous substance or chemical wastes shall follow regulations specified under Article 25 of this Law.



- Identifying and minimizing any potential hazards which may be caused by the use and dispose of hazardous substance or chemical wastes through setting up effective mechanisms to minimize risk and mitigate effects of any hazard which may occur.

#### **Article 30**

No person shall use hazardous chemical substances in food products, cosmetics, and toys that can cause direct health hazards to human beings.

### **Chapter 8** **Chemical Industry**

#### **Article 31**

Organization or individual engaged in production of chemical substances shall have technical capacity for environmental and social safeguarding as shown below:

- Workshops, storehouse and technological equipment;
- Safety equipment and devices, equipment and devices for prevention and fighting of fire, explosions, lightning, chemical leakages or dispersal and other chemical incidents;
- Labor protection equipment and devices;
- Environmental protection equipment and devices,
- Waste disposal and treatment systems;
- Prevention and response Plan, including posting visible hazard pictogram and hazard communication;

#### **Article 32**

Organization and individual engaged in production of chemical substances shall have professional staff with qualifications relevant to the scope, type, and scale of the chemical-related activity along with thorough knowledge about technologies and chemical safety plans and measures.

#### **Article 33**

Organization or individual is encouraged to review manufacturing processes that can produce green chemical substances or products involving less green house gases emission, less energy consumption, and minimal hazard and toxicity to the environment and human.

#### **Article 34**

Organization or individual engaged in production of chemical substances or products shall have proper registration of the substances and manufacturing permits issued by relevant responsible ministry or authority.

#### **Article 35**

In case of production of hazardous chemicals or hazardous chemical products, organization or individual shall provide annual report on manufacturing processes, the amount of hazardous ingredients, intended use, point of delivery, waste disposal and treatment systems, and safety plan and measures to the respective ministries and the Ministry of Environment. The format of reports shall be developed by responsible Ministry in cooperation with the Ministry of Environment.

## **Chapter 9 Prevention and Response**

### **Article 36**

Organization or individual shall have the duty to:

- Strictly follow technical specification, labeling and safety instruction defined by each hazardous substance;
- Have prevention and emergency response measures (first aid, evacuation plan, fire elimination equipment) including personal protective equipment for workers at the work place;
- Organize training on safe use and safe handling of hazardous substances, including a safe-drill toward the occurrence of hazard to human health and/or the environment;
- Set up a chemical emergency response.

### **Article #**

In case of accidents caused by hazardous chemical substances, organization or individual shall cease immediately the activities in question and immediately inform the relevant authorities and the Ministry of Environment. Adequate action shall be taken according to the prevention and emergency response plan aiming for reducing hazards and damage to human health, environment and the property.

### **Article #**

A Hazard Chemical Insurance Mechanism shall be set up by a financing mechanism for prevention, response and compensation of hazards or accidents associated with hazard substances. The regulations and operation of this insurance shall be specified by a Sub-decree.

## **Chapter 10 Public Awareness**

### **Article #**

Organization or individual involved in distribution, sale and use of hazardous chemical substances shall provide all information related to safety data sheets, hazard communication, prevention and mitigation measures to the responsible ministries, the users and the public.

## **BOOK 18 – WATER MANAGEMENT**

- *This Book will provide details of water management and water planning. Plans for water management should be prepared under the*

*provisions of Book 5 dealing with National, Regional and Local Management Plans.*

- *This will need to consider the benefit-sharing arrangements for the use of transboundary watercourses in accordance with international legal obligations.*
- *Waste water and water pollution will be dealt with in Book 17 Waste Management and Pollution Control.*

**Chapter # - Whole-of-catchment concerns (including relationships between upper and lower river reaches and between different users)**

**Chapter # - Identifying and quantifying (through monitoring and mapping) all surface and ground water sources**

**Chapter # - Irrigation system and water supply for agricultural purposes**

**Chapter # - Erosion control (riparian vegetation management)**

**Chapter # - Man-made waterway**

**Chapter # - Water reservoirs for public use (referencing urban planning in Book 6)**

**Chapter # - Allocation and trade of entitlements to use water**

**Chapter # - Introducing monitoring and reporting systems (in reference to Book 29)**

## **BOOK 19 – CULTURAL AND NATURAL HERITAGE PROTECTION AND MANAGEMENT**

- *This Book will examine the identification, protection and management of cultural and natural heritage. It will consider the need to protect both tangible and intangible items of cultural heritage.*
- *This Book will look at the operation of the APSARA Authority and related legislation to ensure a consistent approach to the protection and management of natural, cultural and built heritage, including both tangible and intangible heritage.*

- *Ministry of Culture and Fine Arts and other authorities related to heritage protection and management.*
- *This would examine both World Heritage and Ramsar listed areas, as well as local and national heritage areas.*
- *It will regulate key activities in heritage areas, including tourism, research, archeological digs and any other development activity. Also note new chapter on rescue archaeology and salvage archeological surveys*
- *Other protection mechanisms will include anti-trafficking provisions, protections against intentional or accidental damage or demolition of known or unknown cultural or natural heritage, restoration and repair of damaged heritage, and financial incentives for heritage protection.*

Commented [MB44]: Recommendations from STWG4

Commented [BR45]: Group 4, 6 April workshop

#### **Chapter # - National Inventory list of cultural and natural heritage**

Article # The relevant Ministry shall established a National Inventory list of cultural and natural heritage sites

Article # The National Inventory list shall be updated on a regular basis

Article # Establishment of local and national heritage zones

Commented [BR46]: Group 4, 6 April workshop

#### **Chapter # - Identification and designation of cultural and natural heritage sites**

#### **Chapter # - Damage and Conservation status classifications**

Commented [MB47]: Recommendation from STWG4

#### **Chapter # - Special considerations in EIA for cultural and natural heritage sites**

#### **Chapter # - Management plans for sites**

Article # The Minister may require for a Heritage Management Plan to be prepared for a cultural and natural heritage site listed on the National Inventory

Article # The Heritage Management Plan shall be developed in consultation with the local community and interested stakeholders.

Article # The Heritage Management Plan shall also establish protected zones and core zones for heritage management of the site.

#### **Chapter # - Requirements for heritage impact assessment**

#### **Chapter # - Rescue Archaeology or Salvage Archaeology of threatened or endangered sites**

**Chapter # - Order to halt construction or clearing if a site is threatened or endangered**

**Chapter # - Impact of protected site on communities**

**Commented [MB48]:** Recommendation from STWG4

## **BOOK 20 – EXTRACTIVE INDUSTRIES AND SUSTAINABLE ECONOMIC BENEFITS**

- *This Book will examine the Laws relating to Mining in the provision of sustainable economic benefits to the Kingdom of Cambodia.*
- *This will link to the Book on EIA, to promote efficient and effective extractive industry development in Cambodia.*

**Chapter # - Extractive Industries Transparency Initiative (EITI) requirements and standards**

**Chapter # - Adoption of best practice in extractive industry**

**Chapter # - Financial and economic arrangements to ensure proper site management**

**Chapter # - Provisions for closure and remediation and restoration of extractive industry sites**

**Chapter # - Licensing and permitting system following EIA approval**

**Chapter # - Sand mining**

**Chapter # - Rock and aggregate mining**

**Chapter # - Minerals**

**Chapter # - Metal mining**

**Chapter # - Oil and Gas**

**Commented [BR49]:** Per R. Deau

**Chapter # - Rehabilitation and closure plans**

**Chapter # - Financing remediation and restoration for extractive industry**



## BOOK 21 – SUSTAINABLE TOURISM AND ECO-TOURISM

- *This Book will create a framework for encouraging appropriate eco-tourism activities in Cambodia.*
- *Eco-tourism activities include small scale, community based tourism opportunities.*
- *This Book will also create a framework to promote sustainable tourism in general, including larger scale tourism with reduced environmental impact.*

**Chapter # - Promotion of ecotourism and sustainable tourism as development priorities**

**Chapter # - Designation of special ecotourism areas**

**Chapter # - Financial incentives for ecotourism operations**

**Chapter # - Ecotourism operational standards (community guidelines, community management, community fund, etc.)**

**Chapter # - Marketing and promotion of ecotourism**

**Chapter # - Greening mass tourism: standards, guidelines, and application**

**Chapter # - Code of Conduct for eco-tourism development**

## BOOK 22 – SUSTAINABLE ENERGY

- *This Book will set goals and standards for the development of sustainable energy for Cambodia.*
- *It will detail the mechanism to achieve the rapid development of energy sources in Cambodia such as hydropower, wind energy, solar energy, biogas, geothermal, tidal energy and nuclear energy.*
- *It will also examine the development of oil and gas in a manner that promotes sustainable development and transparency.*

**Chapter # - Sustainable Energy Plan**

**Chapter # - Standards and technology for sustainable energy**

**Chapter # - Provision of clean energy for rural communities**

**Commented [MB50]:** A number of submissions have suggested that this Book should be renamed Energy and then be divided into renewable and non-renewable energy sections.

**Commented [CJ51]:** Agree with matthews comment above

Chapter # - Definition of sustainable energy sources

Chapter # - Promotion of sustainable energy

Chapter # - Development of micro and mini-grid systems

## BOOK 23 – CLIMATE CHANGE

- *This Book will outline how to mainstream Climate Change assessment into the management of natural resources in Cambodia. Adopting existing strategies to adapt to and mitigate the impacts of climate change in Cambodia, this Book will provide the details on how those matters should be taken into consideration during the EIA process and the natural resource management process.*
- *The Book will incorporate international climate change mechanisms such as REDD+ CDM and other climate change mechanisms into Cambodia law.*
- *It will also address some key issues in relation to other relevant Books, including building resilience to climate change through planning and construction standards (referencing Book 6 – URBAN LAND USE PLANNING AND MANAGEMENT–URBAN LAND USE PLANNING AND MANAGEMENT and Book 11 – SUSTAINABLE CITIES–SUSTAINABLE CITIES)*

**Commented [BR52]:** Potential combine of Books 23 and 24 M Ramasamy

## BOOK 24 - REDUCTION OF GREENHOUSE GAS EMISSIONS AND PROMOTION OF GREEN GROWTH

- *This Book will outline how to reduce greenhouse gas emissions by Cambodia and the promotion of Green Growth.*
- *This Book will also link to Book 22 – SUSTAINABLE ENERGY CITIES and Book 26 – ENVIRONMENTAL INCENTIVES, FEES AND CHARGES–ENVIRONMENTAL ECONOMIC MEASURES, FEES AND CHARGES.*

**Commented [CJ53]:** Green growth is completely cross cutting and isn't just exclusive to GHG reduction. I suggest that this Book be renamed to "Reducing Cambodia's Carbon footprint" and discuss green growth much further up near the introduction as it links to so much more including sustainable cities, energy. Natural resource use etc.

Chapter # - Obligation to address climate change

Chapter # - Incorporating climate change mitigation in all natural resources and environmental decisions

**Chapter # - Incorporation of climate change adaptation in all natural resources and environmental decisions**

## **BOOK 25 – DISASTER RISK REDUCTION AND DISASTER MANAGEMENT**

- *The Book will provide the requirements for reducing disaster risk by proper planning and incorporating risk reduction strategies into natural resource management decisions.*

**Chapter # - Disaster management planning**

**Chapter # - Incorporation of risk-reduction planning**

**Chapter # - Developments to take into account disaster management planning**

**Chapter # - Planning for major pollution incidents**

**Chapter # - Responding to environmental damage**

**Chapter # - Disaster management for protected areas and heritage locations**

**Chapter # - Management of disasters at waste facilities**

**Chapter # - Management of disasters at energy production and storage facilities**

**Chapter # - Management of disasters at chemical facilities**

**Chapter # - Obligation to report potential disasters**

## **BOOK 26 – ENVIRONMENTAL INCENTIV-ECONOMIC MEASURES, FEES AND CHARGES**

- *This Book will set out the mechanism by which the responsible Ministries will be able to charge for fees and services.*
- *This Book will include clear provisions to ensure that all fees and charges that are levied and received and all economic instruments that*

Commented [BR54]: Per Teng Rithiny

*are established such as environmental funds will be managed in accordance with international standards on accountability and transparency.*

- *A submission has been received that highlights that Cambodia does not have a Trust Fund Law that would assist in developing funding arrangements to finance the protection of protected areas and protected forests. Consideration should be giving to enable Trusts to be created.*

**Chapter # - Fees payable for services provided by Ministry**

**Chapter # - Auditing of funds**

**Chapter # - Environmental taxation**

**Chapter # - Economic incentives for green investment**

**Chapter # - Special incentives for public/private partnerships – also mention the importance of SMEs as a driver for Green growth**

**Chapter# - Financial incentives and taxation measures to promote green urban infrastructure**

**Chapter # - Financial incentives and taxation measures to promote eco-tourism and sustainable tourism**

**Chapter # - Financial incentives and taxation measures to promote conservation and biodiversity**

**Chapter # - Financial incentives and taxation measures to promote community resource management**

**Chapter # - Financial incentives and taxation measures to promote sustainable low carbon energy production**

**Chapter # - Establishment of the Environment, Conservation and Social Development Fund; goals of the Fund**

**Chapter # - Sources of revenue to the Environment, Conservation and Social Development Fund**

**Chapter # - Transparency and governance procedures for the Environment, Conservation and Social Development Fund**

**Chapter # - Criteria for grant-making and disbursement from the Environment, Conservation and Social Development Fund**

**Chapter # - Green financing**

**Chapter # - Financing for eco labeling**

**Chapter # - Environmental liability mechanisms for payments by polluters/environmental damage (e.g. bond, environment and social fund)**

**Chapter # - Community initiative funds**

**BOOK 27 - ENVIRONMENTAL PUBLIC AWARENESS AND ENVIRONMENTAL EDUCATION**

- *This Book will detail plans for the promotion of public awareness on environmental protection and environmental issues using mass communication means, including cinemas, the internet and advertising.*
- *It will establish an Environmental Information Initiative to educate the public and the private sector on environmental obligations and environmental issues.*

**Chapter # - Promotion of environmental awareness in schools**

**Chapter # - Promotion of environmental awareness in universities**

**Chapter # - Establishment of Environmental Education Committee**

**Chapter # - Development of environmental education materials and training**

**Specialized vocational training programs???**

**Chapter # - Promotion of environmental awareness to the public**

**Chapter # - Requirement to promote environmental awareness in cinemas and mass media**

**Chapter # - Support for environmental awareness campaigns**

**Chapter # - Promotion of World Environment Day**

**Chapter # - Promotion of special environmental programs**

Commented [BR55]: R. Deau



## **BOOK 28 – ENVIRONMENTAL AND NATURAL RESOURCES STUDY AND RESEARCH**

- *This Book will provide details on the promotion of research on environmental and natural resource management issues.*
- *It will promote research and development for innovative practices to protect and manage the environment and natural resources.*

**Chapter # - Establishment of environmental research institutes**

**Chapter # - Provision of scholarships for environmental studies**

**Chapter # - Promoting of environmental research at universities**

**Chapter # - Establishment of Center of Excellence in Natural Resource Management and Sustainable Development**

**Chapter # - Funding of environmental research**

## **BOOK 29 – ENVIRONMENTAL AUDITS AND ENVIRONMENTAL MANAGEMENT REPORTING**

- *This Book will outline the principles and requirements for environmental audits and for reporting requirements under the relevant provisions of the Environmental Code. An environmental audit will be a key mechanism to ensure that permit holders and those undertaking development projects are complying with the conditions of approval. This will include EIA, IEE and environmental protection agreements as well as any conditions attached to permits or licenses or ELC.*
- *The Book will also establish a PROPER system for self-report of pollution by companies and a color-coded registration for environmental compliance. Companies will be designated from Green and Blue (Beyond Compliance) to Black (Compliance) to Yellow and Red (Below Compliance)*
- *The aim of this Book is not to increase the regulatory burden on the holder of a license or approval but to ensure that environmental and social obligations are carried out in accordance with the approval conditions.*

**Chapter # - Establishment of self reporting for environmental compliance**

**Chapter # - Obligation to report breaches of Environmental Code**

**Chapter # - Establishment of system of environmental compliance**

**Chapter # - Register of approvals, permits, licenses and monitoring reports**

**Chapter # - Unified register to be publically available and easily accessible**

**Chapter # - Environmental audits**

**Chapter # - Appointment and qualifications of environmental auditors**

**Chapter # - Projects and activities requiring environmental audits**

**Chapter # - Projects and activities requiring environmental certification to international standards**

**Chapter # - Monitoring reports to be required for specific project and activities**

**Chapter # - Monitoring reports required under EIA approvals**

**Chapter # - Monitoring reports to be publically available**

**BOOK 30 – INVESTIGATION, ENFORCEMENT AND ACCESS TO REMEDIES**

- *This Book will deal with the powers of the relevant Ministries to investigate the environmental offences outlined in Book 31.*
- *It will make provision to allow for citizens and organizations to follow dispute resolutions procedures and bring proceedings to the relevant review body. These provisions will also identify mechanisms for citizens and organizations to bring general complaints and other proceedings.*
- *This Book will also examine the use of relevant dispute resolution procedures and grievance mechanisms, including Environmental Courts and Tribunals (ECTs), to deal with environmental and natural resources development decisions. This Book will examine options for the Ministry of Environment to establish an Environmental Tribunal to reexamine environment and natural resource management decisions made under the Environmental Code.*

- *This Book will also look at other options such as administrative tribunals and an Environmental Commissioner, to review problems and concerns relating to environmental and natural resources decisions. These would be established to be accessible to the community and open and transparent.*
- *For example, one matter would be the use of municipal planning tribunals to resolve conflict between planning and land use decisions in the urban context.*

### **Chapter # - Environmental complaints**

#### **Section 1     Parties of Environmental Complaint**

- Article #: Directed Affected Parties  
Article #: Participation of Relevant NGOs in Environmental Complaint  
Article #: The Governmental authorities in the Environmental Complaint

#### **Section 2     Type of Environmental Complaint**

- Article #: Civil Complaints  
Article #: Criminal Complaint  
Article #: Complaint Against Administrative Decision of the Government or Governmental Authorities  
Article #: Relation of Civil and Criminal Complaint

### **Chapter # - Procedures for resolution of environmental complaints**

#### **Section 1     General Provision**

- Article#: Objective  
Article #: Scope of Code Application  
Article #: General Principle  
Article #: Type of Environmental Dispute Resolution

#### **Section 2     Out of Court Resolution of Environmental Dispute**

- Article #: Objective  
Article #: Appointment of Mediator/Arbitrator  
Article #: Obligation of Government to Create the Environmental Arbitration Institute  
Article #: Appeal to the Decision of Arbitrator to the Court

#### **Section 3     Resolution of Environmental Dispute through the Court**

- Article #: Rights of Affected Parties  
Article #: Obligation of Government to Create the Environmental Court  
Attach to Lower Court and higher Court  
Article #: Decision of Court  
Article #: Appeal to Decision of Lower Court to Higher Court

**Section 4 Complaint Against to Decision of Administration of  
Governmental Authorities**

- Article #: Right of Affected Natural Person/Legal Entities  
Article #: Time Limitation of Issuance of Decision on the Complaint  
Article #: Appeal to Decision of Higher Administration Institute

**Chapter # - Judicial police officers**

- Article #: Component of Judicial Police Officers  
Article #: Role and Obligation of Judicial Police Officers  
Article #: Procedure of Qualification of Judicial Police Officers  
Article #: Territory of Judicial Police Officers  
Article #: Investigation of Environmental Crime of Judicial Police Officers  
Article #: Obligation of Relevant Authorities in Co-Operation to  
Environmental Crime Investigation  
Article #: Procedure of Environmental Complaint Compilation  
Article #: Uniform Consumption in Environmental Complaint Investigation

**Chapter # Establishment of Royal Academy of Ranger Professionals**

Commented [BR56]: Per comment from Meas Sophal

**Chapter # Establishment of Environmental and Natural Resources  
Court or Tribunal (ECT)**

**Chapter # - Establishment of Environment Commissioner**

**Chapter # - Role of the Environment Commissioner**

**Chapter # - Monitoring, compliance and enforcement rights of citizens**

**Chapter # - All Citizens may bring complaints before the ECT for  
breaches of the Environmental Code**

**Chapter # - Rights of review of environmental and natural resources  
decisions**

**Chapter # - NGOs may assist citizens and communities to bring matters to  
the ECT**

**Chapter # - Obligation of ECT to hear and determine matters quickly and fairly**

**BOOK 31 – ENVIRONMENTAL OFFENCES**

- *This Book will outline the Environmental Offences that will be subject to possible action under the Civil Code or Criminal Code.*
- *It will provide an outline for determining which breaches of the Code should be subject to criminal prosecution.*
- *The Book will identify specific offences and failures to comply with relevant provisions of the Code.*
- *This will provide relevant information about compensation and restoration orders, if a breach of the Code has led to environmental harm or harm to human health.*
- *It will provide options for penalties from fines to imprisonment and remediation orders. It will be based of the work done on the draft EIA Law.*

**Chapter # - Breach of any provision of the Environmental Code**

**Chapter # - Environmental Impact Assessment offenses**

**Chapter # - Penalty provisions**

**Chapter # - Orders for compensation**

**Chapter # - Restitution and restoration of environmental damage**

**Chapter # - Air pollution offenses**

**Chapter # - Water pollution offense**

**Chapter # - Waste offenses**

**Chapter # - Contamination offenses**

**Chapter # - Application of Criminal Code to environmental offenses**

**Chapter # - Application of civil penalties for environmental offenses**

**Chapter # - Table of penalties for offenses**



## **BOOK 32 – LEGAL HARMONIZATIONS**

- *This Book will provide details of the laws and sub-decrees that will be repealed.*
- *This Book will clarify how the Environmental Code will amend the various existing natural resources laws and laws relating to environmental protection and natural resource management.*

## **BOOK 33 – TRANSITIONAL PROVISIONS**

- *This Book will provide details of the transitional provisions required to allow the Code to become effective in the shortest period of time.*
- *It will provide details of how existing protected areas and relevant reserves will be maintained, based on the principles of the Environmental Code, until they have been reviewed and assessed in accordance with the provisions of the Code.*
- *The development of the Environmental Code should not be used to allow continued environmental destruction during the period that new management plans are being developed.*
- *This Book will provide details of the laws and sub-decrees that will be repealed.*

## **BOOK 34 – FINAL PROVISIONS**

## **Submission Form**

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

**Email to: Lim Nalin at Vishnu Law Group: *limn@vishnulawgroup.com***

Date of Submission: 19 May 2016

Submitted by (provide individual and STWG contact information):

Norman Sheridan (STWG 2)

#### 1. Issue:

MANAGEMENT of CHEMICAL SUBSTANCES

#### 2. Reference to Code Book and Chapter (if applicable):

Book 17 – Waste management and Pollution Control

#### 3. Comparative Experience (including Cambodian and international examples and experience):

#### 4. Recommendation:

1. I agree with the suggestion that this Book 17 be divided into two Books – one on Waste Management and the other on Pollution Control. While there are some overlapping issues, there will be many issues that are specific to one or the other.

2. I would further separate out Management of Chemical Substances into a separate Book.

3. General point. The Chapters on hazardous chemical substances and hazardous chemical products (as the name suggests) applies to both hazardous chemicals and to hazardous products. However in a number of places in the chapters reference is only made to either hazardous chemicals or to hazardous products. This would imply that that particular provision would not apply to the chemical/product not mentioned. Presumably this is not the intention.

Unless a specific provision requires it, in all cases refer to both hazardous chemical substances and to hazardous chemical products.

4. Article 3 – Need to add “produce” and “transport” to the scope of the chapter on Management of Chemical substances.

Producers of hazardous chemicals and products will need to be brought into the scope of the legislation.

The transport of hazardous chemicals and substances needs to be regulated – and in line with international conventions. Significant damage can occur as a result of accidents involving vehicles/boats carrying hazardous chemicals and substances.

5. Article 10. The wording of Article 10 means that misbranded/banned substances (note does not refer to products) “introduced” into Cambodia are subject to seizure/confiscation. But that this provision does not apply to substances (note again does not refer to products) for export.

Suggest change “introduction” to “import” as assume that this is what is intended. (Also make the same change in Article 8).

Is there any reason why misbranded/banned substances and products intended for export should not also be subject to seizure/confiscation?

Is there any reason why misbranded/banned substances and products that are produced in Cambodia or which are already in Cambodia should also not be subject to seizure/confiscation?

Suggest changing wording of Article 10 as set out below.

6. Article 11. Add “export” to the list. Otherwise it would be illegal to possess but not illegal to export.

7. Article 12. Use similar wording as in Article 11. Otherwise there would be a dis-connect. But need to consider whether to include “use” here. Should an ordinary person be allowed to use a hazardous chemical that is not correctly packaged (eg he/she has taken it out of the container themselves and put it into something else) – and how would this be enforced.

Also need to consider the situation of a manufacturer. Cannot add “manufacturer” to the list as presently worded. The chemical would have to be manufactured before it can be packaged.

8. Article 14. This Article is too widely worded and is too general so as to be unclear as to its scope. It prohibits the use of certain chemicals that have certain negative impacts on human health and life. But it is such a broad prohibition that it would mean that no-one could use gasoline, bleach, various other household cleaners etc.

Suggest deleting this article 14 altogether.

9. Article 15. Currently the obligation is only to apply for registration. Surely the obligation should be to hold a valid registration.

Further, should not the registration requirements also apply to manufacture, import, export etc?

10. Article 24. General article on transport. Need to add a specific requirement that staff (including drivers) are trained in safety and emergency response actions in the event of an accident.

Need to add a specific provision that vehicles used for such transport are suitable for the transport of that particular hazardous chemical/product and are marked with the appropriate hazard warning signs.

11. Article XX. Accidents. Consider imposing an obligation on the organization/individual to immediately inform the local public in the event that the accident may affect their health or property and provide advice as to what they should do.

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

#### Article 10

Any misbranded hazardous ~~chemical substance or hazardous chemical product~~ or banned hazardous ~~chemical substance or hazardous chemical product~~ when introduced into the Kingdom of Cambodia shall be subject to confiscation and seizure, ~~but is not applicable for any substance intended for export to other countries.~~

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#### Article 11

No person shall manufacture, possess, handle, store, transport, import, ~~export~~, distribute or use a hazardous ~~chemical substance or hazardous chemical product~~ that is not registered under Sub-decree dated October 2009 on “Management of Classification and Labeling of Chemicals”.

#### Article 12

No person shall ~~possess, handles~~, store, ~~transport~~, import, export or distribute a hazardous chemical that is not packaged in accordance with the regulations and the conditions of registration.

A manufacturer of any hazardous chemical substance or hazardous chemical product shall not package that substance or product other than in accordance with the regulations and the conditions of registration.

#### Article 14

~~No person is allowed to use chemical substances such as acid, gasoline, or toxic chemicals that can cause corrosion, burn, oxidation, injury and destruction of human organs implicating health and human life.~~

#### Article 15

Organization and individual shall have the duty to ~~apply for official~~ hold valid registration of any hazardous chemical substances and hazardous chemical products intended for manufacture, import, export distribution, sale and use in the Kingdom of Cambodia.

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### CHAPTER 1 ARTICLE 24

An organization or individual that transports hazardous chemicals shall abide by the provisions on transportation of hazardous chemical substances or products as prescribed in this Law and other relevant laws.

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Transport operators and transport owners shall prepare staff health and safety plans and response plans for substance specific hazardous materials incident response plans in order to: Identify and take necessary measures to minimize potential incidents and remedy consequences if they take place, and

Identify and notify the nearest local authorities and concerned ministries about the incident if an incident occurs en route – either on road, inland waterway, railway, air or sea transport.

Transport operators and transport owners shall ensure that staff and drivers are trained in appropriate safety and emergency response actions in the event of an accident.

Transport operators and transport owners shall ensure that any vehicle used in the transport of hazardous chemical substances or products is suitable for the transport of that substance or product and that the vehicle is visibly marked with the appropriate warning marks and symbols.

**Article #**

In case of accidents caused by hazardous chemical substances, organization or individual shall cease immediately the activities in question and immediately inform the relevant authorities and the Ministry of Environment. Adequate action shall be taken according to the prevention and emergency response plan aiming for reducing hazards and damage to human health, environment and the property.

In the event that the accident may have negative effects on health or property of people in the vicinity of the accident, the organization or individual concerned shall immediately provide advice and information to the public concerned.

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):



## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: *limn@vishnulawgroup.com***

Date of Submission: 19 May 2016

Submitted by (provide individual and STWG contact information):

Dian Turnheim (STWG 2)

#### **1. Issue:**

MANAGEMENT of CHEMICAL SUBSTANCES

#### **2. Reference to Code Book and Chapter (if applicable):**

Book 17 – Waste management and Pollution Control

#### **3. Comparative Experience (including Cambodian and international examples and experience):**

#### **4. Recommendation:**

I agree with the comments from Norman Sheridan.

I would just add that article 33 needs to be rewritten to not use “green” substances but rather safer or more environmentally friendly substances (alternatives) and processes.

“Organization or individual is encouraged to review manufacturing processes that can produce green chemical substances or products involving less greenhouse gases emission, less energy consumption, and minimal hazard and toxicity to the environment and human.”

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: *limn@vishnulawgroup.com***

Date of Submission: 19 May 2016

Submitted by (provide individual and STWG contact information): Maylis Desrousseaux  
(STWG 2)

### **1. Issue: Structure**

The structure of the Code is not very clear to me. For instance, climate change seems to be equally treated with fisheries management. The numerous books bring confusion and maybe a hierarchy would make the Code more practical.

### **2. Reference to Code Book and Chapter (if applicable):**

### **3. Comparative Experience (including Cambodian and international examples and experience):**

French environmental Code is divided in

1. Books (Livres)
2. Titles (Titres)
3. Chapters (Chapitres)
4. Sections

There are only 6 books:

Livre Ier : Dispositions communes (Common dispositions)

Livre II : Milieux physiques (could be translated as natural media)

Livre III : Espaces naturels (Natural areas)

Livre IV : Patrimoine naturel (could be translated as natural heritage, but concretely deals with biodiversity, uses regulations: hunting, fishing etc.)

Livre V : Prévention des pollutions, des risques et des nuisances (Risks and pollution : includes polluting activities, waste management, soil pollution, remediation chemicals).

Livre VI : Dispositions applicables en Nouvelle-Calédonie, en Polynésie Française, à Wallis et Futuna, dans les terres australes et antarctiques françaises et à Mayotte (Applicable in french territories over seas : the rules are sometimes more, sometimes less restrictive according to the statute of these territories and the recognition of indigenous customs and laws like in New Caledonia).

### **4. Recommendation:**

Example: There could be a book “NATURAL RESOURCES” with chapters on “Planning and management”, “Fishery”, “Forestry” etc.

The book 26 on “incentives, fees and charges” could disappear as articles would be integrated in different books.

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [linn@vishnulawgroup.com](mailto:linn@vishnulawgroup.com)

- For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.
- If needed, please submit large documents as an attachment.
- Please submit all comments in Khmer and English when possible.

Date of Submission: 20 May 2016

Submitted by (provide individual and STWG contact information): Anonymous (STWG 2)

#### 1. Issue:

Suggestions to Book 1

#### 2. Reference to Code Book and Chapter (if applicable):

Code Book 1

#### 3. Comparative Experience (including Cambodian and international examples and experience):

International agreements

#### 4. Recommendation:

New suggested language

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

#### Article 1: Purpose

The purpose of this Environmental Code is to promote the sustainable development of Cambodia through the protection of the environment and sustainable use of natural resources.

**Commented [BM1]:** The draft text refers sometimes to Environmental Code and other times, to 'Code'. Suggest being consistent throughout the Code and refers only to 'this Code'.

#### Article 2: Objectives

The present Code reflects the importance of conserving, protecting and enhancing environment and the desirability of Cambodia to modify its laws to promote sustainable development and sound environmental management. To this end, the objectives of this Environmental Code has the following objectives include to:

**Commented [BM2]:** The draft text refers sometimes to 'Cambodia' and other times to 'Kingdom of Cambodia'. Suggest being consistent throughout the Code – either 'Cambodia' or 'Kingdom of Cambodia'.

**Commented [BM3]:** Same comment applies here. Refers to 'Code' only.

#### Article 3: Scope of ~~the Code~~ Application

**Commented [BM4]:** Note that the text suggests a closed list of objectives. If the intent of the drafters is a non-exhaustible list, suggest using the verb "include" or add the term 'inter alia'.

This Code regulates environmental protection activities; policies, measures and resources for protection of the environment; and the rights and obligations of organizations, community, family households and individuals with respect to protection of the environment.

Where this Code refers to or incorporates by reference other laws, such reference is to the laws as they may be amended or modified.

### Applicable entities

This Code applies to Cambodian State ~~bodies~~ organs and branches of government, organizations, family households and individuals; to Cambodians residing overseas and “foreign organizations” and individuals with operations in the territory of ~~the Kingdom of Cambodia~~. In the event of an inconsistency between an obligation in this Code and an obligation of Cambodia under an international treaty to which it is party, the provisions of such international treaty shall prevail [except as otherwise provided in this Code]. ~~Where an international treaty of which the Kingdom of Cambodia is a member contains provisions, which are different from the provisions in this Code, the provisions of such international treaty shall prevail.~~

### Article 4: Definitions of General Application/Glossary

For purposes of In this Code, unless otherwise specified: the following terms shall be construed as follows:

Sustainable development means .....

Environmental standards means ....; and

Best practices means .....

The Definition of Terminology shall be determined in the glossary section of this code.

## CHAPTER 1 – PRINCIPLES

This ~~Environmental~~ Code is premised on, and should be implemented and interpreted in accordance with, the following fundamental principles of environmental law and policy:

## CHAPTER 4 – INTERNATIONAL ENVIRONMENTAL AGREEMENTS

**Commented [BM5]:** It is not clear which organizations are referred to here. Is the intent to refer to public organizations only? Consider having a definition in the general definitions section to determine whether organizations would include private entities as well. If not, suggest adding private entities here since this Code would also apply to the private sector.

**Commented [BM6]:** Suggest using the word ‘persons’ instead of family household and individuals. The term ‘persons’ could be included in the general definition sections and be defined as including, nationals and enterprise. A definition of enterprise could also be included to include any entity whether or not for profit, privately owned or governmentally-owned.

**Commented [BM7]:** To consider: this phrase ‘except as otherwise provided in this Code’ could be included in the event that Cambodia wants this Code to prevail in case of inconsistencies between this Code and another international treaty - in specific circumstances provided for in this Code (lex specialis rule).

**Commented [BM8]:** It is not whether the rules are different but whether they are in conflict. Otherwise if there is no conflict, the provision could be interpreted in a way that gives meaning to all of them, harmoniously.

**Commented [BM9]:** Consider moving general definitions to the beginning of Chapter 1 to assist the reader. This section should include general definitions that are applicable throughout the Code. Note that there could also be specific definitions that apply to one chapter only. In this case, such definition could be at the beginning of the chapter since it is not a definition of general application that applies to each chapter.

**Commented [BM10]:** Note that this is a closed list of principles. Do you also want to refer to general principles of international law to include other principles that could have been missed? Since those principles might change/evolve over times according to state practice, consider referring to customary international law to incorporate the evolution of those principles.

**Commented [BM11]:** Suggest using the same alignment for all titles (i.e. chapters 1 and 2 are in the center of the text while chapters 3 and 4 are on the left alignment).



- *This Chapter will explain how the Environmental Code implements and is based upon existing international and regional agreements.*
- *It will also address future agreements and treaties and how these shall be integrated into the environmental responsibilities of the relevant Ministries.*

Cambodia recognizes the value of international and regional environmental agreements as a response to environmental problems and the need to adopt or modify its laws accordingly and in a manner consistent with international and regional agreements to which it is party.

This Code hereby reflects the commitment of Cambodia to effectively implement in its laws and practices the international and regional agreements to which it is party.

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

**Commented [BM12]:** Consider having an Annex in which you list applicable international and regional treaties, which can be amended to include future agreements and treaties.

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: 20 May 2016

Submitted by (provide individual and STWG contact information):

Teng Rithiny (STWG1, STWG3&5, STWG4, STWG6 and STWG7)

On behalf of, WCS, CI, WWF, BirdLife, FFI and Wildlife Alliance

Issue related to STWG 3/5

### 1. Issue:

- The protection of Critically Endangered Species (Giant Ibis and Vulture ) and its habitats. The key threat to the species is forest loss, driven primarily by clearing of land in order to develop industrial agriculture (Economic Land Concessions), small scale agricultural encroachment and infrastructure developments.

### 2. Reference to Code Book and Chapter (if applicable):

- BOOK8: Biodiversity Conservation and Management (chapter #: Protection of endangered species)

### 3. Comparative Experience (including Cambodian and international examples and experience):

Attached with the Cambodia Vulture Action Plan and Giant Ibis National Action plan

### 4. Recommendation:

- Should list down the endanger species in the Code including how to manage and prevent those species.

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

# Ten-year species action plan for the Giant Ibis *Thaumatibis gigantea* in Cambodia

2015-2025



## **Ten-year species action plan for the Giant Ibis *Thaumatibis gigantea* in Cambodia**

The present action plan represents the output of a workshop entitled ‘Giant Ibis Consultancy workshop to produce a conservation action plan to effectively conserve Giant Ibis’ conducted in Phnom Penh, Cambodia, on 30 November 2014 and two follow up workshops in January 2015 and July 2015. It was compiled by BirdLife International Cambodia Programme with technical input from the following organisations: Forestry Administration, Ministry of Environment, Wildlife Conservation Society, World Wide Fund for Nature, Conservation International, Angkor Centre for Conservation of Biodiversity, Conservation Leadership Programme, Sam Veasna Center, Center For Biodiversity Conservation- Royal University of Phnom Penh, Birds of Cambodia Education And Conservation and People Resources and Conservation Foundation.

### **Compilers**

Robin Loveridge and Ty Srun

### **List of contributors**

Dr. Keo Omaliss, Jonathan C. Eames, Bou Vorsak, Dr. Neil Furey, Sum Phearun, Simon Mahood, Alistair Mould, Dr. Thomas Gray, Rachel Crouthers, Toby Bakos, Oliver Gray-Read, Yav Net, Hong Lina, Thi Sothearen, Kry Masphal, Ian Burfield, Mike Crosby and Roger Safford, Prum Sovanna, Suy Senglim, Thou Veasna, Rours Vann, Thong Sokha, Chhin Sophea, Mem Mai, Luy Rathana, Sok Ko, Neab Samneang, Ken Bopreang.

### **Acknowledgements**

We are grateful to the Conservation Leadership Programme, the MacArthur Foundation and the Giant Ibis Transport without whose donor support, the development of this national action plan would not be possible. We would also like to express our sincere thanks for the comments of all those who have contributed their experience and ideas at the different workshops and review stages.

### **Recommended citation**

Loveridge, R. and Ty, S. (2015). Ten-year species action plan for the Giant Ibis *Thaumatibis gigantea* in Cambodia. 2015-2025. Phnom Penh, Cambodia. BirdLife International Cambodia Programme.

**Photograph credit:** Jonathan C. Eames

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## **Abbreviations**

ACCB Angkor Centre for Conservation of Biodiversity  
BLI BirdLife International  
BCEC Birds of Cambodia Education And Conservation  
CBC Center for Biodiversity Conservation  
CLP Conservation Leadership Programme  
FA Forestry Administration  
FFI Fauna and Flora International  
MoE Ministry of Environment  
NTFP Non Timber Forest Product  
PF Protected Forest  
PRCF People Resources and Conservation Foundation  
SVC Sam Veasna Center  
SMP Sansom Mlup Prey Cambodia  
WCS Wildlife Conservation Society  
WS Wildlife Sanctuary  
WWF World Wide Fund For Nature



## Executive Summary

Once relatively widespread in mainland South-east Asia, the Critically Endangered Giant Ibis (*Thaumatibis gigantea*) is now almost entirely restricted to the dry forests of northeastern Cambodia. The key threat to the species is forest loss, driven primarily by clearing of land in order to develop industrial agriculture (Economic Land Concessions), small scale agricultural encroachment and infrastructure developments. Based on the findings of this status review a minimum population estimate is 194 mature individuals.

The 10-year goal of this action plan is that by 2025, a stable or increasing population of Giant Ibis inhabits a network of well-protected sites. This will be achieved through three complimentary objectives: 1) Protect priority habitat of Giant Ibis at all key sites where the species occur. 2) Improve survival and breeding success through targeted species interventions. 3) Conduct research to inform conservation actions. This report details the priority actions required over the next 10 years to ensure the long-term survival of the species. Top priority actions are to establish Protected Forests around key Giant Ibis habitat, the identification of key Giant Ibis habitat for prioritisation within protected area management plans, the incorporation of Giant Ibis as a priority species within site level management plans and the establishment of a Giant Ibis Working Group to share information of Giant Ibis research and conservation measures.

## សេចក្តីសង្ខេប

ត្រយ៉ងយក្សដែលជាបក្សីជិតផុតពូជ ធ្លាប់មានវត្តមាននៅទូទាំងភូមិភាគអាស៊ីអាគ្នេយ៍ដែលបច្ចុប្បន្ន ចំនួនរបស់វាស្ទើរតែទាំងអស់មានវត្តមានតែនៅភាគឦសាននៃប្រទេសកម្ពុជាតែប៉ុន្មាននោះ។ កត្តាគម្រាមកំហែងសំខាន់ៗរួមមាន៖ ការបាត់បង់ទីជំរក ទាំងទីជំរកពងកូន និងទីជំរកកក់ចំណី, ការបរបាញ់, ការប្រមូលពងកូន ព្រមទាំងកត្តារំខានផ្សេងៗ។ ដោយផ្អែកលើការពិនិត្យផ្ទៀងផ្ទាត់ឡើងវិញនេះបាន ការព្យាករណ៍ចំនួនតិចបំផុតនៃត្រយ៉ងយក្សពេញវ័យគឺមានប្រហែល 194 ។

គោលដៅ១០ឆ្នាំនៃផែនការសកម្មភាពនេះគឺនៅឆ្នាំ២០២៥ ធ្វើអោយចំនួនត្រយ៉ងយក្សដែលមាន នៅក្នុងតំបន់ការពារទាំងអស់មានស្ថេរភាព រីកមានការកើនឡើង។ គោលដៅនេះនិងសម្រេចបាន តាមរយៈកម្មវត្ថុបីគឺ៖ 1) ការការពារជម្រកអាទិភាពនៃត្រយ៉ងយក្សនៅទីតាំងសំខាន់ៗទាំងអស់ដែល ត្រយ៉ងយក្សមានវត្តមាននៅទីនោះ 2) ធ្វើឱ្យប្រសើរឡើងនូវការរស់រានមានជីវិតនិង បង្កើនភាព ជោគជ័យនៃការបន្តពូជតាមរយៈការចាត់វិធានការណ៍ការពារសត្វប្រភេទនេះ។ 3) ធ្វើការសិក្សា ស្រាវជ្រាវបន្ថែមដើម្បីជូនដំណឹងដល់ផែនការណ៍អភិរក្ស។ ផែនការសកម្មភាពនេះលំអិតអំពី សកម្មភាពអាទិភាពដែលចាំបាច់សំរាប់អនុវត្តក្នុងរយៈពេល១០ឆ្នាំ ដើម្បីធានាការរស់រានមានជីវិត របស់ត្រយ៉ងយក្សក្នុងរយៈពេលយូរ។ សកម្មភាពមួយចំនួនដែលជាអាទិភាពជាងគេដូចជា ការបង្កើត តំបន់ព្រៃការពារនៅតំបន់សំខាន់ៗសត្វស្លាបសៀមប៉ាង កំណត់ទីជម្រកសំខាន់ៗរបស់ត្រយ៉ងយក្ស សម្រាប់ជាអាទិភាពដាក់ក្នុងបញ្ចូលក្នុងផែនការគ្រប់គ្រងតំបន់ការពារ ការដាក់បញ្ចូលត្រយ៉ងយក្សជា ប្រភេទអាទិនៅក្នុងផែនការគ្រប់គ្រងថ្នាក់តំបន់ ហើយនិងការបង្កើតក្រុមអភិរក្សត្រយ៉ងយក្ស ដើម្បី ចែករំលែកព័ត៌មានសិក្សាស្រាវជ្រាវ និងវិធានការណ៍នៃការអភិរក្សត្រយ៉ងយក្ស។

## **1. Background**

### **Taxonomy**

Phylum: Chordata

Class: Aves

Order: Pelecaniformes

Family: *Threskiornithidae*

Genus: *Thaumatibis*

Species: *Thaumatibis gigantea* (Oustalet, 1877)

### **1.1 Policies**

#### **1.1.1 International conservation and legal status**

The Giant Ibis is considered globally Critically Endangered because it has an extremely small population, which has undergone a rapid decline as a result of disturbance and lowland deforestation, and it is likely to continue to decline rapidly owing to on-going deforestation and human disturbance; it thus triggers IUCN Red List criteria A2cd+3cd+4cd and C2a(i). The species is not listed on CITES appendix I or II.

#### **1.1.2 National policies and legislation**

Giant Ibis was listed as Critically Endangered in the Sub-Decree (*Anukret*) by the Ministry of Agriculture, Forestry and Fisheries on the 25th January 2007 and under protection of 2002 forest law which promulgated by the Royal Decree (*Preah Reach Kram*) on 31 August 2002, Protected Area Law 2008 and Law on Environmental Protection and Natural Resource Management 1996 of the Ministry of Environment. Hunting of Giant Ibis was prohibited by declaration No. 359 dated August 01, 1994 issued by the Ministry of Agriculture, Forestry and Fisheries. The Giant Ibis is also nominated as the national bird of Cambodia by the Royal Decree on Designation of Animals and Plants as National Symbols of the Kingdom of Cambodia on 21 March 2005.

### **1.2 Conservation situation**

#### **1.2.1 Distribution, population size and trend**

*Thaumatibis gigantea* is mostly confined to northern and eastern Cambodia, where it is probably still fairly widespread but extremely rare; with a few birds from the same population observed in extreme southern Laos. There is a recent record from Yok Don National Park, Vietnam: a single bird was seen in 2011. Its historical range spanned southern Vietnam and southeastern and peninsular Thailand, where it is now extinct. Available data suggest that it has a patchy distribution across Cambodia (BirdLife 2015, Figure 1).

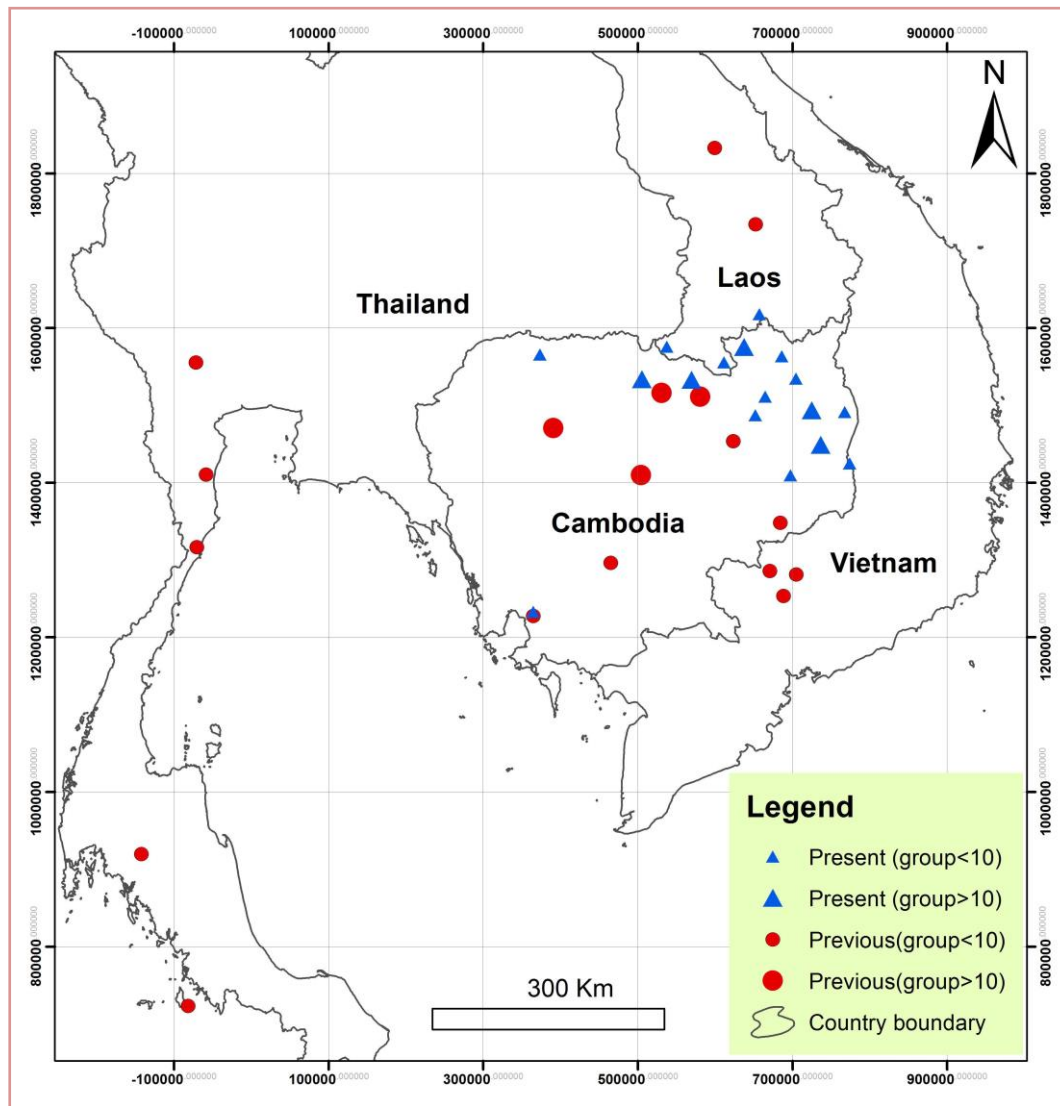


Figure 1: Map based on the range map produced by Keo (2008) and includes additional confirmed sightings from the literature - camera trap data from Koh Kong (Evans and Goes 2011), and two new sites presented at the Giant Ibis workshop 2014- camera trap photos from Sang Sahakum Rukhavoan Community Forest in Oddar Meanchy, and Sesan river.

Some areas of relatively high density still exist in the Northern Plains of Cambodia (Figure 2), including Preah Vihear Protected Forest and Kulen Promtep Wildlife Sanctuary, where 24 pairs were monitored in 2014 (WCS 2014). In Western Siem Pang IBA, recent estimates suggest a slight decline from approximately 40 pairs (H. Wright *in litt.* 2012) to estimates of between 42-62 individuals (Ty *et al.*, 2014 unpublished data).

Other areas of significant populations include Mondulkiri Protected Forest and Lomphat Wildlife Sanctuary. Sum *et al.* (2011, 2013) estimated at least 10-15 pairs of Giant Ibis inhabit Lomphat Wildlife Sanctuary; while anecdotal camera-trap data (Gray *et al.* 2014) suggest a population of 50 individuals in Modulkiri Protected Forest (Gray personal communication). Although further survey effort is required at both these locations to gain a better understanding of these populations and distribution within the protected areas to prioritise conservation effort.

Other confirmed, although somewhat out of date sightings suggest populations of approximately five pairs may still exist in Seima Protection Forest, Phnom Prich Wildlife Sanctuary, Veun Sai-Siem Pang Conservation Area, Yok Don National Park in Vietnam and scattered across the

extreme South of Laos (BirdLife 2015). In addition Giant Ibises have recently been confirmed to at three further sites; these are Koh Kong (Evans and Goes 2011), Sang Sahakum Rukhavoan Community Forest in Oddar Meanchy and one site on the Sesan river near Stueng Treng (see range map below for exact locations). It is estimated that these sites each contain a minimum of one pair of Giant Ibis.

Based on these findings a minimum population estimate is 194 mature individuals. It is important to note that Figure 1 does not represent evidence of range expansion from the earlier range map produced by Keo (2008). Instead we document here previously unavailable data, which represent an increase in survey effort. In fact the range of the Giant Ibis has likely decreased between 2008 and 2015 as discussed below in relation to the large scale habitat conversion occurring across much of the species' range.

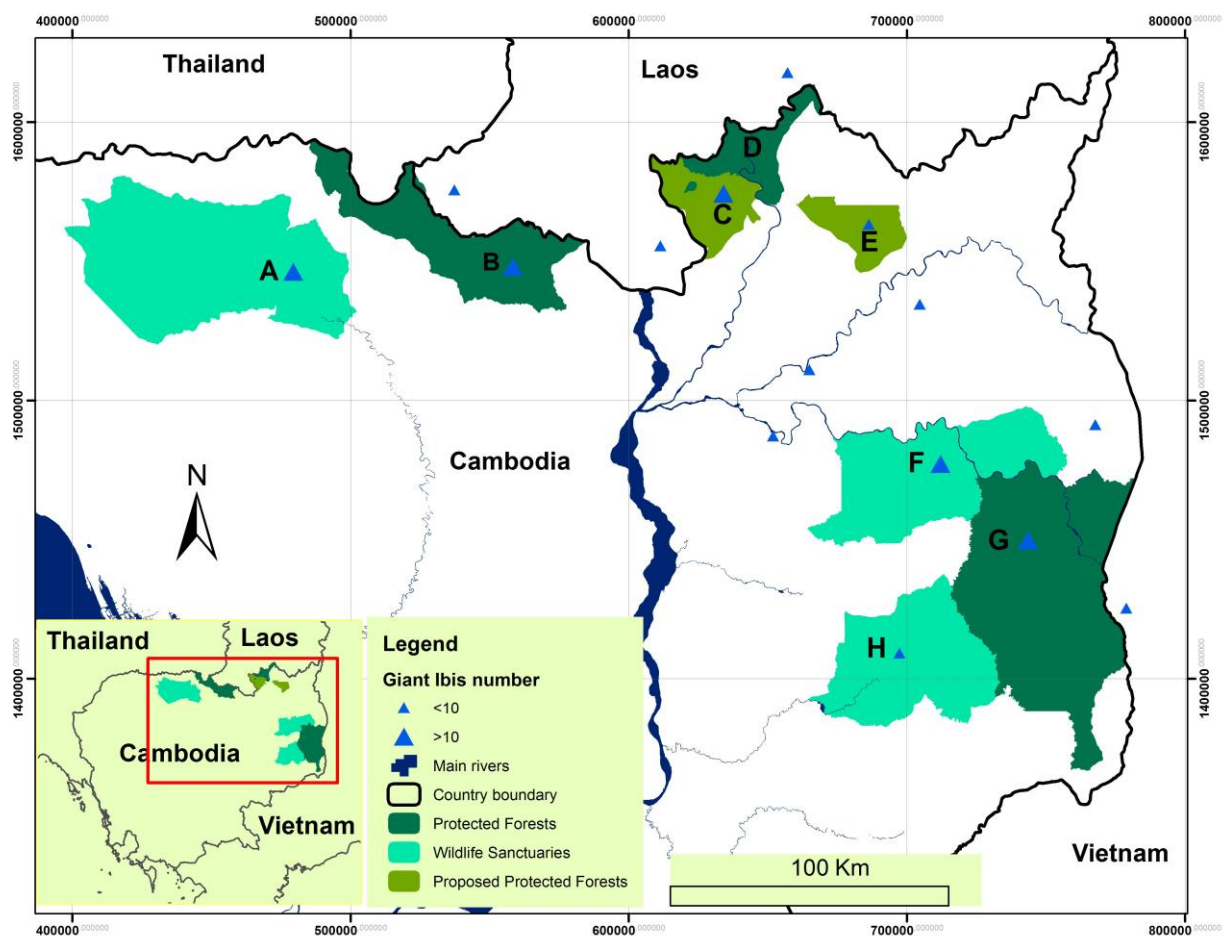


Figure 2. Map of priority protected sites in relation to present Giant Ibis populations of more than 10 individuals (large triangles) and less than 10 individuals (small triangles). Sites include Forestry Administration managed Protected Forests, Ministry of Environment managed Wildlife Sanctuaries and proposed new sites for protection. A: Kulen Promtep Wildlife Sanctuary, B: Preah Vihear Protected Forest, C: Siem Pang Proposed Protected Forest, D: Siem Pang Protected Forest, E: Veun Sai Proposed Protected Forest, F: Lomphat Wildlife Sanctuary, G: Mondulkiri Protected Forest, H: Phnom Prich Wildlife Sanctuary.

### 1.2.2 Habitat requirements

Singles, pairs or small parties occur in marshes, seasonal pools (*trapeangs*), wide rivers and grasslands in open, predominantly deciduous dipterocarp lowland forest (BirdLife 2015). The species seems to be dependent on soft mud around *trapaengs* for foraging during the dry season

(Wright *et al.* 2012), but sometimes it also feeds in deep water. Its diet comprises a variety of invertebrates, crustaceans, eels, frogs and reptiles. It frequently feeds in soft mud, but forages on all substrates at *trapaengs* (Wright *et al.* 2012). It nests in trees, with a preference for large *Dipterocarpus* species, generally more than 4 km from human habitation (Keo 2008b); in breeding season Giant Ibis use the very open dry dipterocarp forest near by the rivers (100-1000m) and in a medium distances from *trapaengs* (1000-2000m) (Ty, 2013).

### 1.3 Priority Issues

#### 1.3.1 General overview

The species has declined as a result of wetland drainage for agriculture, deforestation and opportunistic hunting and egg collection. Clearance of very large areas of lowland dry forest, including parts of the Northern Plains (Preah Vihear Protected Forest, Kulen Promtep Wildlife Sanctuary) and other areas (Lomphat Wildlife Sanctuary, Western Siem Pang IBA) where the species occurs, for agro-industry including rubber, cassava, wood pulp and teak plantations, has recently emerged as the greatest threat to this species.

It relies on *trapeangs*, which in the past were perhaps maintained by the now much depleted megafauna (Wright *et al.* 2012). As a consequence there is concern that these priority foraging habitats will become overgrown and dry up, becoming unusable as a foraging resource.

Generally the human population is increasing within the range of this species mostly through immigration from other provinces in Cambodia. Subsequent expansion of agricultural land and increasing hunting pressure and disturbance at feeding sites is causing the loss of breeding habitat for the species (An Dara 2008). The species appears to be very sensitive to human disturbance (An Dara 2008), particularly during the dry season when both birds and humans are concentrated around available *trapeangs* rendering much apparently suitable habitat unusable.

There is a lack of precise information on population estimates for the different sites where Giant Ibis is known to occur and this impedes prioritisation of conservation effort. Furthermore there is a lack of evidence on species survivorship at different stages of the species' lifecycle. Nest monitoring activities by WCS in Preah Vihear shows that without protection measures nesting success of 66%, producing on average 1.25 chicks per nest (Keo 2009). However the localised population remains low, suggesting that a high percentage of these fledged chicks do not survive to maturity (Keo pers. comms.).

#### 1.3.2 Key threats

Throughout this section “Current threat level” refers to the predicted severity of each threat between 2015 and 2025. Where threats are driven by more than one process “driver”, each process has been described separately.

Threat levels were determined by combining rankings for scope of threat (percentage of total population affected by each threat) and severity (estimated impact on population). Scope and severity rankings are detailed below:

Scope: 1- all of population (>90% of population), 2- most (50-90%), 3- some (10-50%), 4- few (<10%).

Severity: 1. rapid (rapid deterioration causing >30% over 10 years or 3 generations), 2- moderate (10-30%), 3- slow (1-10%), 4- none (<1%).

## **1) Forest loss**

Current threat level: Very High

### ***A) Habitat conversion by large-scale Economic Land Concessions***

Clearance of very large areas of lowland dry forest, including parts of the Northern Plains (Preah Vihear Protected Forest, Kulen Promtep Wildlife Sanctuary) and other areas (Lomphat Wildlife Sanctuary) where the species occurs, for agro-industry including rubber, cassava, wood pulp and teak plantations, has recently emerged as the greatest threat to this species; as agreed at a workshop held in Phnom Penh 2014. Indeed the majority of suitable Giant Ibis habitat within two protected areas previously identified to contain the species; Snoul Wildlife Sanctuary (Grey *et al.* 2014) and O Ya Dao Protected Forest (Barzen 2004) has now been converted to economic land concessions. This suggests that the species has become locally extirpated at these sites.

### ***B) Habitat conversion by small-scale agricultural encroachment***

In contrast to the habitat conversion described above, which refers to large-scale, industry led forest conversion into cash crop plantations, this threat, relates to small-scale agricultural expansion carried out by local communities for the purposes of subsistence agriculture and is often linked to the provision of infrastructure in the form of new roads.

### ***C) Forest loss due to planned infrastructure and development initiatives***

Development projects such as the planned construction of new roads through Siem Pang and Seima Protected Forest pose serious risk to Ibis habitat as they pave the way for high levels of migration into and settlement within sensitive habitat and increased levels of human disturbance. Future hydroelectric dam developments at the upper Mekong tributaries (Lower Se San 2 Dam and Lower Sre Pok 2 Dam) will lead to loss of some parts of Giant Ibis habitat along the Srepok and Sesan rivers, where a Giant Ibis population has recently been confirmed.

## **2) Human disturbance**

Current threat level: High

### ***A) Selective logging causing disturbance from and loss of suitable nesting trees***

Giant Ibis prefer large dry dipterocarp tree species for nesting (Keo 2008). Indeed 90% of Giant Ibis nesting trees were found to be common deciduous dipterocarp tree species: “Trach” *Dipterocarpus intricatus* (Least Concern) (50% of nesting trees) – Royalty Class II<sup>1</sup>, “Tbeng” *Dipterocarpus obtusifolius* (Least Concern) (40% of nesting trees) – Royalty Class II, “Korki” *Hopea odorata* (Vulnerable)- Royalty class I, “Chheuteal” *Dipterocarpus alatus* (Endangered) – Royalty Class II and “Phadiék” *Anisoptera costata* (Endangered) – Royalty class II.

In 2013 and 2014 BirdLife research team led by Ty Srun found that Giant Ibis used another tree species for nesting, “Phacek” *Shorea obtuse* (Least Concern) – Royalty class I.

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<sup>1</sup> Royalty class refers to the taxation category for commercial sale of different timber species; royalty class I is taxed more heavily and of higher economic value than class II.



Although Giant Ibis are not known to nest in luxury timber species, as commercial extraction depletes the remaining populations of luxury species, selective logging may increasingly target the above mentioned timber species which are still of significant commercial value. Therefore in heavily logged forests, commercial timber extraction may increasingly target trees also preferred by Giant Ibis for nesting.

Furthermore, Giant Ibis prefer to nest in tall straight trees, the tree type also preferentially selected for shaping into timber for house building. Therefore selective logging for subsistence housing construction by local communities is likely directly targeting and removing preferred Giant Ibis nesting trees. Logging of Giant Ibis nest trees during the nesting season may therefore increase breeding failure.

The lack of suitable nesting trees may also force Giant Ibis to nest in sub-optimal trees. In Siem Pang many of the large dipterocarp trees have been selectively logged, possibly causing a skew to the age classes of trees remaining in the landscape. In 2013 one Giant Ibis nest was observed on a small branch of a small tree. After a strong storm the nest was found beneath the tree. This anecdotal account suggests that selective logging may have an indirect effect on nesting success, although more detailed studies of the changing age classes of tree species is required to gain a better understanding of how selective logging is influencing forest structure.

### **B) Exclusion from foraging resources**

With a rapidly increasing rural Cambodian population, the number of people using Giant Ibis habitat is increasing. This causes unintentional negative impacts on Giant Ibis including competition for food resources (fish and frogs) and associated disturbance and exclusion from *trapeangs* (An Dara 2008). The species appears to be very sensitive to human disturbance (An Dara 2008), particularly during the dry season when both birds and humans are concentrated around available waterholes rendering much apparently suitable habitat unusable by the birds.

### **C) Anthropogenic burning**

The deciduous dipterocarp forest is burnt annually under an anthropogenic regime. However the frequency of burning has increased in recent years, causing an assumed reduction in ground biomass, which must impact negatively on food sources for Giant Ibis, such as frogs, reptiles and arthropods. A study of *trapeangs* that had versus had not been affected by fire found that mole crickets were three times as abundant at un-burnt pools (Keo 2008b). Burning history did not strongly affect the choice of feeding pool by Giant Ibises, although they used un-burnt pools more than burnt ones (Keo 2008b).

## **3) Loss of key habitat features (*trapeangs*)**

Current threat level: High/Medium

*Trapeangs* are key foraging resources for Giant Ibis during the dry season (Keo 2008a, Wright et al. 2012). In the absence of wild ungulates such as Wild Water Buffalo *Bubalus arnee* and Asian Elephant *Elephas maximus*, the wallowing and grazing behaviours of domestic water buffalo *Bubalus bubalis* play a crucial role in maintaining the ecological integrity of *trapeangs* (Wright 2012). In particular the wallowing behaviour may play a key role in creating, saturated muddy substrate, the preferred foraging habitat of Giant Ibis (Keo 2008b). However, due to agricultural modernisation, buffalo ownership is decreasing (Bou and Yam 2014). The reduction of domestic buffalo from the site may cause sedimentation and vegetation to increase at *trapeangs* (Wright 2012). The effects of this can already been seen at some of the more remote *trapeangs* in Western Siem Pang, which are becoming

choked with dense vegetation, particularly *Sesbania* spp, a woody stemmed member of the pea family that forms tall (>3m) dense stands at *trapeangs*. Similar *trapeang* conditions can be seen at other sites in Cambodia such as Lomphat Wildlife Sanctuary, with the absence of large wallowing ungulates (both domestic and wild) considered being the main factor behind this deterioration. Increased sedimentation and vegetation at *trapeangs* has the potential to decrease the amount of foraging habitats available to Giant Ibis.

**4) Natural predators (snakes, crows, monitor lizards and civets and other small carnivore species)**

Current threat level: High/Medium

Nest predation by common palm civet *Paradoxurus hermaphroditus* and/or yellow-throated marten *Martes flavigula* on two occasions in 2004 suggest that loss of nestlings to mammalian carnivores might be a constraint on breeding success (Keo 2008b). In that study it was presumed that these mammals were the source of predation and bengal monitor *Varanus bengalensis* was not considered. However, in a recent study nearly 60% of nest failures were not attributable to any cause (Wright *et al.* 2013). Protection of Giant Ibis nests from predators resulted in the number of young fledged per nest being 50% higher for protected nests (Keo *et al.* 2009). This provides experimental evidence that nest predation is a threat.

## **2. Ongoing conservation strategies**

### **Conservation Actions Underway**

Currently, the international conservation NGOs are supporting FA and MoE to strengthen effective protected area management at priority protected sites where Giant Ibis are known to occur by providing both financial and technical support. BirdLife International is supporting FA working in Siem Pang and supporting MoE working in Lomphat Wildlife Sanctuary to protect and conserve wildlife in both sites, especially the Critically Endangered bird species. WCS is supporting FA to protect Preah Vihear Protected Forest and supporting MoE to protect Kulan Promtep Wildlife Sanctuary; WWF is working at Mondulkiri Protected Forest; ACCB work at Mekong Flood Plain and CI work at Vuen Sai.

Trial habitat restoration of key Giant Ibis foraging habitat (*trapeangs*) is currently being tested by WWF (Gray *et al.* 2015), WCS and BLI with the goal of improving suitable foraging habitat and prey availability for Giant Ibis during the dry season.

Targeted species conservation actions to date have included the use of predator exclusion devices known as baffles (on Giant Ibis nest trees to protect against predation of eggs from small carnivore species (Keo 2008b). In Preah Vihear Protected Forest the use of nest baffles has been shown to increase survival success (Table 1). However there is concern that baffles may act as a clear visual cue to attract potential hunters to nest trees. Therefore the overall success of this intervention may depend on it being implemented in combination with a strong community engagement programme to deter hunting behaviour.



Figure 3. Predator-exclusion device (baffle) used for protecting Giant Ibis nests from civets and martens, reproduced from Keo 2008a.

Table 1: Success rate of the protected and unprotected nests in PVPF (Keo, 2009)

	Number of nests	Number of chicks fledged	Chicks per nest	Success	Daily survival Mayfield estimate	Estimated survival over nestling period
Protected	24	45	1.875	93.75	$99.85 \pm 0.15$	$90.00 \pm 9.48$
Unprotected	28	35	1.250	67.31	$99.30 \pm 0.21$	$61.30 \pm 9.04$

An alternative targeted nest protection method that has been used on other threatened bird species in Cambodia is the use of nest guardians; local community members given conditional payments to protect nests. In Preah Vihear Protected Forest and Kulen Promtep Wildlife Sanctuary a study comparing survival during the nesting period for nests with and without nest guardians of Lesser Adjutant *Leptoptilos javanicus*, and Sarus Crane *Grus antigone* showed that nests with guardians had significantly higher success (Clements *et al.* 2013)- Giant Ibis nests already being protected by the use of baffles. Nests were located by local people, often well-known hunters, hired specifically to reduce hunting pressure and for their knowledge of species' ecology. Local people received a reward of US \$5 for reporting a nesting site. For all species except Giant Ibises a permanent protection team of two people was established for each nest, or colony of adjutants. Each community member was paid \$1 per day (prior to 2008, increasing to \$2.5 after 2008) and a bonus \$1 per day if the chicks fledged successfully.

The effectiveness of nest guardians appears to differ from site to site. In a study of the breeding success of the White-shouldered Ibis *Pseudibis davisoni* in Western Siem Pang, Kulen Promtep Wildlife Sanctuary, Mekong Flooded Forest and Lomphat Wildlife Sanctuary, Wright *et al.* (2013) found that overall the use of nest guardians had no effect of breeding success. We infer

that the effectiveness of nest guardian schemes may also depend on developing positive local attitudes towards conservation.

WWF Siphandone, Stung Treng, Kratie currently use nest guardians on the White-Shouldered Ibis and hope to apply this approach to Giant Ibis nests. WCS and WWF plan to continue to use nest baffles and nest guardians in connection with wider sustainable habitat management and law enforcement initiatives. While BirdLife International has currently stopped the use of nest guardians and baffles due to concern that these targeted protection measures may cause additional disturbance at breeding sites and have a negative effect on breeding success. Instead BirdLife International is increasing the level of nest monitoring by trained members of the field monitoring team.

Furthermore WCS in partnership with SMP is pursuing a livelihoods development programme through the Ibis Rice initiative at Preah Vihear aimed at supporting improved livelihoods among local communities in exchange for land titling agreements and increased commitment to sustainable and non-environmentally damaging agricultural practices. WCS is also working with SVC to implement Giant Ibis focused ecotourism at KPWS. Local communities receive a financial benefit linked to successful sightings of the ibis by birdwatchers.

Giant Ibis Transport has also taken on the role of Species Champion, agreeing to provide funding over three years for conservation work undertaken by BirdLife International. Giant Ibis Transport has supported the production of a documentary ([Land Of The Giants](#)) on the Giant Ibis, available in both English and Khmer, to support awareness raising efforts on the species.

### **3. Framework for action**

#### **3.1 Scope of planning**

This action plan represents the output of a workshop entitled ‘Giant Ibis Consultancy workshop to produce a conservation action plan to effectively conserve Giant Ibis’ conducted in Phnom Penh, Cambodia, on 30 November 2014. A list of attendees is contained in Annex 2.

#### **3.2 Matrix**

##### **Aim**

By 2025, a stable or increasing population of Giant Ibis inhabits a network of well-protected sites.

##### **Objectives**

1. Protect priority habitat of Giant Ibis at all key sites where the species occur
2. Improve survival and breeding success through targeted species interventions
3. Conduct research to inform conservation actions.

##### **Outcomes**

1. All priority sites within the range of Giant Ibis are managed appropriately.
2. Targeted species interventions result in improved breeding success and survival.
3. Conservation research and monitoring is used to inform species management.

## Actions and Budget

All costs in US\$. Indicative budget does not account for rate of inflation.

<b>Objective 1. To protect breeding and foraging habitats of Giant Ibis at all key sites where the species occur.</b>						
<b>Action</b>	<b>Priority</b>	<b>Timescale</b>	<b>Organisations</b>	<b>Annual cost</b>	<b>Years</b>	<b>Total</b>
1.1. Establish new Protected Forests covering core deciduous dipterocarp habitat in Western Siem Pang, Vuen Sai, Mekong Bird nest Protection site near Kratie	Very High	2015, 2017, 2019	FA, BLI, CI, WWF	100,000	3	300,000
1.2. Implementing and supporting effective protected area management including law enforcement and targeted patrolling of key Giant Ibis habitat	High	Ongoing	FA, MoE, WWF, WCS, BLI, CI	800,000	10	8,000,000
1.3. Support sustainable development initiatives to enhance the economic value of conservation for local communities surrounding core Giant Ibis habitat and reduce the need for encroachment e.g. Wildlife Friendly rice, ecotourism	High	Ongoing	FA, MoE, WCS, WWF, BLI,	50,000	3	150,000
1.4. Support environmental impact assessment process for planned development initiatives to consider and minimise impact on core Giant Ibis habitat- locating new road developments outside of protected sites and minimising the impact of planned	High	Ongoing	FA, MoE, WCS, WWF, BLI	50,000	5	250,000

dam development projects on Giant Ibis habitat						
1.5. Support efforts to engage the private sector in socially and environmentally responsible development projects, preventing ELCs from being located within protected sites and reducing, mitigating and where necessary offsetting the biodiversity impact of projects. Particularly Lomphat WS and Seima PF e.g. mitigate the impact from Hoang Anh Gia Lai Group	High	As the need arises	All, NGO network meetings as needs arise	50,000	3	150,000
1.6. Piloting of habitat restoration techniques for priority foraging habitat- ( <i>trapeangs</i> )	High	2015-2020	BLI, WCS, WWF, FA,	10,000	5	50,000
1.7. Supporting community co-management of priority habitats ( <i>trapeangs</i> ) and advocacy to reduce community disturbance and poisoning of these sites	Medium	2015-2020	FA, MoE,	20,000	10	200,000
1.8. Secure funding for implementing conservation activities	Medium	Ongoing	All	5	1	5,000
<b>Total cost</b>						<b>9,955,000</b>



<b>Objective 2. Improve survival and breeding success through targeted species interventions</b>						
<b>Action</b>	<b>Priority</b>	<b>Timescale</b>	<b>Organisations</b>	<b>Annual cost</b>	<b>Years</b>	<b>Total</b>
2.1. Incorporate Giant Ibis as a priority species, setting conservation targets and activities within site level management plans for protected sites in SP, PVPF, KPWS, MPF, LWS)	High	2015-2016	FA, MoE, BLI, WCS, WWF, ACCB	5,000	1	5,000
2.2. Locate Giant Ibis nests and provide targeted protection e.g. baffles/ nest guardians/ targeted patrols	High	Ongoing	FA, MoE, WCS, WWF, BLI	40,000	10,000	400,000
2.3. Consolidate awareness raising materials (including Giant Ibis film, <i>trapeang</i> poisoning posters etc.) and conduct education and awareness raising programme in villages surrounding key Giant Ibis populations to effect positive attitude change	Medium	Ongoing	All partners	10,000	10	100,000
<b>Total cost</b>						<b>505,000</b>

<b>Objective 3. Conduct research to inform conservation actions</b>						
<b>Action</b>	<b>Priority</b>	<b>Timescale</b>	<b>Organisations</b>	<b>Annual cost</b>	<b>Years</b>	<b>Total</b>
3.1. Establish Giant Ibis Working Group to share information on Giant Ibis research	High	2015	BLI	2,000	10	20,000
3.2. Develop unified census method that is possible to implement at all priority sites at a minimum cost and with appropriate national technical expertise	High	2015-2016	BLI	10,000	2	20,000
3.3. Conduct census in priority sites – each site to follow appropriate methodologies to suit their needs and resource availability until a census method is endorsed by all partners	High	2017, 2020, 2023	All partners	50,000	3	150,000
3.4. Within priority sites identify and map key areas for Giant Ibis conservation (e.g. nest sites , <i>trapeangs</i> , earthworm mounds) to inform the development of site management plans	High	2015-2017	All partners	60,000	3	180,000
3.5. Establish regular monitoring of key foraging sites, nesting trees, changes in forest structure and condition within priority protected sites	Medium	2017 onwards	All partners	10,000	9	90,000
3.6. Investigate under surveyed sites of potentially high Giant	High/ Medium	2016 onwards	BLI, WWF, ACCB, WCS	60,000	1	60,000

Ibis populations – Lomphat WS, Mondulkiri PF, Mekong Bird Nest Protection site near Kratie						
3.7. Assess effectiveness of targeted conservation actions (e.g. breeding success with/without baffles)	Medium	2015 onwards	All partners	5,000	3	15,000
3.8. Update data on species distribution, trend, etc. to update BirdLife Data Zone factsheet on Giant Ibis	Medium	2015, 2018, 2021, 2024	BLI	1000		4000
3.9. Purchase satellite transmitters for opportunistic studies of Giant Ibis, to understand ranging behaviour	Medium	2018	WCS, WWF, BLI, ACCB	10,000	1	10,000
3.10. Research species survival at different stages of lifecycle - particularly monitor juvenile mortality and causes.	Medium	2019, 2020	All partners	10,000	3	30,000
3.11. Investigate intensification of burning regimes	Low	2020,2021	WCS, BLI, WWF	10,000	1	10,000
<b>Total cost</b>						<b>589,000</b>

#### 4. Law and regulation drafting schedule

Giant Ibis is protected by Cambodia law and was nominated as national symbol bird of Cambodia by Royal Decree. Therefore there is no need for additional laws to be passed for this species.

#### 5. Budget summary and implementation plan

##### 5.1 Budget summary

Action	Mean annual cost	Years	Total
<b>Objective 1.</b> To protect breeding and foraging habitats of Giant Ibis at all key sites where the species occur	<b>995,500</b>	10	<b>9,955,000</b>
<b>Objective 2.</b> Improve survival and breeding success through targeted species interventions	<b>50,500</b>	10	<b>505,000</b>
<b>Objective 3.</b> Conduct the research to inform conservation actions	<b>58,900</b>	10	<b>589,000</b>
<b>Total</b>	<b>1,104,900</b>		<b>11,049,000</b>

\* Budget in US\$

## 5.2 Implementation plan

Action\Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Objective 1</b>											
1.1											
1.2											
1.3											
1.4											
1.5											
1.6											
1.7											
1.8											
<b>Objective 2</b>											
2.1											
2.2											
2.3											
<b>Objective 3</b>											
3.1											
3.2											
3.3											
3.4											
3.5											
3.6											
3.7											
3.8											
3.9											
3.10											
3.11											

## **6. Monitoring and evaluation**

The delivery of the Giant Ibis National Action Plan will be monitored and evaluated by the Ibis Working Group (see annex 5). At the time of writing this group is in the process of establishment. It will be co-chaired by senior representatives from the Forestry Administration and Ministry of Environment, with two group coordinators from BirdLife International Cambodia Programme to oversee day to day delivery of action plan activities and organise two workshops per year to review progress. The group will also include government representatives from each protected site and NGO counterparts.

The impact of Giant Ibis conservation measures is monitored through both species monitoring and habitat monitoring approaches:

### **6.1 Species monitoring**

Two species monitoring approaches are undertaken to assess population and individual survival:

- 1) The direct monitoring of nesting success of breeding pairs
- 2) Population surveys of priority sub populations during the dry season (Jan-March). A detailed protocol for this survey methodology is available from BirdLife Cambodia Programme (contact [Srun@birdlifecambodia.org](mailto:Srun@birdlifecambodia.org))

### **6.2 Forest cover change**

Changes in the extent of forest cover are derived from remotely sensed satellite data and reviewed periodically every three years for the different priority protected sites.

## **7. Conclusion**

The Giant Ibis is Cambodia's national bird. Yet the species is Critically Endangered and faces a high risk of extinction. Its continued survival depends on greater commitment of key protected sites to implement targeted conservation measures for the species. This action plan aims to form the foundation for a Giant Ibis Working Group, a core group of government and civil society partners that will identify and drive forward priority actions for the species.

Important threats to Giant Ibis habitat are the large-scale land clearance of forest for plantation farming known as Economic Land Concessions, small-scale agricultural encroachment and forest loss due to infrastructure developments such as new road construction projects. In addition there are still big gaps in our knowledge of the species' distribution across Cambodia, the priority locations for targeted conservation within protected sites, and the species' ranging behaviour.

Priority actions for site conservation of Giant Ibis include the establishment of new protected sites around key areas of Giant Ibis habitat, naming Giant Ibis as a priority species for conservation within site management plans and agreeing conservation actions at a site level, improved law enforcement and sustainable management of forest resources and sustainable development support to local communities to reduce over-exploitation of Ibis habitat. In addition greater effort is required to locate Giant Ibis nests in order to implement targeted nest protection measures, coupled with community awareness raising to improve the flagship status of the species. Finally on-going monitoring and research is required to inform conservation interventions and better understand survival challenges at different stages of the species' lifecycle.



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Wright, H. L. (2012). *Synanthropic survival: low-impact agriculture and White-shouldered Ibis conservation ecology* (Doctoral dissertation, School of Environmental Sciences, University of East Anglia).

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## **ANNEX 1: Description of low priority threats to Giant Ibis**

### **5) *Hunting of adult Giant Ibis, chicks and eggs***

Current threat level: Low

A thorough assessment of the severity of this threat is still lacking. However consultation with key site managers at all protected sites where Giant Ibis are known to occur has provided no documented cases of Giant Ibis hunting. Therefore hunting is not considered to be as widespread a threat as had previously been assumed. Any hunting that may occur is assumed to be undertaken opportunistically and linked to other forest use strategies, such as NTFP collection.

### **6) *Climate Change***

Current threat level: Low

A prolonged drought in the 2009-2010 dry seasons appeared to dramatically lower the breeding success of Giant Ibis, by approximately 50%; although this event is not attributable to climate change, climate change may pose a long-term threat to the persistence of this species (H. Rainey *in litt.* 2012).

### **7) *Poisoning***

Current threat level: Low

A potential threat is also posed by human intervention at *trapeangs*, poisoning water sources either deliberately or unintentionally. This has the potential to cause knock on effects on species that feed at these food sources. A Giant Ibis was found poisoned at Trapeang Svay Toyoch on 11 January 2009 (BirdLife International Cambodia Programme 2012)

### **8) *Stochastic effects (heavy rain and wind causing nest destruction)***

Current threat level: Unknown

In 2013 one chick fell from the nest at Siem Pang forest. This was likely caused by strong wind as the nest was built on an unsuitably small branch and easily shaken by the wind.

**ANNEX 2: List of attendees at Giant Ibis workshop 30 November 2014, Phnom Penh**

No.	Name	Organisation	Position	Other
1	Jonathan Eames	BL	Senior Technical Advisor	
2	Bou Vorsak	BL	Country Programme Manager	
3	Robin Loveridge	BL	Technical Advisor	
4	Kry Masphal	BL/FA	Siem Pang Protected Forest Manager	
5	Sum Phearun	BL	National Vulture Coordinator	
6	Simon Mahood	WCS	Tonle Sap Technical Advisor	
7	Thomas Gray	WWF		
8	Toby Bakos	ACCB	Programme Manager	
9	Oliver Gray-Read	ACCB	Vulture Coordinator	
10	Rours Vann	WCS	Research Team Leader at KPWS	
11	Thong Sokha	WCS	Project Coordinator	
12	Suy Senglim	BL/BCEC		
13	Chhin Sophea	CBC/FFI	Researcher	
14	Neil Furey	CBC/FFI	Research Associate	
15	Prum Sovanna	WWF/FA		
16	Neab Samneang	MoE		
17	Ken Bopreang	MoE		
18	Thou Veasna	PRCF	Project Officer	
19	Sok Ko	WWF/FA		
20	Yav Net	BL	Project Officer	
21	Ty Srun	BL	Project Officer	
22	Hon Lina	Grandis Timber	Coordinator	
23	Thi Sotearen	CBC/FFI	Project Officer	
24	Mem Mai	BL	Senior Monitoring Ranger	
25	Luy Rathana	FA		

### ANNEX 3: Updated population estimate

Location	Previous BirdLife datazone estimate no. of pairs	Source	2014 estimates	Source	2014 mature inds
Preah Vihear and Kulen Promtep Wildlife Sanctuary	40	T. Evans in litt. 2012	24 nests	WCS nest data 2014	48
Siem Pang	40	H. Wright in litt. 2012	42-62	Ty 2014	35
Lomphat Wildlife Sanctuary	5	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	10-15 pairs	Sum (2013)	25
Koh Kong			1	(Evans and Goes 2011)	2
Sesan			1 pair or 3 birds	Oliver Gray-Read expert opinion based on anecdotal sightings	2
Oddar Meanchy - Sang Sahakum Rukhavoan community forest			1 pair	Peter Brackles camera trap anecdotal evidence	2
Seima Protection Forest	5	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	5 pairs	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	10
Mondulkiri Protected Forest	5	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	50 individuals	Tom Grey's expert opinion based on anecdotal camera trap data	30
Phnom Prich Wildlife Sanctuary	5	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	5 pairs	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	10
Snoul Wildlife Sanctuary			0	Previous sightings by Tan Setha 2002 in litt. (taken from Grey et al. 2014)	0
O Ya Dao Protected Forest			0	Previous sightings by Barzen 2004 (taken from Grey et al. 2014)	0
Veunsai Protected Forest	5	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	5 pairs	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	10
Tonle Sap Lake		T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	5 pairs	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	0
Yok Don National Park - Vietnam	5	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	5 pairs	T. Evans, H. Rainey, R. Vann and H. Wright in litt. 2012	10
extreme south of Laos	5		5 pairs	BirdLife 2015	10
<b>Total number of adult pairs</b>	<b>115</b>	BirdLife 2015			
<b>Total Number of mature individuals</b>				Updated estimate	<b>194</b>
<b>Total number of individuals</b>	<b>345</b>	BirdLife 2015			

#### ANNEX 4: Giant Ibis educational resources

Michaud, A. (2015) *Land of the Giants*.

Available: <https://www.youtube.com/watch?v=7IPsunz-cPI&feature=youtu.be>

BirdLife International Cambodia Programme. (2014). *Buffalo Friend*.

Available: [https://www.youtube.com/watch?v=w\\_p1smzZFG4](https://www.youtube.com/watch?v=w_p1smzZFG4)

#### ANNEX 5: Ibis working group draft mission and objectives

##### Mission

To promote the long-term conservation of both Giant Ibis and White-shouldered Ibis and their habitats in Cambodia by coordinating conservation activities between international and national organisations.

##### Objectives:

- 1) Oversee the development, implementation and review of Ibis species action plans
- 2) Improve the coordination, capacity and quality of conservation interventions at all sites
- 3) Coordinate national species censuses
- 4) Develop mechanisms for the sustainable financing and coordination of Ibis conservation

#### ANNEX 6: List of attendees at Giant Ibis consultation meeting 29 July 2015

No.	Name	Position	Organization
1	Keo Omaliss	Director	Department of Wildlife and biodiversity, FA
2	SengRathea	Deputy Director	Biodiversity Department, MoE
3	Jonathan Eames	Senior Technical Advisor	BLI
4	Bou Vorsak	Country Programme Manager	BLI
5	Robin Loveridge	Technical Advisor	BLI
6	Kry Masphal	Manager	Siem Pang Protected Forest, FA/BLC
7	Sum Phearun	National Vulture Coordinator	BLI
8	Simon Mahood	Tonle Sap Technical Advisor	WCS
9	Prum Sovanna	Deputy Director	Mondulkiri Protected Forest ,FA/WWF
10	Rours Vann	Research Team Leader at KPWS	WCS
11	Ty Srun	Senior Project Officer	BLI
12	Ou Sothy	Manager	Lomphat Wildlife Sanctuary, MoE
13	Phan Channa	Senior Researcher	WWF/MoE
14	Chea Ngeth	Manager	Veun Sai PPF, FA
15	Samrangdy Vecheth	Manger	Phnom Prich wildlife Sanctuary, MoE
16	Seang Darong	Patrol Team Leader	WCS/FA
17	Aylin McNamara	Student/Researcher	Cambridge



# **Submission Form**

## Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: *limn@vishnulawgroup.com*

Date of Submission: 25<sup>th</sup> May 2016

Submitted by (provide individual and STWG contact information): Maylis Desrousseaux (STWG 2)

### 1. Issue:

Soil protection

### 2. Reference to Code Book and Chapter (if applicable):

BOOK 6 – URBAN LAND USE PLANNING AND MANAGEMENT

BOOK 17 - **Chapter # - Identification, management and clean up of contaminated land**

### 3. Comparative Experience (including Cambodian and international examples and experience):

In French environmental law, soils are only considered through pollution, but this statement is being reviewed. A national strategy on soils is being elaborated and research programs are dealing with the possibility of an evolution.

The article 75 of the Federal Constitution of the Swiss Confederation about spatial planning specifies "The Confederation shall lay down principles on spatial planning. These principles are binding on the Cantons and serve to ensure the appropriate and economic use of the land and its properly ordered settlement." In other words, Switzerland has an accurate perception of the scarcity of its land and proactively attempts to limit its urbanization. Food safety is also one of its concern. As a result, Switzerland is considered as one of the most performing country of Europe to preserve land and its food security (Swiss Ministry of environment 2007; CGAAER 2012).

### 4. Recommendation:

Soil is not taken into consideration in the draft of the environmental code. We guess that soil issues will be treated by the chapters on identification and management of contaminated land, but this means that only polluted soils will be taken care of.

1. There is an international movement in favor of the recognition of soils as natural medias, regarding the major threats that this media is facing. Therefore, a chapter on soils, under a book on natural medias would be particularly interesting.  
See Boer B. & Hannam I. (2014). Drafting legislation for sustainable soil: A guide, IUCN environmental policy and law paper, n°52, 100 p.
2. It could also be connected with the book on **land use and land planning**.

The scope of book 6: Regarding book 6, I don't see why it only applies to urban areas. Does this mean that there is no land planning in rural areas? I don't know if this is relevant to have different types of tools to plan land uses.

I believe there could be tools related to the size of the areas (Regions, cities, villages etc.).

An article with principles could lead land uses and land planning in Cambodia.

3. What does the word “management” imply?

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):

**Book 17:** Instead of “clean up”, prefer rehabilitation and remediation.

**Ecological restoration** could be made compulsory when soil pollution occurs in protected areas.

**The compatibility principle:** This principle limits the level of restoration of polluted sites to the quality required for the next use that would have been planned by industrial companies, in accordance to land planning documents. It is considered by a large part of the legal doctrine as unambitious in a sense that land isn't ecologically restored. Belgian law is particularly interesting for this aspect: Regions have adopted very detailed regulations with a nomenclature of uses permitted or not, depending on the type and extent of the pollution.

The notion of **soil security** could be integrated in books 6 and 17 to prevent unnecessary urbanization and to guide rehabilitation measures.

Therefore, **book 6 and book 12** on coastal zone planning could be linked. Book 12 could be a chapter of land planning.

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

**14 June 2016**

Submitted by (provide individual and STWG contact information):

**Miriam Stark**

**Cultural and Natural Heritage Park Conservation**

*(Required, including relevant STWG, if any.)*

#### 1. Issue:

**I have two concerns. The first is a lack of a “Cultural Impact Assessment” component in the Code anywhere. Title 5 (Book 2) lists an Environmental Impact Assessment, but it’s not clear that this title/book also includes a Cultural Impact Assessment. Without it the code may do a fine job of protecting natural resources but a very poor job of protecting the human populations who live on/in/with these resources. Not only would that be a problem in terms of human rights (evictions, land loss, etc.); trying to protect the environment without accounting for people will likely be unsuccessful. Does your code include a Cultural Impact Assessment? If so, where?**

**My second concern is that this Environmental Code, at least as far as you have organized your working groups, largely restricts cultural heritage to parks. Cambodia’s cultural heritage is dispersed across the country and is not restricted to “parks.” So – unless the code recognizes and accommodates this fact – your environmental code may actually make it legal to destroy cultural heritage resources that are not within designated park boundaries. This is obviously not what you had in mind.**

#### 2. Reference to Code Book and Chapter Title (if applicable):

***Book 2 - Environmental Planning***

**Title 5 – Environmental Impact Assessment**

***Book 3 – Environmental Management and Sustainability Mechanisms***

**Title 4 – Cultural and Natural Heritage Management**

3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

**I've noted repeatedly in messages to Megan Quenzer, the US Environmental Impact Assessments include a Cultural Impact Assessment. This is codified in the National Environmental Protection Act (NEPA) of 1969**

<https://www.epa.gov/nepa>

**Please note, when your team does consult the cultural heritage protection legislation, that the heritage resources (archaeological, architectural) are privileged ahead of human resources. In essence, heritage managers now can evict human populations from areas whose cultural heritage resources are deemed protectable. Note, please, that the US government also made this mistake in establishing national parks in the 20<sup>th</sup> century, which included evicting Native Americans from their ancestral lands. Let's avoid making the same mistake in Cambodia by building a stronger Environmental Code that acknowledges that people are one of our most important resources for protecting the natural environment.**

4. Recommendation:

*(Please include here the text of the recommendation to address the issue provided in number 1 ["1. Issue"] above. If needed, note "See Attachment" for corresponding documents.)*

**Incorporate social science concerns more deeply into your Environmental Code to accommodate the needs of Cambodian people who will be affected (and in some cases are adversely affected already) by governmental decisions.**

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

Date of Submission: May 26, 2016

Submitted by (provide individual and STWG contact information): Paul A. Barresi  
([p.barresi@snhu.edu](mailto:p.barresi@snhu.edu)) STWG-1

1. Issue: Unnecessary conceptual complexity created in Book 4 by a lack of clarity in the scope of the activities for which EIA is required

2. Reference to Code Book and Chapter (if applicable): Book 4

3. Comparative Experience (including Cambodian and international examples and experience):

In its aims and text, Book 4 distinguishes either between “development projects” and “activities that will have an impact on the environment,” or between “development projects that will have an impact on the environment” and “development activities that will have an impact on the environment,” although the reasons for making either distinction is not apparent. (Please see my other comment about the reference to impacts on society.) If the point is to undertake EIA for things having to do with development that have environmental impacts, then distinguishing between “development projects” and “development activities” (which on their face would seem to include “development projects”) is both superfluous and conceptually confusing. Moreover, it is not clear why the EIA process is limited to “development,” or even what “development” is. Is it “development” in the sense of the distinction between developed and less developed countries? Is it “development” in the sense of construction? Is it both? Book 4 would be less conceptually confusing, and therefore easier to implement, if it referred merely to “development activities,” and if “development” were defined to make clear what qualifies as such.

4. Recommendation: Redraft Book 4 (and related definitional provisions) in accordance with the above

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible): None at this time

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses): None

7. Drafting Team Analysis/Response (to be included in public database):



## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

Date of Submission: May 26, 2016

Submitted by (provide individual and STWG contact information): Paul A. Barresi  
([p.barresi@snhu.edu](mailto:p.barresi@snhu.edu)) STWG-1

1. Issue: EIA for existing projects

2. Reference to Code Book and Chapter (if applicable): Book 4

3. Comparative Experience (including Cambodian and international examples and experience):

In my experience, requiring EIAs for existing projects is very unusual. It is not clear from the fragmentary text on the subject in this draft of the Code what the implications of this process would be.

4. Recommendation: I would suggest that the idea of performing EIA's for existing projects be thought through conceptually before the drafting of any more text on the topic in the Code

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible): None

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses): None

7. Drafting Team Analysis/Response (to be included in public database):



## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Date of Submission: May 26, 2016 (supersedes my May 19 recommendations on the same topic)

Submitted by (provide individual and STWG contact information): Paul A. Barresi  
([p.barresi@snhu.edu](mailto:p.barresi@snhu.edu)) STWG-1

1. Issue: Unnecessary conceptual complexity created in Book 4 by a less than fully comprehensive concept of the term *environment*, and the lack of a definition of the term

2. Reference to Code Book and Chapter (if applicable): Book 4

3. Comparative Experience (including Cambodian and international examples and experience):

In its aims and text, the current version of Book 4 distinguishes between impacts on the “environment” and impacts on “society,” but does not define either term. It also creates a distinct process for undertaking “Health Impact Assessment.” The result is a fragmented conception of what an “environmental” assessment is. Although I understand that the Code will include a glossary of key terms, the definitional issues relevant to EIA really need to be addressed in advance in order to avoid creating conceptual confusion and unnecessary complexity in the text of the Code itself.

The environmental law regimes of all of the jurisdictions on which I work (i.e. China, India, Russia, the U.S.) define the term *environment*, but do so in surprisingly different ways. In general, the relevant questions are: Does the environment include things? If so, then which things? Just non-human “natural” things (although the use of the term “natural” in this context is conceptually problematic)? Man-made things? Human beings themselves? Does it include relationships among things? If so, then among which things? Only among non-human things? Between human things and non-human things? Among human beings themselves? (After all, in accordance with the ordinary usage of the term, the “environment” of any given human being includes all other human beings.)

In general, my view is that the most comprehensive and robust definitions are the best and easiest with which to work because they simplify the law. Especially in jurisdictions in which a strong rule of law remains aspirational, simplicity is a virtue. When the term *environment* is robustly and comprehensively defined, there is no need to distinguish between impacts on the “environment” and impacts on “society,” because the one concept is subsumed by the other. Similarly, there is no need to carve out a special procedure for “Health Impact Assessment”

because impacts on human health are impacts on the “environment” itself, either directly or indirectly.

4. Recommendation: Redraft Book 4 (and the related definitional provisions of the Code) to include a comprehensive definition of the term *environment* in accordance with the above

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible): None at this time, although I could draft a definition if asked to do so

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses): None

7. Drafting Team Analysis/Response (to be included in public database):

## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Date of Submission: May 26, 2016 (supersedes my May 19 recommendations on the same topic)

Submitted by (provide individual and STWG contact information): Paul A. Barresi  
([p.barresi@snhu.edu](mailto:p.barresi@snhu.edu)) STWG-1

1. Issue: A lack of clarity in Book 4 about the scope of the impacts that EIA must cover

2. Reference to Code Book and Chapter (if applicable): Book 4

3. Comparative Experience (including Cambodian and international examples and experience): Although in my experience defining the impacts to be assessed in EIAs is less common than defining the term *environment*, the definition of the latter necessarily implies something about the scope of the former. (Please see my other comments about defining the term *environment* in the Code.) In any case, defining the term *impact* in the sense of listing the general categories or specific types of impacts that must be assessed is very useful in clarifying the EIA process. The current draft of the Code does refer to the general category of cumulative impacts, but not to indirect impacts. It makes no distinction between positive impacts and negative impacts, and thus fails to make clear whether both should be assessed. With respect to specific types of impacts, the current draft of the Code refers to impacts on “the environment, economy, society, health and culture” with respect to EIAs in general, and to “health and safety” in the context of the “Health Impact Assessment” process (please see my comments about this process in the context of the lack of a definition of the term *environment*), but also singles out impacts on the “culture, custom, tradition, livelihood, and the property of” indigenous people for special treatment. Thus, the current draft of the Code both fragments the impact concept, and leaves important questions unanswered, and in ways for which the reasons are not immediately apparent. For example, why does the Code require assessments of impacts on the custom, tradition, livelihood, and the property of indigenous peoples, but not of anyone else? The EIA process would be more robust, and the Code would be less conceptually complex, and thus easier to implement, if the term *impact* were defined by reference to the general categories and specific types of impacts that EIAs must address in all cases, even if it also emphasizes that some impacts are likely to be more relevant in some cases than in others. This definitional exercise would have to be undertaken in tandem with the effort to draft a robust, comprehensive definition of the term *environment*, as described in one of my other comment submission.

4. Recommendation: Redraft Book 4 (and related definitional provisions) in accordance with the above

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible): None at this time, although I could draft appropriate language if asked to do so

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses): None

7. Drafting Team Analysis/Response (to be included in public database):



# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

Date of Submission: May 26, 2016

Submitted by (provide individual and STWG contact information): Paul A. Barresi  
([p.barresi@snhu.edu](mailto:p.barresi@snhu.edu)) STWG-1

1. Issue: Artificial distinction between “Environmental Impact Assessment” and “Strategic Environmental Assessment”

2. Reference to Code Book and Chapter (if applicable): Book 9

3. Comparative Experience (including Cambodian and international examples and experience):

Although the laws of many jurisdictions distinguish between planning-level “strategic environmental impact assessment” and project-level “environmental impact assessment,” the practice is not universal. Conceptually, there is no fundamental difference between assessing the environmental impacts of plans (whether strategic or otherwise) and assessing the environmental impacts of proposals for site-specific projects (which might or might not be intended to implement those plans) because they all are proposals for activities likely to have environmental impacts, which proposals exist along an unbroken continuum of comprehensiveness and abstraction. The only practical difference lies in the focus of the universe of impacts that the assessor generally considers it to be prudent to consider at each level of analysis, with that focus becoming narrower and more concrete as one moves along the continuum of activities from strategic-level planning to the preparation of less comprehensive, more concrete implementation plans, to proposals for undertaking site-specific projects (which might or might be intended to implement plans per se). The practice of focusing environmental impact statements appropriately in this way, whether in jurisdictions that purport to carve out a special category of “strategic” environmental impact assessments or not, is called “tiering.” Tiering ensures that the environmental impact assessments of strategic plans focus on the environmental impacts of the strategies, not the environmental impacts of the less comprehensive plans that will implement the strategies, or the impacts of the site-specific projects that will implement the less comprehensive plans. Environmental impact assessments of the less comprehensive plans focus on the impacts that flow proximately from those plans, not the site-specific projects that will implement them, etc. As an effort to draw bright lines along an unbroken continuum of activities that are likely to cause environmental impacts, the distinction between “strategic” environmental impact assessment and other types of environmental impact assessment is a distinction without a difference, and thus neither necessary nor especially useful.

4. Recommendation: Delete Book 9, and address all activities likely to have environmental impacts in Book 4

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible): None at this time

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses): None

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

Date of Submission: May 26, 2016

Submitted by (provide individual and STWG contact information): Paul A. Barresi  
([p.barresi@snhu.edu](mailto:p.barresi@snhu.edu)) STWG-2

1. Issue: Placement of all pollution control issues in a single chapter

2. Reference to Code Book and Chapter (if applicable): Book 17

3. Comparative Experience (including Cambodian and international examples and experience):

Although the laws used to control different types of pollution in progress (e.g., air pollution emissions, water pollution discharges) often are based on the same general policy implementation strategies (e.g., ambient environmental quality standards, performance standards), considerations applicable to the sources, methods of transport, and control strategies most appropriate for these different types of pollution in progress have led most, if not all, jurisdictions to address them separately. The cleanup of contaminated land, which is different in fundamental respects from the control of pollution in progress, is in a category by itself in terms of the relevant policy design principles, policy implementation mechanisms, and legal enforcement strategies.

4. Recommendation: Break the chapter currently devoted to “pollution control issues, including air, water, noise, smell, smoke, haze, vibration, light, ozone, radioactivity and contaminated land into separate chapters

5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible): None at this time

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses): None

7. Drafting Team Analysis/Response (to be included in public database):

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment. : [see attached page]*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*(Required)* **3 June 2016**

Submitted by (provide individual and STWG contact information):

**STWG 7, Joanne Fox-Przeworski, [jfoxprzeworski@gmail.com](mailto:jfoxprzeworski@gmail.com)**

### 1. Issue

*(Please provide a brief description of the issue that is addressed by the recommendation included in number 4 [“4. Recommendation”] below.).*

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

*(Please include here the text of the recommendation to address the issue provided in number 1 [“1. Issue”] above. If needed, note “See Attachment” for corresponding documents.)*

### 5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

### 6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

### 7. Drafting Team Analysis/Response (to be included in public database):

## Revised Draft Structure of the Environmental Code

Comments re. specific titles from Joanne Fox-Przeworski, sent 3 June 2016

Please note: I have not received any submissions from STWG 7 and therefore do not know what others have suggested. It would be helpful and more efficient if those on STWG 7 could circulate comments to all members of the group so we don't duplicate efforts and could complement or react to comments from others.

My suggestions below relate to elements originally suggested under STWG7.

### *Book 1 - General Provision*

Title 1 – General Provisions

Title 2 – Organization of Jurisdictional Institutions/Jurisdictional Issues

*Important issues that deserve attention include: allocation of funding and responsibilities between the central and local governments, implementation bodies for environmental monitoring, provisions for reporting, quality assurance and accountability.*

Title 3 – Public Participation Policy

*Provisions for citizen suits, legal standing, legislative hearings  
comparative experience: US: NEPA*

Title 4 – Access to Environmental Information and Transparency [all to be available on line]

*Benchmarking of key indicators needed  
Mandated reporting of emissions, effluents, sudden discharges during maintenance or accidents  
Policy of targeting "high priority violators"  
Maps of pollution levels in different parts of Cambodia on web site*

### *Book 2 - Environmental Planning*

Title 1 – Making of National, Sub-National and Local Environmental and Natural Resource Plans

Title 2 – Urban Land Use Planning

Title 3 – Environmental Quality Standards

*Independent certification of products and services (hotels, restaurants) to meet standard for eco-labeling  
comparative experiences: US: Green Seal, LEED*

Title 4 – Strategic Environmental Assessment

Title 5 – Environmental Impact Assessment

Title 6 – Environmental Audits and Environmental Reporting

Title 7 – Climate Change Adaptation and Mitigation

Title 8 – Disaster Risk Reduction and Disaster Management

### *Book 3 – Environmental Management and Sustainability Mechanisms*

Title 1 – Establishment of National Conservation Corridors

Title 2 – Biodiversity Management and Endangered Species Protection

Title 3 – Community Management

*[unclear what this means: seems it would be a subtopic under many of Book 3 topics ]*

Title 4 – Cultural and Natural Heritage Management

Title 5 – Water Management

Title 6 – Coastal Zone Management



Title 7 – Solid and Hazardous Substances Control and Contaminated Land  
Title 8 – Energy  
Title 9 – Extractive Industries  
Title 10 – Sustainable Cities  
Title 11 – Sustainable Tourism and Eco-Tourism  
Title 12 – Sustainable Forestry  
Title 13 – Sustainable Fisheries

*Book 4 – Education, Enforcement and Awareness*

Title 1 – Environmental Incentives, Fees and Charges

Title 2 – Environmental Public Awareness and Environmental Education

*Periodic campaigns (triage of trash, reporting of pollution, citizen scientists)  
grade school, high school, curricula integrating natural resources, environment  
Post high school and professional certificates (short courses) and graduate degrees,  
comparative experience: US: environmental high schools, modular programs  
for professionals*

Title 3 – Environmental and Natural Resources Study and Research

*Creation of research institutes attached to or independent of universities; partnerships  
with other country institutions; exchange programs  
comparative experiences: US: World Resources institute; many...  
Local government proposals for research on specific topics relevant to the  
specific region*

Title 4 – Investigation, Enforcement and Access to Remedies

*Central government-local government monitoring of implementation & enforcement  
Independent NGO monitoring, negotiation and litigation against local polluting by  
government and business, lapse and absence of permits  
comparative experiences: US: Watch dog groups.e.g.,Riverkeepers  
Environment Integrity Project*

Title 5 – Environmental Offences and Remedies

*Book 5 - Transitional Provisions*

*Book 6 – Final Provisions*

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*3 June 2016*

Submitted by (provide individual and STWG contact information):

*Fiona Dickson, STWG 2, [fiona.dickson@legiste.co.uk](mailto:fiona.dickson@legiste.co.uk)*

### 1. Issue:

*The structure of the revised Code omits any reference to sustainable consumption and production, the application of circular economy principles and producer responsibility in the context of manufacturing processes and products.*

### 2. Reference to Code Book and Chapter Title (if applicable):

*Book 3, Proposed new Chapter Title.*

### 3. Comparative Experience (if any):

These are all key facets of EU policy for ensuring we move away from a society built around extracting raw materials, making goods from them, then discarding them at the end of their life towards an economy in which we seek to ‘make the most of what nature provides us with for free’. This is leading to a whole new way of thinking, including moving away from producing goods for sale towards leasing arrangements under which producers play a key part by taking responsibility for the goods they produce throughout their life-cycle, taking them back for refurbishment, remanufacturing, upcycling etc.. This is critical for a wide range of consumer goods such as electrical and electronic equipment (phones, computers etc), cars, batteries, packaging materials etc.

Introductory resources to explain the principles include:

<http://ec.europa.eu/environment/archives/eussd/pdf/brochure.pdf>

[http://ec.europa.eu/environment/circular-economy/index\\_en.htm](http://ec.europa.eu/environment/circular-economy/index_en.htm)

<https://www.ellenmacarthurfoundation.org/circular-economy>

<http://www.oecd.org/env/tools-evaluation/extendedproducerresponsibility.htm>

### 4. Recommendation:

*Propose a new Chapter Title: “Sustainable Manufacturing, Producer Responsibility and a Circular Economy”*

5. Proposed Language to be Inserted into the Draft Code (if any):

*See above.*

6. Cambodian Laws to be Abrogated or Modified (if any):

*No information available to comment.*

7. Drafting Team Analysis/Response (to be included in public database):

# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

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- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*3 June 2016*

Submitted by (provide individual and STWG contact information):

*Fiona Dickson, STWG 2, [fiona.dickson@legiste.co.uk](mailto:fiona.dickson@legiste.co.uk)*

### 1. Issue:

*The structure of the revised Code omits any reference to environmental permitting of industrial processes, including power generation, textile manufacturing, organic solvent use (e.g. common in light industrial processes) etc.*

### 2. Reference to Code Book and Chapter Title (if applicable):

*Book 2, Proposed new Chapter Title.*

### 3. Comparative Experience (if any):

The EU approach is one of 'Integrated Pollution Prevention and Control', the emphasis being on (i) an integrated approach in which the impact on the 'environment as a whole' is considered; and (ii) prevention, with the aim being to prevent pollution arising in the first instance, rather than addressing it through abatement plant. The approach has been developed from experience accumulated since the Industrial Revolution began in the mid-1800s.

Reference:

<http://ec.europa.eu/environment/industry/stationary/ied/legislation.htm>

### 4. Recommendation:

*Propose a new Chapter Title: "Industrial Permitting"*

### 5. Proposed Language to be Inserted into the Draft Code (if any):

*See above.*

### 6. Cambodian Laws to be Abrogated or Modified (if any):

*No information available to me to provide a basis for comment.*

### 7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.
- If needed, please submit large documents as an attachment.
- Please submit all comments in Khmer and English when possible.

Date of Submission:

*3 June 2016*

Submitted by (provide individual and STWG contact information):

*Fiona J Dickson, STWG 2, [fiona.dickson@legiste.co.uk](mailto:fiona.dickson@legiste.co.uk)*

1. Issue:

*The revised Code does not specifically mention the important topic of Ecosystem Services.*

2. Reference to Code Book and Chapter Title (if applicable):

*Book 3, Title 2.*

3. Comparative Experience (if any):

EU policy is moving towards recognizing the many services nature provides to us for free and placing a monetary value on these.

References:

<http://www.unep.org/maweb/documents/document.300.aspx.pdf>

<http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/EcosystemServices/tabid/103/Default.aspx>

<https://www.gov.uk/guidance/ecosystems-services>

4. Recommendation:

*Propose either a new Chapter Title: "Ecosystem Services" or at least including this as a topic under Book 3, Title 2.*

5. Proposed Language to be Inserted into the Draft Code (if any):

*See above.*

6. Cambodian Laws to be Abrogated or Modified (if any):

*No information available to me to provide a basis for comment.*

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*June 6, 2016*

Submitted by (provide individual and STWG contact information):

*Michael Mahoney, Expert, STWGs 1 and 61. Issue:*

*I recommend the Code have a specific substantive section on air quality in Book 3.*

2. Reference to Code Book and Chapter Title (if applicable):

*Book 3. Perhaps as Title 6 to Book 3.*

3. Comparative Experience (if any):

*In the United States, as well as many countries, there are specific sections of code addressing air quality standards and related implementation mechanisms. The code as currently constructed contains an energy section, as well as a climate change planning section, but does not appear to specifically address air quality. As Cambodia continues to develop, it's vital that air quality concerns be addressed early on. The energy policy can help mitigate air quality concerns, but actual air quality standards should be in place. Including a separate title on the subject stresses how important it is.*

4. Recommendation:

*Title 6. 5. Proposed Language to be Inserted into the Draft Code (if any):*

*Book 3, Title 6. Air Quality.*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):



# **Submission Form**

## **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*9<sup>th</sup> June 2016*

Submitted by (provide individual and STWG contact information):

*Dr Thomas NE Gray ([tomnegrav@hotmail.com](mailto:tomnegrav@hotmail.com))*

**1. Issue:**

*Insufficient prominence of Protected Areas, and their effective management, within the current draft of the Environmental code*

**2. Reference to Code Book and Chapter Title (if applicable):**

*Book 3 – Environmental Management and Sustainability Mechanisms*

**3. Comparative Experience (if any):**

*(Please include any Cambodian and international examples and experience.)*

**4. Recommendation:**

Given the critical role of Protected Areas as one of the key instruments for conserving biodiversity, and the explicit Protected Area targets under the Conventional of Biological Diversity Aichi Declaration (<https://www.cbd.int/sp/targets/>), more emphasis is needed under the revised code for the effective management of protected areas and the necessary legislation required to support this. I don't believe this critical topic can be covered in sufficient detail through incorporating under the currently proposed Titles 'Establishment of National Conservation Corridors) and 'Biodiversity Management and Endangered Species Protection'. Whilst Protected Areas are critical for, and there principal role is, biodiversity management and endangered species protection they have a much wider role including livelihood and community benefits, climate change adaptation and mitigation, and ecotourism. As such a specific Title on Protected Areas is recommended within Book 3.

**5. Proposed Language to be Inserted into the Draft Code (if any):**

*Please find pasted below some possible section headers and comments for a Title on Protected Areas and Protected Area Management within Book 3 of the Environmental Code:*

*Protected areas are critical to biodiversity conservation and government commitments under CBD/Aichi targets [particularly target 11]. They are the cornerstone of biodiversity and particularly threatened species protection. Currently PAs are not given suitable prominence in the Environmental Code and a specific Title on PAs in Book 3 recommended.*

**Chapter x: PA coverage and desired coverage as per Aichi Target 11**

**Chapter x: Types of PAs** (community PAs, National Parks, Wildlife Sanctuaries) and different objectives of each e.g. Thai model – National Parks = conservation & recreation; WS = strict biodiversity conservation; community PAs – securing local resource tenure and non exploitive NTFP etc. collection].

**Chapter x: Legislation for zonation of PAs and enforcement inside PAs** [covering what can happen in certain zones, clear penalties for infringements, aligning forestry, PA, species laws ]

**Chapter x: PAs and EIAs**

**Chapter x: PA management plans and planning process**

**Chapter x: PA staffing and budgets** [including sustainable funding sources for PA management]

**Chapter x: PA network and climate change adaptation:** Role of PAs as CC adaptation; how PA network can be flexible to species movements etc. and possible change following CC.

**Chapter x: PA network and community protected areas/protected forests**

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to:** Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

**Date of Submission:** June 18, 2016

**Submitted by:** Carlos Linares, External Reviewer

#### **1. Issue:**

**Recommendation to improve the structure and contents of Book 3 and Book 4 of the Draft Environmental Code (Version of May 2, 2016)**

#### **2. Reference to Code Book and Chapter Title (if applicable):**

**All Chapters and Articles of Book 3: Public Participation and Access to Environmental Information – from: “Public consultation a fundamental requirement for environmental decisions” to “Exercise of grassroots rights in protection of environment.”**

**All Chapters and Articles of Book 4: Environmental Impact Assessment (EIA) – from Chapter #: “Purpose of EIA” to “Article #: The Project Proponent shall make payment of Environmental Endowment Fund...”**

#### **3. Comparative Experience (if any):**

**Environmental Assessment Sourcebook, World Bank; Environmental Law of the Republic of Chile; EIA Procedure/Myanmar; Environmental Safeguards Policy and Guidelines of the Interamerican Development Bank and the World Bank.**

#### **4. Recommendation:**

##### **Recommended Structure and Contents:**

##### **Book 3 – Environmental and Social Impact Assessment (ESIA)**

Objective:...

##### **Chapter (#) Environmental Impact Assessment**

Article (#) Screening

Article (#) IEE Type Projects

Article (#) EIA Type Projects

Article (#) Categorization

New development projects or activities that shall prepare and submit ESIA Studies, in design phase, or construction and post-construction phase, or operational phase, are the following...:

*NOTE: Recommend the Code to include the types of projects – well known from international experience – that are required to submit to the screening process for type EIA or IEE determination, for instance:*

- Oil and gas exploration and exploitation;
- Mining operations - exploration and/or exploitation of minerals;
- Roads and bridges;
- Oil Refineries;
- Petrochemical plants
- Hydroelectric dams and reservoirs
- Industrial and manufacturing facilities/factories;
- Railways, etc., etc.

## **Chapter (#) Social Impact Assessment (SIA)**

Social Impact Assessment is a required section to be included in all EIA (ESIA) Studies (Part of Book 3).

This SIA section of an ESIA would include:

Article (#) Public Disclosure of Information,

Article (#) Public Access to Information and Public Consultation

Article (#) Involuntary Resettlement

Article (#) Indigenous People's Rights

Article (#) Gender Equality

Article (#) Grievance Resolution Mechanisms

*NOTE: Recommend several of the chapters that now appear under Book 3 to be inserted in this new chapter. Others from current Book 3 may be inserted in new Book 4 referring to access to environmental information and environmental awareness and education (see below Book 4).*

## **Chapter (#) Environmental and Social Management Plans (ESMP)**

*NOTE: ESMPs are a required section to be included in all EIA (ESIA) and SEA Studies (Part of Book 3).*

## **Chapter (#) Existing Projects (change to “Existing Facilities and Operations - in page 20 of 59 according to May 2 version)**

Article (#) All existing industrial, mining, and energy facilities, under operation prior to the approval of this Code, must submit to an environmental inspection (audit), and prepare an Environmental Management Plan (EMP) in order to obtain a working license from the relevant environmental authority to continue their operations.

## **Chapter (#) Environmental Audits / Monitoring and Inspections**

*(Part of Book 3)*

## **Chapter (#) Strategic Environmental Assessment (SEA)**

Apply SEA for the assessment of the potential risks and impacts of sectoral development policies, strategies, plans and project investments in terrestrial and marine ecosystems at state, regional and national level.

*NOTE: Currently SEA is out of place in Book 9 – recommend to be part of new Book 3 and become part of Book 3 Environmental Assessment requirements.*

## **Chapter (#) Cumulative Impact Assessment**

*NOTE: Cumulative Impact Assessment is a required section to be included in all EIA (ESIA) and SEA Studies (Part of Book 3).*

## **Book 4 – Public Participation, Access to Environmental Information, Environmental Awareness and Education (merge here with Book 27)**

Objective:...

Proposed new articles:

Article (#) through a consultation process with experts from academic institutions, relevant ministries, NGOs, civil society and development partners, The Ministry of Environment shall prepare and broadly disseminate State of the Environment Reports every five years.

Article (#) The Ministry of Environment in collaboration with the Ministry of Education shall promote the incorporation of environmental education into school curricula from kindergarten through college.

Article (#) Promote training programmes for journalists for dissemination and public awareness of environmental issues through publications in newspapers, journals, magazines, radio and television programming, and the Internet.

### 5. Proposed Language to be Inserted into the Draft Code (if any):

*N/A (Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

### 6. Cambodian Laws to be Abrogated or Modified (if any):

*N/A (Please include the law title and the titles of specific articles and clauses.)*

### 7. Drafting Team Analysis/Response (to be included in public database):

## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: June 19, 2016

Submitted by (provide individual and STWG contact information):

STWG-2 Department of Solid Waste Management

#### 1. Issue:

Recommendations for Code structure/sections for waste management.

#### 2. Reference to Code Book and Chapter (if applicable): Book 17

#### 3. Comparative Experience (including Cambodian and international examples and experience):

#### 4. Recommendation:

Chapter # - Promoting waste avoidance and reduction

Chapter # - Encouraging and facilitating recycling (including regulating recycling businesses)

Chapter # - Roles and responsibilities of government, private sector and citizens in recycling, waste reduction, and waste management

Chapter # - Labeling of waste (Shall be included in the below chapter that states about hazardous waste in details)

Chapter # - Regulation of waste management facilities, including rubbish dumps (shall states in details from the establishment, collection, transport, 3R, resources exploitation, treatment, compost production, biogas incinerators until the final disposal, export, and import of non-toxic rubbish or solid waste for the future)

Chapter # - Standards for classification of waste

Chapter # - Management of waste incinerators (details about incinerator standard and technique, incinerator operation and limit standard of ash discharge from burning)

Solid waste management department, MoE requested that there shall be a separation of provisions on non-toxic solid waste and toxic waste, so that it is easy to check and practice when the law comes into force.

#### 5. Proposed Language to be Inserted into the Draft Code (optional) (Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible):



## **1. Urban/household solid waste management**

**1.1 Sources:** Urban/household waste is waste from houses, public administrative buildings, service and business locations, clinics, hospital, markets, super markets, commercial centers, gardens, public areas, tourism sites, a septic tank, all of which excludes hazardous waste.

### **1.2 Provisions for management:**

- **Effectiveness of management:**

- Separation, packaging, and disposal at the source:
  - The setting of rules and conditions of separating rubbish, solid waste according to types organic wastes- recyclable and non-recyclable
  - The setting of rules and conditions of proper packaging
  - The setting of rules and conditions of disposal at the source in order not to affect aesthetic value, order, traffic, transport, ...
  - The setting of time of solid waste discharge awaiting to be collected
  - What are obligations of waste producers?
- Provisional disposal location (joint): The setting of rules and conditions on selecting location for managing, time for receiving , and transporting of waste and rules for controlling that location
- Collection and transport
  - The setting of rules and conditions of methodology of collecting, means, program of collecting, regulatory of collecting, proper collecting
  - The setting of rules and conditions of transport, loading
  - Collection and transport divided based on waste types
  - Obligations of companies providing services of collection and transport
  - Obligations of competent institutions on collection and transport task (monitor, check, instruct, and recommend service companies)
- Reduce, reuse, and recycle (3R) Compost production
  - The setting of rules to courage the practice of 3R: provide support and encourage investors and 3R activities
  - Obligations of competent institutions in 3R activities
  - Obligations of citizens in 3R activities
- Resources exploitation from rubbish, solid waste (Biogas incinerator): The setting of methodology of exploiting biogases from organic waste
- Solid waste treatment: The setting of methodology, conditions of rubbish, solid waste treatment
- The final disposal:
  - Measures to reduce at maximum waste poured into the dump site
  - Measures to control the final disposal with safety
  - Construction, operation, and maintenance when shutting the dump site
  - Waste incinerator sets technical standard for construction and operation of waste burning
- Obligations and participation of relevant institutions and private sectors on solid waste management
- Obligations and participation of users on rubbish, solid waste management (including user pay principles) to monitor and report on the implementation of companies offering services to competent institutions
- Education and knowledge enhancement for the public relating to solid waste management
- Penalty provisions on committing offenses

## **2. Industrial solid waste management**

**2.1 Sources:** Industrial solid waste is waste from factories, enterprises, handicrafts (from production), sewage system treatment, agricultural sector, all of which excludes hazardous waste.

**2.2 Provisions for management:**

- **Effectiveness of management:**
  - Separation, packaging, and disposal at the source:
    - The setting of rules and conditions of separating rubbish, solid waste according to types organic wastes- recyclable and non-recyclable
    - The setting of rules and conditions of proper packaging
    - The preparation of location or place to dispose waste based on types and with safety.
    - The setting of rules and conditions of disposal in order not to affect people's health and the environment
    - What are the obligations of waste producers? cleaning premise outside and around factories
  - Collection and transport
    - The setting of rules and conditions of methodology of collecting, means, program of collecting, regulatory of collecting, proper collecting
    - The setting of rules and conditions of transport, loading
    - Collection and transport divided based on waste types
  - Solid waste treatment: The setting of methodology, conditions of rubbish, solid waste treatment
  - The final disposal:
    - Measures to reduce at maximum waste poured into the dump site
    - Measures to control the final disposal with safety
    - Construction, operation, and maintenance when shutting the dump site
    - Waste incinerator sets technical standard for construction and operation of waste burning
  - Obligations and participation of relevant institutions and private sectors on solid waste management
  - Obligations and participation of users on rubbish, solid waste management (including user pay principles) to monitor and report on the implementation of companies offering services to competent institutions
  - Education and knowledge enhancement for the public relating to solid waste management
  - Penalty provisions on committing offenses

6. Cambodian Laws to be Abrogated or Modified (include specific articles and clauses):

7. Drafting Team Analysis/Response (to be included in public database):

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- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

19 June 2016

Submitted by (provide individual and STWG contact information):

STWG 2 Members from Department of Air Quality and Noise Management

### 1. Issue:

Recommendation for Code structure/sections for air pollution, noise and vibration, and ozone layer.

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

- I. Air pollution
  1. The flow of toxic air from mobile sources
  2. The flow of toxic air from fixed sources
  3. The air pollution in buildings
  4. The technology to reduce and prevent air pollution
  5. The control of air pollution
  6. The request for approval
  7. The monitoring of atmosphere quality
  8. The procedure of inspections
  9. The transboundary air pollution
- II. Sound and vibrant disturbance
  1. The sound emitted from mobile source
  2. The sound emitted from fixed source
  3. The voice in the workplace
  4. The technology of sound deduction
  5. The monitoring of sound diffusion

6. The request for approval
  7. The vibrant causing
  8. The monitoring of vibration levels
  9. The technology for vibrant reduction
  10. The approval
- III. Ozone Layer protection
1. The import-export of ozone layer destroy substances
  2. The form of registration
  3. The control on the exploitation and on the usage of damage ozone layer substances
  4. The clearance, recycle and destruction of substance damaging the ozone layer
  5. The monitoring of cooling device
  6. The elimination of the substances damaging the ozone layer
  7. The monitoring and control of the substance damaging the ozone layer

**Standard:**

1. The limit of public air quality standards
2. The maximum standard limited for the authorized of hazardous substance in the air
3. The maximum standard for the noxious substances discharge from the fixed source in the atmosphere
4. The standard level of emission from mobile sources
5. The maximum standard of the sound level permitted to vehicle on the road
6. The maximum standard of sound level permitted in the public and residence area
7. The standard level for the sound control in the area of the workshop and industrial factory
8. The standard of the toxic level permitted to contain for the fuel and burning substance
9. The standard level for air quality in the building
10. The vibration standard level

**ធាតុចូលសម្រាប់ក្រមបរិស្ថាន  
នាយកដ្ឋានគ្រប់គ្រងគុណភាពខ្យល់ និងសំឡេង**

**I. ការបំពុលខ្យល់**

1. ការបញ្ចេញសារធាតុបំពុលខ្យល់ពីប្រភពចល័ត
2. ការបញ្ចេញសារធាតុបំពុលខ្យល់ពីប្រភពអចល័ត
3. ការបំពុលខ្យល់ក្នុងអគារ
4. បច្ចេកវិទ្យាកាត់បន្ថយ និងទប់ស្កាត់ការបំពុលខ្យល់
5. ការត្រួតពិនិត្យការបំពុលខ្យល់
6. ការសុំការអនុញ្ញាត
7. ការត្រួតពិនិត្យ តាមដានគុណភាពបរិយាកាស
8. នីតិវិធីនៃការធ្វើអធិការកិច្ច
9. ការបំពុលខ្យល់ឆ្លងដែន

**II. ការរំខានដោយសំឡេង និងរំញ័រ**

1. ការបញ្ចេញសំឡេងពីប្រភពចល័ត
2. ការបញ្ចេញសំឡេងពីប្រភពអចល័ត
3. ការបញ្ចេញសំឡេងក្នុងកន្លែងធ្វើការងារ
4. បច្ចេកវិទ្យាកាត់បន្ថយសំឡេង
5. ការត្រួតពិនិត្យការបញ្ចេញសំឡេង
6. ការសុំការអនុញ្ញាតិ
7. ការបង្កឱ្យមានរំញ័រ
8. ការត្រួតពិនិត្យកំរិតរំញ័រ
9. បច្ចេកវិទ្យាកាត់បន្ថយរំញ័រ
10. ការសុំការអនុញ្ញាតិ

### III. កិច្ចការពារស្រទាប់អូស្សូន

1. ការនាំចូល-នាំចេញសារធាតុបំផ្លាញស្រទាប់អូស្សូន
2. បែបបទនៃការចុះបញ្ជី
3. ការត្រួតពិនិត្យការធ្វើអាជីវកម្ម និងការប្រើប្រាស់សារធាតុបំផ្លាញស្រទាប់អូស្សូន
4. ការសំអាតឡើងវិញ ការកែច្នៃ និងការបំផ្លាញចោលសារធាតុបំផ្លាញស្រទាប់អូស្សូន
5. ការត្រួតពិនិត្យឧបករណ៍ធ្វើឱ្យក្រដាក់
6. ការលុបបំបាត់សារធាតុបំផ្លាញស្រទាប់អូស្សូន
7. ការតាមដាន ត្រួតពិនិត្យ និងគ្រប់គ្រងសារធាតុបំផ្លាញស្រទាប់អូស្សូន

### ស្តង់ដារ

1. កម្រិតកំណត់ស្តង់ដារគុណភាពខ្យល់សាធារណៈ
2. កម្រិតកំណត់ស្តង់ដារអតិបរមានៃសារធាតុប្រកបដោយគ្រោះថ្នាក់ដែលអនុញ្ញាតិឱ្យមាននៅក្នុងខ្យល់
3. កម្រិតកំណត់ស្តង់ដារអតិបរមានៃសារធាតុបំពុលដែលអនុញ្ញាតិបញ្ចេញពីប្រភពអចល័តចូលទៅក្នុងបរិយាកាស
4. កម្រិតកំណត់ស្តង់ដារនៃការបញ្ចេញឧស្ម័នពីប្រភពចល័ត
5. កម្រិតកំណត់ស្តង់ដារអតិបរមានៃសំឡេងដែលអនុញ្ញាតិបញ្ចេញសំឡេងលើផ្លូវសាធារណៈពីប្រភពយានយន្ត
6. កម្រិតកំណត់ស្តង់ដារសំឡេងអតិបរមា ដែលអនុញ្ញាតិនៅតំបន់សាធារណៈ និងតំបន់លំនៅដ្ឋាន
7. កម្រិតកំណត់ស្តង់ដារសម្រាប់ត្រួតពិនិត្យសំឡេងក្នុងទីតាំង រោងជាង រោងចក្រឧស្សាហកម្ម
8. កម្រិតកំណត់ស្តង់ដារសារធាតុពុលដែលអនុញ្ញាតិឱ្យមាននៅក្នុង ប្រេងឥន្ធនៈ និងសារធាតុរ៉េនៈ
9. កម្រិតកំណត់ស្តង់ដារគុណភាពខ្យល់ក្នុងអាគារ
10. កម្រិតកំណត់ស្តង់ដាររំញ័រ

### 5. Proposed Language to be Inserted into the Draft Code (if any):

(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)

### 6. Cambodian Laws to be Abrogated or Modified (if any):

(Please include the law title and the titles of specific articles and clauses.)

### 7. Drafting Team Analysis/Response (to be included in public database):





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- *If needed, please submit large documents as an attachment.*
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Date of Submission:

19 June 2016

Submitted by (provide individual and STWG contact information):

Mr. Chea Sina (STWG 2)

### 1. Issue:

Recommendation for Code structure/sections for environmental pollution check and inspection.

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

#### **Chapter: Environmental Pollution Check and Inspection**

##### **Article 1:**

Environmental pollution inspection officers appointed by the proclamation of the minister of environment ministry shall have following duties:

- Daily check source of pollution and polluting activities
- Inspect environmental pollution
- Suppress environmental pollution offenses
- Fulfill other duties assigned by the minister of environment ministry.

##### **Article 2:**

An environmental pollution inspection officer is rehabilitated as a police of justice for checking environmental pollution offenses stated in this code, in accordance with criminal procedure code of kingdom of Cambodia.

The formality and procedure of rehabilitation for pollution inspection officers are determined by joint proclamation of the minister of justice ministry and the minister of environment ministry.

**Article 3:**

Environmental pollution inspection officers shall have uniforms, labeling, and ranking signs determined by sub-degree.

During the operation of implementing this law, an environmental pollution inspection officer shall have mission command letter and wear a uniform, labeling, and ranking sign as stated in the first paragraph above.

**Article 4:**

On duties to daily check pollution source and pollution activities, environmental pollution inspection officers shall have the following rights:

1. Check controlling means and facilities and treatment of waste and pollutants from pollution source in consistence with provisions and procedure of this law.
2. Monitor and control activities relating to discharge of waste and pollutants from pollution source.
3. Guide, at the controlled scene, owners or pollution controllers to change or correct their waste and pollution discharge.
4. Take photo of and bring a waste or pollutant sample which is a subject to be checked to make an analysis for verification and assessment.
5. Require people who are owners or pollution controllers provide information and disclose documents, records, permission letters, and documents relevant to waste or pollutants.
6. Take measure to temporarily stop serious pollution activities found while checking and implementing inspection procedure or procedure to suppress environmental pollution offences continuously.

**Article 5:**

In case there is a notification or a complaint on environmental pollution case or a serious pollution offence which harms public health or destroy property, environment ministry and municipal, provincial environment department in cooperation with competent ministries, institutions, and sub-national administration shall take a lead on inspection work immediately.

On duties to inspect environmental pollution cases, environmental pollution inspection officers shall have the following rights:

1. Search for reasons and a person who causes environmental pollution.

2. Bring a waste or pollutant sample which is a subject to be checked to make an analysis for verification and assessment.
3. Collect and seize any object relating to environmental pollution cases.
4. Take provisional measure on any activity or means relating environmental pollution cases found during the inspection and implementation of procedure to suppress environmental pollution offenses continuously.

The procedure of inspection on an environmental case is set by a proclamation of the minister of environment minister.

**Article 6:**

In case of a flagrant environmental pollution offense which is harmful to the environment, public health, or damage property, environment ministry and municipal, provincial environment department in cooperation with competent ministries, institutions, and sub-national administration shall take a lead on environmental pollution offense suppression work immediately.

On duties to suppress an environmental pollution offense, environmental pollution inspection officers shall have the following rights:

1. Take provisional action on any activity contributing to an environmental pollution offence.
2. Check, observe causes of an environmental pollution offence.
3. Bring and analyze a pollutant sample, an environmental sample, or a relevant sample which is polluted for verification, assessment, and assertion.
4. Limit and evaluate scope of impact.
5. Collect evidences for making a complaint in consistence with law procedure.
6. Take immediate action to eliminate environmental pollution.

**Article 7:**

Case filing of an environmental pollution offense shall follow the criminal procedure code of kingdom of Cambodia.

Application form for taking minutes of an environmental pollution offense shall be determined by join proclamation of the minister of justice ministry and the minister of environment ministry.

**Article 8:**

Cost on an environmental pollution elimination operation is an offender responsibility. In case that identity of the offender is not known, all cost is the state responsibility.

**Article 9:**

In case of an environmental pollution offense which affects or harms the environment or damage public property, environment ministry shall make a complaint to demand damages for destruction or damages for environmental quality restoration from the offender.

An impact scope assessment shall be made by environment ministry and have assessment participation from line competent ministries, institutions based on a proposal of the minister of environment ministry.

**Article 10:**

Competent ministries, institutions, sub-national administration, and the public shall have good and active cooperation in participating in inspecting or suppressing an environmental offence based on a proposal of environment ministry or municipal, provincial environment department.

**Article 11:**

Any person who is not satisfied with any measure taken by environmental pollution inspection officers as stated in this law, except for a decision on transitional punishment, may file a complaint to the minister of environment ministry within thirty (30) days after receiving decision.

The minister of environment ministry shall decide on the complaint and make a written response to complaint owner within forty (40) days after receiving the complaint.

In case that a person who is the complaint owner is still not happy with the decision of minister of environment ministry, that person has right to file a lawsuit to court based upon the court procedure.

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

18 June 2016

Submitted by (provide individual and STWG contact information):

Department of Water Quality Management (STWG 2)

1. Issue:

Recommendation for Code structure/sections for water pollution.

2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

4. Recommendation:

BOOK 17 (2): Environmental Pollution Control

Chapter 1: Water Pollution

I In-charge Institutions

- Public Institutions
- Private (Owners or Responsible persons)

II Provisions on the Prevention of Water Pollution

- Liquid waste discharge
- Solid Waste disposal
- Oil-grease waste
- Chemical substance disposal
- Hazardous waste disposal

- The disposal of waste from fresh water transportation
  - Penalty provision
- III Liquid waste disposal Permit Request
- Provision on discharge
  - In-charge institution
  - Types of pollution source that require the request of permit
  - The permit request on discharge or the transport of liquid waste from pollution sources to other sites
  - Permit on discharge or the transports of liquid waste from pollution sources to other sites
- IV Pollution source control
- Control of disposal or discharge of liquid waste from special economic zones, industrial parks, factories, enterprises
  - Control of disposal or discharge of liquid waste from Business or other services
  - Control procedure (sample taking, analysis, report writing)
  - Responsibility of the owners or responsible persons for liquid waste Treatment
  - Penalty Provision
- V Water pollution control at public water areas
- Water quality standard determination at public water areas
  - Protected public water areas
  - Classification of water quality at public water areas
  - Daily monitoring on situation of water pollution at public water areas
  - The management of water quality data and evaluation on water situation at public water areas
  - Immediate Response Measure in case of water pollution

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):



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- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

19 June 2016

Submitted by (provide individual and STWG contact information):

Department of Water Quality Management (STWG 2)

### 1. Issue:

Recommendation for Code structure/sections for marine pollution.

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

## **Book 17(2) Environmental Pollution Control**

### **Chapter 7 : Marine Pollution**

#### **I. Prevention of pollution by oil & oily water**

- Discharging oil into State waters from a ship
- Causing discharge of oil into State waters from a ship
- Offence

#### **II. Control of pollution by noxious liquid substances in bulk**

- Offences relating to carrying uncategorized noxious liquid substances
- Offences relating to discharge of noxious liquid substances
- Cleaning of tanks of ships

#### **III. Prevention of pollution by harmful substances carried by sea in packaged form**

- Offences relating to carriage
- Offences relating to jettisoning

#### IV. Pollution by sewage from ships

- Offences relating to discharge of sewage

#### V. Pollution by garbage from ships

- Offences relating to discharge of garbage

#### VI. Prevention of air pollution from ships

- Offences relating to release of smoke

### គន្ថី ១៧ (២) ការគ្រប់គ្រងការបំពុលបរិស្ថាន

#### ជំពូកទី ៧ ការបំពុលសមុទ្រ

##### ១. ការបង្ការពីការបំពុលដោយប្រេង និងទឹកប្រេង

- កាបង្ហូរប្រេងពីកប៉ាល់ទៅក្នុងទឹក
- ផលវិបាកនៃការបង្ហូរប្រេងពីនាវាចូលក្នុងទឹក
- បទល្មើស

##### ២. ការត្រួតពិនិត្យការបំពុលដោយសារធាតុពុលរាវក្នុងបរិមាណច្រើន

- បទល្មើសទាក់ទងនឹងការដឹកសារធាតុពុលរាវដែលមិនបានចាត់ថ្នាក់
- បទល្មើសទាក់ទងនឹងការបញ្ចេញចោលនូវសារធាតុពុលរាវ
- ការលាងសម្អាតធុងនាវា

##### ៣. ការបង្ការពីការបំពុលដោយសារធាតុគ្រោះថ្នាក់ដែលដឹកជញ្ជូនជាកញ្ចប់

- បទល្មើសទាក់ទងនឹងការដឹកជញ្ជូន
- បទល្មើសទាក់ទងនឹងការបញ្ចេញចោល

##### ៤. ការបំពុលដោយទឹកសំអុយពីនាវា

- បទល្មើសដែលទាក់ទងនឹងការបញ្ចេញចោលទឹកស្អុយ

##### ៥. ការបំពុលដោយសំរាមដែលចេញពីនាវា

- បទល្មើសដែលទាក់ទងនឹងការបញ្ចេញចោលសំណល់
៦. ការបង្ការពីការបំពុលខ្យល់ពីនាវា
- បទល្មើសដែលទាក់ទងនឹងការបញ្ចេញផ្សែង

5. Proposed Language to be Inserted into the Draft Code (if any):

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6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

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- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

19 June 2016

Submitted by (provide individual and STWG contact information):

Department of Water Quality Management (STWG 2)

### 1. Issue:

Recommendation for Code structure/sections for sewage system and sewage treatment system management.

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

**BOOK 17 (1):       Waste and Hazardous Substances Management**

**Chapter 5:         Sewage System and Sewage Treatment System Management**

#### I       In-charge Institutions

- National Level
- Sub-national Level.

II       Responsibility of the site owners: (satellite city development zones, housing cities, hotels, tourism centers, markets, guesthouses, restaurants, houses, Casino, Public Admin buildings, Commercial buildings, Condo, Apartments, Factories, handicrafts, Animal Killing house...etc.):

- Obligation of the house owners
- Obligation of the business owners

- Obligation of the public admin building owners
  - Obligation of the property owners or construction/repair contractors.
- III General measure on dirty water management
- Compliance with legal instruments
  - Prohibition for liquid waste discharge/ dirty (contaminated) water into sewage system or public water sources without pre-cleaning
  - Constructing or sewage system restoration and dirty water treatment system
  - Management and responsibility of sewage system and dirty water treatment systems.
- IV Service providing of sewage system management and dirty water treatment system
- The responsibility of dirty water management service and dirty water treatment system.
- V The management of natural reservoir and dirty water treatment system
- Planning and promoting natural reservoir restoration
  - Inventory list organization of natural reservoir
  - The technical construction of dirty water treatment system.
- VI Penalty Provisions

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

# **Submission Form**

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- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

**Date of Submission: June 20, 2016**

**Submitted by (provide individual and STWG contact information): STWG Group 3&5**

1. **Dr. Nguon Pheakkdey, Department of International Studies, Royal University of Phnom Penh.**
2. **Mr. Chhun Delux, Office of Forest Carbon Credits and Climate Change, Forestry Administration**

### **1. Issue: Options for Sustainable Forest Financing**

### **2. Reference to Code Book and Chapter Title (if applicable):**

#### **Prior to June 2, 2016**

Book 8: Biodiversity Conservation and Management

Book 23: Climate Change

Book 24: Reduction of Greenhouse Gas Emissions and Promotion of Green Growth

Book 26: Environmental Incentives, Fees and Charges

#### ***According to New Structure, After June 2, 2016***

*Book 3 – Environmental Management and Sustainability Mechanisms*

*Title 2 – Biodiversity Management and Endangered Species Protection*

*Title 3 – Community Management*

*Title 11 – Sustainable Tourism and Eco-Tourism*

*Title 12 – Sustainable Forestry*

*Title 13 – Sustainable Fisheries*

*Book 4 – Education, Enforcement and Awareness*

*Title 1 – Environmental Incentives, Fees and Charges*

*Title 4 – Investigation, Enforcement and Access to Remedies*

*Title 5 – Environmental Offences and Remedies*

### **3. Comparative Experience (if any):**

**Please refer to full report where we reviewed relevant Cambodian and international experiences.**



#### 4. Recommendation:

**From Vishnu: How can the findings and lessons learned from the *Sustainable Finance Mechanisms for Conservation and Protected Areas in Cambodia* document (attached) be integrated into the Code?**

The assessment identified several promising opportunities for the government to consider as it strategizes the long-term conservation of Cambodia's protection forests. This assessment provided an overview of the legal context in which any finance strategy must be developed. It also examined existing forest financing sources being used to support forest management in Cambodia, including taxes levied on the legal trade in forest products, non-timber forest product (NTFPs), and wildlife permit; bilateral and multilateral funding for forest sector; income generated from Economic Land Concessions, or breeding or trade of wildlife species; government investment funds allocated to forestry development and conservation; tourism revenues; and donors funding. Attention in the assessment was then given to financial tools that will have the most political and social acceptance; and identification of actions necessary to administer and manage the use of forest finance funds.

It was suggested that four conditions can ensure the sustainability of a finance instrument:

- (1) Markets and capital exist to support the instrument over the long term
- (2) Political will and commitment exist to support the use of the financial instrument
- (3) Financial instruments have the support of communities, CBOs, NGOs, and the business community
- (4) The management and use of funds is transparent and well organized

#### **Recommendations**

1. Environmental Code shall create an operative and legal platform for relevant government institutions to work together to design and implement a comprehensive strategy that includes several of the financial instruments described in the assessment.
2. Given that most of the financing mechanisms analyzed are still new for Cambodia, the Environmental Code should commission further studies on
  - a. Assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;
  - b. Market analysis to determine the approximate amount of income that may be accessible to the government through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
  - c. Prioritization of the most promising financial instruments based on the results from the market analysis;
  - d. Determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
3. Environmental Code shall enable the creation of a work plan that will encourage respective stakeholder roles and responsibilities in the design and implementation of a comprehensive Cambodia forest finance strategy. In turn, the completed work plan should determine the funding requirements necessary to achieve long-term forest management goals in Cambodia; the institutional and policy framework necessary to implement the strategy; and implementation, monitoring, and reporting procedures.
4. Environmental Code shall provision to ensure that protected forest financing measures and instruments mechanisms will achieve the following outcomes:

- a. Increase the size and diversity of financing sources and funding portfolios;
- b. Enhance revenue retention and promote direct reinvestment in conservation; and
- c. Streamline protected forest financial planning, costing and allocation procedures.

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

**From Vishnu: What specific legislation, if there is any, in Cambodia that addresses finance for conservation and protected areas?**

We would highly encourage members to read the entire study, particularly the section written by H.E. Dr. Sok Siphana. But to the answer the proposed question, here are a list of relevant legislations:

1. The Constitution of the Kingdom of Cambodia, 1993
  - a. Article 59
2. Political Platform of the Royal Government of Cambodia of the Fifth Legislature of the National Assembly, 2013
  - a. Section 3.11. Environment
3. Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III of the Royal Government of Cambodia, 2013
  - a. Paragraph 27
4. National Strategic Development Plan 2014-2018
  - a. Paragraph 4.40 – see Paragraph 27 of Rectangular Strategy Phase III
5. Cambodia Climate Change Strategic Plan: 2014-2023
  - a. Strategic Objective 3: Ensure climate resilience of critical ecosystems (Tonle Sap Lake, Mekong River, coastal ecosystems, highlands, etc.), biodiversity, protected areas and cultural heritage sites Strategies
  - b. Strategic Objective 8: Strengthen collaboration and active participation in regional and global climate change processes Strategies
6. National Policy on Green Growth, 2013
  - a. Section 3.2: Objectives
7. Law on Forestry, 2002
  - a. Article 1; Article 7; Article 51; Article 52; Article 56;
  - b. Article 62; Article 63; Article 64; Article 94
8. National Forest Programme: 2010-2029
  - a. Strategic objectives
  - b. Programme 6. Sustainable Forest Financing
9. Law on Nature Protection Area/ Protected Areas Law 2008
  - a. Article 1; Article 4; Article 32
10. Law on Environmental Protection and Natural Resource Management, 1996
  - a. Article 1; Article 8; Article 19; Article 21; Article 22; Article 23; Article 31; Article 32; Article 33; Article 34; Article 35.
11. Land Law, 2001
  - a. Article 1; Article 8; Article 12; Article 26:
12. Law on Public Finance 2008
  - a. Article 2; Article 13; Article 16; Article 68

13. Law on Tourism, 2009
  - a. Article 2; Article 21; Article 36; Article 55; Article 69
14. Sub-Decree 19 on Social Land Concessions, 2003
  - a. Article 1; Article 16; Article 17
15. Sub-Decree 79 on Community Forestry Management, 2003
  - a. Article 1; Article 4; Article 10; Article 11; Article 31
16. Sub-Decree 146 on Economic Land Concessions, 2005
  - a. Article 3; Article 6

7. Drafting Team Analysis/Response (to be included in public database):

# SUSTAINABLE FINANCE MECHANISMS FOR CONSERVATION OF FORESTS AND PROTECTED AREAS IN CAMBODIA

PREPARED BY THE CAMBODIA FORESTRY ADMINISTRATION,  
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES WITH  
SUPPORT FROM THE WILDLIFE CONSERVATION SOCIETY



## FINANCE OPTIONS ASSESSMENT REPORT



# **SUSTAINABLE FINANCE MECHANISMS FOR CONSERVATION OF FORESTS AND PROTECTED AREAS IN CAMBODIA**

**PREPARED BY THE CAMBODIA FORESTRY ADMINISTRATION,  
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES WITH  
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**FINANCE OPTIONS ASSESSMENT REPORT**







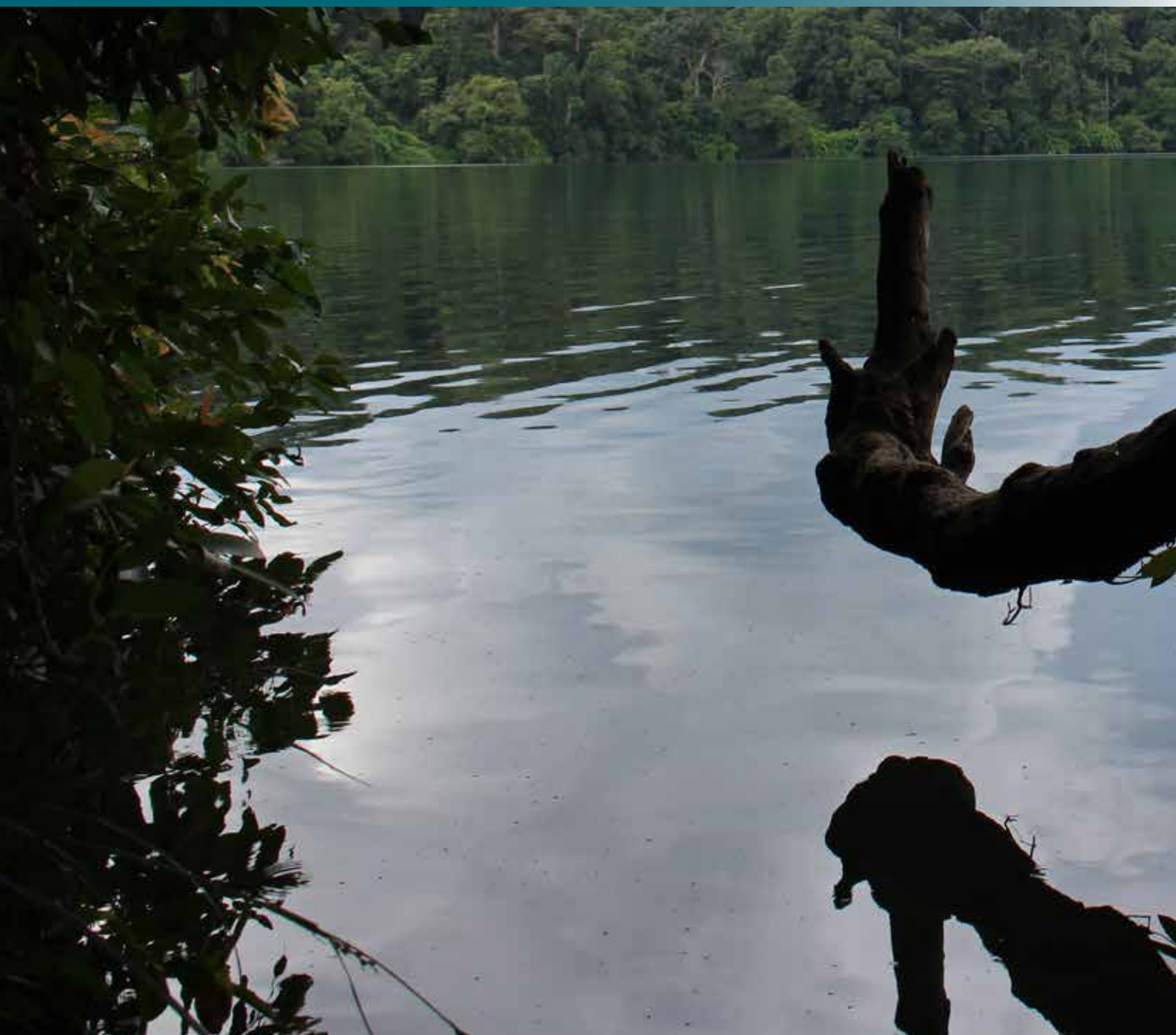


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# Foreword

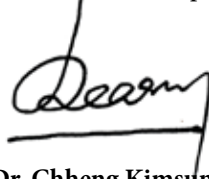
The Royal Government of Cambodia's National Forestry Program (NFP) for 2010-2029 has set six program areas for priority implementation, one of which is the development of sustainable financing mechanisms to support the management and administration of protected forests and other areas. Current levels of financial support, from government and donor budgets, are significantly below that needed to ensure successful implementation of the NFP. At the moment, there are very few policies or regulations that enable collection of revenues from the forestry sector, and the revenues that are collected are remitted to the national treasury, rather than allocated directly to support the implementation of the NFP. Private sector engagement in sustainable forest management is also very low. Consequently, Cambodia relies heavily on support from development partners, especially bilateral and multilateral donors and large NGOs, to fund the NFP. However, continued investments by donors and NGOs is not by itself a sustainable source of funding. As a result, the development of a long-term financial plan to secure sustainable financing for the forestry sector is essential in order to safeguard existing on-the ground achievements, and ensure the long-term integrity of standing forests.

The Technical Working Group on Forestry Reform (TWG-FR) is the government-donor coordination mechanism for the forestry sector. In 2014, it formed a Sustainable Forest Financing Sub-Group which is co-chaired by the Forestry Administration and Wildlife Conservation Society (WCS). The sub-group is comprised of representative from Forestry Administration, Ministry of Environment, Ministry of Economic and Finance, development partners, national and international NGOs and the private sector. It is tasked to lead a policy process and develop ideas for long-term forest financing mechanisms. The assessment of finance options for Cambodia's forests presented here was initiated to provide technical information that can be used by stakeholders to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the forests in Cambodia.

This report includes a concise description of the theory and intent of various financial mechanisms and an overview of how they are typically applied in practice in a country of similar social and environmental conditions to Cambodia. It also provides an overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia, and a description of any prior experience with the financial mechanism in Cambodia.

I would like to take this opportunity to acknowledge the work of the Sustainable Forest Financing Sub-Group, especially WCS who have prepared this assessment report. By acknowledging its comprehensive analysis and financial options for Cambodia's forests, I would also like to offer my thanks to all colleagues of the TWG-FR who have contributed to provide inputs for this report.

Phnom Penh, 07 April 2016



**Dr. Chheng Kimsun**  
Delegate of the Royal Government  
Head of the Forestry Administration  
Ministry of Agriculture, Forestry and Fisheries

# Acknowledgement

This report was designed and written by the Forestry Administration's Sustainable Finance Sub-group of the Technical Working Group on Forestry Reform (FA, TWG-FR) and the Wildlife Conservation Society (WCS), with contribution from Dr. James Tolisano (WCS), Dr. Nguon Pheakkdey (Royal University of Phnom Penh, RUPP) and Mr. Chhun Delux (FA). This assessment report also benefited from the insightful comments and supports from **H.E. Dr. Chheng Kimsun**, Delegate of the Royal Government of Cambodia, Head of the Forestry Administration, **H.E. Dr. Chea Sam Ang**, Deputy Director General of the Forestry Administration, and members of the TWG-FR. Financial contribution to complete this assessment report came from WCS.

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# Executive Summary

The Cambodia Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have led actions taken since the 1990s to establish new protected areas and secure protected forests in ecologically important landscapes. These actions have resulted in the stabilization, and, in some cases, recovery of populations of some threatened species. However, these accomplishments require on-going funding to insure payments for recurrent and new costs. Continued investments by donors and NGOs into the same landscapes may provide some of this funding, but is not expected to represent by itself a sustainable source for these funds. As a result, the development of a long-term financial plan to secure fund is essential in order to safeguard existing on-the-ground achievements, and ensure the long-term integrity of standing forests.

Cambodia can reduce the risks to its protected forests and enhance overall protection measures by diversifying the financing mechanisms used to produce the funds required for recurrent management costs. The principal task for Cambodia will be to ensure that funding for protected forests is not exclusively dependent on government budget allocations and external donor support, and that funding sources are sufficiently varied to allow conservation and sustainable management programs to continue even during market downturns (e.g., if, for example, tourism-based revenues decline or demand decreases for specific forest products). More effective revenue collection and cost reduction mechanisms are also important financing strategies to achieve financial sustainability.

The following report is intended to provide technical information that can be used by stakeholders in Cambodia to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the protected forests of Cambodia. The approach used here follows the lead provided by several other national conservation finance strategies being developed or applied worldwide, particularly the assessments developed for Mozambique and Belize.

The assessment of finance options for Cambodia's protection forests examined all mechanisms that were determined to be technically achievable by the Forestry Administration and its associates. The options considered were reviewed, verified, and prioritized at a consultative meeting held on Monday 26th May, 2014 at the Sunway Hotel in Phnom Penh, Cambodia, and attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The consultative meeting provided input on the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms.

The participants in the consultative meeting identified eight possible finance mechanisms to include in the assessment, including each of the following:

- Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
- Public-private partnerships, including leases, concession fees, and direct payment or profit sharing ventures in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
- Donor funding;
- Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
- Debt relief ('Debt-for-nature swaps');
- Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
- Biodiversity and Forestry offsets and compensation agreements with industry;
- Establishing a forest conservation trust fund, with revenues generated from multiple sources;

The assessment of each mechanism includes the following information:

- A concise description of the theory and intent of the mechanism;
- An overview of how the financial mechanism is typically applied in practice;
- An example of how the financial mechanisms has been applied in a country of similar social and environmental conditions, and a summary of any results to date;
- An overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia
- A description of any prior experience with the financial mechanism in Cambodia.

The review of the potential financial instruments included in this assessment report suggests that each may hold some potential for contributing to the financial resources needed to manage Cambodia's protection forests and secure their ecological integrity for future generations.

Further action on the forest finance assessment must occur in the context of existing and anticipated institutional policy. For the next five years, 2014-2018, the policy priorities for the RGC in terms of sustainable management of natural resources will focus on four areas.

1. Further managing forest and wildlife resources in a sustainable and equitable manner, in accordance with the "National Forest Programme 2010-2029";
2. Further strengthening of the management and conservation of fishery resources in a sustainable manner in line with the "Strategic Planning Framework for Fisheries Sector 2010-2019" and the "Declaration on the National Policy for Fisheries Sector";
3. Intensifying the implementation of measures to ensure ecosystem sustainability in the agricultural sector, particularly to protect soil productivity, and surface and underground water quality and supply;
4. Strengthening stakeholder cooperation under the framework of the "National Policy on Green Development" and the "National Strategic Plan on Green Development 2013-2030" through the development of regulatory frameworks and mechanisms.

Ultimately, it is expected that the Forestry Administration will work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;
- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

It is recommended that TWG-FA now establish a work plan to carry out each of these steps. The results from this work will help provide more precise answers to each of the following concerns:

- The "Mission" and "Vision" of the proposed finance strategy;
- The approximate amount of funding required to ensure long-term conservation of Cambodia's protection forest resources;
- The expected outputs and outcomes from the funding
- Identification of the institutional structure and responsibilities of the management authority
- Determination of the disbursement and accounting procedures for all leveraged funds.

The work plan should also establish the respective stakeholder roles and responsibilities in the design and implementation of a comprehensive Cambodia forest finance strategy. In turn, the completed strategy should determine the funding requirements necessary to achieve long-term forest management goals in Cambodia; the institutional and policy framework necessary to implement the strategy; and implementation, monitoring, and reporting procedures.







# 1. Introduction to Cambodia's Forest Finance Feasibility Study

Cambodia lies within one of the world's most significant biodiversity hotspots, and also one of the most threatened. Significant conservation investments have been made by external donors and the Cambodian government since the 1990s to establish new protected areas and secure protected forests in ecologically important landscapes. These actions have resulted in the stabilization, and, in some cases, the recovery of populations of some threatened species.

The Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have led this work, with technical and financial support from donors and international non-government organizations (NGOs), including the Wildlife Conservation Society (WCS), Conservation International (CI), World Wide Fund for Nature (WWF), Birdlife International, and Flora and Fauna International (FFI). Independent external reviews of many of these programs, such as the evaluation report from the United Nations Development Program (UNDP) – Global Environment Facility (GEF) project entitled “Establishing Conservation Areas through Landscape Management,” have emphasized the significant on-the-ground results that have been achieved in terms of forest areas placed under protection or improved management. However, these accomplishments require on-going funding to insure payments for recurrent and new costs. Continued investments by donors and NGO into the same landscapes may provide some of this funding. However, donor and NGO contributions are finite in scope and cannot serve as a sustainable financing source. As a result, the development of a long-term financial plan to secure fund through market-based mechanisms is essential in order to safeguard existing on-the-ground achievements, and ensure the long-term integrity of standing forests.

These financial pressures continue in parallel with on-going social and ecological pressures. As mentioned above, the forested landscapes in Cambodia are under significant and increasing levels of threat. Cambodia now has one of the world's highest rates of deforestation, driven by large-scale forest clearance for agriculture and in-migration to frontier regions. Deforestation rates increased significantly following changes in forest management policies in the mid-2000s that provided a basis to expropriate forestlands for agriculture, and the new Protected Areas Law in 2008 that permitted the de-gazettement of protected areas for economic development. Since 2008 more than 10% of Cambodia's protected area network has been allocated to investment firms. Assignment of large-scale concessions to corporations also removes options for local people to use land and resources for livelihoods and new enterprises. Securing the finances to sustain forest landscapes in Cambodia thus becomes important for the needs of local people and biodiversity.

Five particularly pervasive financial constraints to effective protected forest management are evident:

1. There is insufficient funding at the present time to cover core site-level costs and coordinate national-level forest management activities;
2. Funding is distributed unevenly across the protected forest network;
3. Staff costs dominate public budgets;
4. Protected forests rely on a very narrow funding base and limited range of financial sources;
5. Protected forests operate according to a short-term financial planning horizon.

Cambodia can reduce the risks to its protected forests and enhance overall protection measures by diversifying the financing mechanisms used to produce the funds required for recurrent management costs. The principal task for Cambodia will be to ensure that funding for protected forests continues to include, but is not fully dependent on government budget allocations and external donor support, and that funding sources are sufficiently varied to allow conservation and sustainable management programs to continue even during market downturns (e.g., if, for example, tourism-based revenues decline due to terrorism or natural disaster). More effective revenue collection and cost reduction are also important financing strategies to achieve financial sustainability.

The following report is not intended to serve as a finance strategy document. Instead, this assessment provides background information and options that can be used to support the development of a long-term finance strategy for Cambodia's protected forests. Preparation of this long-term forest finance strategy is expected to be a follow-on activity to the results provided in this report. Ultimately, the assessment is intended to provide technical information that can be used by stakeholders in Cambodia to guide the development of a strategy to secure the funds necessary to pay for the full costs incurred to sustain the protected forests of Cambodia.

The approach used here follows the lead provided by several other national conservation finance strategies being developed or applied worldwide. Mozambique and Belize are two countries that have recently completed similar conservation finance strategies, and each provides an appropriate model for Cambodia's forests. The Cambodia forest financing assessment has also relied on the important work and resources available through the Conservation Finance Alliance (<http://conservationfinance.org/>). Members of the Alliance at the global level include most of the development partners working in Cambodia, including donor agencies (AFD, EC, GIZ, KfW, UNDP, and USAID, among others) and NGOs (FFI, IUCN, Pact, WCS, and WWF). The organizations and experts in the Alliance have supported other countries to develop strategies for sustainable financing, including Mozambique.





## 1.1 Policy Framework for Innovative Forest Financing in Cambodia

The National Forest Programme (NFP), approved by the Royal Government of Cambodia in 2010, sets out the strategic framework for the forestry sector over the period 2010–2029, to be implemented by the Forestry Administration (FA). The NFP prioritizes six programmatic areas that will receive emphasis over the next two decades in order to achieve these objectives. One of the six programmatic areas is the development of sustainable financing mechanisms, including innovative mechanisms, such as conservation concessions or offsets. In addition, the recent National Strategic Development Plan for 2014–2018 similarly encourages the pursuit of sustainable finance measures to support forest conservation in Cambodia.

The implementation of the NFP Programme's sustainable finance objective has thus far focused on REDD+ (Reducing Emissions from Deforestation and forest Degradation) pilot projects and the National REDD+ Readiness Programme. The present report recognizes the importance of continuing this REDD+ work, and references other information sources that can ensure that this work is included in a broader forest finance strategy for Cambodia. The present report will include information on REDD+ opportunities while also highlighting the potential benefits from other innovative financing approaches. Some examples of these other, innovative approaches include:

- Development of Payments for Environmental Services (PES) mechanisms by WCS with the Forestry Administration and MoE in Preah Vihear province;
- Community-based ecotourism development by the Wildlife Alliance, WCS, and WWF; and
- The Community-based Production Forestry (CBPF) pilot led by FA/WCS in the Seima Protection Forest, and similar activities undertaken by the Regional Community Forestry Training Center funded by UNDP.

These initiatives have succeeded in generating significant revenue for conservation and local development at the village level. Scientific research conducted by WCS staff, which has been published in leading academic journals, has demonstrated that these models can protect biodiversity and ecosystem services and alleviate local poverty. However, the amount of funding provided by these village-level projects is not sufficient to fulfill the existing forest management financial targets. As a result, the present recommendations review options from a mix of potential revenue sources. Each section of this report provides an overview of a potential revenue source and evaluates its feasibility under existing conditions in Cambodia. The eventual Cambodia protected forest finance strategy will most likely achieve its greatest results through a combination of several of these potential sources implemented in a coordinated and unified process as a Cambodia Forest Fund.

Further, any funding mechanisms put into practice must be managed in a transparent way with clear oversight and engagement of development partners and potential investors. This is important if any fund is to ensure confidence from investors and contributors. Specifically, a comprehensive sustainable finance strategy for protected forests in Cambodia will require the establishment of a fund management system that is (a) consistent with national law, (b) has sufficient input by government, and (c) is structured to ensure transparency and effective management by financial experts.



# 2 Objectives of the Sustainable Finance Mechanisms for Conservation of Cambodia Protection Forests

On 28 February 2013 the Technical Working Group on Forestry Reform (TWG-FR) formed an informal taskforce to address the issues and needs of sustainable finance for Cambodia forests. The TWG-FR is the government-donor coordination mechanism for the forestry sector, chaired by the Director-General of the Forestry Administration (FA) and the European Union (EU). The TWG-FR determined that the taskforce is to be facilitated by the Deputy Director-General of the FA and WCS.

The assessment is designed to support the Forestry Administration (FA) of the Royal Government of Cambodia to develop an options assessment of innovative forest financing modalities for Cambodia's protection forests, and to understand and communicate the results of this assessment to key stakeholders. The assessment carried out the following 3 activities:

**Activity 1:** Consultations on appropriate innovative financing mechanisms. The FA has created an informal taskforce, chaired by the Deputy Director-General of the FA and WCS, and includes representatives from the FA, donors, and NGOs. This group will consider different innovative financing options, analyze ongoing initiatives, and identify priority modalities for further research. Particular effort has been made to engage the private sector in these discussions, including the European Chamber of Commerce in Cambodia.

**Activity 2 :** Development of the options assessment on forest financing modalities of Cambodia's Protection Forests. The assessment team has reviewed and identified a range of mechanisms that may provide opportunities for Cambodia to generate the revenues necessary to support long-term conservation of its protected forests. The assessment of each mechanism includes a summary of the theory by which the mechanism operates and generates revenue. The assessment also includes at least one example of how the mechanism has been used to generate revenues in Cambodia or in another country facing similar social and ecological challenges. Finally, the assessment examines existing policy and laws in Cambodia to identify possible constraints or opportunities that may facilitate the adoption of the finance mechanisms.

**Activity 3 :** Communication of the results to the Forestry Administration (FA) and interested stakeholders. The results of this study will be communicated to the FA and development partners through a national-level workshop, with results summarized and distributed to appropriate interests. The workshop will be held under the authority of the TWG-FR. The experts who contributed to the results included in the study will facilitate the workshop, the objectives of which are to:

1. Provide initial training to the Government on the various types of innovative forest financing mechanisms, and how they have been used in other countries.
2. Explore which mechanisms might be relevant for Cambodia, and select the ones that should be considered in more detail.

Research for the options assessment as conducted over a four-month period from June – September 2014, and included an extensive literature review and consultation with key stakeholders in Cambodia and outside of the country. The literature review for the assessment consisted of a review of recent guides and case studies on protected area financing; existing documents on sustainable financing and PES; and, conservation area business plans. The options considered were reviewed, verified, and prioritized at a consultative meeting held on Monday 26th May, 2014 at the Sunway Hotel in Phnom Penh, Cambodia, and attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The consultative meeting provided input on the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms.

The report is presented in three parts: Section 3 provides a review of possible financing mechanisms; Section 4 summarizes the overall findings and recommendations; and, Section 5 outlines the steps needed to prepare an action plan for the development of a long-term sustainable financing plan for Cambodia's protected forests.





# 3. Review of Financing Mechanisms

The assessment of finance options for Cambodia's protection forests examined all mechanisms that were determined to be technically achievable by the Forestry Administration and its associates, including the Ministry of the Environment. The finance mechanisms reviewed in the assessment include each of the following:

- Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
- Public-private partnerships, in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
- Donor funding;
- Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
- Debt relief ('Debt-for-nature swaps');
- Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
- Biodiversity and Forestry offsets and compensation agreements with industry;
- Forest conservation trust fund, with revenues generated from multiple sources;

The assessment of each mechanism includes the following information:

- A concise description of the theory and intent of the mechanism;
- An overview of how the financial mechanism is typically applied in practice;
- An example of how the financial mechanisms has been applied in a country of similar social and environmental conditions, and a summary of any results to date;
- An overview of legal and policy considerations that may affect the adoption of the financial mechanism in Cambodia
- A description of any prior experience with the financial mechanism in Cambodia.

Section 4 of the assessment concludes with suggestions for steps to be taken to develop an action plan that can support the development and implementation of a forest finance strategy.

## 3.1 Government Budget Support – Public Taxes, Fees, Fines, and other direct allocations from Government

Government revenue allocations are an important source of support for protected areas. A portion of the fees collected from public taxes, fines, and other payments from concessions and businesses using Cambodia's natural resources is typically reassigned to support costs for management of protection forests. Despite the importance of this finance mechanism, direct government budget support is often inadequate to meet all forest management costs, with financing gaps typically met by revenues from external donor assistance. However, new sources of public finance may be accessible through additional public taxes, fees or fines derived from natural resources exploitation or use, and other sources of public finance, such as debt relief. Effective financial management and revenue retention regulations, including revenue sharing with local communities, are also critical to ensure public support for protected forests.

### 3.1.1 How Does This Mechanism Work?

Taxes, fees and fines related to natural resource use are charged in sectors such as petroleum, mining, hydropower and other energy production, fisheries, forestry, land, water supply, and tourism. A percentage of the fees, taxes and fines for environmental licensing and environmental impact assessment (EIA) can also be assigned to a government or independently managed fund designated for forest conservation uses. It is important to ensure that the fees and taxes levied for the use of Cambodia's natural resources are charged at rates that reflect fair market value for the service and product being delivered. For example, the fee for leasing an ecotourism site in the Northern Plains of Cambodia should fully account for the cost of creating, maintaining, and managing these areas. Fee structures should include "willingness to pay" surveys that are further linked with market surveys to determine a fair market rate for each service offered to private businesses for the use of Cambodia's natural resources.

**Using Government Fees to Finance Conservation:** Government budget allocations are typically done on an annual basis, and protected forests typically are funded through a centralized revenue system. Thus revenues from taxes, fees or other charges within a specific protected forest are not retained at the local level, but are delivered to a central agency or the national Treasury. Protected forests typically receive only a small portion of these collected fees through one annual allocation. This can create significant difficulties for local managers who may not have reserves in place during times of new growth or need. Also, the separation of budget allocations from earnings reduces any incentives for protected forest managers to generate more revenue, and creates little responsibility or accountability for them to do so. The financial autonomy of protected forests can be enhanced by increasing the opportunity to generate and retain funds locally (Emerson, et al. 2006).

It is also essential to evaluate the way in which financial allocations from government budget support are distributed. In some cases the vast majority of funds are assigned to recurrent costs, and principally human resource costs. However, this usually occurs at the expense of essential investment needs in infrastructure, maintenance and new growth. For example, salaries for forest guards may be secure, but those same guards will have no funding available to cover transportation, community meeting, or facility maintenance costs. Providing competitive salaries for staff is unquestionably essential. However, these personnel must also have the resources and capital they need to carry out the management functions expected to ensure long-term sustainability of the forest ecosystems. Thus funds must also be in place to cover the costs of building maintenance and essential new construction, vehicle purchases and maintenance, community consultations, and social and environmental fieldwork.

Most protected forests operate on an annual budget cycle. Yet cash flow requirements for conservation finance rarely conform neatly to an annual budget or project calendar. Similarly, donor-funded projects may involve very irregular or delayed transfers of funds. When combined with uncertainty about the level of funding that can be expected in the future, this means that it is often difficult to match cash availability to actual needs, or to undertake long-term planning and investment (Emerson et al., 2006).

### 3.1.2 Institutional and Policy Factors in Cambodia

The Royal Government of Cambodia (RGC) has evolved a 'Rectangular Strategy' (RS), which has been the hallmark of development since about 2004. The National Strategic Development Plan (NSDP) for 2006-2010 carried forward the agenda laid out in the first RS, and the NSDP Update 2009-2013 on the RS Phase II. The NSDP 2014-2018 carries forward the agenda laid out in RS Phase III, and it was enacted in September 2013. The NSDP 2014-2018 states that the national budget revenue collection target should increase revenues by an average of 0.5 percent (half of one percent) of the GDP per year in order to achieve one of Cambodia's development priorities – environmental sustainability. Thus the target was 13.2% of GDP in 2011 and rose to approximately 14.9 in 2013, and 15.4% in 2014. At the end of the plan, the minimum expectation is to target budget revenue at 16.9% of the GDP, although the goal should be closer to 18% as stated in Step 2 of the Public Financial Management Reform Program.

In order to generate revenues for environmental sustainability, the RGC will continue formulating and increasing the effectiveness of enforcement of laws (and legal letters) related to non-tax revenue mobilization and enforcement of contracts (or agreement on state property management), especially Economic Land Concession Contracts, public property-leasing, petroleum and mine concessions, and other concessions.

The RGC has in place many laws, regulations, and policies that enable relevant ministries to collect revenues for natural resources conservation from environmental taxes, fines, fees, and/or royalties (see Annex 4 for the complete list of enabling legal provisions under Cambodian law). As stipulated in Article 51 of the Law on Forestry, FA shall collect both a Wildlife Conservation Fee and Wildlife Royalty. The exact amount of Fee and Royalty shall be determined by Joint-Prakas between MAFF, and MEF. The Law on Forestry also specifies that: (i) any individual or legal entity harvesting

Forest Products and By-products for commercial purposes within the Permanent Forest Reserve shall pay royalties and premiums to the national budget through FA (Article 52); (ii) anyone with legal possession of a permit to harvest Forest Products and By-products shall pay all applicable royalties and premiums prior to transferring or selling any of these rights to a third party (Article 56); and (iii) any individual who has committed a forestry offense harming the forest ecosystem shall be liable for payment in order to restore or repair the forest ecosystem to its original condition (Article 94).

In addition, Article 32 of Law on Mineral Resource Management and Exploitation states that the rate of royalty on the value of mineral resources, methods of royalty payment to the State, and incentives for competent officials as provided in Article 23, shall be determined by Inter-Ministerial Prakas. Taxes, duties, tax on shares, tax on personal share, provision, method of expenditure, tax payment procedure, accounting and financial principles and practices, definitions of losses, exemption and incentives of investment in mineral sector shall comply with laws in force.

Finally, according to Article 53, punishment for natural resource offences within protected areas include imprisonment, fines by court procedures, transaction fines, confiscation of evidence, payment of restoration damages, warning, termination or suspension of agreements or permits. Decisions to suspend or terminate agreements or permits shall be the responsibility of the Minister of Environment. Decisions to impose transaction fines, to pay restoration damages and to issue warnings shall be the responsibility of the Nature Conservation and Protection Administration.

### 3.1.3 Prior Experience with this Finance Mechanism in Cambodia

FA has been collecting royalties from timber products, fines and premiums for many years. For example, as stated in the National Forest Programme, the royalties for timber collected between 1999 and 2009 was calculated at USD 56.5 million. In 2008, the royalties to FA from 36,785 m<sup>3</sup> of round logs totaled approximately USD 2.5 million, while fines and premiums collected by FA was estimated at approximately USD 600,000. The revenues from forests have been derived from the sale of logs and timber as a sub-unit of the total value of the forests. Therefore, it should be noted that some of the significant services and incomes provided by forests that could add to the total amount of fines, fees and royalties from forests have not been estimated. Those include:

- The value of NTFPs such as fuel-wood, charcoal, medical plants, furniture processing, and wildlife;
- Employment resulting from timber harvesting in the primary sector, in particular the considerable downstream processing;
- Significant increases in value-added through the chain of wood processing;
- Payments for environmental services; and,
- Revenues from eco-tourism.

FA will focus from the present time through 2029 on the RGC's ability to contribute to the financing of forest conservation by pushing for the reallocation of funds from the national budget, the contribution from royalties and fines collected, as well as any export duties on timber and non-timber forest products.

In the next 10-20 years, some of the approaches that FA will pursue to raise revenues for sustainable forest management will include:

- Collecting royalties from logging in the intact evergreen areas;
- Royalties and legal fees from logging in community forest areas and concessions areas, including from non-timber forest products;
- Sales of services in forestry;
- Property tax on private plantations;
- Sale of carbon credits based on reduced impact logging and redd+;
- Entrance fees to protected forest areas; and,
- Sale of hunting rights.

According to the National Forest Programme, it is expected that royalties from logging in the intact evergreen areas (1.25 million hectares, which is 50 percent of the production forest) for the next 20 years will bring in an estimated USD 728 million. The other 50 percent of production forest will bring in the royalties estimated at USD 455 million. Finally, it is expected that 75% of the 2 million hectares of community forest areas will consist of degraded deciduous forests, and 25% of logged semi-evergreen forests. Therefore, royalties from logging can be expected to commence once all of CF is operational with proper management plans in place. It is expected that within 20 years, royalties from log-



ging in CF areas would total approximately USD 476 million. Overall, the RGC expects that within the next 20 years, FA would be collecting about USD 1.6 billion from royalties from logging in the intact forest areas, production forest areas, and CF areas.





## 3.2 Leases, Concession Fees, and Public-Private Partnerships to Generate Revenues from Forest Enterprise Products and Services

In most parts of the world, user fees – especially for tourism and resource harvesting – have traditionally provided the majority of revenues for protected forests. In Cambodia, a variety of charges can in principle be collected for the use of forest land, resources and facilities, including for access, recreational services, land rental and concessions, as well as for various extractive resource uses. As well as generating income, user fees have the additional advantage that they can be employed to manage demand and optimize income from both economic and conservation viewpoints. Considerable revenues can also be generated from public-private partnerships created by the government of Cambodia with private businesses. In such a case the resulting business will have an explicit mission to generate revenues for the conservation of forests, biodiversity, and ecosystems, and income for communities and regions. These public-private entrepreneurial partnerships can also provide existing or emerging markets with products that have a positive impact on the environment, educate consumers, and contribute to building a global constituency for conservation and sustainable production.

The potential certainly exists to widen considerably the range of goods and service for which charges are levied. For example, the Philippines has expanded the basis of revenue generation in protected areas by allowing for income to be generated from a wide variety of sources including entrance fees, charges for the use of facilities such as car parks and visitor centers, payments for services such as snorkeling, diving, swimming, boating, mountain climbing, trekking, picnicking, bird watching, filming and photography, as well as fees for resource harvesting, construction and aquaculture development, land rental and concessions. Diversifying the range of goods and services for which fees are charged can make a significant difference in terms of income generation and cost recovery. For example, even though New Zealand's Department of Conservation is not permitted to charge for entry into public lands, it is able to cover 15% or more of its annual budget from commercial concessions on tourism, agriculture and filming, as well as from income generated by the users of recreational facilities such as huts, trails and campsites. All of these rates are set at levels that will ensure full cost-recovery, and are regularly revised and updated in line with inflation (Phillips 2000).

As well as involving the creation of new fee systems, funds can be generated by improving existing markets and pricing structures. This is because, very often, charges are set so low that they neither accurately reflect prevailing prices, nor fully recover the costs of providing those services. Kenya's differential pricing system in their protected areas was, for example, preceded by studies to assess tourist demand and willingness to pay, and to look entry fees and service charges in neighboring countries.

There is some risk in developing public-private enterprises since considerable initial capital outlay may be required to finance a business start up. However, initial investments for business start-ups typically rely on blended capital in the form of grants and affordable loans. Public-private partnerships can be developed through collaboration between government, NGOs and private foundations, with a guarantee that revenues from the business be used to support social and economic needs and forest and ecosystem conservation management. An important advantage of public-private partnerships to create forest-based enterprises is that the revenues generated from these businesses can become commercially viable and will not be dependent on long-term donor subsidies.

Impact investors may also be a source for initial project funding in some contexts. Impact investments are made into companies, organizations, and funds with the specific intention to generate social and environmental benefits and a financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market-to-market rate, depending upon the circumstances.

There is a growing opportunity to take advantage of existing markets promoting conservation, including such markets as:

- Ecotourism - “experiential” tourism--which encompasses ecotourism, nature, heritage, cultural, and soft adventure tourism, as well as sub-sectors such as rural and community tourism—are among the sectors expected to grow most quickly over the next two decades. Tourists are willing to travel long distances and pay high rates for viewing of charismatic wildlife and scenic landscapes and ecosystems.
- Organic or Sustainable Intensified Agriculture – the sale of organically derived agricultural products has grown globally at a rate of nearly 20 percent per year for the last few years. Further, emerging land management strategies such as the System of Rice Intensification (SRI), can be a win-win for both conservation and farmers' yields and profits.

<sup>1</sup> It should however be noted that these revenues are not necessarily collected or administered by FA authorities, but can instead be managed by an independent third party entity.

- Non-timber forest products market development – increasing interest from impact investors in products such as bamboo, resins, rattans, etc.

Section 3.2.3 below outlines other examples of public-private partnerships that have already been tested in Cambodia.

### 3.2.1 How Does This Mechanism Work?

The government has considerable experience collecting fees and charges for the use of public lands and resources. This expansion of this revenue source needs only to explore new possible funding sources from resources from which fees are not been collected, or where fee structures do not currently reflect fair market values. Government also has considerable experience with public-private partnerships. However, it may be useful for government and NGOs to identify suitable private sector partners for possible collaborative ventures involving sustainable forest-based enterprises. Government can then solicit funding and collaboration requests from potential partners through a formal proposal submission process, and then select and share the development costs for collaboration ventures. Each venture would then require the following:

- Feasibility studies, business plans and possibly seed grants to support start-up enterprise concepts.
- Capital loans at low interest rates (0-11% per annum) provided by NGO, private foundation, or investor partners allocated to the most promising enterprises for working capital and/or scaling up (either vertically or horizontally). Actual terms can be customized to the situation of each enterprise.
- Sustainable sourcing plans to ensure consistent high quality in product delivery.
- Marketing plans to identify and build demand, and ensure best price options for products and services.
- On-going technical support provided through NGO or investor partners to optimize business operations (accounting, sourcing, legal compliance), and ensure the adoption of sustainable business management and best practices, including monitoring support.

The feasibility of these public-private enterprises to generate significant revenues as part of a comprehensive forest finance strategy will require a comprehensive initial market survey to determine opportunities for proposed new ventures to gain entry into existing marketplaces or to stimulate new ones.

#### *Protecting Parks and Gorillas in Congo*

*WCS has developed an ecotourism program in the Republic of Congo that generates revenue for and creates jobs in Nouabalé-Ndoki National Park (NNNP), and positions the park to cover its operating costs. The project simultaneously benefits the local community, and increases awareness and support of gorilla conservation, while demonstrating the value of the wildlife and habitat to the surrounding communities. In the short-term, WCS has worked with the government of Congo to help to secure funding to improve NNNP's ecotourism infrastructure.*

*Additional staff will be hired to track the existing gorilla groups, maintain and improve local hiking trails, and handle tourism logistics. The results will better position the operation to handle an increase in tourist demand and may encourage enthusiastic visitors to stay longer and visit multiple groups. In the long-term, the project seeks to attract private investment from tour operators who will gain from the increased tourism opportunities created by the venture. Early stage sales of approximately \$200,000 suggest that the low investments could eventually yield significant revenues to help defray long-term park management costs.*





### 3.2.2 Institutional and Policy Factors in Cambodia

The Government of Cambodia has been taking steps to improve the investment climate and levels of investment. Comprehensive sector development plans have been prepared, but implementation is constrained by institutional weaknesses and limited borrowing capacity. Most funding is sourced from user fees for services provided by state-owned enterprises (SOEs), and through public sector borrowing on a concessional basis. SOEs have limited capacity to borrow due to the lack of availability of long-term debt in local financial markets. The amount of public sector borrowing is limited by the size of the country's tax base, which is low and does not reflect the demand for infrastructure facilities and services. In December 2011, all public sector debt, by law, was sourced on a concessional basis, and there was no commercial debt program. Government and official development assistance (ODA) funding resources are insufficient to meet Cambodia's overall funding needs. Public-private partnership (PPP) can help the government meet this financing gap by stimulating private sector investment and financing for development activities.

The Royal Government has recognized the importance of PPPs, and a Law on Concessions (LOC) was enacted by the National Assembly in 2007. A draft sub-decree that would allow the LOC to be implemented has been prepared, but it has not been approved. Despite the absence of a legal framework, as of December 2012, a significant number of PPPs had been implemented, or were in the process of being implemented in Cambodia, and further PPP projects are planned in the power sector. The PPP projects being proposed are often quite small and emerge on an ad hoc basis. PPPs are not standardized, and they tend to be issued on a reactive, unsolicited, and negotiated basis, rather than through proactive government preparation and competitive tendering. As a result, the amount of funds being raised through PPPs is below potential, and it is unlikely the services provided accurately reflect market needs.

### 3.2.3 Prior Experience with this Finance Mechanism in Cambodia

To date, most PPP projects in Cambodia have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the International Monetary Fund (IMF) noted in a recent report on Cambodia's debt sustainability that the hydropower projects presently being developed by the government as PPPs have the potential to create significant liabilities for the government. The IMF does recommend that the government implement a phased PPP development program that builds on project successes to create political support and investor confidence in order to broaden the scope and sector coverage for PPP projects.

While the number of PPPs is impressive, the overall level of private investment outside power in sectors such as water and transport is low. Data from the World Bank's Private Participation in Infrastructure (PPI) Projects Database show that during the period 1990–2008 there was a total of 22 PPP projects in Cambodia. Slightly over half of these projects were in the energy sector, representing about 55% of total investments by number and investment value. While private investment in infrastructure has been increasing in recent years, the number of projects and the amounts mobilized continue to be small. It appears that in the road sector there has been little investment as the concessions were allocated for existing roads. There is virtually no PPP investment in social sectors such as health and education and cross-sectoral sectors such as environment and conservation.

#### PPPs Implemented by the RGC

Sector	Number and Form of PPP	Level of Government Issuing Contract
Power	6 hydropower generation BOT projects 3 coal-powered generation BOT projects 2 transmission leases/ BOT projects Various licenses issued to small REEs for generation and distribution	National National National Subnational
Airports	3 airport concessions Air navigation services concession	National National
Roads	National Route 4, concession Various rural concessions	National Subnational
Rail	Operation and maintenance contract	National
Seaports	Oil terminal and dry port concession	National
Water	16 small rural distribution concessions 1 bulk water project	Subnational Subnational
Solid Waste Management	2 concessions	Subnational

BOT: Build-Operate-Transfer; REE: Rural Electrification Enterprise; PPP: Public-Private Partnership  
Source: ADB 2012



## 3.3 Funding from Development Partners – Including Trust Funds

### 3.3.1 How Does This Mechanism Work?

Between 2008 and 2012, Cambodia received about USD 5.4 billion in development cooperation financing from development partners. Approximately USD 3.55 billion of this total was dispersed as grants, and US\$1.85 billion as loans. Based on projections in the NSDP 2014-2018, Cambodia is likely get USD 1.2 billion (USD 600 million as grant, and USD 600 million as loan) in the next 2-3 years. Development cooperation has accounted for approximately 10 percent of the country's GDP in the recent years. It has also probably contributed to the recent high economic growth rate, increased GDP per capita from USD 760 in 2008 to USD 1,036 in 2013, and reduced the poverty rate from around 47.8% in 2007 to 19.8% in 2011. Besides demonstrating the international community's support for the Royal Government's development program and reform effort, this increased level of external resources has also supported the creation of a positive enabling environment, which has been associated with expanded public and private investment, primarily in the infrastructure, garment, agriculture, construction, and tourism sectors.

Development partners provide an important source of funding for protected forests in Cambodia, with bilateral and multilateral agencies providing the largest source, along with some donations from individuals, NGOs, private charitable foundations, and private companies. However, donor interests and procedures can vary significantly. This means that fundraising approaches need to be tailored for each partner, and funding priorities can change quickly and dramatically. Most development partners provide support through two to five year projects, and this is often insufficient to fulfill the medium or long-term objectives and needs of many protected forests. However, some funders are increasingly willing to consider funding requests to catalyze long-term sustainable financing mechanisms and to capitalize financing mechanisms, such as conservation trust funds (see Section 3.3.2 below). Public-private-community partnerships, supported by donor financing, also provide new models for sustainable financing (see Section 3.2 above).

New approaches to traditional donor fundraising can also help to increase funding for protected forests. For example, many development partners have significantly increased available funding for programs responding to climate change and capitalizing on opportunities to generate revenues from payments for ecosystem services (PES – see Section 3.4 below). Others, such as the Global Environment Facility, have identified sustainable forest management as a funding core. Private charitable foundations are principally focused on social sectors in Cambodia. However, foundation support through NGO collaboration is another viable source of short-term funding. Increased private investment in Cambodia may also create new opportunities for private sector financing through partnership agreements, sustainable investments, and biodiversity offsets.

### 3.3.2 Conservation Trust Funds

Conservation Trust Funds (CTFs) are private, legally independent grant-making institutions that provide sustainable financing for biodiversity conservation and natural resource management. Conservation trust funds have been legally established in over 50 countries, typically as trust funds or foundations, as a way to manage long-term financing for protected areas, biodiversity conservation or other environmental purposes. These funds are usually independent of government, and are typically set up as private grant-making institutions that are governed by an independent board of directors which is charged with ensuring that funds are used for the specific purposes defined in the fund's legal statutes.

Conservation trust funds are often established to anchor other sustainable financing mechanisms by providing a transparent and efficient way to manage funding for conservation purposes. Conservation trust funds can manage endowment funds (e.g., only investment income is spent), sinking funds (e.g., both capital and investment income is disbursed) or revolving funds (e.g., pass-through sources of revenue are disbursed), or a combination of any of these.

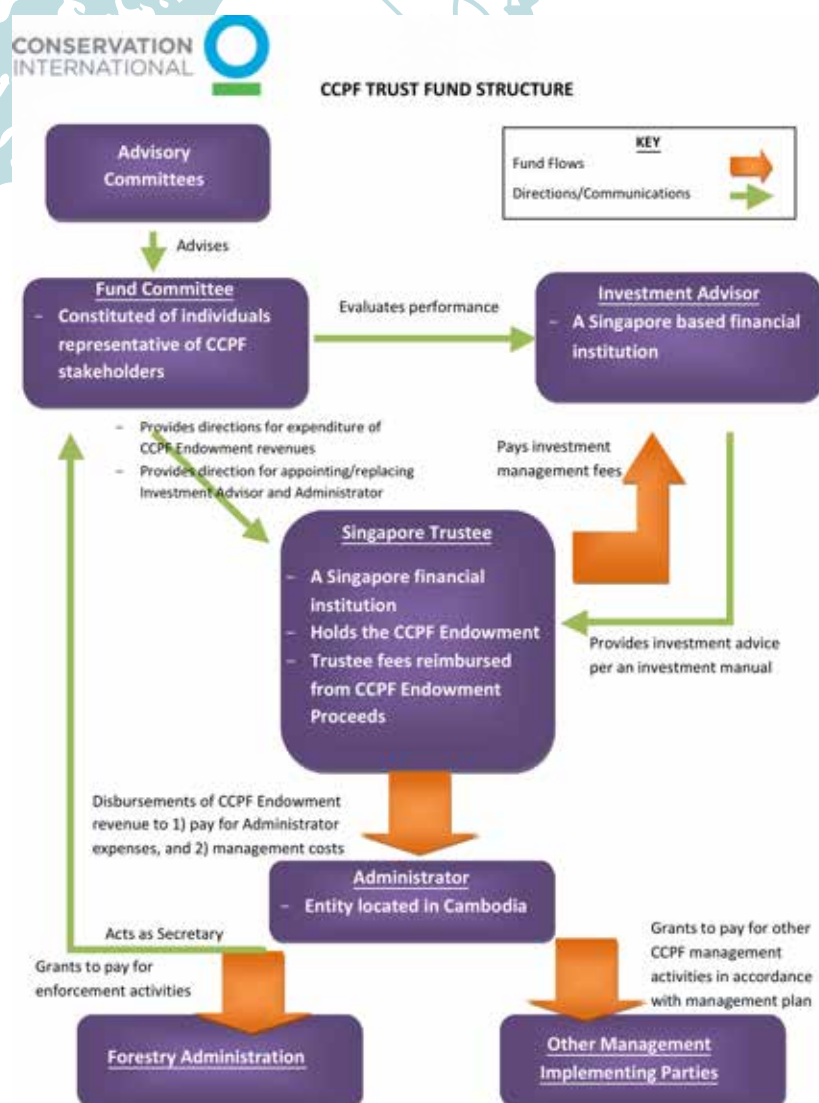
CTFs can be:

- Funds that support Protected Area (PA) management with a primary focus on biodiversity conservation, or
- Environmental funds that cover a range of environmental issues with significant support to civil societies and local communities.

- Endowment Fund – A large capital fund (often provided by a donor or via a grant or debt swap). Only spends the interest earned on the account.
- Sinking Fund – All funds in the account are spent over a specific time frame – 10 to 20 years.
- Revolving Fund – Income from taxes, fees, fines, donors, or PES are continuously raised and put in the fund.

Most funds combine 2 or 3 of the fund types as a way to diversify their sources of funding and take advantage of emerging opportunities.

The Central Cardamoms Protected Forest (CCPF) trust represents an important existing model to show how trust funds can significantly support forest management and conservation in Cambodia. The CCPF was signed and executed on June 10, 2015 by the MAFF, FA, and MEF and with support from The Global Conservation Fund of Conservation International (CI). The Fund includes an endowment (the “CCPF Endowment”) to provide a secure and steady long term flow of funds to support core management costs of the CCPF. An initial \$2.5 million in funds have been raised and invested by CI from various donors, with a gap of \$7.5 million in funds required for full target capitalization needed to cover management expenses. The first payout is expected in January 2017. Management decisions are made by a Fund Committee comprised of MAFF, MEF, a designated Administrator (CI), another NGO (FFI), private sector interests (Grandis Timber Ltd), academia (RUA), and donors (FINTRAC-HARVEST). The Fund Committee offers credible and transparent operational procedures and effective checks and balances for the administration of the Fund, pursuant to a CCPF Operations Manual. The CCPF protects habitat for 54 endangered species listed on the IUCN red list, provides drinking water for 30,000 people downstream, and stores an estimated 358,000 tons of CO2. The CCPF represents an essential source of funding to cover the significant gap in the \$250,000 minimum needed annually to manage the CCPF and enforce existing laws, including payment for 44 rangers, management and support staff and the fuel and motorbikes needed for monitoring patrols.





### 3.3.3 How Do Conservation Trust Funds Work?

CTFS are typically developed through a process that engages all affected stakeholders to carry out the following steps:

- Define the mission, vision, and desired outcomes from establishment of the fund.
- Determine the roles and responsibilities for all parties involved in the development and management of the fund – this can include the assignment of fund management responsibilities to an independent third party, often a local or international NGO, and appointment of secretariat to manage the overall development and implementation of the fund.
- Legally establish the fund, and define financial management procedures.
- Identify potential donors with demonstrated interest in the mission and vision of the proposed fund.
- Develop and submit proposals to raise the funds to endow the fund.
- Build the capacity for individuals and institutions managing funds.
- Help fund managers communicate with and learn from other trust funds.

#### *Madagascar Biodiversity Trust Fund*

*The Government of Madagascar established a conservation trust fund in 2005 as a part of a concerted effort to find sustainable financing the effective management of the protected area network by the National Park Service.*

*The external trust fund donors in addition to the participation of the Government of Madagascar are the Global Environment Facility (GEF), Fonds Français pour l'Environnement Mondial (AFD/FFEM), World Wildlife Fund (WWF), Conservation International (C.I.), World Bank (IDA), and KfW. The interests yielded from the assets will go to cover selected measures for infrastructure, and to partly cover the costs of maintaining the parks. They planned to have \$33 million EUR. As of 2007, \$11 million USD had already been disbursed.*

### 3.3.4 Institutional and Policy Factors in Cambodia

As previously mentioned, the NSDP 2014-2018 provides the overarching framework for implementing development activities and for programming domestic and external resources in Cambodia. The RGC has also produced a Development Cooperation and Partnerships Strategy to support implementation of the NSDP with the objective to promote development effectiveness in Cambodia. The Strategy is effective for the period between 2014 and 2018 and will guide the promotion of partnerships with a wide range of development actors, including Government ministries and agencies, development partners, civil society, the private sector and regional actors including South-South partners. Finally, the Cambodian Rehabilitation and Development Board of the Council for the Development of Cambodia (CRDB/CDC) is the focal point within the RGC for the mobilization of Official Development Assistance (ODA), for coordination of ODA with all development partners and NGOs, and for coordination with and between Royal Government ministries and agencies on ODA allocation and utilization issues.

#### *Development Partner Support for Conservation in Cambodia*

*Development partners have supported more than 550 projects in Cambodia. These development projects are divided into 4 main sectors: social, economic, infrastructure, and services/ cross-sectoral programs.*

*Environment and conservation projects are listed under the services/ cross-sectoral programs sector. There are in total 82 environment and conservation projects out of the 550 plus projects that are currently being supported by development partners. For the complete list of all projects in Cambodia, visit this Council for the Development of Cambodia's portal:*

*[http://cdc.khmer.biz/Reports/report\\_oda\\_and\\_ngo\\_listing\\_of\\_project\\_by\\_sector.asp](http://cdc.khmer.biz/Reports/report_oda_and_ngo_listing_of_project_by_sector.asp)*

The RGC divides development partners into two categories: bi-lateral partners and multi-lateral partners. Current bi-lateral partners include: Australia, Belgium, Canada, China, Denmark, Finland, France, Germany, Japan, the Netherlands, New Zealand, Norway, Republic of Korea, Russian Federation, Sweden, Thailand, United Kingdom, and the United States. Multi-lateral development partners include: United Nations Agencies (UNDP, UNICEF, WFP, UNFPA, UNHCR, UNESCO, FAO, WHO, UNCOHCHR, UNAIDS), Bretton-Wood Institutions (IBRD/ World Bank and IMF), Asian Development Bank, and the European Union/EEC. The RGC welcomes support from all of its development partners and acknowledges that, if carefully managed, this provides for innovation and a broad range of policy perspectives to help achieve successful implementation of priority policy objectives of the NSDP 2014-2018.

### ***Cambodia: Greater Mekong Subregion Biodiversity Conservation Corridors Project/Asia Development Bank, USD 19 Million***

*A Grant Agreement was signed between the RGC and ADB on 27 January 2011 to implement the GMS BCC Project in Cambodia over an eight year period (2011–2019) to establish sustainably managed biodiversity corridors in the GMS BCC Project provinces (Monduliri and Koh Kong). The Project covers 80 villages in 10 districts (covering 22 communes) across Monduliri and Koh Kong provinces in Cambodia. The long-term impact of the Project is to achieve climate resilient sustainable forest ecosystems benefiting local livelihoods. The Project outcome is sustainably managed biodiversity corridors. The Project has four outputs: (i) institutions and communities strengthened for biodiversity corridor management; (ii) biodiversity corridors restored, protected and maintained; (iii) livelihood improvement and small-scale infrastructure support in villages; and (iv) project management and support services provided.*

**Institutional and Policy Factors for Conservation Trust Funds:** Cambodia does not have any identifiable overarching law or any sub-decree that guides or regulates the establishment of funds generally (aside from the more general Law on Public Finance System 2008, discussed further below). The result is that existing funds in Cambodia have been created on an ad hoc basis through special subject-matter laws. Further details could be included below this law, via a sub-decree, in accordance with the hierarchy. An exception to this would be a project-based, donor managed trust fund established under contractual arrangements with a development partner(s) (also discussed further below). Nevertheless, there are various laws in Cambodia that do provide provision on how the different types of Conservation Trust Fund (discussed earlier) could be established.

The Law on Forestry 2002 establishes the legal framework for the management, harvesting, use, development and conservation of the forests in Cambodia. This law enables the establishment of a National Forestry Development Fund (NFDF), which is to be administered and managed under the responsibility of the National Forestry Development Committee (the organization and function of which is to be set out in Sub-Decree), and co-chaired by Minister of the MAFF and the Minister of MEF. The Forestry Law specifies that its revenue sources will include government allocations, premiums on forest products/by-products, wildlife conservation fees, contributions from international organizations, donations from individuals and non-government organizations, and revenue from 'other services in the forestry sector'. Activities the NFDF's funds may be only be used for are reforestation, silviculture and forestry rehabilitation, forest and biodiversity protection and conservation, scientific and technical research, extensions services; development in the forest and wildlife sector, development of community forestry; and training human resources for the forest and wildlife sector. The revenue of the fund must not be used for the organization and functioning of the FA. The FA is currently preparing the Sub-Decree to operationalize the NFDF.

The Law on Protected Areas 2008 ('PA Law') establishes a framework for the management, conservation and development of protected areas, under the jurisdiction of GDNAP of MoE. Amongst other things, the PA Law requires the establishment of a National Protected Area Strategic Management Plan, action plans and technical guidelines for managing protected areas, and proposals for establishing and modifying any protected areas. The PA Law also contains provisions enabling the establishment of a Protected Areas Fund ('PA Fund'). Similar to the Forestry Law, the PA Fund is to be organized, managed and 'given responsibility' by a protected area committee, which is to have the Minister of MoE and the Minister of MEF as co-chairs. PA Law also specifies that the PA Fund may be used for activities within protected areas including the protection, conservation, rehabilitation and enhancement of biological resources and ecosystems, technical and scientific research and study, maintenance and extension of eco-tourism services, training, human resource development and capacity building of staff, support for establishing community protected areas, education on protected areas, and infrastructure needs. The PA Fund has not yet been operationalized.

The Law on Environmental Protection and Natural Resource Management 1996 ('Environment Protection Law') under MoE establishes a broad framework on matters including national and regional environmental plans, natural resource management, environment protection and pollution control, and environmental impact assessment. It also provides the foundations for the establishment of an 'Environment Endowment Fund', a special Treasury account to be created and administer by the MoE 'for environmental protection and natural resource conservation' in Cambodia. Sources of revenue are to constitute government contributions, grants from international organizations, donations from individuals and non-government organizations, and other lawful sums. To date, MoE has not operationalized the Environment Endowment Fund.

### 3.3.5 Prior Experience with this Finance Mechanism in Cambodia

There are several examples of conservation trust funds that have been established in Cambodia. Thus far, the biggest trust fund that is currently operational and is relevant for conservation activities is the Cambodia Climate Change Alliance Trust Fund. Other trust funds that have been set up include the Marine Conservation Trust Fund and the Tropical Forest Conservation and Venture Trust Fund.

#### *Cambodia Climate Change Alliance (CCCA) Trust Fund*

*The CCCA Trust Fund is a multi-donor trust fund established by donors and government to apply a more coherent approach to climate change support for Cambodia. The fund is administered by UNDP, and implemented by a National Climate Change Committee within the MoE. A dedicated Trust Fund Secretariat appointed by government manages day-to-day operations, and reports to a Programme Support Board. A Trust Fund Administrator manages the Trust Fund, provides capacity development and financial assurance, and reports to the government and donors.*

*The CCCA Trust Fund is a sinking fund, where all committed funds will be disbursed by the end of the project time-frame. The initial design was for the duration of 3 years (2010-2012) and approximately USD 8.9 million was committed for that period. Recently the CCCA programme has been extended to 2014, with additional donor commitments being made (details to be finalized).*

*The CCCA Trust Fund operates under a project cycle, utilizing 'calls for proposals' followed by a two-step appraisal process (concept notes and full proposals), and grants are capped at a maximum of US\$300,000. It accepts proposals from government institutions, international organizations, NGOs and research institutes/universities. The CCCA Trust Fund prioritized projects that contribute to or are aligned with the 39 projects identified as priorities in the National Adaptation Programme of Action to Climate Change (NAPA). Four priority areas for adaptation are identified in the NAPA, which include water resource management and agriculture, forestry, health, and the coastal zone.*

#### *Tropical Forest Conservation and Venture Trust Fund, Eastern Plains Landscape (TRAFO)*

*The Eastern Plains Landscape covers an area of almost 16,000 km and constitutes the largest intact tropical dry forest in Southeast Asia, with 2 globally recognized protected areas: the Mondulkiri Protected Forest and the Phnom Prich Wildlife Sanctuary. Funded by WWF-Switzerland, the TRAFO project recognizes the multiple (economic, social and biological) values of forests. The approach also recognizes the role that communities play in retaining the forests, the opportunity costs of sustainable land uses and the sustainable commercialization of NTFP. There are three main objectives: (i) to identify appropriate financing incentives through an 'Incentive to Conserve' assessment, (ii) to establish and build capacity in the management of community forests, and (iii) to develop sustainable NTFP use and management processes. Communities are paid a set annual fee per hectare for protecting their forests. Another key strategy is to help establish Community Protected Areas (CPA) and Community Conservation Forests (CCF) that give communities management and decision-making rights within legally designated areas. The TRAFO also provides compensation to 30 forest patrol team members. Financial support is also given to CCF Management Committee and CPA Committee members to start up new enterprises based on natural products, or to scale up their existing ones to allow them to move beyond a subsistence level.*



### 3.4 Payments for Ecosystem Services (PES)

Ecosystem services are the many diverse benefits that people derive from nature. Payments for Ecosystem Services (PES) initiatives create financial mechanism allowing the people who protect ecosystem services to be compensated by the people who receive or benefit from those same services.

#### *What are 'Payments for Ecosystem Services'?*

*PES fall into four broad categories: supporting services (basic services upon which all other services depend such as photosynthesis, nutrient cycling, and soil formation); provisioning services (the goods that we directly derive and consume from nature which include food, fuel, drinking water, and medicine); regulating services (services that are often “invisible,” including flood control, disease regulation, water purification, pollination, and climate regulation); and cultural services (the spiritual, recreational, educational, and aesthetic services that nature provides to people).*





### 3.4.1 How Does This Mechanism Work?

PES projects create mechanisms to measure, value, incentivize, and create payment schemes for one or more of the recognized services provided by ecosystems. This process typically proceeds as follows:

1. A set of parameters is established for measuring the stocks and flows of a specific ecosystem service, such as drinking or irrigation water.
2. The economic (or social) value of the service is quantified in collaboration with affected stakeholders. In voluntary markets the value can be arbitrarily set by the affected stakeholders working in collaboration with an independent third party to facilitate transactions.
3. Public or private interests who benefit from the protection of the ecosystem service compensate landowners for the use of best management practices to ensure protection.

The landowner affecting the supply the environmental services must typically hold a publically recognized right over an environmental service that provides a flow of benefits to the demanding party in order for compensation to be equitably established. Once these rights are established then a PES program can be set up through a contract agreement between the consumers of ecosystem services (the beneficiaries) and landowners who affect the supply of these services. In some cases, such programs can operate in the open marketplace without government involvement. However, many PES programs are funded by governments and facilitated by independent third party intermediaries, such as non-government organizations.

### 3.4.2 Institutional and Policy Factors in Cambodia

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#### *An Ecosystems Services Approach in the Cardamom Mountains*

*With the financial support from a three year European Commission's grant, FFI has been implementing the Sustainable Provision of Ecosystem Services in the Cardamom Mountains Landscape (CML) Project. The main objective of this project is to explore new incentive approaches to deal with the challenges of balancing biodiversity conservation and development at two hydro-dam sites located within the CML. One of the outcomes of this project was the feasibility assessment of an incentives for ecosystems services scheme in the Stung Atay catchment, developed using principals from PES projects*

### 3.4.3 Prior Experience with this Finance Mechanism in Cambodia

As discussed in the previous section (section 3.3.2), there have been several references to PES in the national policy documents. Several international conservation NGOs, in particular WCS and FFI, have also piloted a series of PES programs in Cambodia as a complement to improving conservation strategies in protected areas. To date, there are three pilot PES projects that have been supported by WCS and a pilot Incentives for Ecosystems Services scheme at a hydroelectricity facility in the Cardamom Mountain Landscape by FFI. All three of WCS programs were piloted in two Protected Areas in the Northern Plains landscape: the Kulen Promtep Wildlife Sanctuary managed by MoE and the Preah Vihear Protected Forest managed by MAFF.

#### *Paying for Upstream Watershed Protection in Colombia*

*In Colombia, associations of irrigators and governmental agencies are paying upstream forest landowners along the Cauca River to manage their land, to improve base flows and to reduce sedimentation in irrigation canals. Voluntary payments are made by associations of irrigators to a government agency; water users originally paid \$0.50/L/second every trimester (covered administrative costs, based on theoretical water use for single crop), but they now voluntarily pay an additional fee of \$1.50 to \$2.00 to be put in a separate fund to be used by the CVC to finance those watershed activities necessary to improve stream flow. The program covers 1 million hectares of forest, and will stimulate reforestation.*

#### *Community-Based Ecotourism in Tmatboey, Cambodia*

*The community-based ecotourism program was started in 2004 in the village of Tmatboey in Kulen Promtep Wildlife Sanctuary, following initial awareness-raising in 2002-3. There are various criteria that contribute to the success of this initiative. First, the area contains rare species that are high profile targets for international birdwatchers (e.g. the Giant Ibis). Second, sightings of these species are reliable year-round. Third, the village is relatively easy to access from the major tourism centre at Siem Reap, which receives more than 2 million visitors annually and has an international airport. Finally, prices for accommodation and other related expenses are moderately inexpensive. An agreement is drawn between the PA authorities, WCS and the village, which stipulates that tourism revenue is subject to the villagers agreeing to stop hunting key species and abiding by the land-use plan. The value to local families of conserving wildlife is further reinforced by the fact that each tourist pays \$30 to the village if all key species are seen and only \$15 if just a subset is observed.*

## 3.5 Debt Relief (“Debt for Nature” Swaps)

Debt relief, or “debt for nature swaps” (DFNS) produce an agreement through which debt owed by a developing country, or a private or commercial company, can be renegotiated with the creditor to fund natural resource conservation. The debt owed is exchanged with the creditor for financial payments made by the debtor country to cover the costs of conservation or improved natural resource management. Bilateral, multilateral, and commercial debt has each been used in DFNS agreements.



### 3.5.1 How Does This Mechanism Work?

A DFNS involves an agreement between a “Debtor”, a “Creditor”, and a conservation intermediary. The debtor is generally the national government erasing debt owed to a bilateral or multilateral donor or bank, or a private company or borrower erasing debt from a commercial loan. Debtors must demonstrate a commitment to allocate funds for biodiversity conservation or natural resource management needs that would not otherwise be funded through other means. A DFNS typically proceeds through a process similar to the following:

- A creditor (donor or bank) converts existing debt into local currency at a discounted rate and pays the debtor (usually the government) cash.
- The debtor (government) agrees to use the cash to fund forest management, or similar conservation activities, in the country in which the debt is to be converted.
- A third party, often a conservation NGO, usually negotiates the debt purchase.

There are also typically several preconditions that must be satisfied to make the DFNS feasible, including the following:

- Funds are available to reduce or cancel the debt, and
- A transparent institution exists to manage the funds that will be used to fund the proposed conservation activities.
- Donors, banks, investors or creditors must be willing to sell a country’s debt at less than full face value.

The payments from a DFNS agreement are often placed into conservation trust funds set up as a public-private entities that are privately managed (often an NGO), with funds disbursed to respond to specific budgeted conservation management needs.

#### *From Debt to Conservation in Indonesia*

*In partnership with the World Wildlife Fund - Indonesia (WWF) and the Nature Conservancy, the United States and Indonesia signed a debt-for-nature swap agreement in 2011. The U.S. agreed to forgive a debt of \$28.5 million over the next eight years; in exchange, the Government of Indonesia promised to commit these funds to support grants to protect and restore the the country’s tropical forests in Kalimantan, as well as investments in green-growth activities to reduce carbon emissions from deforestation, forest degradation, and land use. This fund will be channeled through civil society and will strengthen capacity of local institutions and stakeholders to ensure that a balanced approach to economic development is supported.*

### 3.5.2 Institutional and Policy Factors in Cambodia

According to the IMF (2014), the stock of Cambodia's external public debt, including arrears, stood at around US\$4.5 billion or 32 percent of GDP by the end of 2012. The debt-to-GDP ratio has increased from 27 percent in 2008, partly reflecting greater external fiscal financing during the economic slowdown in 2009 and larger disbursement of bilateral loans during 2011–12 (IMF 2014). In addition, the share of bilateral debt, including arrears, in total external public debt has increased from 50 percent in 2009 to 63 percent in 2012. China remains the largest bilateral creditor, contributing to more than 50 percent of the total bilateral debt stock and about 80 percent of bilateral debt disbursement during the past three years. Cambodia remains in arrears to the Russian Federation and the U.S. (nearly 20 percent of total debt or 6 percent of GDP), and the status of negotiations of these arrears has remained unchanged since the last IMF's Debt Sustainability Analysis (DSA). Cambodia is not servicing its debt with these two creditors. The Cambodian authorities have been in contact with the Russian and U.S. authorities at least on an annual basis, but further efforts are needed to conclude agreements under the Paris Club framework.

In terms of national legal provisions, Article 68 of the Law on Public Finance System states that only MEF has the rights to prepare debt repayment schedules for either debt liable to and from others. The preparation of a debt schedule is defined by the Law on Finance. Furthermore, according to Article 21 of the Draft Law on Financial Regime and Property Management for Sub-National Administration (2012), the sub-national administrations shall not be entitled to involve in loan agreement, publish bonds or/ and financial tickets, issue guarantee letters, and directly or indirectly perform activities which cause direct or indirect debts or financial liabilities for the Kingdom of Cambodia. In receiving grants, the sub-national administrations shall obtain prior agreement from MoI and MEF.

### 3.5.3 Prior Experience with this Finance Mechanism in Cambodia

As stated in the IMF's Press Release No. 05/286, the IMF Executive Board, under the Multilateral Debt Relief Initiative, has approved debt relief for Cambodia. As part of the Initiative, the IMF will provide 100 percent relief of outstanding debt incurred before January 1, 2005. This amounts to approximately US\$82 million. This debt relief was made available in early January 2006 when the remaining consents of the contributors to the Trust Subsidy Account have been received. According to the IMF, Cambodia qualified for the debt relief because of its overall satisfactory recent macroeconomic performance, progress in poverty reduction, and improvements in public expenditure management. Since 1999, Cambodia has enjoyed robust economic expansion, with annual growth rates averaging over 7 percent and inflation being kept under control. During this period, the RGC has shown strong commitment to implementing its National Poverty Reduction Strategy, and improving public administration, in particular public expenditure management. Performance in these areas provides assurance that resources made available under the Multilateral Debt Relief Initiative would be used effectively.

These additional resources were made available to help Cambodia make progress toward its Millennium Development Goals (CMDGs). While environmental sustainability is part of the CMDGs (Goal 7), the targets for this goal include: reverse the loss of environmental resources; increase the proportion of people who have access to potable water supply and sanitation, to a stipulated number (separately defined for rural and urban areas); reduce dependence on firewood for cooking to 52%; and increase the proportion of people with secure land tenure. In other words, the existing debt relief does not conform to the conventional modes of debt-for-nature-swap such as that developed in Indonesia or other countries.

## 3.6 Loans, Bonds, and Sustainable Investment Funds

A bond is a written promise to pay back a specified amount of money, with interest earned on the principal, at a specific date or dates in the future. It is very similar to a loan, with the exception that a bond can be traded in the marketplace to generate revenue. This means that the issuer of the bond, usually government, can sell it to investors, who, in turn, will purchase shares in the bond on the expectation that its value will increase over time. Loans are more commonly agreements made between banks and customers, and are generally non-tradable. The issuer of the bond (usually government) provides financial backing for the bond through its credit rating.



Pioneered by issuers such as the World Bank and the European Investment Bank (EIB), the green bond market has expanded across agencies and the wider corporate market. Green bonds are essentially debt securities whereby the issuer declares that the proceeds must be channeled into a designated environmental cause. The potential to generate revenue from the sale of a bond has made this a very desirable mechanism to use to help finance many infrastructure improvement projects, with the credit rating of the bond issuer generally incentivizing investors.

Conservation funds can also be raised through similar bond mechanisms, such as a Social Impact Bond (SIB). An SIB uses a commitment by the public sector to pay for improved social outcomes that result in public sector savings. Repayment of the capital is tied to the achievement of specified social and environmental outcomes (or 'impacts'). An SIB transfers project risk to impact-oriented investors, and uses donor finance to repay the principle once set objectives are delivered, guaranteeing increased effectiveness of the donor financing.

Another financial tool available for consideration is a "credit enhancement" adopted by banks or other lending institutions. Credit enhancements are protections provided to a borrower through pledged financial support to cover the losses of securitized assets in adverse conditions. Banks use credit enhancements to improve the credit rating of a borrower who may not have established credit. Rating Agencies such as Moody's Investor Services, Standard and Poor's Ratings Service, or Fitch Ratings can establish the borrower's credit. Risk mitigation tools such as credit enhancements or guarantees provide stability and support to projects which otherwise do not have the track record necessary to attract investors.

A further emerging financial force is the engagement of impact investors in the management of forest resources and natural capital. Impact investors seek to achieve specific social and environmental results through investments made into companies, organizations, and funds, while simultaneously achieving a desired financial return on their investment. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market value to market rate, depending upon the circumstances. Investors can include private pension funds, wealthy individuals, or other mainstream retail investors. Consultations with impact investors at the recent Responsible Business Forum on Sustainable Development held in Singapore November 24-25, 2014 indicates very high investor interest in Southeast Asian markets, with a particular interest in infrastructure and natural capital development in the Mekong region

(<http://www.responsiblebusiness.com/events/responsible-business-forum-on-sustainable-development/>).

### 3.6.1 How Does This Mechanism Work?

Government backed bonds are typically developed and issued through a relatively simple process:

- The government determines how much money is needed to fund specific projects for a particular period of time.
- The Government then legally authorizes the creation of a bond to raise money from investors to fund the projects.
- Underwriters from national or international private sector companies buy the bonds and resell them to large and small investors. The underwriters make money on their investment when they re-sell the bonds. The investors in the bonds are most commonly pension funds, mutual funds, and other large investors. In some cases small investors will find bonds appealing, typically if they feel that the value will increase rapidly over a short time period.

Other key participants in the bond market include:

- Bond rating companies that provide a wide range of credit services, including establishing a rating that indicates how the financial market views the risk associated with the bonds.
- Debt Service administrators facilitate the payment schedule on the bond (principal and interest), with payments typically are made every 6 months for 20 or 25 years.

As the issuer of a bond, the government may also decide to declare a debt limit that restricts the amount of bonds the state can issue. Investors in the bond must have transparency, and some form of verification as to how the projects to be carried out fulfill the mandates of the bond. It is also essential that monitoring data demonstrate the use of proceeds from bond sales.

- *Proceeds bond* - a “full faith” senior unsecured bond whereby funds are set aside into a sub-portfolio to be used on a conservation project.
- *Proceeds Revenue bond* - these bonds have non-recourse to the issuer, and the credit exposure is made to pledged cash flows derived from other revenue streams such as fees, taxes, etc.
- *Project bond* - the investor has direct exposure to the risk of the project with or without recourse to the issuer of the bond.
- *Securitized bond* - these are collateralized by one or more projects, such as covered bonds or asset-backed securities.

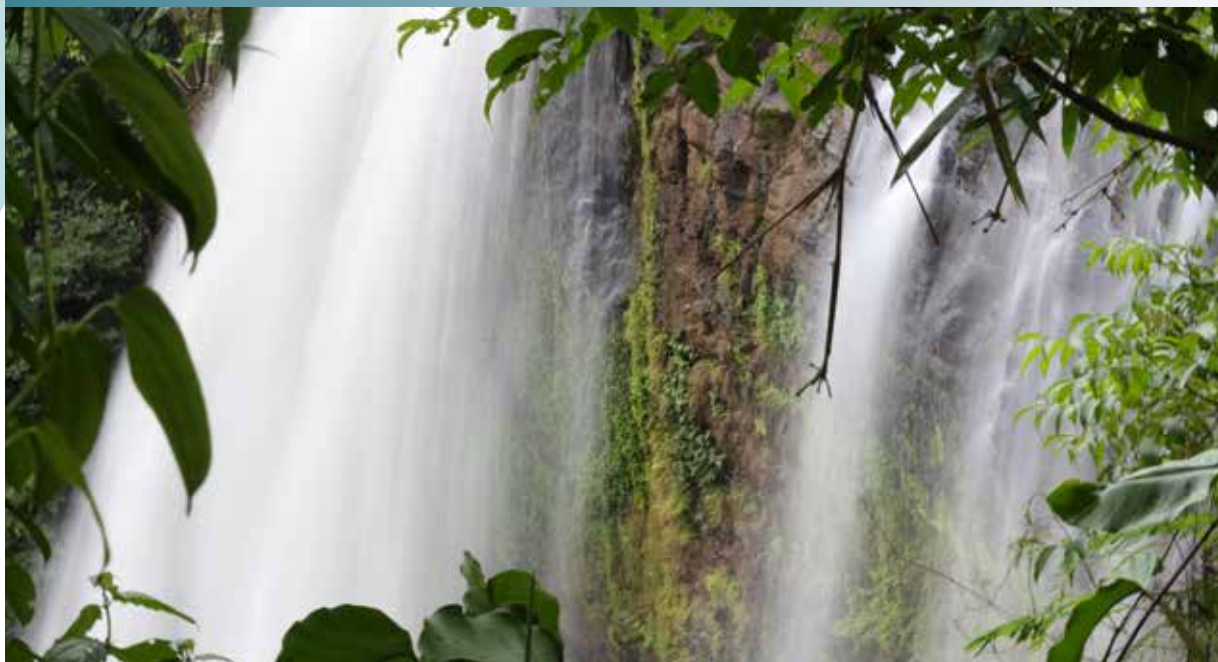
### *Green Bond Options*

Enterprise funds and other types of sustainable investment funds differ from bonds in that they channel capital – debt or equity – into environmentally-sustainable businesses. For-profit investments can be structured to provide financial returns for a private conservation trust or similar financial structure by tapping into the substantial financial resources of the private sector. In this way, these funds can provide both a direct financial benefit and promote adherence to environmental standards for use of resources.

The issuance of bonds to support forest or biodiversity conservation work is a relatively new mechanism, and has not been thoroughly tested to date. However, the mechanism is increasingly being viewed as a promising tool as part of a broader conservation finance strategy. Non-financial corporations began issuing such instruments in 2012. Although commercial banks have generally stood on the sidelines of the green bond market thus far, two banks have already been active - Bank of America kick-started the bank green bond market in November 2013 as part of a 10 year USD 50 billion environmental commitment. Canadian Toronto Dominion (TD) Bank followed in March 2014. There has also been some development in China. The Chinese government has already called for growth of a corporate green bond market, and the first yuan denominated green bond was issued last month by IFC.

### *A Green Bond for Rhinos*

*Threatened by poaching, rhino protection has become a high priority in Africa and Asia. In response to this problem, The Global Environment Facility (GEF) and the Zoological Society of London (ZSL) have teamed up to create what they call “rhino impact bonds” to raise money for rhino protection in up to five different conservation sites in Africa and Asia. These long-term funding commitments are used to leverage private investment on the basis that if outcomes are verifiably achieved then investors will be paid back (potentially with interest) by the donor. The project proposal outlines several goals, that when met, will be considered positive returns on the investment. The project will potentially receive over \$6 million USD in funding.*



### 3.6.2 Institutional and Policy Factors in Cambodia

The Government of Cambodia has undertaken comprehensive economic and structural reforms, beginning in 2001 when the Financial Sector Blueprint for 2001-2010 was adopted. The strategy outlines a sequence of policy reforms, including plans for the establishment of a securities exchange in 2007, and the legal and regulatory framework needed for market infrastructure. It also outlines the development of money market instruments, treasury bills, and the need to establish a bond market. Currently, Cambodia is in the second phase of implementation of the Financial Sector Blueprint. Through the National Bank of Cambodia (NBC), MEF has issued treasury bills, recapitalization bonds, and certificates of deposit. However, no negotiable instruments have been issued yet. The Law on Government Securities and Law on Issuance and Trading of Non-Government Securities were adopted in 2007, and have both been enforced. Additional to MEF's roles and responsibilities, the tasks related to bond market infrastructure are delegated to the Securities and Exchange Commission of Cambodia (SECC), the National Bank of Cambodia (NBC), and the Cambodia Securities Exchange (CSE).

The SECC is established under the Law on The Issuance and Trading of Non-Government Securities (Securities Law) to help regulate the securities industry in Cambodia and contribute to socio-economic development through capital mobilization from securities investors. The NBC is the central bank of Cambodia. Established in 1954, the NBC is referred to as the Government Securities Management Agency, whose authority is to address operational matters related to government securities. Finally, the CSE was established in March 2009 through a joint-venture agreement between the government, represented by MEF, and the Korea Exchange. CSE is considered as a public enterprise in accordance with the Law on the General Statutes of Public Enterprises. Cambodia Securities Exchange was then incorporated on 23 February 2010. In accordance with the agreement, CSX was capitalized by both parties, with MEF owning 55% of the registered capital and Korea Exchange the remaining 45%. In accordance with the Securities Law, CSX had been granted approval to function as market operator, clearing and settlement facility operator, and depository operator.

### 3.6.3 Prior Experience with this Finance Mechanism in Cambodia

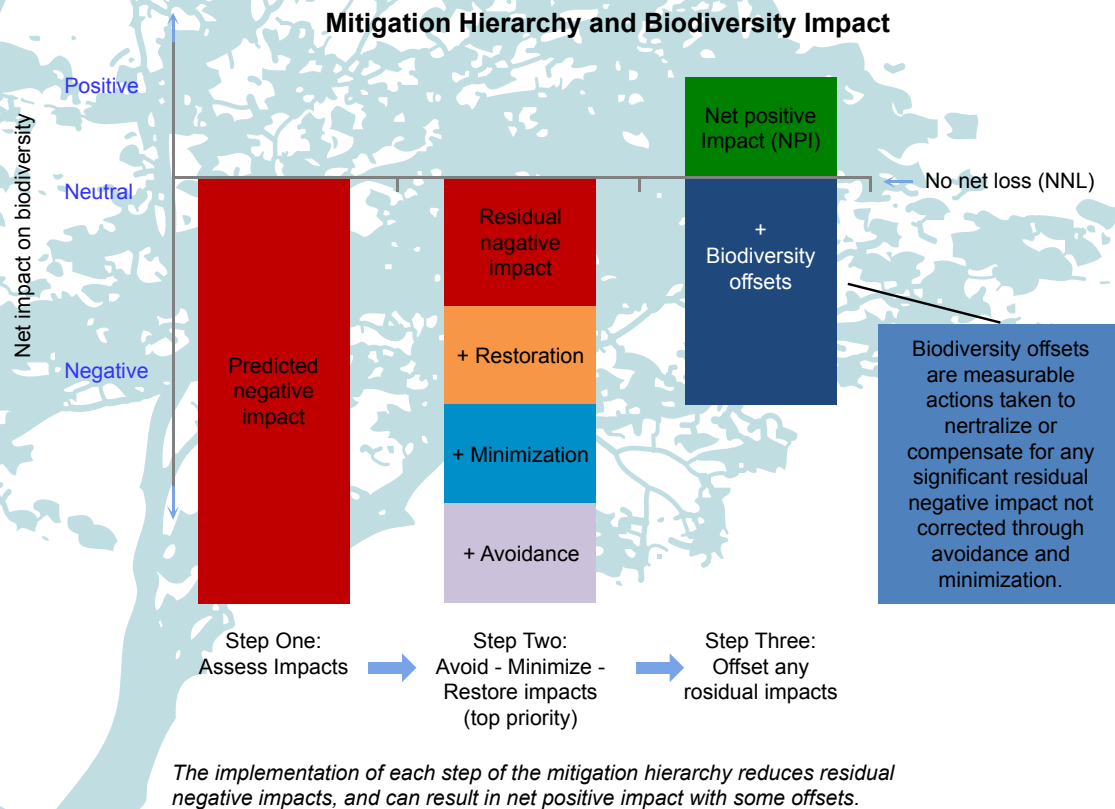
At the moment, there is no government bond market in Cambodia (ADB 2013). In the Financial Sector Development Strategy 2011-2020, it is stated that the Royal Government will consider issuing government bonds starting in 2017. Although the system no longer operates, Cambodia previously issued government bonds with maturities longer than 10 years, and it implemented a book-entry system. The Book-Entry System (BES) is a computerized registry for government bonds developed by the IMF that can process participant's details, auction outcomes, and secondary market transactions. BES also handles information on interest and redemption. In order to register, commercial banks need to create three accounts: securities account, customer account (one account for all customers of each bank that are trading on behalf of customers), and collateral account. A security account can be created for any large non-bank corporation that intends to participate in bond auctions on a regular basis, and a collateral account is also created when required. All submissions for bond auctions must be made on a standard physical form issued by the NBC. After all bid forms are validated, NBC enters all bid submissions in BES and selects accepted bids. The settlement date is 3 days (72 hours) after auction.

There are three patterns of bond sales and purchases in Cambodia: (i) between a bank and its customers, (ii) between two banks, and (iii) repo and reverse repo. For sales and purchases between a bank and its customers, the bank's securities account and bank's customer account are involved. The bank's customer account is one separate account whose current balance can be monitored by NBC. NBC occasionally requires a complete disclosure of a customer's particulars and the amount of securities held, the total of which must reconcile with the BES book-entry account held at NBC. All interest payments on bonds issued at face value with an annual rate of interest and a fixed maturity date are shown in BES. Interest can be paid to bond holders either once or twice per year depending on the terms of issuance. On the due date, NBC processes a fund transfer arising from interest payment by debiting a treasury account. NBC types and sends a letter to subscribers and also sends copies of an interest payment due report for to NBC's Internal Audit Department.



### 3.7 Biodiversity Offsets and Compensation

Biodiversity offsets are measurable actions taken to correct significant residual impacts to biodiversity and ecosystems that have resulted from a particular project development. Offsets are intended to correct adverse impacts that have not been avoided, minimized, or mitigated through other project actions. Offsets are generally developed in accordance with the protocol outlined in the mitigation hierarchy.



source: Tolisano et al., 2013

The mitigation hierarchy is a best practice approach to managing biodiversity risk. The approach applies efforts early in the project development process to prevent or avoid any adverse impacts to biodiversity and ecosystems wherever possible. The project developer then acts to minimize and reduce impacts that cannot be avoided; and then repair or restore impacts that cannot be avoided, minimized or reduced. If it is evident that the residual impacts cannot be corrected by actions to avoid, reduce, or mitigate the impact then an offset or compensation strategy may be the most appropriate action to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity. The mitigation hierarchy process distinguishes between actions to "compensate" for residual impacts, and those to "offset" residual impacts. Compensation for residual impacts can take a variety of forms, including financial payments or funds established and managed over the life of a project to cover recurrent costs for conservation management. Offsets typically involve specific actions designed to ensure that an equal or greater area of identical habitat is protected or improved as a result of residual project damages.

The corporation or business responsible for the project impacts assumes the costs for a biodiversity offsets. For example, a corporation or business may provide the funds to protect ecosystem services or the management costs for protected forests. Offset and compensation strategies typically create a mechanism through which the corporation or business either directly pays the mitigation and management costs, or finances the government or an assigned third party to carry out the same mitigation and management actions.

Although no standards have been adopted at the international level for biodiversity offsets, more than 30 countries have laws requiring biodiversity offsets or compensation. Brazil's industrial compensation program requires that, as a condition for licensing, project developers pay a percentage of the capital costs of development to finance the establishment or maintenance of protected areas. In Africa, although there are examples of companies voluntarily compensating for impacts on biodiversity (e.g. in Ghana and Madagascar), South Africa is one of the few countries that is developing a national biodiversity offset policy, and offset guidelines have already been drafted in the Western Cape and KwaZulu-Natal provinces. (Madsen et al. 2010)

### 3.7.1 How Does This Mechanism Work?

Examples of possible offset activities that may be included as a form of compensation could include:

- Strengthen ineffective protected areas by investing in capacity building for management staff and additional needed management activities;
- Establish new protected areas or no-go zones in collaboration with communities and government in order to conserve particular species and increase available habitat;
- Establish movement and dispersal corridors for wildlife;
- Establish or strengthen buffer zones adjacent to protected areas;
- Work with communities to develop alternative livelihoods that can reduce or eliminate unsustainable activities and hunting pressures.

Ideally, offsets should be designed and implemented as part of a national planning effort taking into account the cumulative impacts of development in the country, and contributing to and nested in existing national conservation strategies, including recovery plans for IUCN recognized threatened and endangered species and protected area strategies. Government-endorsed national offset and compensation strategies may also be most effective if supported and overseen by effective and transparent institutions, such as conservation trust funds, to ensure permanent funding to deliver conservation outcomes over the long term.

A key factor in the development of any compensation or offset strategy is the assurance that investments in conservation or offset activities do not simply provide a mechanism to allow inappropriate developments to move forward. This is particularly true in areas of rare, unique, or highly threatened species and ecosystems. Thus all compensation and offset strategies must ensure that appropriate monitoring, planning, and management mechanisms are in place and secure over the long term to guarantee that the compensation objectives are achieved.

#### *An Offset for Mining Impacts in Madagascar*

*Madagascar is a global hotspot for biodiversity, with a high species richness and many endangered and range-restricted species. Sherritt International, Sumitomo, KORES, and SNC Lavalin have teamed up in Madagascar to undertake a No-Net-Loss mining project in Madagascar. This site is a nickel and cobalt mining and processing joint venture, with an investment of \$7 billion USD. Their mission is to be the leader in the sustainable production of quality nickel and cobalt for the global market, while delivering no net loss, and preferably, a net gain in biodiversity. They plan to avoid pipeline tunnels underneath the forest, minimize paced directional clearing, and to restore the site after the mining is completed.*







## 3.7.2 Institutional and Policy Factors in Cambodia

The Draft Law on Environmental Impact Assessment under MoE establishes the legal framework for environmental impact assessments of all investment projects that create impacts on and harmful consequences to the environment, society, economy, culture, and legality and democracy of the nation. This law applies to all projects and activities carried out by naturalized persons, of owners of all types, of private legal entities, public legal entities, state units and institutions, and nations, which are under the jurisdiction of the Cambodian laws (Article 3), except for state projects, which have been decided by the government or approved by the National Assembly and which are considered to be the emergency projects related to national security, national protection, and disaster management (Article 4). The law establishes the condition that all development projects shall adopt and apply the 'polluter pays' principle in order to achieve the objective of sustainable development. Specifically, those who generate pollution and waste or cause harm to the environment should bear the cost of damage, containment, avoidance, or abatement (Article 7). As stated in Article 9, MoE is the only institution responsible for carrying out EIA.

The law further defines offsets as measurable conservation outcomes resulting from actions designed to compensate for significant adverse biodiversity impacts arising from project development and persisting after appropriate avoidance, minimization, and restoration measures have been taken. Generally, these are not within the project site (Annexure 1: Vocabulary). The format and procedure of the payment must be determined by a joint Prakas by MoE and MEF (Article 28). It should be noted that since this is still a draft law, sub-decree No. 72 dated August 11, 1999 on the Process of EIA and legal regulations related EIA are still valid until the draft law is adopted and that there are new regulations to replace them (Article 94).

## 3.7.3 Prior Experience with this Finance Mechanism in Cambodia

The RGC has thus far piloted various carbon and biodiversity offset projects across different sectors in Cambodia. These pilot projects could be grouped into two categories:

1. Forest specific offset projects, as in Reducing Emissions from Deforestation and Degradation (REDD+) pilot projects
2. Non-forest offset projects, taking the form of Clean Development Mechanisms

### REDD+ Pilot Projects

Following His Excellency Dr. Mok Mareth's remark at the 2007 UNFCCC conference in Indonesia, the Royal Government of Cambodia (RGC) started to implement REDD+ pilot projects. Classified as a priority "high forest cover, high deforestation" country for the purposes of REDD+, Cambodia started to pilot REDD+ projects in May 2008 when the Forestry Administration (FA) of the RGC approved the first REDD+ pilot project in Oddar Meanchey province, followed by the second REDD+ pilot project in the Seima Protection Forest, Mondulakiri province in 2009 (Forestry Administration, 2011). In addition to these two pilot projects, there are several other REDD+ projects that have been initiated under the different institutional jurisdictions of the RGC. Additionally the RGC has developed a jurisdictional REDD+ concept, submitted 2014 to FCPF, for the Northern Plains regions (Oddar Meanchey and Preh Vihear). The program was not pursued by the FCPF at this time. However, jurisdictional REDD+ development is still being pursued through other possible financial mechanisms. The following table lists the potential and current REDD+ pilot project sites in Cambodia.

## Pilot and potential REDD+ pilot sites in Cambodia

Forestry Administration	Ministry of Environment	Fisheries Administration
<ol style="list-style-type: none"> <li>1. Oddar Meanchey Community Forest REDD+ Pilot Project</li> <li>2. Seima Protection Forest REDD+ Pilot Project</li> <li>3. Southern Cardamom Mountains</li> <li>4. Central Cardamom Mountains</li> <li>5. Cardamom Mountains REDD+ project</li> <li>6. Siem Reap REDD Project</li> <li>7. Prey Lang REDD Project</li> <li>8. Western Siem Pang Important Bird Area</li> </ol>	<ol style="list-style-type: none"> <li>1. Kulen Promtep Wildlife Sanctuary REDD+ Pilot Project</li> <li>2. Phnom Oral REDD Project</li> <li>3. Phnom Samkos REDD Project</li> <li>4. Lomphat Wildlife Conservation Area</li> </ol>	<ol style="list-style-type: none"> <li>1. Koh Kong mangrove and flooded forest REDD Project</li> <li>2. Kampong Chhnang REDD Project</li> <li>3. Sihanouk Ville REDD Project</li> </ol>
1. Samlout REDD+ Project		

*Source: Information collected through interviews and desk review*

Oddar Meanchey Community Forest REDD+ Pilot Project and Seima Protection Forest REDD+ Pilot Project are the most advanced of these 16 projects.

The Oddar Meanchey REDD+ pilot project has been implemented by the FA, communities of the Oddar Meanchey province, Pact Cambodia, Terra Global Capital, the Children's Development Association and the Monk's Community Forestry Association. It has partnered directly with local communities to establish Community Forest groups that implement project activities in order to reduce deforestation, to improve livelihoods and to protect biodiversity. The project is the first community-based mosaic REDD+ project to achieve registration under the Verified Carbon Standard (VCS) and, in recognition of its exceptional social and biodiversity benefits, Gold level validation under the Climate, Community and Biodiversity (CCB) Alliance's standard. Over its 30-year lifetime (2008-2038), the project is expected to result in the generation of 8.1 million tons of emissions reductions (Forestry Administration, 2011).

The Seima REDD+ pilot project was officially launched by the Council of Ministers with the collaboration between the FA and the Wildlife Conservation Society (WCS). It aims to expand and improve law enforcement activities, to register existing communities land claims, and to provide incentives for communities to protect forests. According to Winrock International's feasibility study, the project is highly feasible and under a conservative scenario, it would avoid millions of tons of carbon emissions. It is estimated that 1.5 million tons of carbon will be sequestered over the 2008-2012 period if deforestation is decreased by 50 percent in the project area. The Seima project was validated in December 2014 and is currently under verification.

### Clean Development Mechanism Projects

Additional to REDD+ pilot projects, as a member of the Non-Annex I countries of the UNFCCC, the RGC is eligible for hosting emission reduction projects under the Clean Development Mechanism (CDM). In general, CDM projects have two key goals: (i) to assist developing countries who host CDM projects to achieve their sustainable development objectives, and (ii) to help developed countries partially meet their GHG reduction commitments by allowing them to take credits from emission reducing projects undertaken in developing countries (MoE 2004). For Cambodia, CDM projects represent a new source of investment on environmentally friendly technology and capacity building in the fields of energy, forestry, agriculture and waste management. Furthermore, the RGC expect that CDM projects will provide many environmental benefits and services such as watershed protection, control of soil erosion and degradation, biodiversity conservation, provision of non-timber products (MoE 2004).

On 15 July 2003, the RGC appointed the Ministry of Environment (MoE) as the Interim Designated National Authority (DNA) for CDM projects (Government Decision No. 01). As of now, MoE is the national implementing agency for a number of projects that aim to generate broad understanding and develop institutional and human capacity to fully participate as equal partner with developed countries in the formulation and implementation of potential CDM projects in Cambodia (MoE 2004). Furthermore, the Cambodian DNA is responsible for assessing proposed CDM projects against national sustainable development criteria and is authorized to provide written approval for proposed CDM projects in accordance with these criteria. Cambodia uses a sustainable development matrix as a tool for assessing the contribution of CDM projects in four aspects of sustainable development: economic, social, environmental and technology transfer. As of October 2014, there are 10 CDM projects listed under the Cambodia Climate Change Office of the MoE. The following table summarizes the projects.



Name of CDM Project Activity	Type of Project	Supplemental Information	Approval Date (D/M/Y)	Annual emission reduction (tCO <sub>2</sub> /per year)	Project Participants (Host Country)	Project Participants (Others)	Status
Angkor Bio Cogen Rice Husk Power Project	Biomass	Rice Husk	19/11/2006	51,620	Angkor Bio Cogen Co., Ltd.	Mitsubishi UFJ Securities Co., Ltd.	Registered
T. T. Y. Cambodia Biogas Project	Biogas	Agricultural Waste	4/7/2007	50,036	T. T. Y. Agricultural Plant Development and IMEX Co., Ltd.	None	Registered
Methane Fired Power Generation Plant in Samrong Thom Animal Husbandry	Biogas	Animal Waste	15/10/2007	5,593	Samrong Thom Animal Husbandry	Mitsubishi UFJ Securities Co., Ltd.	Registered
Kampot Cement Waste Heat Power Generation Project (KCC-WHG)	Waste heat/ gas utilization	Cement Production Line	20/11/2008	17,107	Kampot Cement Company Co., Ltd.	None	Registered
Kamchay Hydroelectric BOT Project	Hydro	New Reservoir	20/11/2008	370,496	RGC's Electricite du Cambodge	Sinohydro Corporation Limited	Under validation
Biogas Project at MH Bio-ethanol Distillery, Cambodia	Biogas	Agricultural Waste	29/6/2009	52,831	MH-Bio-Energy Co., Ltd.	None	Under validation
W2E Siang Phong Biogas Project Cambodia	Biogas	Agricultural Waste	3/11/2010	27,121	W2E Siang Phong Ltd.	None	Under validation
Lower Stung Russei Chrum Hydro-Electric Project	Hydro	New Reservoir	2/11/2011	701,199	China Huanan Lower Stung Russei Chrum Hydro-Electric Project (Cambodia) Co., Ltd.	Vitol S. A. Switzerland	Under validation
Cambodia Stung Atay Hydropower Project	Hydro	New Reservoir	3/1/2012	266,472	C. H. D. (Cambodia) Hydropower Development Co., Ltd.	Carbon Asset Management Sweden Pte Ltd.	N/A
Stung Tatay Hydroelectric Project	Hydro	New Reservoir	16/1/2012	563,074	Cambodian Tatay Hydropower Limited	Gazprom Marketing & Trading Singapore Pte. Ltd.	N/A

Source: Cambodia Climate Change Office's Database, Ministry of Environment







# 4.

## Conclusions and Recommendations – A Proposed Action Plan for Development of a Cambodia Forest Finance Strategy

The forest finance options assessment has identified several promising opportunities for the Forestry Administration to consider as it strategizes the long-term conservation of Cambodia's protection forests. This assessment builds from the dialogue developed during an initial forest finance workshop carried out with 70 participants in Phnom Penh on May 26, 2014. This workshop provided an overview of the legal context in which any finance strategy must be developed. The workshop also examined existing forest financing sources being used to support forest management in Cambodia, including taxes levied on the legal trade in forest products, non-timber forest product (NTFPs), and wildlife permit; bilateral and multilateral funding for forest sector; income generated from Economic Land Concessions, or breeding or trade of wildlife species; government investment funds allocated to forestry development and conservation; tourism revenues; and donors funding.

Attention in the workshop was then given to financial tools that will have the most political and social acceptance; and identification of actions necessary to administer and manage the use of forest finance funds. It was suggested that four conditions can ensure the sustainability of a finance instrument:

- (1) Markets and capital exist to support the instrument over the long term
- (2) Political will and commitment exist to support the use of the financial instrument
- (3) Financial instruments have the support of communities, CBOs, NGOs, and the business community
- (4) The management and use of funds is transparent and well organized

Examples of innovative forest finance instruments being applied outside of Cambodia were then reviewed, including Payments for Ecosystem Services (PES); Debt Relief – Debt Exchanges; Trust Funds; Bonds and other investment funds; Offset and compensation payments; and Forest Enterprises. A comprehensive review of the information covered in this workshop is included in Annex 2 to this report.

The more detailed review of each of these potential financial instruments included in this assessment report suggests that each may hold potential for contributing to the financial resources needed to manage Cambodia's protection forests and secure their ecological integrity for future generations. Ultimately, it is expected that the Forestry Administration will work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;
- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

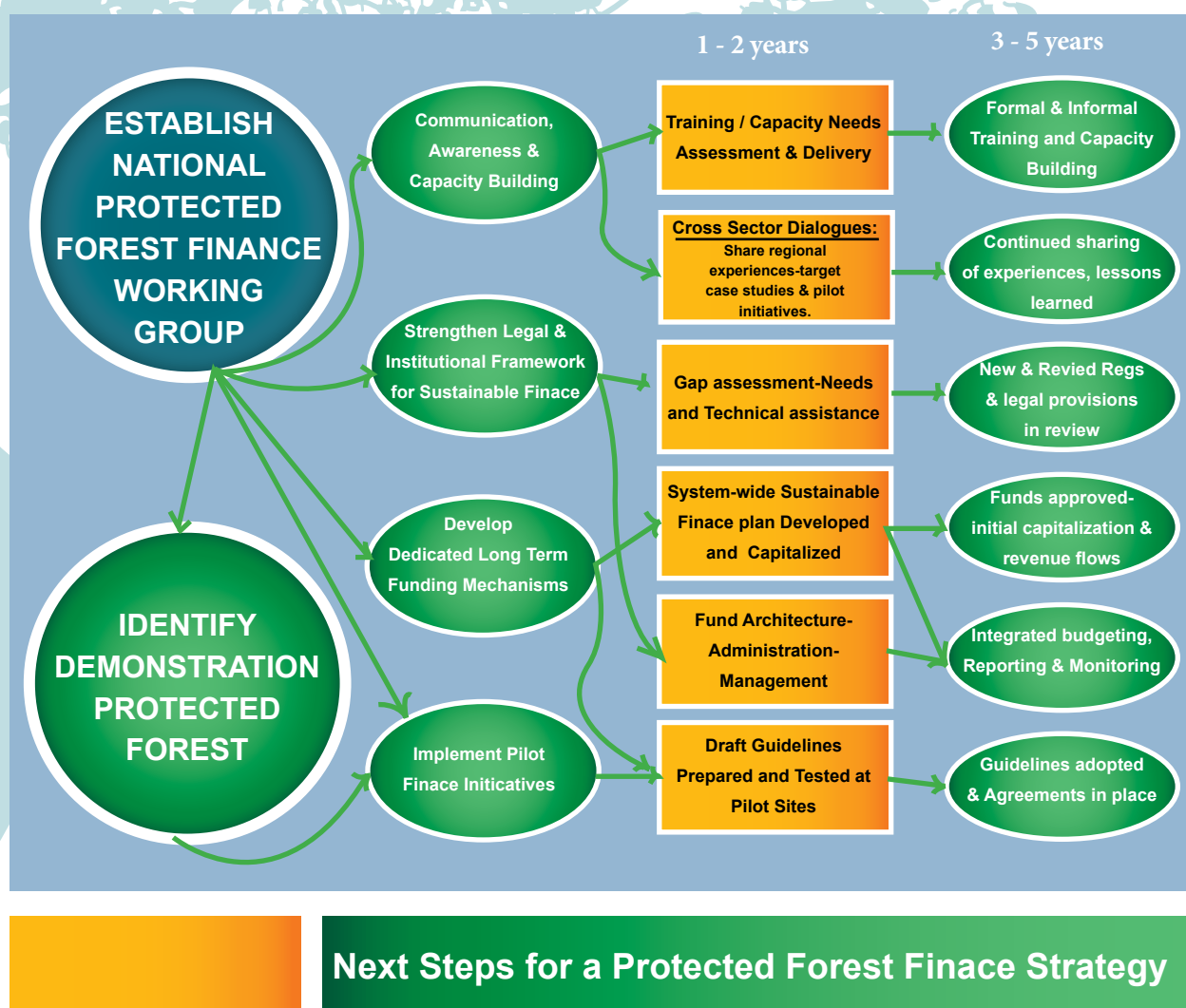
It is also recommended that protected forest financing measures and instruments mechanisms to ensure that the following three factors are achieved:

- A. Increase the size and diversity of financing sources and funding portfolios;
- B. Enhance revenue retention and promote direct reinvestment in conservation; and
- C. Streamline protected forest financial planning, costing and allocation procedures.

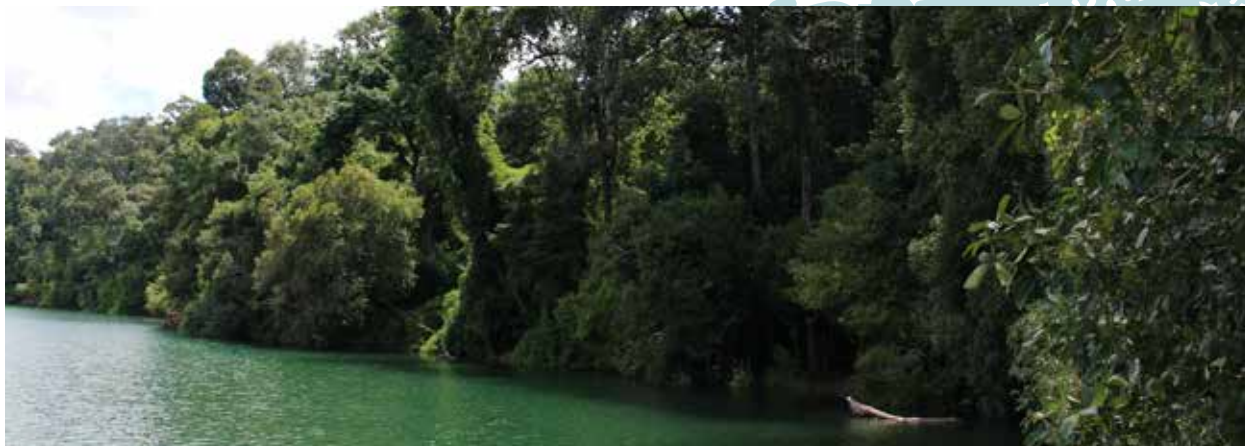
It is further recommended that TWG-FA now establish an action plan to carry out each of these steps. The results from this work will help provide more precise answers to each of the following concerns:

- The “Mission” and “Vision” of the proposed finance strategy;
- The approximate amount of funding required to ensure long-term conservation of Cambodia’s protection forest resources;
- The expected outputs and outcomes from the funding;
- Identification of the institutional structure and responsibilities of the management authority; and,
- Determination of the disbursement and accounting procedures for all leveraged funds.

A more detailed summary of the next steps that can be carried out to implement a sustainable finance strategy for Cambodia’s protected forests is shown in Figure.



The proposed action plan to move this work forward can proceed from the following:



A more detailed elaboration of the action has been produced as an outcome from the dissemination workshop held June 4, 2015.

### **Institutional Context for Going Forward**

Further action on the forest finance assessment must occur in the context of existing and anticipated institutional policy. For the next five years, 2014-2018, the policy priorities for the RGC in terms of sustainable management of natural resources will focus on four areas.

1. Further managing forest and wildlife resources in a sustainable and equitable manner, in accordance with the “National Forest Programme 2010-2029”, in particular through better law enforcement and governance, demarcation, classification and registration of forest, effective management and exploitation of state and private forests, implementation of measures for improving the livelihoods of and promoting participation from forest-dependent communities, enhancement of management and effectiveness of conservation measures, reduction of deforestation and degradation of forests, intensified tree planting and forest rehabilitation, strengthening the conservation of wildlife and wildlife sanctuaries, development of institutional and human capacity, and promotion of research studies and their dissemination.
2. Further strengthening the management and conservation of fishery resources in a sustainable manner in line with the “Strategic Planning Framework for Fisheries Sector 2010-2019” and the “Declaration on the National Policy for Fisheries Sector”, especially through the suppression of all violations of laws, rules and regulations related to fisheries including tightened control of fishing gears and fishing period, elimination of overfishing, strengthening fishing communities’ capacity for the management, use and conservation of fisheries resources, protection of biodiversity and aquatic-animal habitats, control of freshwater and seawater quality through pollution minimization, protection and replanting of flooded forests and mangroves, demarcation of flooded forest and fisheries conservation zones, development of institutional and human capacity, and preparing research studies and their dissemination.
3. Intensifying the implementation of necessary measures to ensure the sustainability of the ecosystem, aimed at ensuring the quality of soil, and surface and underground water for serving the agriculture sector and the livelihood of Cambodian people by promoting the preparation and effective implementation of policies and regulations, as well as related action plans and programs for the management of protected natural areas such as national parks, wildlife sanctuaries, protected landscape areas, multiple use areas, wetlands, biodiversity conservation areas, natural heritage conservation areas, and maritime parks, and in particular, strengthening the implementation of “Law on the Environmental Protection and the Management of Natural Resources”, “Law on Protected Natural Areas” and “Guideline on the Development of Coastal Areas in the Kingdom of Cambodia”.
4. Stepping up cooperation with relevant development stakeholders under the framework of the “National Policy on Green Development” and the “National Strategic Plan on Green Development 2013-2030” through the development of regulatory frameworks and mechanisms for carbon trading, strengthening the capability, preparation and implementation of climate change adaptation measures, assessment of the scope of the use of environmental financing mechanisms including payment for environmental services and environmental fund, strengthening the management of protected natural areas including protection of biodiversity, rain forests, and wetland areas; and environment and ecosystem monitoring and control mechanism at both national and sub-national levels.



# ANNEXES

Annex 1 is a list of relevant National Strategies, Laws, Policies and Regulations and literatures which used to compile the report. Annex 2 provides a summary result of the consultative meetings which aim to present and consult upon the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms. The meeting was held in May 2014 attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The list of all the participants in this consultative meeting can be found in Annex 3. In addition, Annex 4 highlights key articles from National Strategies, Laws, Policies and Regulations which enabling references in developing the forest financing options assessment. Annex 5 provides a legal assessment and some policy considerations that may affect the viability, or the practical reality of adoption, of each financial mechanism. Annex 6 gives a short description of a preliminary analysis of potential benefits and costs of the forest finance options proposed for the Royal Government of Cambodia's protected forests and protected areas, along with some recommendations.

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## Annex 2: Results From Consultative Meeting May 26, 2014

### Summary

The meeting was held on Monday 26th May, 2014 at the Sunway Hotel, attended by a total of 60 participants including representatives from the Royal Government of Cambodia (Forestry Administration, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy and Finance), NGOs and Development Partners, Private Sector, and Civil Society Organizations. The meeting started at 08:00am and finished at 15:30pm. The main objective of this consultative meeting was to present and consult upon the context, framework, and approach to be taken in developing the forest financing options assessment, and share international experiences with regards to forest financing mechanisms. The restitution workshop, to be held in July 2014, will present and consult upon the findings from the forest financing options assessment study.

The key outputs for this May 26th consultative meeting were to:

1. Review and consult upon the options for forest financing in Cambodia
2. Build the capacity of different stakeholders, especially relevant government line agencies, about the development of forest financing in Cambodia and international best practice
3. Produce an official report with the approval from the TWG-FR chair (Forestry Administration). This report will be used as a basic roadmap to support the development of forest financing in Cambodia. The results of the workshops will be posted in TWG-FR webpage to ensure the report is widely accessible.

Below is a summary of key points from each session.

1. **Welcome Remark, Dr. Ross Sinclair:** Dr. Sinclair started his welcome remark by reminding participants of the composition and key functions of the sustainable forest financing sub-group under the Technical Working Group on Forestry Reform (TWG-FR), a government and non-government platform that supports the implementation of the National Forest Programme (NFP). Dr. Sinclair mentioned that current work on sustainable forest financing will help contribute to keeping remaining forests in Cambodia by providing necessary finance for the implementation of key national policies and strategic plans on sustainable development and green growth.



Dr. Sinclair also stressed that the Forestry Administration has been very open and participatory in its approach to sustainable forest financing by inviting an NGO to be its co-chair for the sub-group. He ended his remark by encouraging participants to contribute to the activities planned for this consultative meeting as their comments will be taken up by the TWG-FR for its current work on sustainable finance to help with the conservation of Cambodia remaining forests.

2. **Opening speech, H. E. Chea Sam Ang, PhD :** For an opening speech, H.E. Dr. Chea Sam Ang welcomed all participants to this consultative meeting. He mentioned how this participation is a reflection of the collaboration between government and non-government counterparts on this important task to sustain Cambodia remaining forests and to improve the livelihood of communities living in and around the forest areas. His Excellency then focused his speech on the importance of sustainable financing in addressing some of the key challenges – human, resources, and collaboration with NGOs at the field – in the implementation of the NFP. Next, His Excellency highlighted some of the recent natural disasters in provinces such as Pailin and those near Tonle Sap that are attributable to climate change and its impacts on local communities and national economy to make his point regarding the roles of forests in reducing the impacts of climate change. Finally, His Excellency mentioned that study on options for sustainable forest financing should align with Cambodia existing legal context while at the same time taking into consideration international requirements and obligations that come with those options. His Excellency closed his opening speech by stating that the contributions from all participants will be very important in how the sub-group will be proceeding with this task to assess the feasible options for sustainable finance for conservation of Cambodia forests.
3. **Forest Conservation Financing in Cambodia: Status and Progress Forwards, Mr. Chhun Delux:** Mr. Chhun Delux made a presentation to explain existing legal context in Cambodia to be taken into account for conversations on sustainable financing for forest conservation. Mr. Chhun remarked that successful implementation of the NFP requires Cambodia to improve its ability to gather revenue from forestry sectors either from existing forest financing sources or innovative forest financing sources. He also stressed that in order to attract international funding, Cambodia would need to have transparent rules to manage funds; appropriate governance arrangements; and follow international best-practice principles. However, these principals have to align with existing laws and regulations relating to fund management in Cambodia, and must be aligned with the existing policies of other relevant government ministries such as the Ministry of Economy and Finance (MEF). Mr. Chhun closed his presentation by discussing existing forest financing sources in Cambodia, which include: taxes levied on the legal trade in forest products, non-timber forest product (NTFPs), and wildlife permit; bilateral and multilateral funding for forest sector; income generated from Economic Land Concessions, or breeding or trade of wildlife species; government investment funds allocated to forestry development and conservation; tourism revenues; and donors funding.
4. **Innovative Tools for Forest Finance, Dr. James Tolisano:** Dr. Tolisano focused on five key points in his presentation. First, he introduced participants to the main purposes of the Forest Finance Assessment, which include identification of financial tools and instruments that can be used to pay the costs for the management of Cambodia forests and habitats; assessment of the identified financial tools that will have the most political and social acceptance; and identification of actions necessary to administer and manage the use of forest finance funds. Second, Dr. Tolisano stated the four conditions that make a forest finance instrument sustainable, which are (1) markets and capital exist to support the instrument over the long term; (2) political will and commitment exist to support the use of the financial instrument; (3) financial instruments have the support of communities, CBOs, NGOs, and the business community; and (4) the management and use of funds is transparent and well organized. Dr. Tolisano then explored six examples of innovative forest finance instruments that have been tried in other countries. These instruments were: Payments for Ecosystem Services (PES); Debt Relief – Debt Exchanges; Trust Funds; Bonds and other investment funds; Offset and compensation payments; and Forest Enterprises. For each of these instruments, Dr. Tolisano first defined what they are, then explained how they could be set up, and finally highlighted some examples of where (which countries) these instruments have been piloted. Fourth, Dr. Tolisano informed participants of the next activities that will be conducted to complete the Forest Finance Assessment. According to the proposed timeline, the Assessment report will be completed by the second week of August 2014. To close his presentation, Dr. Tolisano shared with the participants key chapters that will be included in the Assessment report.
5. **Question and Answer Session:** After the presentation by Mr. Chhun Delux and Dr. James Tolisano, the floor

was open for questions from participants.

**Question 1 (H. E. Than Sarath, MAFF):** H. E. Than asked how/ what processes will be required to establish forest as an asset for the purposes of forest financing? How would government extract revenue from these financing options? Before asking his question, H. E. Than mentioned the difficulties of managing public property, for example a national park, where various stakeholders are involved.

**Answer 1 (Dr. James Tolisano, WCS):** Answer to H. E. Than's question would depend on which specific sustainable forest financing tool has been selected for a particular land area because each financing tool comes with different details on how land, forest and/ or natural resources should be managed. Similar to this point, the question on how government could extract revenue from these financing options is in fact one of the underlying factors that would indicate the constraints or feasibilities of certain financing options. **Mr. Chhun Delux** mentioned that he agreed with Dr. Tolisano's points. He also added that to ensure that revenues from these financing options reach the government, various policies and measures might need to be established depending on which option is selected for implementation. In addition, Mr. Chhun stated that this conversation highlighted the significance of having existing sources of funding for conservations well-coordinated amongst NGOs and development partners.

**Question 2 (Dr. Tim Boyle, UN-REDD Regional):** Dr. Boyle asked two clarifying questions. First, how money would be raised and managed for sustainable forest financing? Based on the concept note for the consultative meeting, Dr. Boyle's second question was why is REDD+ not included as one of the potential forest financing options?

**Answer 2 (Dr. James Tolisano, WCS):** Dr. Tolisano mentioned that the current Assessment report that he is working on with the help from Mr. Chhun Delux does not look at implementation of any financing option in particular. Thus Dr. Boyle's question on how fund should be managed will be answered at a later stage of the assessment.

- 6. Group Discussions:** After the coffee break, participants were divided into four groups to discuss two main questions following the presentations by Mr. Chhun Delux and Dr. James Tolisano. Except for one group where members are non-Khmer speakers, each discussion group composed of representatives from government ministries, private sector, NGOs and CSOs. The group discussed two questions: (1) what conservation finance mechanisms have been tried in Cambodia? (2) If you were in charge of this process, which finance mechanisms would you choose? It should be mentioned that before breaking into group, each participant was given 10 minutes to write their own answers to these questions on the Q-cards.

Each group received a flip chart. The group appointed one person to record the information shared on the flip chart. This person was also responsible for reporting the group's results to the full group of participants. A facilitator was assigned for each group, and was responsible for keeping the group on task and making sure everyone gets an opportunity to talk. Each group member started by sharing the answers they wrote on the Q-cards with other members while the recorder wrote down those mechanism identified by each participants on the flip chart. The group then discussed each of the identified mechanism in terms of its pros and cons in order to identify 3 to 5 prioritized mechanisms for conservation finance in Cambodia. The group also took into consideration the risks (social, economic, institutional, and environmental) that each of the mechanism might impose. Below are the summary from the group discussions.

## Question 1: What conservation finance mechanisms have been tried in Cambodia?

Group 1	Group 2	Group 3	Group 2
1. REDD+ 2. Forest Management 3. Government Investment Fund 4. Development Partners' Fund 5. Climate Change Trust Fund 6. Ibis Rice Project 7. Nature-based Tourism 8. PES 9. Proposed Trust Fund 10. NTFP-based Enterprise 11. Pilot Forest Production Enterprise 12. CIP (NCDD) NRM 13. Revolving Fund	1. Pilot REDD+ 2. Wild Cattle Conservation Fund 3. Government Investment Fund 4. Commune/ Sangkat Fund 5. National Social Security Fund 6. Cambodia Climate Change Alliance Trust Fund 7. TWG-FR 8. NGOs Trust Fund	1. Government Investment Fund 2. Development Partners' Fund 3. Bilateral and Multilateral Fund 4. Commune/ Sangkat Fund 5. National Social Security Fund 6. Cambodia Climate Change Alliance Trust Fund 7. Private Sectors 8. International NGOs Fund	1. National Budget 2. Bilateral Funding 3. Grants from Donors, NGOs 4. PES 5. Tourism 6. REDD+ 7. Offsets/ Lease from ELCs 8. Cambodia Climate Change Alliance Trust Fund 9. Conservation Agreements 10. Conservation Enterprises

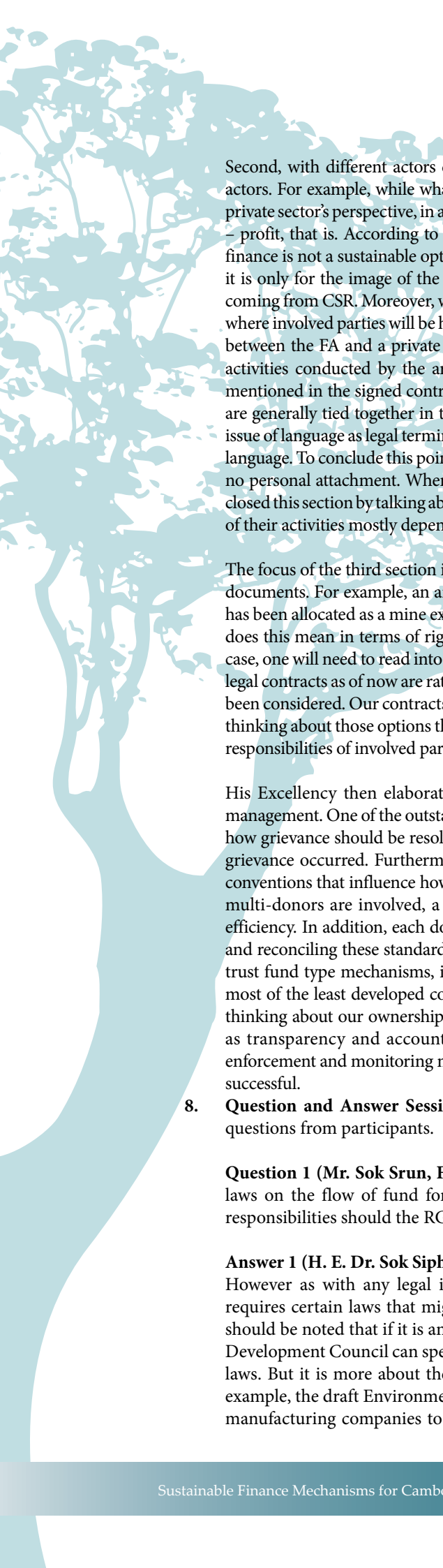
## Question 2: If you were in charge of this process, which finance mechanisms would you choose?

Group 1	Group 2	Group 3	Group 2
1. REDD+ 2. Nature-based Tourism 3. PES/ PEFF 4. NTFP Enterprise 5. Climate Change Trust Fund	There should be further studies on these options: 1. TWG-FR 2. Cambodia Climate Change Alliance Trust Fund 3. NGOs Trust Fund	1. Government Investment Fund 2. Development Partners' Fund 3. International NGOs Fund 4. Private Sectors	1. National Budget 2. Trust Fund Development 3. PES 4. REDD+ 5. Private Sector

### 7. Legal considerations for development of forest financing options in Cambodia, H. E. Sok Siphana, PhD:

His Excellency mentioned that from the legal perspective, there are three points that one should think about when it comes to discussions on sustainable forest financing options, which were rights, responsibilities, and actors. Starting with actors, His Excellency mentioned that this could include government (e.g. ministry), private sector (e.g. banks), and civil society. In this category, actors such as the World Bank or the International Finance Corporation would impose on actors such as national government their standards/ conditions/ requirements as payments will be based on compliance with these standards. To think back to the different options that Mr. Tolisano presented in the morning, the discussions on actors that will be involved in these different options and the complications that it entail would depend on the scale of implementation for these options. For example, a micro level PES program in a rural area in Cambodia where the project is simply paying for local communities to stop what they are doing could not be compared to a national or international level of finance, for example bond, where the issues of credit rating will bring into the equation various international organizations. A very good example to illustrate this point is the US government shut down which affected the US credit rating, which in consequence affected the various actors that are involved with the US bond market. The point is, we should think of actors' involvement in conservation finance options as a funnel from international to national to local. Doing so, we will be able to see the different actors and their responsibilities at these various levels.





Second, with different actors come different responsibilities, some of which are beyond the control of certain actors. For example, while what has been mentioned so far are the responsibilities of the government, from the private sector's perspective, in addition to rights and responsibility, there is an added dimension for any discussions – profit, that is. According to His Excellency, corporate social responsibility (CSR) as a source of conservation finance is not a sustainable option because first of all it is a limited amount for a specified timeframe, and second it is only for the image of the company. Thus, government should really think more about the money that are coming from CSR. Moreover, when working with any private sector, one should be cautious of the legal procedure where involved parties will be held responsible to protect an investment. For example, a REDD+ contract is signed between the FA and a private company to protect a forest area. After the contract is signed, there was logging activities conducted by the army. In this case, the FA would be held responsible for this loss of forest area mentioned in the signed contract. The point is, when it comes to legal conversations, actors and responsibilities are generally tied together in the form of a contract. An additional comment to be made about contracts is the issue of language as legal terminologies are most of the time different in their meanings in comparison to everyday language. To conclude this point about private sector, one just has to remember that it is all about business, there is no personal attachment. When a signed contract is breached, someone will be responsible. His Excellency then closed this section by talking about the responsibilities of civil society organizations (CSOs), where implementation of their activities mostly depends on the agreements with their donors in order to receive funding.

The focus of the third section in His Excellency's presentation focused on government's responsibilities and legal documents. For example, an area has been allocated by MAFF as an ELC while at the same time this very same has been allocated as a mine exploration site by MIME. How would the government deal with this overlap? What does this mean in terms of rights and responsibilities of those involved? According to His Excellency, in such a case, one will need to read into the contracts that were signed by those involved. The difficulty however is that our legal contracts as of now are rather loose in comparison to international agreement where different scenarios have been considered. Our contracts are in general 5 to 6 pages in length, thus very difficult to interpret. In this context, thinking about those options that Mr. Tolisano presented this morning, one must think about these overlapped of responsibilities of involved parties, then clearly elaborate these responsibilities in the contracts.

His Excellency then elaborated on different issues one should think about in terms of trust fund and its management. One of the outstanding issues in terms of trust fund is the management of conflicts. In other words, how grievance should be resolved. In most cases, this issue has often been addressed outside the country where grievance occurred. Furthermore, most countries including Cambodia are signatories to various international conventions that influence how grievance shall be addressed. In terms of management of trust fund where there multi-donors are involved, a huge percentage of the fund would go to administrative costs - a question of efficiency. In addition, each donor or development partner operates according to their standards of operations, and reconciling these standards in general is not possible. Specific to Cambodia, in terms of ownership of these trust fund type mechanisms, in the next few years Cambodia will become a middle income country, and thus most of the least developed country's privileges would no longer apply. Therefore, Cambodia should now start thinking about our ownership and management of these trust funds in way that would address the issues such as transparency and accountability. His Excellency concluded his speech by stressing the importance of enforcement and monitoring mechanisms that must be in place for any conservation finance options for it to be successful.

8. **Question and Answer Session:** Following H. E. Dr. Sok Siphana's presentation, the floor was open for questions from participants.

**Question 1 (Mr. Sok Srun, FA):** Mr. Sok asked two questions. First, could you elaborate on RGC's existing laws on the flow of fund for forest management? Second, in terms of sources from private sector, what responsibilities should the RGC have in place to manage this fund?

**Answer 1 (H. E. Dr. Sok Siphana):** RGC has almost all the basic laws covering most activities in the country. However as with any legal issue, the specificity of the activity for sustainable conservation finance will requires certain laws that might already exist. In short, the contract will determine what law to be used. It should be noted that if it is an agreement, law would not be relevant in most cases. In general, the Cambodia Development Council can specify the content of the agreement. For your second question, we do have general laws. But it is more about the effective implementation of these laws that is the point of conversation. For example, the draft Environmental Impact Assessment (EIA) law specifies the standards and requirements for manufacturing companies to comply. However, in reality we (the RGC) do not have the resources nor the

technology to implement these requirements. In general, it is difficult to exactly estimate relevant stakeholders that should be responsible for the true costs of business activities on the environment.

**Question 2 (H. E. Than Sarath, MAFF):** H.E. Than asked two questions. First, how can we ensure that the procedure that Cambodia will use for establishing sustainable forest financing option will be compliant with both national and international requirements to be able to attract funding? Second, in terms of rights and responsibilities for economic growth, how can we ensure that private sector comply/ fulfill their responsibilities in the management of Economic Land Concessions?


**Answer 2 (H. E. Dr. Sok Siphana):** First we need to understand who is included in the partnership so that we can understand the enforcement and implementation of the contract for relevant stakeholders involved in this partnership. There is no one size fits all for these issues. Any one of the forest financing options we discussed so far will vary in terms of its rights, responsibilities and conditions. As for the second question, in any ELC agreement there are rights and responsibilities for parties involved when it comes to implementation. However, these ELC agreements are in general 6 or 7 pages in length, thus interpretation of articles in these agreements are very much open-ended. This type of agreement is where the weakness lies in terms of effective implementation of ELC agreements, for parties involved, in particular private sector. Therefore, we (the RGC) need to address these poorly articulated agreements to avoid the possibility of being sued by the private sector actors.







9. **Conclusion and Next Steps, Mr. Chhun Delux:** Mr. Chhun provided a short summary of activities conducted throughout the consultative meeting. He then reminded participants of the upcoming activities that will be required to complete the Assessment report. These include analysis of results from this consultative meeting, supplemented by a review of existing literature on the options prioritized by participants through group discussion activities and further consultation with key stakeholders. Mr. Chhun also informed the participants that the first draft of the Assessment report will be completed by mid-July, and a dissemination workshop of the results from this first draft will be conducted. The final draft of the Assessment report will be completed by mid-August, 2014.
10. **Closing remark:** H.E. Chea Sam Ang, Ph.D: H.E. Dr. Chea Sam Ang started the closing remark by mentioning that our efforts to further explore the feasibility of sustainable forest financing options in Cambodia should build on what we have at the moment. As such, we have looked at options such as PES and ecotourism. However, His Excellency mentioned that Cambodia is still learning about how we could get access to those potential options that Mr. Tolisano presented. His Excellency stated that there are various fund available for this task from development partners, but as His Excellency Sok Siphana mentioned there need to be better coordination of these supports to help with the implementation of existing strategies and policies that contribute to financing conservation of remaining forests in Cambodia. His Excellency then discussed the importance of the sustainable finance feasibility study which he hopes would contribute to a better coordinated sources of conservation finance current available in Cambodia and the potential of setting up innovative financing tools, to be completed by July 2014 (see Mr. Tolisano's presentation). His Excellency mentioned that if this feasibility study indicates that there are gaps in current policies/ laws/ regulations that would stymie the establishment of potential innovation conservation financing tools in Cambodia, actions could be taken to amend those identified gaps. His Excellency concluded his closing remark by reminding each participant to think about not just the finance that could come from these potential innovative conservation financing tools, but also the responsibilities that will be bestowed on relevant stakeholders. He mentioned that these responsibilities could be inter-generational, thus we must be careful on the decisions we make today. His Excellency then thanked all participants for joining today consultative meeting, and the organizers for making this meeting possible.





Annex 3: Participants in Assessment Scoping Session,  
May 26, 2014

No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរសព្ទ Tel	អ៊ីមែល E-mail	
1	ឯ.ឧ បណ្ឌិត ឆេង គឹមស៊ុន	ប្រធានរដ្ឋបាលព្រៃឈើ	រដ្ឋបាលព្រៃឈើ	012-671-222	chheng.kimsun@yahoo.com	
2	ឯ.ឧ ជា សំអាង	អនុប្រធានរដ្ឋបាលព្រៃឈើ	រព	012-862-730	chsang@online.com	✓
3	បណ្ឌិត កែវ អូម៉ាលីស្ស	ប្រធាននាយកដ្ឋានសត្វព្រៃ និង ជីវចម្រុះ	រព	012-755-558	omaliss@gmail.com	
4	លោក ប៊ុន វណ្ណា	ប្រធាននាយកដ្ឋានសុរាហកម្មព្រៃ ឈើ និងសហប្រតិបត្តិការអន្តរជាតិ	រព	012-880-303	vannabun@yahoo.com	
5	លោក ហួត ពន្លឺ	ប្រធាននាយកដ្ឋានផែនការ និង ហិរញ្ញវត្ថុ	រព	017-664-378	houptponloeu@yahoo.com	
6	លោក បណ្ឌិត សូ ធា	អនុប្រធានវិទ្យាស្ថានស្រាវជ្រាវ និង អភិវឌ្ឍន៍ព្រៃឈើ-សត្វព្រៃ	រព	097-620-7925	sothea67@hotmail.com	
7	លោក ឡាវ សេដ្ឋាផល	អនុប្រធាននាយកដ្ឋាននីតិកម្ម និង ពង្រឹងការអនុវត្តច្បាប់	រព	077-827-063	laosethaphal2007@yahoo.com	
8	លោក សំរិត វណ្ណា	អនុប្រធាននាយកដ្ឋានព្រៃឈើ និង សហគមន៍ព្រៃឈើ	រព	092-720-071	samrethv@yahoo.com	
9	លោក ឈាង ដានី	អនុប្រធាននាយកដ្ឋានសត្វព្រៃ និង ជីវចម្រុះ	រព	012-867-447	vanhachang@gmail.com	

No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
10	លោក ហុង គឹមហ៊ាន	អនុប្រធាននាយកដ្ឋានអភិវឌ្ឍន៍ចំការព្រៃ និងព្រៃឯកជន	រោ	012-955-702	kimhean-hong@hotmail.com	
11	លោក វីស័រ វិសាល	ប្រធានការិយាល័យគ្រប់គ្រងស្ថានីយ៍ផ្ទាល់បណ្តុះនិងស្ថានទូទៅ	រោ	017-792-727		
12	លោក ញឹក គនៈពេជ្រ	ប្រធានទូទាត់ស្ថានសត្វ និងមជ្ឈមណ្ឌលសង្គ្រោះសត្វព្រៃក្នុងតាម៉ៅ	រោ	012-934-093	ratanapichhok@gmail.com	
13	លោក លីម ប៊ុនណា	អនុប្រធានការិយាល័យស្ថិតិ និងប្រកាសប្រ	រោ	088-8787-878		
14	លោក ឈុន ឌីសុច	អនុប្រធានការិយាល័យគណនាកម្មវិធីព្រៃ និងការប្រែប្រួលអាកាសធាតុ	រោ	077-805-610	chhundeux04@yahoo.com	V
15	លោក ជុន ជន្មា	អនុប្រធានការិយាល័យគ្រប់គ្រងដែនជម្រក និងទេសចរណ៍ធម្មជាតិ	រោ	០២ 50០១១៩	huchphonlaxa@gmail.com	
16	លោក សុខ ស្រីន	អ្នកសម្របសម្រួល TWG-FR	រោ	012-940-936	twgfr@wikam.com.kh	
17	លោក ម៉េង ឡុត	មន្ត្រីវិទ្យាស្ថានស្រាវជ្រាវ និងអភិវឌ្ឍន៍សត្វព្រៃ	រោ	012 890 144	wengloth@gmail.com	M. Loth
18	កូន. ទី	កម្មវិធីសត្វព្រៃ	សហគមន៍សត្វព្រៃ	០២ ៨២០០១		
19	នគ. សុខ	សហគមន៍សត្វព្រៃ	សហគមន៍សត្វព្រៃ	012 8857	sokhom-noungyalee.com	
20	សុខ សុខ	សហគមន៍សត្វព្រៃ	ស.ស	012904690	sokun theatong@gmail.com	

No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
21	គុណ្ណី ជ័យជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥	kom-techno@gmail.com	
22	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥		
23	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥	kom-techno@gmail.com	
24	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥	kom-techno@gmail.com	
25	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥		
26	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥		
27	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥	kom-techno@gmail.com	
28	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥		
29	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥		
30	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥	kom-techno@gmail.com	
31	គុណ្ណី ជ័យ	នាយកដ្ឋានប្រឹក្សាភិបាល	ម/ក. ភិបាលក្រុង	០៩៥៥៥៥៥	kom-techno@gmail.com	

No.	ឈ្មោះ: Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរសព្ទ Tel	អ៊ីម៉ែល E-mail	
32	Thibault Ledeey	Conversion Pig Manager	Went		Thibault.ledeey@wspredimchy.org	
33	Prak Munny	WCS - Advisor	WCS	012555486		
34	Teang David	Chief of OMC	CFA. Odd	012350997	davidteang@yahoo.in	
35	Sin Rosal	chief of K.G	CFA. odd.	012.889733	kompengchimaif fa- @yahoo.com.	
36	Chhidy Sany	CD	WWF	012929595		
37	Chhay Saran	Chief of Pursat FA - Contentment	FA	012565327	Saravichhay@yahoo.com	
38	Sok Kumthay	Translator	Sunthe (operation)	012602960		
39	វ៉ាន់ ហ៊ុន	ឧបនាយករដ្ឋមន្ត្រី	ស.អ	01888088	chunthathannarakeyabocan	
40	លី. វ៉ាន់	19 ០ km	MEF			
41	ស៊ី ឈី	15.7 km	ស. អ	0976207925		
42	ស៊ី ឈី	ឧបនាយករដ្ឋមន្ត្រី	ឧបនាយករដ្ឋមន្ត្រី	012881877		



No.	ឈ្មោះ: Name	តំណែង Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរសព្ទ Tel	អ៊ីមែល E-mail	
43	Alex Diment	T.A.	WCS	012 434554	adiment@wcs.org	hi
44	Sofheany	Coordinator	BNHI	012249407	Soo.sothearyag@gmail.com	Sofheany
45	Vibol Neth	Assistant to CEO	Wildlife Alliance	012 713774	neth@wildlifealliance.org	Vibol
46	ប្រាក់ ណូម៉ា	Chief of FA-Ky Chau	FA	017534496		
47	Prak Noma	DD of DPS	MAFF	012 231314	praknoma@yahoo.com	
48	THAN SARATH			012 812383	fsarath@yahoo.com	
49	Kim Monethin	Envi specialist	USAID	017535318	mls@ecsaider.com	Kim Monethin
50	Lu H. Kimhy	PC	RTS	011 911102	kimhy.luu@undp.org	
51	TRACY FARREL	TECHNICAL ASSISTANT	CI	095772287	tfarrel@camerica.com	Tracy
52	Moelco Sauto-Jusen	Programme Analyst	UNDP	017868835	moelco.sauto-jusen@undp.org	Moelco
53	Limchun Ht.	Country Coordinator	W	012365778	limchun@wri.org	Limchun

No.	ឈ្មោះ Name	តួនាទី Position	អង្គភាព Organization	ទំនាក់ទំនង Contact		ហត្ថលេខា Signature
				លេខទូរស័ព្ទ Tel	អ៊ីមែល E-mail	
65	Go/ Sokcha	Training Coordinator	Recofte	012322696		
66	ឃីន ឈុន	សិស្ស	FA	012591678		
67	ឈា គីរា	Student	RUPP	0899773376	kheunrupp@gmail.com	
68	Meas Chenda	Student	RUPP	017294819	measchendarup@yahoo.com	
69	សុំ សុផា	Assistant	TN6-FR	014578474	sonnaphakda@gmail.com	
70	JIEL A. SURGENS	PROJECT MANAGER (SPES)	FFI	012234170	IEL.SURGENS@FIANA.FIOM.ORG	
71						
72						
73						
74						
75						

## Annex 4: Enabling Provisions under Cambodian Law for Options Identified

### **The Constitution of the Kingdom of Cambodia, 1993**

**Article 59:** The State shall protect the environment and balance of abundant natural resources and establish a precise plan of management of land, water, air, wind, geology, ecological system, mines, energy, petrol and gas, rocks and sand, gems, forests and forestry products, wildlife, fish and aquatic resources.

### **Political Platform of the Royal Government of Cambodia of the Fifth Legislature of the National Assembly, 2013** **Section 3.11. Environment**

- Preserving and protecting biodiversity and ecosystem while exploiting onshore and offshore natural resources in a sustainable manner for the benefit of people now and in the future in order to respond to the increased pollution caused by industrial development and global climate change and to ensure socio-economic advancement and the public well-being.
- Hastening the protection of environment quality and preservation of natural resources to ensure their sustainability in the ecosystem by way of: enhancing the development of green economy with full participation from all strata of society, especially local communities; and through strengthening the institutional and legal framework relating to environmental protection.
- Streamlining environment sector into the socio-economic development plan, and deepening regional and international cooperation in this sector. Accelerating the implementation of the Law on Environment with the aim to preserve protected natural areas, prevent environmental quality degradation and mitigate disasters.
- Undertaking sound environmental impact assessments for all development projects in order to ensure sustainable use of natural resources for advancing socio-economic development. Reinforcing the management of land concessions so as to ensure sustainable land use for development projects with the aim to prevent forest land encroachment at core and protected zones all the while providing technical support to local people living in those areas. Promoting eco-tourism that will help protect the environment and natural resources.
- Increasing environmental control and reducing pollution including: the management of solid waste, dangerous substances, air quality monitoring and quality improvement; monitoring and prevention of land and water pollution, including sound and visual pollution.

### **Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III of the Royal Government of Cambodia, 2013**

**Paragraph 27:** The Royal Government will continue to take a comprehensive development approach toward environmental management in Cambodia, through:

1. Sustainable management of natural resources.
2. Intensifying efforts to reduce the impacts of climate change by strengthening adaptation capacity and resiliency to climate change, particularly by implementing the “National Policy on Green Development” and the “National Strategic Plan on Green Development 2013-2030”.
3. Continuing to strengthen technical and institutional capacity to promote the mainstreaming of climate change responses into the policies, laws and plans at national and sub-national levels.
4. Continuing to introduce measures to control environment and ecosystems pollution.

### **National Strategic Development Plan 2014-2018**

- **Paragraph 4.40 – see Paragraph 27 of Rectangular Strategy Phase III**

## **Cambodia Climate Change Strategic Plan: 2014-2023**

**Strategic Objective 3: Ensure climate resilience of critical ecosystems (Tonle Sap Lake, Mekong River, coastal ecosystems, highlands, etc.), biodiversity, protected areas and cultural heritage sites Strategies:**

- a. Strengthen biodiversity conservation and restore ecosystems threatened by climate change;
- b. Promote and encourage community-based, ecosystem-based approaches and ecotourism as cost-effective ways of addressing climate change;
- c. Promote payment for ecosystem services including REDD+;
- d. Promote participatory land-use planning.

**Strategic Objective 8: Strengthen collaboration and active participation in regional and global climate change processes Strategies:**

- a. Promote regional cooperation on climate change within inter-governmental and non-governmental mechanisms:
  - i. Implementation of commitments under the UNFCCC
  - ii. Cooperation under ASEAN framework
  - iii. South-South and North-South collaboration
  - iv. Trans-boundary initiatives, e.g. within the Mekong River Basin framework
  - v. Cooperation through the Clean Development Mechanism (CDM), carbon market mechanisms and other relevant carbon credit schemes.

## **National Policy on Green Growth, 2013**

### **Section 3.2: Objectives**

- Developing an economy in balance with environment, society and culture;
- Create a favorably enabling environment for green growth in equity, balance, fraternity, and quality of socio-economic systems and ecology that uphold national cultural value;
- Effective management of Access to water resources management and sanitation, Access to food security and food safety, Access to development, forest conservation, and mixed resources water, and sustainable land use, Access to renewable energy, and energy efficiency, Access to information and knowledge and skill, Access to better social livelihood service means and environment, and Access to finance for creation of small medium } enterprise and investment associated with green growth;
- Enhancing education and training on green growth;
- Strengthening information exchange, knowledge, good experiences, technology and investment related to green growth;
- Stimulating green growth cooperation at a national and sub national level, region and the world.

## **Law on Forestry, 2002**

**Article 1:** The objective of this law is to ensure the sustainable management of these forests for their social, economic and environmental benefits, including conservation of biological diversity and cultural heritage.

**Article 7:** The Forestry Administration shall perform the following duties: Study, collect data on State forests regarding scientific, economic, social and environmental factors in order to set a sustainable production level.

**Article 51:** The Forestry Administration shall collect the following Wildlife Conservation Fee and Wildlife Royalty:

1. A Wildlife Conservation Fee shall be paid to the Forest Development Fund; and
2. A Wildlife Royalty shall be paid to the National Budget.

The amount of a Wildlife Conservation Fee and Wildlife Royalty shall be determined by Joint-Prakas between the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Economy and Finance.

**Article 52:** Except as stated in Article 53 of this law, any individual or legal entity harvesting Forest Products & By-products for commercial purposes within the Permanent Forest Reserve shall pay royalties and premiums to the national budget through the Forestry Administration. The Royal Government of Cambodia shall determine the royalties and premiums upon the joint proposal of Ministry of Agriculture, Forestry and Fisheries and Ministry of Economy and Finance. The state will not require the payment of royalties or premiums for the harvesting of Forest Products & By-products from private forests. The Model Forest Concession Management Agreement shall include a table of royalties and premiums on Forest Products & By-products.



**Article 56:** Anyone with legal possession of a permit to harvest Forest Products & By-products shall pay all applicable royalties and premiums prior to transferring or selling any of these rights to a third party. The Minister of Ministry of Agriculture, Forestry and Fisheries, after consultation with the Ministry of Economy and Finance, may approve a delay in the payment of Royalties and Premiums on Forest Products & By-products for a permit holder who the Forestry Administration has recognized for practicing the sustainable forest management, and the delay of payment shall be based on rules and guideline under Article 55, 2nd paragraph of this law.

**Article 62:** The Royal Government of Cambodia shall establish a fund known as “National Forestry Development Fund” which shall be administered and managed under the responsibility of the National Forestry Development Committee, and co-chaired by the Minister of Ministry of Agriculture, Forestry and Fisheries and the Minister of the Ministry of Economy and Finance. The organization and functioning of the National Forestry Development Committee shall be determined by AnuKret.

**Article 63:** The National Forestry Development Fund shall have sources of revenues derived from:

1. Distributions from the Royal Government of Cambodia;
2. Premium on Forest Products & By-products;
3. Wildlife Conservation Fees;
4. Aid from international organizations;
5. Donations from charitable individuals and national and international non-governmental organizations, and
6. Revenue from other services in the forestry sector.

All of the above mentioned revenue should be deposited into the account of the National Forestry Development Fund.

**Article 64:** National Forestry Development Fund shall not be used for the organization and functioning of the Forestry Administration. This fund shall be used only for the following activities:

1. Reforestation;
2. Silviculture and forestry rehabilitation;
3. Forest Protection and Conservation and bio-diversity
4. Forest and wildlife scientific and technical research;
5. Extensions on Forest and Wildlife sector;
6. Development in Forest and wildlife sector;
7. Development of Community Forestry; and
8. Training human resources for the Forest and Wildlife sector.

**Article 94:** Any individual who has committed a forestry offense harming the forest ecosystem shall be liable for payment in order to restore or repair the forest ecosystem to its original condition.

### **National Forest Programme: 2010-2029**

#### **Strategic objectives**

1. Maximize sustainable forest contribution to poverty alleviation, enhanced livelihoods and equitable economic growth
2. Adapt to climate change and mitigate its effects on forest based livelihoods
3. Macro land-use planning that allows for holistic planning across sectors, jurisdictions and local government borders
4. Forest governance, law and enforcement at all levels
5. Develop a conflict management system
6. Raise awareness, capacity of institutions and quality of education to enable sustainable implementation of the National Forest Programme
7. Ensure environmental protection and conservation of forest resources
8. Apply modern sustainable management models adaptive to changing context
9. Develop sustainable financing systems



## 6. Sustainable Forest Financing

Sustainable Forest Financing provides an economically sustainable and transparent framework required in meeting all the NFP objectives. This will be achieved through:

Sub-programme 6.1 – Government Financing

Sub-programme 6.2 – Income from Forest Sector

Sub-programme 6.3 – Income from the Private Sector and Community Forestry

Sub-programme 6.4 – Financing via Donors

Sub-programme 6.5 – Innovative Financing from Payments of Environmental services and Carbon Credit

### Law on Nature Protection Area/ Protected Areas Law 2008

**Article 1:** This law defines the framework of management, conservation and development of protected areas. The objectives of this law are to ensure the management, conservation of biodiversity, and sustainable use of natural resources in protected areas.

**Article 4:** The management of protected areas as mentioned in Article 2 of this law shall be under the jurisdiction of the Ministry of Environment. The Ministry of Environment has the “Nature Protection and Conservation Administration” (NPCA) as its own secretariat to manage the protected areas pursuant to the policy of the RGC. The organization and functioning of the Nature Protection and Conservation Administration in each protected area shall be determined by Prakas (Declaration) of the Ministry of Environment. The management of the protected area shall have to guarantee the rights of the local communities, indigenous ethnic minorities and the public to participate in the decision-making on the sustainable management and conservation of biodiversity.

**Article 32:** The Government shall establish a fund called “protected areas fund” which is organized, managed and given responsibility by a protected area committee with Minister of Environment and Minister of Economy and Finance as co-chairmen. The establishment and functioning of the committee shall be determined by a Sub-decree.

Article 33: Funding support for rehabilitation, improvement of protected areas and biodiversity shall come from:

1. National budget
2. Protected area entrance and other service fees
3. Environmental endowment insurance
4. Donations
5. Assistance from national and international organizations and friendly countries
6. Assistance from international environment funds

Article 34: Budget and funds from sources as stated in article 33 of this law may be used to support the following activities within the protected areas:

- The protection and conservation of biological resources and ecosystems;
- Rehabilitation and enhancement of biodiversity and ecosystems;
- Technical and scientific research study on the biological diversity and ecosystem;
- Maintenance and extension of eco-tourism services
- Training, human resource development and capacity building of the Nature Conservation and Protection Administration staff for effective protection and conservation of biodiversity and ecosystems;
- Programmes supporting the establishment of community protected area;
- Dissemination and education on protected area; and
- Construction, rehabilitation and maintenance of infrastructure.

## **Law on Environmental Protection and Natural Resource Management, 1996**

**Article 1:** This law has an objective:

- To protect and upgrade the environment quality and public health by means of prevention, reduction and control of pollution.
- To assess the environmental impacts of all proposed projects prior to the issuance of decision by the Royal Government;
- To ensure the rational and sustainable preservation, development, management and the use of the natural resources of the Kingdom of Cambodia.
- To encourage and provide possibility to public to participate in the protection of environment and the management of the natural resources.
- To suppress any acts which may affect to environment.

**Article 8:** Natural resources of the Kingdom of Cambodia which primarily consist of land, water, airspace, air, geology, ecological systems, minerals, energy, petroleum and gas, rocks and sand, gems and stones, forests and forest sub-products, wildlife, fish and aquatic resources, shall be preserved, developed and managed to use in a rational and sustainable manner. Natural resource protected zones consists primarily of National Parks, wildlife sanctuaries, landscape protected areas, multiple use areas, shall be determined by Royal Decree.

**Article 19:** A special Treasury account, the Environment Endowment Fund, shall be crested, and administered by the Ministry of Environment for environmental protection and natural resource conservation in the Kingdom of Cambodia in accordance with the Finance Law. The Environment Endowment Fund, which comes from contributions from the Royal Government, grants from international organizations, donations from charitable individuals, donations from non-governmental organizations, and other lawful sums, shall be included in the National Budget in order to provide the above special account.

**Article 21:** Any person who refuses to allow access or obstructs the inspection officials from entering to examine or carry out an inspection inside the premise as provided for in the para.1 of the article 15 of this law, shall be subject to an administrative fine in cash from 500,000 (five hundred thousand) to 1,000,000 (one million) riels. In case of repeated offenses, shall be penalized a fine of 1,000,000 (one million) riels to 5,000,000 (five million) riels or shall be punished to imprisonment from 1 month to 3 months or to both punishments.

Any person who violate the article 20 of this law, shall be subject to administrative fine in cash of 1000,000 (one million) riels to 10,000,000 (ten million) riels. In case of repeated offenses, shall be penalized a fine from 21,00,000 (twenty one million) riels to 30,000,000

(thirty million) riels or shall be subject to punishment to imprisonment from 1 (one) month to 1 (one) year, or to both punishments.

## **Law on Mineral Resource Management and Exploitation, 2001**

**Article 1:** The purpose of this law is to determine the management and exploitation of mineral resources, the manipulation of mines and all activities relating to the mining operation in the Kingdom of Cambodia save for the mining operation of petroleum and gas which shall be under a separate law.

**Article 22:** Guidelines on the form, plan expansion and increase and content of all necessary documents and work program, financial guarantee for proper implementation shall be determined by a Prakas of the Minister.

**Article 23:** In each necessary case, the Minister shall appoint competent officials to monitor the implementation of this law. Appointed officials shall:

1. Be responsible to the Minister for methods of administration in accordance with the provisions of the law.
2. Prepare an annual report on regulatory activities of exploration and mining during the preceding year and submit it to the Minister.
3. Collate information and maintain records of operations of explorations, mining, treatments, marketing and exportation of mineral resources and products.
4. Follow up and monitor to ensure that all provisions of this law have been implemented.
5. Make inspection to ensure that all regulations relating to the health and safety of workers and of the general public have been properly applied.

6. Perform other duties as determined by the Minister.

The power and duties of the officials appointed to monitor, inspect and report on all activities relating to the exploration, mining, research and analysis related to the methods of administration under the authority of this law shall be prescribed in Sub-decree.

**Article 31:** According to the applicable laws, a special tax regime shall be established for application to the output and revenue gained from the 6 (six) categories of the mining licenses as provided in Article 11.

**Article 32:** The rate of royalty on the value of mineral resources, methods of royalty payment to the State, and incentives for competent officials as provided in Article 23 shall be determined by Inter-Ministerial Prakas. Taxes, duties, tax on shares, tax on personal share, provision, method of expenditure, tax payment procedure, accounting and financial principles and practices, definitions of losses, exemption and incentives of investment in mineral sector shall comply with laws in force.

**Article 33:** Any person who conducts the operation of the mineral resource exploration without a mineral resource license shall be liable to a fine ranging from 500,000 (Five Hundred Thousand) Riels to 1,000,000 (One Million) Riels. In case of recalcitrance, the penalty shall be from 1,000,000 (One Million) Riels to 2,000,000 (Two Million) Riels, or such person shall be punished by 1 (one) month to 1 (one) year imprisonment, or both punishments.

**Article 34:** Any person who conducts the exploration operation in violation of the second paragraph of Article 7 or of Article 8 of this law shall be liable to a fine ranging from 5,000,000 (Five Million) Riels to 10,000,000 (Ten Million) Riels, or punished by 6 (six) months to 2 (two) years imprisonment or both penalties.

**Article 35:** Any person who conducts mining operation without a mining license or in violation of Article 7 and Article 8 of this law shall be liable to a fine of an amount equal to 3 (three) times the assessed value for a period the output of mineral has been extracted based on the size of apparatuses, used production machinery and quantity of minerals within such area, and shall be punished with a fine ranging from 1,000,000 (One Million) Riels to 10,000,000 (Ten Million) Riels per diem starting from the date such person illegally committed to the date the activities of mining operation have been ceased, and by imprisonment ranging from 1 (one) year to 5 (five) year regardless of compensation for damages. And the apparatuses and production machinery shall be confiscated into the State's property.

#### **Land Law, 2001**

**Article 1:** This law has the objective to determine the regime of ownership for immovable properties in the Kingdom of Cambodia for the purpose of guaranteeing the rights of ownership and other The Khmer version is the official version of this document rights related to immovable property, according to the provisions of the 1993 Constitution of the Kingdom of Cambodia.

**Article 8:** Only natural persons or legal entities of Khmer nationality have the right to ownership of land in the Kingdom of Cambodia. Thus, the following persons or entities may be owners of land in Cambodia: Cambodian citizens, public territorial collectives, public institutions, Cambodian communities or associations, public enterprises, Cambodian civil or commercial enterprises and any Cambodian organization which is recognized by law as a legal entity. A foreigner who falsifies national identity to become an owner of land in Cambodia shall be punished as determined under article 251 of this law. Any property bought under these circumstances will be seized as State property without compensation from the State.

**Article 12:** The State is the owner of the properties in the territory of the Kingdom of Cambodia enumerated in Article 58 of the 1993 Constitution and of all properties that are escheat, or that are voluntarily given to the State by their owners, or that have not been the subject of due and proper private appropriation or that are not presently being privately occupied in accordance with the provisions of Chapter 4 of this law.

**Article 26:** Ownership of the immovable properties described in Article 25 is granted by the State to the indigenous communities as collective ownership. This collective ownership includes all of the rights and protections of ownership as are enjoyed by private owners. But the community does not have the right to dispose of any collective ownership that is State public property to any person or group. The exercise of all ownership rights related to immovable properties of a community and the specific conditions of the land use shall be subject to the responsibility of the traditional authorities and mechanisms for decision-making of the community, according to their customs, and shall be subject to the laws of general enforcement related to immovable properties, such as the law on environmental protection. The provisions of this article are not an obstacle to the undertaking of works done by the State that are required by the national interests or a national emergency need.

#### **Law on Public Finance 2008**

**Article 2:** The Law has its objective to manage public financial system by complying with the principles of integrity, authority, unity, associability, universality, consistency, accountability, transparency, stability, comprehensiveness, and achievements. The public financial management covers national public finance including relations and interactions between national and international public finance, national and international private finance ensuring compliance with budget principles, financial accountability, linkages between budget and policies, and accountability for achievements.

**Article 13:** Permanent resources of the state include current and capital revenues.

■ Current revenue is divided into 2 groups and 3 categories, namely:

- Group 1: Real revenue
  - ◆ Category 1: Fiscal revenue
  - ◆ Category 2: Non-fiscal revenue
- Group 2: Revenue by order
- Category 3: Revenue by order

■ Capital revenue is divided into 2 groups and 3 categories, namely:

- Group 1: Real revenue
  - ◆ Category 1: Revenue from own sources
  - ◆ Category 2: Revenue from external sources
- Group 2: Revenue by order
  - ◆ Category 3: Revenue by order

Each type of revenue is classified by chapter, account, sub-account, and eventually can be in more detail by the Prakas issued by the Minister of Economy and Finance.

**Article 16:** Taxes, excises, and other fiscal revenues shall be determined by laws, collected and supervised by the Minister of Economy and Finance. The rates of taxes, excises, basis for taxation, tax exemption, and disputes related to the identification, collection, and control of taxes shall be determined in the framework and formalities stated in the law pertaining to the types of each tax and excise. No regulations of any kind, no international conventions shall induce changes leading to losses of revenue. The above case can only happen unless implementation of the formalities of similar laws and orders after having the approval from the Minister of Economy and Finance. The collection of non-fiscal revenue shall be under the supervision of the Minister of Economy and Finance.

**Article 68:** Under the limits defined by the Law on Finance and under the authority of the Prime Minister, only the Minister of Economy and Finance has the rights to prepare debt repayment schedules for either debt liable to and from others. The preparation of debt schedule shall be defined by the Law on Finance.

#### **Law on Tourism, 2009**

**Article 2:** The purposes of this Law are as follows:

- Govern the development of the tourism sector in a sustainable manner effectively and qualitatively and to reduce poverty;
- Protect and conserve the natural resources, culture and customs, which serve as the foundation of the tourism sector;



- Ensure and promote the quality of tourism services in the Kingdom of Cambodia through the introduction of a quality assurance system by providing security, safety, and comfort and by increasing tourists' satisfaction;
- Minimise negative impacts and maximise positive impacts of the tourism sector;
- Seek markets and enhance publicity with participation of both the public and private sectors;
- Develop human resources in the tourism sector; and
- Contribute to the development of international friendship and understanding through the tourism industry.

**Article 21:** Funds for the development and the management of the tourism sector shall be financed by:

- Allocation of the annual budget of the Ministry of Tourism;
- Cooperative finances from development partners;
- Contributions from charitable persons, customers, charity organizations, and the Tourism Industry Associations;
- Donations from the Cambodian Tourism Marketing and Promotion Board;
- Contributions from tourism operators; and
- Other financing sources or legitimate incomes.

The management and utilisation of funds for the development of tourism sector shall be determined by an interministerial regulation of the Ministry of Tourism and the Ministry of Economy and Finance.

**Article 36:** An application for the grant of or renewal of a tourism license shall be made by the operators of the tourism business and shall be in the form and accompanied by the supporting documents and other information as required by a Prakas (regulation) of Minister of the Ministry of Tourism. An application of tourism licence must thereof attach the license fees which were determined by an inter-ministerial Prakas (regulation) of Minister of the Ministry of Tourism and Minister of the Ministry of Economy and Finance.

**Article 55:** The types of complaints and disputes for which are in the jurisdiction of the Ministry of Tourism to undertake the role of ombudsman include complaints from and disputes between tourism businesses operators, their agents, employees, contractors, government officials concerned with tourism, tourists and other stakeholders. The Tourism Ombudsman Committee shall consider justly undertaking the dispute including the complaint. If the ombudsman is unable to resolve the dispute, any party may then refer the matter to the courts for resolution according to law. The expenditure and fee of the Tourism Ombudsman Committee shall be determined by a Prakas (regulation) of Minister of the Ministry of Tourism and Minister of the Ministry of Economy and Finance.

**Article 69:** Any tourist or leisure traveler who causes damages to the environment, cultural and natural heritages shall be guilty of an offence and subject to a legal liability in accordance with laws and regulations in effect.

Sub-Decree 19 on Social Land Concessions, 2003

Article 1: This sub decree has the objective to define the criteria, procedures and mechanism for the granting of social land concessions for residential use and/or family farming.

**Article 16:** The maximum size of social concession land granted for residential purposes is one thousand two hundred (1200) square meters, except in rural areas where land is available, the size of social concession may be increased up to three thousand six hundred (3600) square meters. In appropriate cases, particularly in urban areas, social land concessions for residential purposes may granted in the form of co-ownership.

**Article 17:** The maximum size of social concession land granted for family farming purposes is two (2) hectares, but for some areas the size of social concession land may be increased up to five (5) hectares based on the characteristics and potentiality of the land or the type of crop, and labor.

#### **Sub-Decree 79 on Community Forestry Management, 2003**

**Article 1:** This Sub-Decree aims at determining rules for the establishment, management and use of community forests throughout the Kingdom of Cambodia.

Article 4: Power in leading and managing a CF Community is gained through the election of community members.



**Article 10:** Roles and duties of CF Community members are as follows:

- Follow the instruction of the Forestry Administration and MAFF;
- Participate in developing and implementing Community Forestry Regulations, Community Forest Agreement and Community Forest Management Plan in compliance with Prakas of MAFF;
- Participate in forest resources management in compliance with Community Forestry Regulation, Community Forest Management Plan and other legislation related to forestry sector;
- Participate in sharing benefits from the community forest;
- Participate in monitoring the use of community forest resources by secondary users;
- Participate in conserving, protecting and planting the forest to ensure the sustainability of forest resources and environment.

**Article 11:** The User Rights of CF Community members include:

- Customary User Rights prescribed in Article 40 of the Forestry Law.
- The rights to barter, process, transport and sell NTFPs as described in Article 40(B) in point 5 of the Forestry Law.
- CF Community may continue to practice traditional swidden agriculture during specific periods of time as determined in the Community Forest Management Plan, as authorized in Article 37 of the Forestry Law.
- The right to appeal decisions which impact CF Community rights.
- The rights granted under a Community Forest Agreement within a specific area that shall ensure the sustainable use of forest resources.

**Article 31:** The Forestry Administration may use the national forest development budget to support the development process of Community Forestry consistent with provision prescribed in Article 62, 63 and 64 of the Forestry Law. Community Forestry Management Committee can seek direct financial sources to support the development process of Community Forestry from charity people, national and international organizations.

#### **Sub-Decree 146 on Economic Land Concessions, 2005**

**Article 3:** Economic land concessions may be granted to achieve the following purposes:

- To develop intensive agricultural and industrial-agricultural activities that requires a high rate and appropriate level of initial capital investment.
- To achieve a specific set of agreements from the investor for developing the land in an appropriate and perpetual manner based on a land use plan for the area.
- To increase employment in rural areas within a framework of intensification and diversification of livelihood opportunities and within a framework of natural resource management based on appropriate ecological system,
- To encourage small as well as large investments in economic land concession projects, and
- To generate state revenues or the provincial or communal revenues through economic land use fees, taxation and related services charges.

**Article 6:** There are two permissible ways to initiate economic land concession projects:

1. Solicited proposal, where a Contracting Authority proposes a project for solicitation of proposals from investors.
2. Unsolicited proposal, where an investor proposes a project proposal to the state for approval
  - o Contracting Authority refers to the authorities who have the legal power and exercise such power as granted by the Prime Minister to enter into Economic Land Concession Contracts on behalf of the Royal Government of Cambodia and who carries out duties in accordance with provisions of this sub-decree.



## Annex 5: Opinion on the Legal and Policy Considerations of the financing Mechanisms for Protected Areas

Prepared for the Cambodia Forestry Administration, MAFF  
By Dr. Sok Siphana  
April 13, 2015

### BACKGROUND:

process of Community Forestry consistent with provision prescribed in Article 62, 63 and 64 of the Forestry Law. Since the 1990s the Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MoE) have received the mandate from the Royal Government of Cambodia (RGC) to secure protected forests in ecologically important landscapes and to establish new protected areas. One of their challenges is the ability to secure long-term financial arrangement necessary to pay for the full costs incurred in sustaining and safeguarding existing on-the-ground achievements, as well as ensuring the long-term integrity of standing forests.

Through a consultative process with key stakeholders the FA has reviewed the following finance mechanisms, which were thought to be technically achievable:

1. Taxes, fees, and fines levied on the legal trade in forest and non-timber forest (NTFPs) products;
2. Donor funding;
3. Payment for Environmental Services (PES), including payment for tourism, water and watershed services, and carbon and climate revenues;
4. Debt relief ('Debt-for-nature swaps');
5. Loans, bonds, and sustainable investment funds, including impact investments, allocated to forestry development and conservation;
6. Biodiversity and Forestry offsets and compensation agreements with industry;
7. Public-private partnerships, in which revenues from products and services sold are directed to a trust or other fund established for the explicit purpose of forest conservation, with primary attention given to possible income generated from Economic Land Concessions;
8. Establishing a forest conservation trust fund, with revenues generated from multiple sources;

This analysis provides a legal assessment and some policy considerations that may affect the viability, or the practical reality of adoption, of each financial mechanism.

### 1. GOVERNMENT BUDGET SUPPORT – PUBLIC TAXES, FEES, FINES, AND OTHER DIRECT ALLOCATIONS FROM THE STATE

Government revenue allocations should be the primary source of financial support for protected areas. Government budget allocations are done on an annual basis as part of the Financial Law, where fees collected directly from public taxes, fines, and other payments from concessions and businesses using Cambodia's natural resources are typically re-apportioned back through a centralized revenue system to support costs for management of protection forests.

The legal framework legislating and regulating the revenues collection through a centralized revenue system for natural resources conservation from environmental taxes, fines, fees, and/ or royalties are well in place:

1. The Law on Forestry provides for the collection of both Wildlife Conservation Fee and Wildlife Royalty,<sup>1</sup> the exact amount of which are regulated in a Joint- Prakas of MAFF and Ministry of Economy and Finance (MEF).
2. Payment of royalties and premiums are directed to the national budget through the FA:
  - a) for harvesting forest products and by-products for commercial purposes within the Permanent Forest Reserve.<sup>2</sup>
  - b) for any transfer of the rights under any permit to harvest forest products and by-products to a third party.<sup>3</sup>
3. Payment for forestry offenses collected by the FA are as well for the account of the national budget (payment to be used for the restoration or repair of the forest ecosystem to its original condition).<sup>4</sup>

New sources of public finance may be accessible through additional public taxes, fees or fines derived from natural resources exploitation or use. Taxes, fees and fines related to natural resource use can also be charged in sectors



such as petroleum, mining, hydropower and other energy production, fisheries, land, water supply, and tourism:

1. In the mining sector, payment of royalty on the value of mineral resources, methods of royalty payment to the State, i.e. through its centralized revenue system, is provided for in the Law on Mineral Resource Management and Exploitation.<sup>5</sup>
2. Fees, taxes and fines for environmental licensing and environmental impact assessment (EIA) are also collected for the account of the State.

#### LEGAL OPINION:

*We are of the opinion that the public finance is the best and viable long term and sustainable option, provided the FA in full collaboration with the MoE and other stakeholders can undertake the following sequential actions:*

1. *Undertake a fair assessment of the market value for various sources of public taxes, fees or fines and other services and products derived from or use of natural resources exploitation. The gist of such an assessment is to ensure:*
  - a) *proper market valuation of various revenue sources and benchmark it with global or regional standard or practices:*
    - (i) *licensing or permit system;*
    - (ii) *royalties from logging in the intact evergreen areas;*
    - (iii) *royalties and legal fees from logging in community forest areas and concessions areas, including from non-timber forest products;*
    - (iv) *sales of services in forestry;*
    - (v) *property tax on private plantations;*
    - (vi) *sale of carbon credits based on reduced impact logging and REDD+;*
    - (vii) *entrance fees to protected forest areas; and,*
    - (viii) *sale of hunting rights.*
  - b) *adequate cost recovery to finance conservation, restoration and redevelopment of damages ecosystem, i.e. sufficient funding available to cover transportation, community meeting, or facility maintenance costs of forest guards, bearing in mind that their basic salaries are covered under the regular national budget;*
2. *Renegotiation with the MEF for a fair re-allocation of these revenue collection with the FA and the key local forestry communities. Such a renegotiation can take into account:*
  - a) *the rewards or incentives for performance of forest guards or rangers, in addition to their low basic salaries;*
  - b) *adequate financing resources for the local communities: (i) to protect and preserve their respective natural resources, and (ii) to start an endowment system for generating regular revenues to support their sustained livelihood development from these natural resources.*
  - c) *the ability of the FA to devise a transparent well governed and managed fund designated for forest conservation uses.*
3. *In light of the trends of economic growth of the country, where public finance revenues are on the increase, competition with other line ministries for redistribution of these revenues will be fierce, although the prospect is more than viable provided the FA can provide the negotiation leadership backed by evidence based solutions.*
4. *However, taking into account the nascent nature or recent development of other natural resource sectors, (i.e. oil and gas, mining, hydropower and other energy production, fisheries, land, water supply, and tourism) and their thirst for financial resources to develop their own sectors, it is very unlikely that the FA and the MoE can argue for the MEF to tap these sectoral resources for protected areas conservation.*

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<sup>1</sup> Law on Forestry, Article 51.

<sup>2</sup> *ibid*, Article 52.

<sup>3</sup> *ibid*, Article 56.

<sup>4</sup> *ibid*, Article 94.

<sup>5</sup> Law on Mineral Resource Management and Exploitation, Article 32.

## 2. FUNDING FROM DEVELOPMENT PARTNERS

Funding for protected forests in Cambodia through Development Partners (DPs) has been and will continue to be an important source, in particular from major bilateral and multilateral agencies. The role of smaller and more ad hoc players, which include NGOs, private charitable foundations, and private companies, and some individual donations, can't be ignored.

Procedurally and agenda wise, DPs' interests and procedures can vary significantly and generally are well beyond the control of the RGC or the FA. DPs' respective approaches to providing funding are idiosyncratic, and although they well appreciated by the government and the local communities, they are not in the long run sustainable. With the pressure to move their gradually limited financial resources to other post crisis countries, Cambodia's importance will fade away from their radar screen in the near or medium term.

### LEGAL OPINION:

*We are of the opinion that DPs' financial support for protected areas still remain a strong and viable long term sustainable financing option, provided the FA, the MoE and other stakeholders, can position it as a complementary source to the public finance. The FA should position their needs to reflect the new reality or concerns of the world, i.e. dramatic effects of climate change, sustainable forest management, etc. The following sequential actions could be envisaged to achieve that objective and to retain DPs' interests:*

- 1. Redirect the major DPs to support to long term financing mechanisms, such as conservation trust funds and public-private-community partnerships.*
- 2. Refocusing DPs' efforts to strengthen the capacity of FA and MoE and their stakeholders to capitalize on opportunities to generate sustainable revenues from payments for ecosystem services.*
- 3. The FA can initiate a mapping process of the long-term development needs of many protected forests so as to provide a coherent framework for interventions by smaller and ad hoc players such as NGOs, private charitable foundations, and private companies, and some individual donations. As the human resources of the FA is finite, it is crucial that they are not diverted or distracted by small and unsolicited petty projects.*

*The harsh reality of dealing with DPs is that they are here but each one of them has its own set of rigid rules of engagement, which leaves very space for the FA to maneuver. As such from the legal arrangement standpoint, there is not much the FA can design or take leadership. The FA needs to bear this legal and institutional reality for as long as the DPs are operating in Cambodia: DPs have their own standard agreements, Memorandums, and programme and project templates for the FA to populate, with minor efforts.*

## 3. PAYMENTS FOR ECOSYSTEM SERVICES (PES)

The RGC has stated unambiguously in many of its key national development strategic plans the possibility of PES as an option to generate revenues for financing sustainably conservation activities. Ecosystem services are the many diverse benefits that people derive from nature and those providing ecosystem services should be compensated by those receiving ecosystem services.

Legally speaking, the process to operationalize the PES process should not be in principle difficult nor complex. The complexity lies upstream with the FA and the MoE to define, design and negotiate projects with clear mechanisms to measure, value, incentivize, and create payment schemes for one or more of the recognized services provided by ecosystems. Such process generally involves: (i) establishing a set of parameters for measuring the stocks and flows of a specific ecosystem service, such as drinking or irrigation water; (ii) quantifying the economic (or social) value of the service in collaboration with affected stakeholders. In voluntary markets the value can be arbitrarily set by the affected stakeholders working in collaboration with an independent third party to facilitate transactions; and (iii) determining compensation by public or private interests who benefit from the protection of the ecosystem service to landowners for the use of best management practices to ensure protection.

### LEGAL OPINION:

*We are of the opinion that while the design of the legal mechanism to implement the PES is not difficult, the real challenges will be in its subsequent enforcement. The issue of minor versus substantial breaches, the latter of which could lead to defaults and therefore of non payments are issues of significant importance; a potential post transaction*



*loss of publically recognized right over an environmental service that provides a flow of benefits to the demanding party could nullify the agreed compensation scheme; the need to secure independent third party monitoring intermediaries is another issue related to the right of payment or non payment.*

*A strong feeling of comfort on the viability of the PES mechanism is the success of existing pilot PES programs in Cambodia as a complement to improving conservation strategies in protected areas. To date, there are three pilot PES projects in two Protected Areas in the Northern Plains landscape -- the Kulen Promtep Wildlife Sanctuary managed by MoE and the Preah Vihear Protected Forest managed by MAFF -- that have been supported by Wildlife Conservation Society (WCS) and a pilot Incentives for Ecosystems Services scheme at a hydroelectricity facility in the Cardamom Mountain Landscape by Flora and Fauna International (FFI).*

#### 4. DEBT RELIEF (“DEBT FOR NATURE” SWAPS)

Debt Relief generally is not well practices in the case of Cambodia. The Cambodian authorities have in vain negotiated with the Russian and U.S. authorities at least on an annual basis to find solution to its decades old debts. A few years ago, there is an exceptional case with the IMF, which provided 100 percent relief of outstanding debt incurred before January 1, 2005. These additional resources freed up from the outstanding debt were made available to help Cambodia make progress toward its Millennium Development Goals (CMDGs). Reallocation of these resources were thus for general poverty reduction related initiatives.

##### LEGAL OPINION:

*We are of the opinion the Law on Public Finance System provides the mandate for the MEF to oversee the debt repayment process<sup>6</sup> and as such the overarching parameters MEF generally follow are directly related to major development agenda of the country, i.e. MDGs and in the next several year the Sustainable Development Goals (SDGs) in the UN Post 2015 Development Agenda. Other key priorities are related to initiatives to generate growth in the lead up to the imminent integration to the ASEAN Economic Community, the focus on remaining competitive and generating new jobs under the recently enacted “Industrial Development Policy (IDP)”. All these elements, combined with the little or no experiences by MEF in existing debt relief, let alone the sophisticated debt-for-nature-swap, lead to a pessimistic conclusion that this financing option will not be considered by the RGC, at least in the near term.*

#### 5. LOANS, BONDS, AND SUSTAINABLE INVESTMENT FUNDS

A bond is a written promise to pay back a specified amount of money, with interest earned on the principal, at a specific date or dates in the future. It is very similar to a loan, with the exception that a bond can be traded in the marketplace to generate revenue. Government backed bonds are typically developed and issued through a relatively simple process whereby (i) the government determines how much money is needed to fund specific projects for a particular period of time, and (ii) the Government then legally authorizes the creation of a bond to raise money from investors to fund the projects.

The real challenges in developing a bond market in Cambodia are the missing soft infrastructure to administer the mechanism. In other words, Cambodia still lack key participants such as (i) bond rating companies (Moody’s Investor Services, Standard and Poor’s Ratings Service, or Fitch Ratings) that provide a wide range of credit services, including establishing a rating that indicates how the financial market views the risk associated with the bonds, and (ii) debt service administrators to facilitate the payment schedule on the bond (principal and interest), where payments typically are made every 6 months for 20 or 25 years.

Institutional coordination wise, the tasks related to bond market infrastructure are still unclear with the MEF delegating its roles and responsibilities to the Securities and Exchange Commission of Cambodia (SECC) and the Cambodia Securities Exchange (CSE) on the one hand, and the National Bank of Cambodia (NBC) on the other. This explains in simple term why at the moment, there is no government bond market in Cambodia.

##### LEGAL OPINION:

*Despite the RGC’s policy commitment as highlighted in the Financial Sector Development Strategy 2011-2020, that it*

<sup>6</sup> Law on Public Finance System, Article 68.

*will consider issuing government bonds starting in 2017, we are of the opinion that such a timeframe is unrealistic. And assuming the optimistic scenario, if the RGC will decide to move so to launch its first bond market, the priorities will be more to raise crucially needed financing to develop and transform Sihanoukville into a Special Administrative Region (SAR) whereas the entire region will be developed into a sort of multi-purpose model Special Economic Zone. This SAR is highlighted as one of the four key practical measures to promote the implementation of the IDP to be achieved by the end of 2018.*

## 6. BIODIVERSITY OFFSETS AND COMPENSATION

Biodiversity offsets are measurable actions taken to respond to significant residual impacts from project development on biodiversity and ecosystems. Offsets are intended to correct adverse impacts that have not been avoided, minimized, or mitigated through other project actions. Offsets are generally developed in accordance with the protocol outlined in the mitigation hierarchy.

Although no standards have been adopted at the international level for biodiversity offsets, more than 30 countries have laws requiring biodiversity offsets or compensation, which could include the followings:

- Strengthening ineffective protected areas by investing in capacity building for management staff and additional needed management activities;
- Establishing new protected areas or no-go zones in collaboration with communities and government in order to conserve particular species and increase available habitat;
- Establish movement and dispersal corridors for wildlife;
- Establish or strengthen buffer zones adjacent to protected areas;
- Work with communities to develop alternative livelihoods that can reduce or eliminate unsustainable activities and hunting pressures.

The RGC has thus far piloted various carbon and biodiversity offset projects across different sectors in Cambodia. These pilot projects could be grouped into two categories:

1. Forest specific offset projects, as in Reducing Emissions from Deforestation and Degradation (REDD+) pilot projects in Oddar Meanchey province launched in May 2008, followed by the second REDD+ pilot project in the Seima Protection Forest, Mondulkiri province launched in 2009.
2. Non-forest offset projects, taking the form of Clean Development Mechanisms.

In addition to these two pilot projects, there are several other REDD+ projects that have been initiated under the different institutional jurisdictions of the RGC.

Additional to REDD+ pilot projects, there is the Clean Development Mechanism (CDM), under which Cambodia is eligible for hosting emission reduction projects. In general, CDM projects have two key goals: (i) to assist developing countries who host CDM projects to achieve their sustainable development objectives, and (ii) to help developed countries partially meet their GHG reduction commitments by allowing them to take credits from emission reducing projects undertaken in developing countries. As of October 2014, there are 10 CDM projects listed under the Cambodia Climate Change Office of the MoE.

### LEGAL OPINION:

*There are initial precedence in carbon and biodiversity offset projects and other projects under the Clean Development Mechanism are well tested. As such the relevant government institutions are very familiar with the legal and procedural aspects to ensure permanent funding to deliver conservation outcomes over the long term.*

*There are currently 14 projects at various phases, which could benefit from the experiences of the Oddar Meanchey Community Forest REDD+ Pilot Project and Seima Protection Forest REDD+ Pilot Project. However, current funding governance and its disbursement mechanism needs to be revisited to ensure timely redistribution of these funds to the local Forest communities.*

## 7. PUBLIC-PRIVATE PARTNERSHIPS TO GENERATE REVENUES FROM FOREST ENTERPRISE PRODUCTS AND SERVICES

Public-private partnerships (PPP) is another mechanism, which can be developed by the government to establish a business with an explicit mission to generate revenues for the conservation of forests, biodiversity, and ecosystems, and income for communities and regions. Like any business, there is some risk in developing public-private enterprises

since considerable initial capital outlay in the form of grants and affordable loans will be required to finance a business start up. Moreover, all funding proposals to select and fund collaboration ventures would require other upfront costs to undertake feasibility studies, business plans and possibly seed grants to support start-up enterprise concepts. There is

also the cost of capital even though loans at low interest rates (0-11% per annum) can be provided by NGO, private foundation, or investor partners. Generally PPPs are very attractive for the power and road infrastructure and there is clearly a large critical mass of consumers who are consuming or buying round the clock energy in their households or their businesses, or travelling on a toll road, thus providing a good steady flow of proceeds to repay the loans. There is virtually no PPP investment in social sectors such as health and education and cross-sectoral sectors such as environment and conservation.

#### LEGAL OPINION:

*While the possibilities of public-private partnerships exist to create forest-based enterprises that can generate revenues and become commercially viable, there is a clear need for an initial endowment or subsidies support from development partners to kick start upstream preparatory works such as feasibility studies, business plans, marketing plans as well as on-going technical support to ensure optimization of business operations, i.e. accounting, sourcing, legal compliance.*

*Moreover, the existing legal framework governing infrastructure concessions, i.e. the 2007 Law on Concessions, is neither appropriate nor applicable for PPP investments in environment and conservation sectors. As such, the viability of this option is slim.*

## 8. CONSERVATION TRUST FUNDS

Conservation Trust Funds (CTFs) are private, legally independent grant-making institutions that provide sustainable financing for biodiversity conservation and natural resource management. Conservation trust funds are often established to anchor other sustainable financing mechanisms by providing a transparent and efficient way to manage funding for conservation purposes. Conservation trust funds can manage endowment funds (e.g., only investment income is spent), sinking funds (e.g., both capital and investment income is disbursed) or revolving funds (e.g., pass-through sources of revenue are disbursed), or a combination of any of these. Most funds combine 2 or 3 of the fund types as a way to diversify their sources of funding and take advantage of emerging opportunities.

Despite the efforts of the MEF in the past several years to draft a Trust Law with the assistance of the Asian Development Bank, Cambodia has yet to have an overarching law or any sub-decree that guides or regulates the establishment of funds generally. The more general trust principles are laid in the 2008 Law on Public Finance System, which explains the creation on an ad hoc basis of existing funds in Cambodia through special subject-matter laws:

1. The 1996 Law on Environmental Protection and Natural Resource Management provides the foundation for the establishment of an 'Environment Endowment Fund', a special Treasury account to be created and administered by the MoE 'for environmental protection and natural resource conservation' in Cambodia.
2. The 2002 Law on Forestry enables the establishment of a National Forestry Development Fund, which is to be administered and managed under the responsibility of the National Forestry Development Committee.
3. The 2008 Law on Protected Areas also contains provisions enabling the establishment of a Protected Areas Fund, which is to be organized, managed and 'given responsibility' by a protected area committee, with the Ministers of MoE and MEF as co-chairs.

On the Development Partners side, there are several examples of conservation trust funds that have been established in Cambodia, the biggest trust fund relevant for conservation activities operational thus far is the Cambodia Climate Change Alliance Trust Fund. This fund is a multi-donor trust fund established by donors and the RGC to apply a more coherent approach to climate change support for Cambodia. It is administered by UNDP, and implemented by a National Climate Change Committee within the MoE. A dedicated Trust Fund Secretariat appointed by government manages day-to-day operations, and reports to a Programme Support Board. A Trust Fund Administrator manages the Trust Fund, provides capacity development and financial assurance, and reports to the government and donors. Other trust funds that have been set up include the Marine Conservation Trust Fund and the Tropical Forest Conservation and Venture Trust Fund.

#### LEGAL OPINION:

*The Conservation Trust Fund option is also another well tested concept, which have tremendous flexibility in terms modes of operations (Endowment Fund, Sinking Fund, Revolving Fund) and can absorb large contribution from development partners. In term of operational efficiency, scale and long term impact, but foremost appreciation and buy-in from the Government, this option should be pursued as much as possible.*

#### CONCLUSION:

*In light of the above review, we are of the opinion that, out of eight options, five options are quite viable though different in procedural approaches: Public finances generated from taxes, fees, and fines levied on the legal trade in forest and non-timber forest products; traditional donor funding; Payment for Environmental Services (PES), Biodiversity and Forestry offsets and compensation schemes; and conservation trust fund.*

The remaining three options are considered as still premature for application in Cambodia; Debt relief ('Debt-for-nature swaps'); bonds, and other sustainable investment funds, including impact investments, allocated to forestry development and conservation; and public-private partnerships. In the medium term, all three options could be considered by the Government as additional options to secure long-term financial arrangement to meet the Government's objectives of sustaining and safeguarding the environment and its forests.



## Annex 6: Benefits, Costs, and Follow Up Information Needs For Potential Forest Finance Options in Cambodia

A preliminary analysis of potential benefits and costs of the forest finance options proposed for The Royal Government of Cambodia's (RGC) protected forests and protected areas is outlined here, along with a summary of follow on recommendations. The purpose of a benefit-cost analysis (BCA) is to compare the potential social and economic benefits associated with each of the finance options policy or investment decisions with the anticipated financial or related costs required to implement the policy or investment. The feasibility of a policy or investment significantly increases if it can be shown that the sum of the benefits exceeds the costs. The accuracy and usability of the results from a BCA is greatly improved if benefits or costs can be measured and monetized. However, in practice, many BCAs are greatly limited by a lack of available information and methods for estimating and monetizing the consequences of the proposed investment or policy. Unfortunately, this is very much the case with the benefit-cost analysis of the options for financing the management and expansion of protected forests and protected areas in Cambodia. Very few data exist to quantify anticipated costs that will be associated with each proposed financial option. As a result, the current analysis is considered to be very preliminary and speculative, and has been designed to serve as a framework from which a more detailed BCA can be developed once the Cambodia Forest Authority (FA) determines the most feasible finance options.

The basic steps carried out to do this preliminary assessment included the following:

1. Define the Project Alternative considered in the analysis. For each alternative the following factors have been estimated:
  - a. Basic cumulative user costs
  - b. Selected economic factors that could affect user costs
  - c. Assumed user benefits.
  - d. Possible risks associated with the finance option
2. Recommendations for the preparation of a more thorough BCA once the preferred financial options for financing Cambodia's protected forests have been determined.

To simplify the benefit-cost-risk analysis, the Project Alternatives described in the Cambodia Forest Finance Assessment have been combined into three categories:

- Direct user fees and service charges, allocation of additional government revenues, voluntary levies and surcharges, along with cross-sectoral and sub-national fiscal transfers;
- Payments for ecosystem services, biodiversity offsets and leases, concessions and joint ventures;
- Debt relief, loans and bonds, and sustainable investment funds.

A summary of conclusions drawn from the preliminary analysis is included, along with recommendations for additional information that can produce a deeper assessment of potential benefits and costs associated with each option.

***Alternative 1 - Direct user fees and service charges, allocation of additional government revenues, voluntary levies and surcharges, along with cross-sectoral and sub-national fiscal transfers.***

Direct user fees and service charges can be derived from taxes, fees and fines related to natural resource uses that are charged in sectors such as petroleum, mining, hydropower and other energy production, fisheries, forestry, land, water supply, and tourism. A percentage of the fees, taxes and fines for environmental licensing and environmental impact assessment (EIA) can also be assigned to a government or independently managed fund designated for forest conservation uses. Fee structures should include "willingness to pay" surveys that are further linked with market surveys to determine a fair market rate for each service offered to private businesses for the use of Cambodia's natural resources. Government budget allocations are typically done on an annual basis, and protected forests typically are funding through a centralized revenue system. Thus revenues from taxes, fees or other charges within a specific protected forest or PA are not retained at the local level, but are delivered to a central agency or the national Treasury. Protected forests and PAs typically receive only a small portion of these collected fees through one annual allocation. Also, the separation of budget allocations from earnings reduces any incentives for protected forest managers to generate more revenue, and creates little responsibility or accountability for them to do so.

**Economic Factors Affecting User Benefits and Costs:** FA has been collecting royalties from timber products, fines and premiums for many years. For example, as stated in the National Forest Programme, the royalties for timber



collected between 1999 and 2009 was calculated at U.S. 56.5 million dollars (USD). In 2008, the royalties to FA from 36,785 m3 of round logs equalled approximately USD 2.5 million, while fines and premiums collected by FA was estimated at approximately USD 600,000. The revenues from forests have been derived from the sale of logs and timber as a sub-unit of the total value of the forests. Thus additional revenues that could add to the total income from fines, fees, and royalties could include:

- The value of NTFPs such as fuel-wood, charcoal, medical plants, furniture processing, and wildlife;
- Employment resulting from timber harvesting in the primary sector, in particular the considerable downstream processing;
- Significant increases in value-added through the chain of wood processing;
- Payments for environmental services; and,
- Revenues from eco-tourism.

FA will focus from the present time through 2029 on the RGC's ability to contribute to the financing of forest conservation by pushing for the reallocation of funds from the national budget, the contribution from royalties and fines collected, as well as any export duties on timber and non-timber forest products.

In the next 10-20 years, some of the approaches that FA will pursue to raise revenues for sustainable forest management will include:

- Collecting royalties from logging in the intact evergreen areas;
- Royalties and legal fees from logging in community forest areas and concessions areas, including from non-timber forest products;
- Sales of services in forestry;
- Property tax on private plantations;
- Sale of carbon credits based on reduced impact logging and redd+;
- Entrance fees to protected forest areas; and,
- Sale of hunting rights.

According to the National Forest Programme, it is expected that royalties from logging in the intact evergreen areas (1.25 million hectares, which is 50 percent of the production forest) for the next 20 years will bring in an estimated USD 728 million. The other 50 percent of production forest will bring in the royalties estimated at USD 455 million. Finally, it is expected that 75% of the 2 million hectares of community forest areas will consist of degraded deciduous forests, and 25% of logged semi-evergreen forests. Therefore, royalties from logging can be expected to commence once all of CF is operational with proper management plans in place. It is expected that within 20 years, royalties from logging in CF areas would total approximately USD 476 million, or an approximate gross yield of more than USD 20 million per year. Overall, the RGC expects that within the next 20 years, FA could be collecting about USD 1.6 billion from royalties from logging in the intact forest areas, production forest areas, and CF areas, or a cumulative gross income of USD 80 million per year.

The government has considerable experience collecting fees and charges for the use of public lands and resources. This expansion of this revenue source needs only to explore new possible funding sources from resources from which fees are not been collected, or where fee structures do not currently reflect fair market values. Government also has considerable experience with public-private partnerships.

From this coarse assessment it is evident that significant financial benefits can be accrued from this Alternative. Management costs are estimated at net present value of approximately USD 35 million per year, which suggests that financial benefits could significantly exceed anticipated costs. However, additional social and ecological costs could be incurred in the process of forest harvests unless stringent forest management practices are incorporated into harvest leases, including minimal impact felling practices, selective logging, and low impact skidding and transport policies, and on-going monitoring of the impacts of harvesting practices on biodiversity and ecosystem dynamics. Although actual cost estimates are not available to calculate the finances required to include these sustainable harvesting measures, it is obvious that including them in forest harvest leases will add significant costs to each lease agreement, and the costs will reduce net financial gain.

**Conclusions:** Despite the anticipated additional costs of sustainable forest harvest measures, the direct user fee options appear to have high potential, with greater benefits than costs. Each method is explicitly enabled by law, and is already under operation in Cambodia. The main opportunity lies in expanding the scope and scale of these arrangements, extending the range of sites in which they are applied, and rationalising fee levels in line with market prices and to consumer willingness to pay.

The voluntary levies and charge financial options are identified as having medium potential. All of these instruments tap into existing revenue streams, and do not require the development of new markets, products or services. Although earmarking and retention is not wholly consistent with the government's current stated policies, on-going public financial management reforms and decentralisation processes open the door to the possibility of these kinds of arrangements becoming more viable in the near future.

#### ***Alternative 2 – Payments for ecosystem services, biodiversity offsets and leases, concessions and public-private partnership (PPP) joint ventures***

It may be useful for government and NGOs to identify suitable private sector partners for possible collaborative ventures involving sustainable forest-based enterprises. Government can then solicit funding and collaboration requests from potential partners through a formal proposal submission process, and then select and share the development costs for collaboration ventures. Each venture would then require the following:

- Feasibility studies, business plans and possibly seed grants to support start-up enterprise concepts.
- Capital loans at low interest rates (0-11% per annum) provided by NGO, private foundation, or investor partners allocated to the most promising enterprises for working capital and/or scaling up (either vertically or horizontally). Actual terms can be customized to the situation of each enterprise.
- Sustainable sourcing plans to ensure consistent high quality in product delivery.
- Marketing plans to identify and build demand, and ensure best price options for products and services.
- On-going technical support provided through NGO or investor partners to optimize business operations (accounting, sourcing, legal compliance), and ensure the adoption of sustainable business management and best practices, including monitoring support.

The feasibility of these public-private enterprises to generate significant revenues as part of a comprehensive forest finance strategy will require a comprehensive initial market survey to determine opportunities for proposed new ventures to gain entry into existing marketplaces or to stimulate new ones.

Examples of possible offset activities that may be included as a form of compensation could include:

- Strengthen ineffective protected areas by investing in capacity building for management staff and additional needed management activities;
- Establish new protected areas or no-go zones in collaboration with communities and government in order to conserve particular species and increase available habitat;
- Establish movement and dispersal corridors for wildlife;
- Establish or strengthen buffer zones adjacent to protected areas;
- Work with communities to develop alternative livelihoods that can reduce or eliminate unsustainable activities and hunting pressures.

Ideally, offsets should be designed and implemented as part of a national planning effort taking into account the cumulative impacts of development in the country, and contributing to and nested in existing national conservation strategies, including recovery plans for IUCN recognized threatened and endangered species and protected area strategies. Government-endorsed national offset and compensation strategies may also be most effective if supported and overseen by effective and transparent institutions, such as conservation trust funds, to ensure permanent funding to deliver conservation outcomes over the long term.

A key factor in the development of any compensation or offset strategy is the assurance that investments in conservation or offset activities do not simply provide a mechanism to allow inappropriate developments to move forward. This is particularly true in areas of rare, unique, or highly threatened species and ecosystems. Thus all compensation and offset strategies must ensure that appropriate monitoring, planning, and management mechanisms are in place and secure over the long term to guarantee that the compensation objectives are achieved.

**Economic Factors Affecting User Benefits and Costs:** To date, most PPP projects in Cambodia have been procured on a noncompetitive and unsolicited basis. Some of these projects are quite large, particularly in the power sector, and the International Monetary Fund (IMF) noted in a recent report on Cambodia's debt sustainability that the hydro-power projects presently being developed by the government as PPPs have the potential to create significant liabilities for the government. The IMF does recommend that the government implement a phased PPP development program that builds on project successes to create political support and investor confidence in order to broaden the scope and sector coverage for PPP projects.

While the number of PPPs is impressive, the overall level of private investment outside power in sectors such as water and transport is low. Data from the World Bank's Private Participation in Infrastructure (PPI) Projects Database show

that during the period 1990–2008 there was a total of 22 PPP projects in Cambodia. Slightly over half of these projects were in the energy sector, representing about 55% of total investments by number and investment value. While private investment in infrastructure has been increasing in recent years, the number of projects and the amounts mobilized continue to be small. It appears that in the road sector there has been little investment as the concessions were allocated for existing roads. There is virtually no PPP investment in social sectors such as health and education and cross-sectoral sectors such as environment and conservation.

Unfortunately, the potential financial revenues from PES and offset strategies remain highly speculative at this time, and predictions are too varied to provide a reliable estimate of potential financial benefits. However, based on experiences in similar environments, the costs of implementation for these projects are expected to be less than potential income, rendering the option as representing a financial gain for the RGC. The social and ecological benefits are also expected to be very significant, including retention of important hydrologic and ecological functions, reduced losses of biodiversity, and increased availability of non-timber forest resources.

**Conclusions:** These financial options are identified as having high-medium potential, with benefits most likely exceeding costs, and low risk associated with each venture. All have been recognized by the MOE for development, and work is already underway on identifying legal and operational modalities for their implementation. All respond to opportunities and interests associated with the recent opening up of the economy to outside investments, especially ongoing developments in the tourism, infrastructure and extractive industries sectors.

### **Alternative 3 – Debt relief, loans and bonds, and sustainable investment funds**

Between 2008 and 2012, Cambodia received about USD 5.4 billion in development cooperation financing from development partners. Approximately USD 3.55 billion of this total was dispersed as grants, and US\$1.85 billion as loans. Based on projections in the NSDP 2014–2018, Cambodia is likely get USD 1.2 billion (USD 600 million as grant, and USD 600 million as loan) in the next 2–3 years. Development cooperation has accounted for approximately 10 percent of the country's GDP in the recent years. It has also probably contributed to the recent high economic growth rate, increased GDP per capita from USD 760 in 2008 to USD 1,036 in 2013, and reduced the poverty rate from around 47.8% in 2007 to 19.8% in 2011. Besides demonstrating the international community's support for the Royal Government's development program and reform effort, this increased level of external resources has also supported the creation of a positive enabling environment, which has been associated with expanded public and private investment, primarily in the infrastructure, garment, agriculture, construction, and tourism sectors.

Development partners provide an important source of funding for protected forests and PAs in Cambodia, with bilateral and multilateral agencies providing the largest source, along with some donations from individuals, NGOs, private charitable foundations, and private companies. However, donor interests and procedures can vary significantly. This means that fundraising approaches need to be tailored for each partner, and funding priorities can change quickly and dramatically. Most development partners provide support through two to five year projects, and this is often insufficient to fulfill the medium or long-term objectives and needs of many protected forests and PAs. However, some funders are increasingly willing to consider funding requests to catalyze long-term sustainable financing mechanisms and to capitalize financing mechanisms, such as conservation trust funds.

Government backed bonds are typically developed and issued through a relatively simple process:

- The government determines how much money is needed to fund specific projects for a particular period of time.
- The Government then legally authorizes the creation of a bond to raise money from investors to fund the projects.
- Underwriters from national or international private sector companies buy the bonds and resell them to large and small investors. The underwriters make money on their investment when they re-sell the bonds. The investors in the bonds are most commonly pension funds, mutual funds, and other large investors. In some cases small investors will find bonds appealing, typically if they feel that the value will increase rapidly over a short time period.

Other key participants in the bond market include:

- Bond rating companies that provide a wide range of credit services, including establishing a rating that indicates how the financial market views the risk associated with the bonds.
- Debt Service administrators facilitate the payment schedule on the bond (principal and interest), with payments typically are made every 6 months for 20 or 25 years.



As the issuer of a bond, the government may also decide to declare a debt limit that restricts the amount of bonds the state can issue. Investors in the bond must have transparency, and some form of verification as to how the projects to be carried out fulfill the mandates of the bond. It is also essential that monitoring data demonstrate the use of proceeds from bond sales.

Enterprise funds and other types of sustainable investment funds differ from bonds in that they channel capital – debt or equity – into environmentally-sustainable businesses. For-profit investments can be structured to provide financial returns for a private conservation trust or similar financial structure by tapping into the substantial financial resources of the private sector. In this way, these funds can provide both a direct financial benefit and promote adherence to environmental standards for use of resources.

**Economic Factors Affecting User Benefits and Costs:** At the moment, there is no government bond market in Cambodia. In the Financial Sector Development Strategy 2011-2020, it is stated that the Royal Government will consider issuing government bonds starting in 2017. Although the system no longer operates, Cambodia previously issued government bonds with maturities longer than 10 years, and it implemented a book-entry system. The Book-Entry System (BES) is a computerized registry for government bonds developed by the IMF that can process participant's details, auction outcomes, and secondary market transactions. BES also handles information on interest and redemption. In order to register, commercial banks need to create three accounts: securities account, customer account (one account for all customers of each bank that are trading on behalf of customers), and collateral account. A security account can be created for any large non-bank corporation that intends to participate in bond auctions on a regular basis, and a collateral account is also created when required. All submissions for bond auctions must be made on a standard physical form issued by the NBC. After all bid forms are validated, NBC enters all bid submissions in BES and selects accepted bids. The settlement date is 3 days (72 hours) after auction.

There are three patterns of bond sales and purchases in Cambodia: (i) between a bank and its customers, (ii) between two banks, and (iii) repo and reverse repo. For sales and purchases between a bank and its customers, the bank's securities account and bank's customer account are involved. The bank's customer account is one separate account whose current balance can be monitored by NBC. NBC occasionally requires a complete disclosure of a customer's particulars and the amount of securities held, the total of which must reconcile with the BES book-entry account held at NBC. All interest payments on bonds issued at face value with an annual rate of interest and a fixed maturity date are shown in BES. Interest can be paid to bond holders either once or twice per year depending on the terms of issuance. On the due date, NBC processes a fund transfer arising from interest payment by debiting a treasury account. NBC types and sends a letter to subscribers and also sends copies of an interest payment due report for to NBC's Internal Audit Department.

Unfortunately, all of the potential income options in this Alternative are minimally developed in Cambodia at this time, and the legal hurdles required to more fully develop each option could be substantial. The potential revenues that can be derived from each option (debt relief, loans and bonds, and outside investment) are also highly speculative and uncertain given Cambodia's fragile credit rating. Thus it is uncertain if the benefits from the investment in the legal and policy infrastructure required outweigh the probable costs.

**Conclusions:** These financial options are identified as have low to medium potential, with costs possibly exceeding benefits in most cases, and moderate to high risk associated with some of these finance strategies. The policy framework to pursue these strategies is only partially in place, and some legal and operational hurdles may exist to constraint their use. Much more information will be required on anticipated changes in market conditions, credit ratings, and expected commercial ventures associated with Cambodian public forests before greater confidence can be generated for these possible ventures.

### **Recommendations for Future B/C Analysis of the Cambodia Forest Finance Options**

A more detailed review of each of the potential financial instruments included in this assessment report suggests that each may hold potential for contributing to the financial resources needed to manage Cambodia's protection forests and secure their ecological integrity for future generations. However, the emphasis should probably be placed on Alternatives 1 and 2, in that priority, with Alternative 3 assigned for more in depth legal and policy cost analysis. Ultimately, it is expected that the Forestry Administration will work together with other appropriate government agencies to design and implement a comprehensive strategy that includes several of the financial instruments described here. However, the development of this strategy will still require the following information:

- A more thorough assessment of the legal framework available or required to support the use of each instrument to support the procurement of funds to support government actions to manage public protection forests;

- An up to date market analysis to determine the approximate amount of income that may be accessible to the FA through use of each financial instrument, including a review of Cambodia's competitive advantage for each instrument to be pursued;
- A prioritization of the most promising financial instruments based on the results from the market analysis;
- A determination of the most effective management framework that can best support the administration and disbursement of any funds raised, including the feasibility of public-private partnerships in the form of trust funds or para-statal organizations;
- A business plan to create a 3-5 year roadmap for financial success. The business plan will define the immediate and long-term objectives of the Forestry Administration and the specific financial needs the plan will fulfill; a summary of the market analysis; an action plan to guide the implementation and fulfillment of the finance strategy; and an operations and management plan to describe the administration and use of funds.

It is also recommended that protected forest financing measures and instruments mechanisms to ensure that the following three factors are achieved:

- A. Increase the size and diversity of financing sources and funding portfolios;
- B. Enhance revenue retention and promote direct reinvestment in conservation; and
- C. Streamline protected forest financial planning, costing and allocation procedures.

Five particularly pervasive financial constraints to effective protected forest management are evident, and each of these factors will ultimately influence the ratio of benefits to costs required to fulfil each alternative:

1. There is insufficient funding at the present time to cover core site-level costs and coordinate national-level forest management activities;
2. Funding is distributed unevenly across the protected forest network;
3. Staff costs dominate public budgets;
4. Protected forests and PAs rely on a very narrow funding base and limited range of financial sources;
5. Protected forests and PAs operate according to a short-term financial planning horizon.

Again, this analysis remains very preliminary due to the very limited data available to assess potential benefits, costs, and risks associated with each forest finance opportunity. Future work will seek to increase the available data to allow a more robust and thorough CBA in order to facilitate greater confidence in the selection and development of specific finance options.

## References

Cited in Annex 1 of full report







## **Submission Form**

### **Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia**

**Email to: LimNalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)**

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*21<sup>st</sup> June, 2016.*

Submitted by (provide individual and STWG contact information):

*Yvonne Idun*

*(Required, including relevant STWG, if any.)*

#### **1. Issue:**

*(Please provide a brief description of the issue that is addressed by the recommendation included in number 4 [“4. Recommendation”] below.).*

*Reference should be made to specific international conventions such as the Basel, Stockholm and Rotterdam Conventions. Other legal instruments and policies such as SAICM have been commendably recommended by my colleagues and these are also great.*

*What about regional and sub-regional conventions which Cambodia has ratified and their trickling down effect on the national law being discussed now?*

#### **2. Reference to Code Book and Chapter Title (if applicable):**

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

*Hazardous Substances Management*

#### **3. Comparative Experience (if any):**

*(Please include any Cambodian and international examples and experience.)*

*Côte d’Ivoire’s Laws No. 96-766.*

#### 4. Recommendation:

*(Please include here the text of the recommendation to address the issue provided in number 1 [“1. Issue”] above. If needed, note “See Attachment” for corresponding documents.)*

*Definition of waste and chemicals, while being peculiar to the context of Cambodia, should as to take into consideration, international definitions as provided in the Basel, Rotterdam and Stockholm Conventions as well.*

*An Inter-Agency Permit Committee/Scheme should be set up. Such a body could comprise different NGOs, academic institutes, government agencies, country offices of FAO, UNIDO and other relevant agencies, for example. The body could meet once every month or so, to assess and monitor trends in waste and chemicals management.*

*Annexes should be attached to the Law, specifying which chemicals should be disposed off by which methods (eg, incineration, etc), and which ones should be recycled, according to their varying levels of toxicity.*

*Liability should be provided for-in-depth (See below).*

*On the other hand, while advocating for penalties and the polluter pays approach, there could also be the carrots and sticks approach to reward best practising companies and other parties, so as to encourage compliance with this law.*

#### 5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

*Under Liability,:*

*Liability of Offenders:*

*(a) Joint and Several Liability Anyone who contravenes any of the provisions of this law, aids and abets a person to infringe upon this law, or conspires in the commission of such acts or the omission of any of the above principles in hazardous waste management, importation and exportation, - shall be accountable in a court of law in this land.*

*(b) Extended Producer Liability from Cradle to Grave: Generators of hazardous waste and persons involved in recycling such waste may be held accountable at any stage of a life-span of a given product. Therefore, it is incumbent upon producers of toxic waste to ensure that such waste is in an environmentally sound condition when being exported or sold to other parties within the territory of the country. These producers may be liable for fines or imprisonment during the entire life cycle, that is, cradle to grave life span of the goods.*

*(c) Retroactive liability. When environmental or human health is adversely affected as a result of the harmful effects of hazardous waste, the party or company responsible for such negative environmental or health impacts will be held liable, even if there is a change in the existing law at the time when such acts and detrimental impacts occurred.*

*(d) Liability of Customs Officials In case of illegal management, imports and exports of toxic waste, the Inter-Agency Permit Committee of this country shall set up an Investigative Commission of Inquiry to find out all pertinent facts relating to the illegal transaction. In this*

*regard, in addition to generators of waste, the customs officer at the time when this transaction occurred, will be given an opportunity to explain the details of the case to the Committee. Where necessary, he/she shall be liable for a criminal offence in a court of law and shall be made to pay fines, serve an imprisonment term of xxx years or both.*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

## **Submission Form**

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

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- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission:

*21 June 2016*

Submitted by (provide individual and STWG contact information):

*Dian Turnheim STWG 2*

1. Issue:

*Reference should be made to SAICM (UN Strategic Approach to International Chemicals Management and its overarching policy strategy (which can be downloaded from the SAICM website). Best practices and policy overview are covered by this document.*

2. Reference to Code Book and Chapter Title (if applicable):

*Hazardous Substances Management*

3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

4. Recommendation:

*I recommend that someone who has the time take a good look at the SAICM website and integrate relevant points on management of chemicals in the Draft Code. This would avoid a great deal of work being done separately for Cambodia which has already been undertaken and agreed in the UN context.*

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):



# Submission Form

## Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.
- If needed, please submit large documents as an attachment.
- Please submit all comments in Khmer and English when possible.

Date of Submission:

23 June 2016

Submitted by (provide individual and STWG contact information):

Raphael Deau, 012 887 449, [raphaeledeau@gmail.com](mailto:raphaeledeau@gmail.com) STWG1-3-5-6

### 1. Issue:

*1. The way the public participation book is being phrased at the moment is very much informed/input, but it gives no chance for the communities to take **part in the decision making process**.*

*Although FPIC and public participation are mentioned on several occasions, it is important to define public participation and agree on a common definition.*

*2. There are references to the timing of when public participation should be made, but all previous experience showing success factors mention timing as being crucial. Community engagement and public participation shall be started BEFORE the EIA process starts, during the pre-feasibility stage of the project, and runs all through the project cycle up to after decommissioning. This will ensure trust is built from the very beginning. Also, this is taking into consideration that public participation, if done properly (preparing the communities in a culturally adapted manner) will take a long time (usually longer than what proponent are anticipating).*

*3. All reference to public participation currently in the books give responsibility to the government. It should be added that the project proponent shall lead that process, or nothing will happen if left to the government alone.*

### 2. Reference to Code Book and Chapter Title (if applicable):

*Book 1 title 3*

*Book 2 title 4-5*

### 3. Comparative Experience (if any):

*The Lao EIA law is quite acute in the public participation description, although still lacks clear guidance. See attached.*

*I'm currently working on 'meaningful public participation on EIA' and how this meaningful practice can change the outcomes of the project for the better and avoid cost related to conflicts. The report will be available in Nov 2016.*

4. Recommendation:

5. Proposed Language to be Inserted into the Draft Code (if any):

**1. On definition of public participation**

*Not sure exactly what language, but could use reference to the Rio declaration and IFC stakeholder engagement guidelines (see attached):*

*Principle 10 of the Rio Declaration states: Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes.*

**2. On timing (to appear in all books mentioned earlier):**

*Public participation shall be started at project feasibility stage and be run all through the project cycle until decommissioning and hereafter.*

**3. On who's responsible (in SEA-EIA titles)**

*The relevant government institution **and the project proponent** shall...*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):



**Lao People's Democratic Republic**  
**Peace Independence Democracy Unity Prosperity**

# **Environmental Impact Assessment Guidelines**



**October 2012**



**Lao People's Democratic Republic  
Peace Independence Democracy Unity  
Prosperity**

# **Environmental Impact Assessment Guidelines**

**Prepared by:** **Environmental  
Management Support  
Programme (EMSP)**

**Supported by:** **Ministry For Foreign  
Affairs of Government of  
Finland**

**October 2012**



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**Ministry For Foreign Affairs of the Government of Finland**



**UNDP-UNEP Poverty-Environment Initiative of the Lao PDR**

This EIA report writing guideline is building on an earlier draft which was developed by the UNDP-UNEP Poverty-Environment Initiative (PEI) of the Lao PDR. PEI continues to complement this work by EMSP by supporting the dissemination and capacity building of DESIA staff of MONRE, EIA consultancy companies and project developers.



## List of Acronyms

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ADB	Asian Development Bank
ALARP	As Low as Reasonably Practicable
AS	Australian Standard
AS/NZS	Australian Standard/New Zealand Standard
CA	Concession Agreement
CGM	Complaints and Grievances Mechanism
CIA	Cumulative Impact Assessment
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
ECC	Environmental Compliance Certificate
EIA	Environmental Impact Assessment
EMDP	Environmental Minorities Development Plan
EMMP	Environmental Management and Monitoring Plan
EMS	Environmental Management System
EMSP	Environmental Management Support Program
ESD	Environmental and Social Department
ESMMP	Environmental & Social Management and Monitoring Plan
ESMU	Environmental and Social Management Unit
EU	European Union
GIS	Geographic Information System
GOL	Government of the Lao PDR
HIA	Health Impact Assessment
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IEE	Initial Environmental Examination
IFC	International Finance Corporation
ISO	International Standard Organization
$L_{Aeq}$	Equivalent Continuous Sound Level A-weighted
MOU	Memorandum of Understanding
NGO	Non Government Organization
NTFP	Non Timber Forest Product
PCDP	Public Consultation and Disclosure Plan
PM	Prime Minister
PMO	Prime Minister's Office
PWREOs	Provincial Water Resources and Environment Offices
OHSAS	Occupational Health and Safety Standard
RAP	Resettlement Action Plan
RU	Resettlement Unit
SDP	Social Development Plan
SI	Système International d'unités (International Standard System of Units)
SIA	Social Impact Assessment
SMMP	Social Management and Monitoring Plan
STDs	Sexually Transmitted Diseases
TOR	Terms of Reference
UNDP	United Nations Development Programme
USEPA	United States Environmental Protection Agency
UXO	Unexploded ordnance
VEC	Valued Ecosystem Component
WB	World Bank
WHO	World Health Organization
MONRE	Water Resources and Environmental Administration

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## Preface

These EIA Guidelines have been developed by the Ministry of Natural Resources and Environment (MONRE) of the Lao PDR in consultation with line ministry agencies, provincial governments, project developers and EIA consultants, and with technical assistance from a team of experts from the international consulting company Grontmij and the Finnish Environment Institute (SYKE).

Development of the EIA Guidelines was co-funded by the Ministry for Foreign Affairs of Finland through the Environmental Management Support Programme, and by the UNDP through the Poverty and Environment Initiative.

The purpose of these guidelines is to guide and assist project developers and their consultants in conducting and reporting the results of environmental impact assessment studies of projects in the Lao PDR. The goal is to ensure that the EIA reports include adequate project descriptions, impact assessments and mitigation measures that are prepared using sound, professional, and scientific tools and methods. The guidelines focus on providing guidance on preparing easily understandable EIA reports.

These guidelines have been prepared based on many years of practical experience in preparing and reviewing EIAs in the Lao PDR, as well as in other developing and industrialized countries. The EIA Guidelines are in line with the Lao PDR *Decree of Environmental Impact Assessment* (no. 112/PM, 16 February 2010) for category 2 projects (i.e., those identified as having significant potential impacts [Article 2]); with recent guidelines issued under the Decree; and with other legislation and guidelines in the Lao PDR. The EIA Guidelines will be useful to the EIA consultant during preparation of the EIA report, and will facilitate the review and approval process by the government authorities.

The EIA Guidelines will be revised after a trial period of two years to incorporate new developments in the EIA field, changes in environmental legislation, and comments from EIA practitioners and government authorities.

MONRE strongly emphasizes the need for project developers and consultants to follow these EIA Guidelines in preparing EIA reports.

# Definitions

**Adaptation** – adjustment of natural or human systems to a new or changing environment. Adaptation to climate change refers to adjustments of natural or human systems in response to actual or expected climatic stimuli or their effects, either to moderate harm or to take advantage of beneficial opportunities. Various types of adaptation can be identified, including anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation.

**Adverse impact** – any adverse environmental, social, socio-economic, health, occupational safety or health effect suffered or borne by any entity, natural person, or natural resource, including, but not limited to, the environment, flora and fauna. Such impacts may be attributed in any degree or extent to, or arise in any manner from any action or omission on the part of the project developer, or from the project or any activities related thereto.

**Applicable Laws** – all existing and future laws, regulations, treaties and other international obligations of the Lao PDR applicable to the project developer's activities or to the project.

**Baseline** – baseline conditions are the conditions of an area potentially affected by a proposed project that exist prior to initiation of the project. Existing baselines are established prior to pre-construction, construction and operation of proposed projects in order to evaluate effects on the environment.

**Best Practices** mean practices to which the project developer will commit, which are not yet required by applicable laws, but are nonetheless are recognized by a consensus of relevant stakeholders, including government, industry, labor, financial institutions and academia as being practices which have been adopted by leading, reputable companies of international standing and which, when carried out by the project developer, can be expected to further to reduce the adverse impacts arising from the project and activities related thereto.

**Biodiversity** refers to the variety of life on earth: the number of plants, animals and other organisms that exist on our planet and the variety within these species and the ecosystems they inhabit.

**Biophysical** – that part of the environment that does not originate with human activities (e.g., biological, physical and chemical processes); pertaining to the natural environment.

**Climate Change** – a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is, in addition to natural climate variability, observed over comparable time periods.

**Compensation** – monetary payment or replacement in kind for losses resulting from a development project; the re-creation of lost or damaged habitat.

**Competent Authority** is any person or organization that has the legally delegated or invested authority, capacity, or power to perform a designated function.

**Complex Project** refers to an investment project that has substantial impacts on the environment and society, including impacts beyond the borders of the jurisdiction under

consideration, or a cumulative impact on other investment projects, or in which complex technology is applied.

**Construction Phase** refers to a specific period, stipulated in a contract and beginning on the date stated in the notice to proceed, during which the contractor must complete construction, subject to the conditions of the contract.

**Cumulative Impact** – is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.”

**Direct Impact** (primary impact) (first order impact) is an impact that follows as a direct consequence of a project activity.

**Ecosystem** is a community of interdependent plants, animals and other living organisms, including humans, together with the environment that supports them and with which they interact.

**Effects/Impacts** (synonymous) – are reactions to changes in the environment as a result of project actions. Effects, whether direct, indirect or cumulative, can be ecological, such as effects on components of natural resources, on the structure and/or functioning of affected ecosystems, or on aesthetic, historic, cultural, economic, or social features.

**Emission Limit Values or ELV** is a figure specifying the concentration or load of a pollutant allowed to be emitted or discharged to the environment from a specific installation in a given period of time or per unit of production.

**Environment** is the complex web of interrelationships between living and non-living components which sustain all life on earth, including the social/health aspects of human group existence. It also includes the physical, biological, social, spiritual and cultural components which are interrelated and affect the growth and development of living organisms.

**Environmental Compliance Certificate or ECC** is a legal document through which MONRE approves an environmental examination or environmental impact assessment report, or an environmental and social management and monitoring plan (ESMMP).

**Environmental and Social Management and Monitoring Plan or ESMMP** means a plan formulated in an environmental impact assessment report that defines the main environmental and social activities, and measures to prevent, reduce or mitigate environmental and social impacts. ESMMPs also include definitions of organizational structures and responsibilities, schedules and sufficient budgets for implementation of environmental and social management and monitoring activities during the construction, operation and termination phases of a project.

**Environmental Impact Assessment or EIA** means studying, surveying, researching, analyzing and estimating possible positive and negative impacts generated by a project on the environment and society, including short and long term impacts on health. Projects subject to EIA are designated in Category 2, Article 2 of the Lao PDR *Decree of Environmental Impact Assessment* (no. 112/PM, 16 February 2010). In addition, EIAs include appropriate alternatives, environmental management and monitoring plans (EMMPs), and social management and monitoring plans (SMMPs) to prevent or mitigate possible impacts that are likely to occur during all phases of an investment project.

**Environmental Quality Standard or EQS** is a measure of the state of a specific environmental medium with regard to a specific pollutant that represents the upper limit of acceptability designed to protect human health or the ecosystem.

**Greenhouse Gases** are defined to be carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), nitrous oxide (N<sub>2</sub>O), oxides of nitrogen (NO<sub>x</sub>), methane (CH<sub>4</sub>), and non-methane volatile organic compounds (NMVOCs). The Kyoto Protocol also addresses hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

**Indirect Impacts** (secondary impacts) (higher order impacts) are environmental effects that are at least one step removed from a project activity in terms of cause-effect linkages. Also included are impacts caused by an action that occur later in time or farther removed in distance, but that are still reasonably foreseeable (e.g., development in undisturbed areas as a result of access road building).

**Initial Environmental Examination or IEE** means studying, surveying, researching and analyzing data to estimate initial environmental and social impacts, including impacts on health, that may arise from investment projects listed in Category 1 of Article 2 of the Lao PDR *Decree of Environmental Impact Assessment* (no. 112/PM, 16 February 2010). IEE also includes identifying measures to prevent and mitigate possible environmental and social impacts.

**Involvement** – means the process of consulting and disseminating information on an investment project to gather comments from people or groups who are likely to be affected by, gain benefits from, or have an interest in the project. The comments are to be used as references in preparing and deliberating on an initial environmental examination (IEE), environmental impact assessment (EIA) report, or environmental and social management and monitoring plan (ESMMP). Involvement can take the form of meetings with stakeholders at all levels, or with those who are likely to be affected by the investment project during all phases of the project.

**Hazard** – a source of potential harm, or a situation with a potential for causing harm, in terms of human injury; damage to health, property, the environment, and other things of value; or some combination of these.

**Mitigation** – an activity intended to reduce the severity of, avoid or control environmental or social impacts of a project through design alternatives, scheduling or other means.

**Project Affected People** – means a natural person, legal entity, or organization that is directly or indirectly affected, or likely to be affected, by the investment project. The people may be affected by legal expropriation of land or real estate, changes of land category, and impacts on the ecological and environmental systems in the their settlement areas.

**Project Developer or Developer** means any person, legal entity or organization, from the public or private sector, that is licensed to undertake the study, survey, design, pre-construction, construction, operation and decommissioning, closure and post-closure of an investment project.

**Project Screening** means study and analysis of data contained in a proposed investment project to determine whether the project requires initial environmental examination (IEE), or environmental impact assessment (EIA).

**Residual Impact** – predicted adverse impacts that remain after mitigating measures have been applied.

**Risk** means the likelihood that harm will actually be done by the hazard occurring while the work is being carried out, or by the way something is used.  $\text{Risk} = \text{Hazard} \times \text{Exposure}$

**Risk Assessment** – the scientific method of confronting and expressing uncertainty in predicting the future (ADB, 1997).

**Scoping** means the process of determining the scope of the environmental impact assessment (EIA), i.e., the data that need to be collected and analyzed to assess the impacts of the investment project on the environment. The primary objective of the scoping process is to produce a terms of reference (TOR) for preparation of an environmental impact assessment report.

**Stakeholders** are defined as persons, groups or communities external to the core operations of a project who may be affected by the project or have an interest in it. This may include individuals, businesses, communities, or local government (IFC, 2012).

**Terms of Reference** is a description of all work to be performed when carrying out an environmental impact assessment (EIA).

**Valued Ecosystem Component (VEC)** – any part of the environment that is considered important by the proponent, public, scientists or government involved in the assessment process. Importance may be determined on the basis of cultural values or scientific concern.

**Vulnerability** – the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.

**Vulnerable groups** – individuals or groups within the project's area of influence who are particularly vulnerable or disadvantaged, and who could experience adverse impacts from the proposed project more severely than others (IFC Guidance Note 1, GN 48, January 2012). Vulnerable groups can include ethnic minorities, migrants, disabled people, the homeless, lone parents, isolated elderly people and children.



# 1. Introduction

## 1.1 Characteristics of an EIA

EIA is a legal requirement for all projects that may have a significant adverse impact on the environment and/or society. EIA is therefore a regulatory tool to identify and minimize adverse environmental and social impacts, and to ensure that proper management and mitigation measures are implemented.

An EIA should consider the environmental issues in all project phases, including planning, pre-feasibility, feasibility, design and procurement, pre-construction, construction, operation, decommissioning, closure, and post-closure. The EIA helps the project developer to prepare a project in consideration of its consequences on the environment without threatening its technical and economic feasibility.

An EIA should consider all biological, physical, social, economic, health cultural and visual components of the environment that could be affected by a project. It offers the possibility of analyzing and defining the relations and interactions between the factors having an influence on the ecosystems, resources and quality of life of the population and communities.

The objectives of EIA are to identify the environmental and social components that will be impacted, as well as the risks and opportunities for the environment and the communities affected that may arise because of the project. The significance of the impacts will help to define the main factors to be considered in deciding whether a project should proceed.

The EIA should consider the views, concerns and perceptions of stakeholders, communities and individuals that could be affected by the project. The EIA should include the results of public consultations and negotiations with the affected populations on the environmental and social issues. Public concerns should also be taken into account in assessing impacts, designing mitigation measures and selecting monitoring parameters.

## 1.2 Lao PDR Environmental Requirements

The *Decree on Environmental Impact Assessment* (no. 112/PM, 16 February 2010) describes environmental impact assessment (EIA) as, the means of “studying, surveying, researching-analyzing and estimating of possible positive and negative impacts on the environment and society, including short and long term impacts on health created by the investment projects as well as offering appropriate alternatives, environmental management and monitoring plan (EMMP), and social management and monitoring plan (SMMP) to prevent and mitigate possible impacts which are likely to happen during construction and operation of the investment projects.” Projects subject to EIA are classified in Category 2, Article 2 of the Decree (Appendix 1).

The EIA should be prepared according to a scientific method, and should satisfy government requirements for project analysis, public consultation, and the decision-

making process. The EIA provides the reader with an understanding of the project and how it will be implemented. More specifically, the EIA:

- presents the characteristics of a project and its justification;
- describes the environmental and social baseline data of the study areas, as well as the changes that will occur during and after project implementation;
- demonstrates how the project can be integrated into its environment by presenting various project alternatives and the defining measures intended to minimize negative environmental, social and health impacts, and to maximize benefits to the communities affected;
- proposes environmental, social and health management and monitoring plans to ensure that the requests from the government and commitments made by the project developer are implemented.

### 1.3 Objectives of the EIA Guidelines

The objectives of the EIA Guidelines are to provide a common framework for EIA reporting, to present project developers and their environmental consultants with clear guidance on the structure, content and scope of EIA reports, and to ensure that EIA reporting is consistent with legal requirements, good practices and professional standards.

Furthermore, by following these guidelines, the quality of EIA reports will be improved, which will also facilitate a smooth and timely review by the agencies concerned.

### 1.4 Scope of the EIA Guidelines

The EIA Guidelines are applicable for all Category 2 projects as defined in the *Decree on Environmental Impact Assessment* (no. 112/PM, 16 February 2010).

These EIA Guidelines address how EIA reports should be structured, what the reports should encompass, how data and information should be presented, and the level of detail and comprehensiveness required or recommended in EIA reports. Thus, the EIA Guidelines are predominantly about reporting, and less about how EIA studies must or should be carried out.

An EIA report should cover and assess all environmental, social, economic, health, cultural and visual impacts of the project during the pre-construction, construction, operation and decommissioning, closure and post-closure phases. Resettlement issues should be detailed in a separate report but summarized in the EIA report. EIA reports include preparation of the Environmental and Social Management and Monitoring Plan for the project.

The EIA Guidelines are divided into four main sections:

Section 1: EIA Process

Section 2: Scoping Report and Terms of Reference for the EIA

Section 3: EIA Report

Section 4: Environmental and Social Management and Monitoring Plan

## 2. EIA PROCESS

### 2.1 Introduction

The EIA Process in the Lao PDR is determined by the *Decree on Environmental Impact Assessment* (no. 112/PM, 16 February 2010). Investment projects are divided into two categories, initial environmental examination (IEE) or environmental impact assessment (EIA), according to the scale of the project. The EIA Guidelines cover large-scale investment projects that are complex or create significant environmental and social impacts, for which environmental impact assessment is required. The list of projects subject to EIA (Category 2) is presented in Appendix 1.

This section of the EIA Guidelines introduces the EIA process with reference to the normal project planning cycle. In addition, this section presents the duties and responsibilities of the project developer and government agencies for preparation, review and approval of the EIA.

### 2.2 EIA Process and the Project Planning Cycle

The normal project planning cycle generally includes the following phases:

- Pre-Feasibility;
- Feasibility;
- Design and Procurement;
- Pre-Construction;
- Construction or Survey-Exploration;
- Operation; and,
- Decommissioning, Closure and Post-closure.

During each of these phases, the developer should undertake investigation and consultation activities to minimize the environmental and social impacts of a project. It is recognized that integrating environmental and social aspects in project cycle as early as possible will significantly reduce project impacts and mitigation costs.

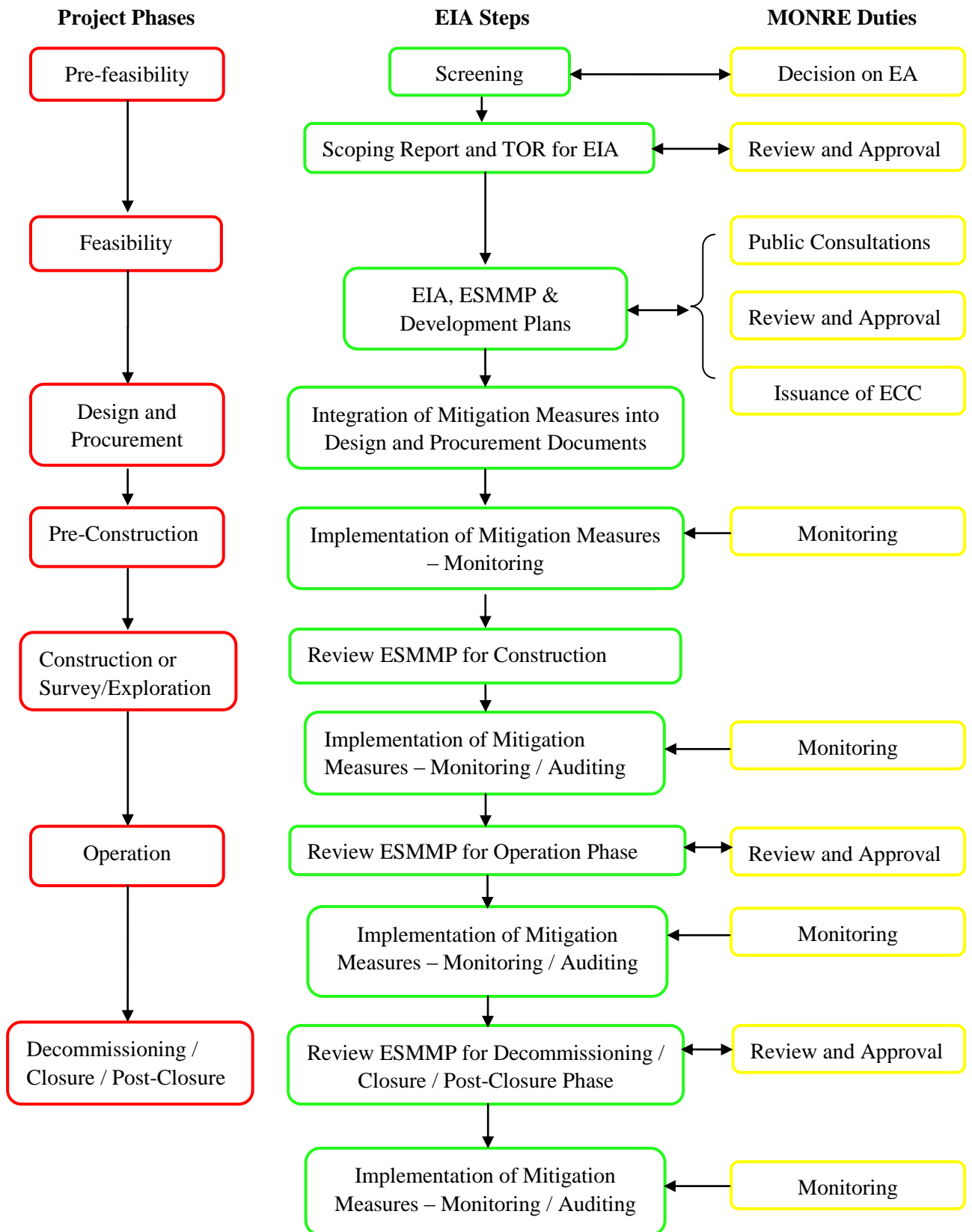
Figure 2.1 presents the project planning cycle in relation to the EIA steps that need to be completed by the project developer and in relation to the duties of MONRE for reviewing, monitoring and approving the documents and activities carried out by the project developer.

The main responsibilities of the project developer are to:

- send an investment application form to MONRE to enable MONRE to determine the scale of the project;
- prepare a Scoping Report and TOR for the EIA;
- prepare the EIA Report, Environmental and Social Management and Monitoring Plan (ESMMP), and development plans;
- conduct public consultation meetings during preparation of the EIA;
- incorporate mitigation measures in the design and procurement documents;

- improve the ESMMP frequently, and implement the mitigation measures during the pre-construction, construction, operation and decommissioning, closure and post-closure phases;
- carry out monitoring and auditing activities as stipulated in the ESMMP.

**Figure 2.1: Project Planning Cycle and Environmental/Social Activities**





## 2.3 EIA Process and the EIA Guidelines

The EIA Process requires completion of a Screening and Scoping Report and TOR for EIA activities prior to preparation of the EIA Report.

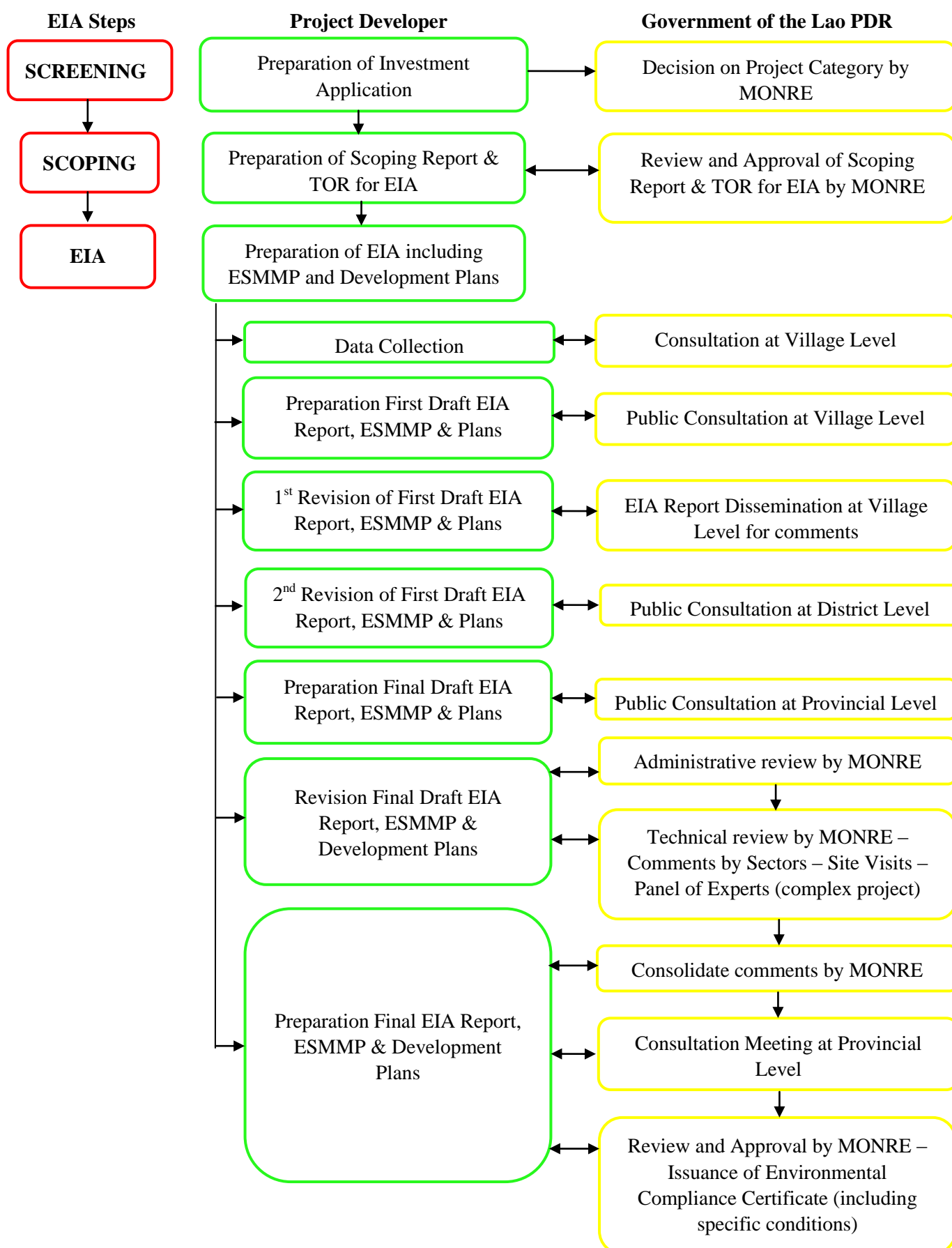
For the project screening, the project developer shall submit an investment application to MONRE (Decree 112/PM, Article 6). The project developer shall utilize the list of projects subject to EIA, in addition to considering the significance of the potential impacts of the project. MONRE will make a decision based on the information provided by the project developer as to whether the proposed project will have to undertake an IEE or an EIA.

During the project scoping, the project developer will prepare a Scoping Report and detailed terms of reference for preparation of the EIA as required in Decree 112/PM (Article 11). Section 3 of the EIA Guidelines provides guidance on how to prepare the Scoping Report and the TOR. MONRE will revise, comment on and approve the Scoping Report and TOR before the project developer begins preparing the EIA.

Preparation of the EIA Report, ESMMP and development plans will require consultations with the local authorities and affected people. The Public Involvement Guidelines describe this consultation process. Figure 2.2 indicates the most important steps to undertake during preparation of the EIA, especially with regard to public consultation. MONRE will conduct an administrative and technical review of the EIA Report, ESMMP and development plans. The project developer will be required to revise the EIA Report, ESMMP and development plans to comply with the consolidated comments provided by MONRE and those of the Panel of Experts.

Once MONRE is satisfied with the EIA Report, the ESMMP and the development plans, the Environmental Compliance Certificate will be issued, including specific conditions if required.

**Figure 2.2: Responsibilities during preparation of EIA Report for project of Category 2**



## 3. SCOPING & TERMS OF REFERENCE FOR EIA

### 3.1 Overview

Scoping is the first phase in carrying out EIA studies. The project developer is responsible for preparing the Scoping Report and Terms of Reference (TOR) for preparing the EIA study. When completed, these documents shall be sent to MONRE for comments and approval (Decree on EIA, Article 11).

During scoping, the likely key environmental impacts and risks of the project, including impacts on social conditions, health, livelihood, etc., are identified in a preliminary manner. In this way, the scoping phase establishes the framework of activities and impacts that require further investigation during the EIA study.

One of the main reasons for scoping is to limit further investigation to those issues that are most important for decision-making and efficient, sustainable project execution.

Scoping is therefore a fundamental phase in the EIA process, which:

- defines the study area, area of influence, time boundaries, project phases, and potential stakeholders;
- starts the process of understanding the applicable regulations and standards, and their context for project design and completion of the EIA;
- makes a provisional identification of impacts, which provides focus on the environmental and social issues that need to be addressed in subsequent EIA studies;
- provides an indication of what baseline data and information are required, and how to obtain it (although there is no need to actually collect any data at this stage);
- provides an opportunity for consultants, relevant authorities, project developers, interested and affected parties to express their views and concerns regarding the proposal before an EIA proceeds;
- enables an efficient assessment process that saves time, resources, costs and delays;
- identifies potentially-affected communities and other stakeholders with an interest in the project.

The Scoping Report should include the following main sections. A proposed table of contents for the Scoping Report is presented in Appendix 2.

- Executive Summary
- Context of the Project
- Overview of the Policy, Legal and Institutional Framework
- Project Description and Alternatives
- Description of the Environment
- Key Potential Environmental Impacts and Mitigation Measures
- Public Consultation and Disclosure
- Conclusions and Recommendations

## 3.2 Executive Summary

The executive summary should summarize the significant findings and recommendations of the Scoping Report and the TOR for preparing the EIA. The executive summary should present all necessary information to provide a clear picture of the project, its environment, the key potential impacts and associated mitigation measures, as well as the significant issues included in the TOR for the EIA study. The executive summary shall be written in Lao and in English.

## 3.3 Context of the Project

The context of the project provides the background to the EIA and the overall context of the project, including the main findings of previous technical, economic, environmental or social studies.

This section of the Scoping Report should be divided into the following sub-sections:

- Presentation of the Project
- Related Projects and Developments
- Presentation of the project developer and the EIA Consultant

### 3.3.1 Presentation of the Project

The project developer should present the status of the project (planning, pre-feasibility and feasibility phases); a brief description of the intended project; the main phases of the project (design, pre-construction, construction activities, operation, decommissioning, closure and post-closure); a brief history of the project; expected investment and revenues (taxes, royalties, etc.); the current status of the existing infrastructure related to the project; and the need for the project, including a brief justification and the project objectives.

### 3.3.2 Related Projects and Developments

Other projects or developments related to construction or operation of the proposed project should be presented. For example, for a pulp and paper mill project, related projects or developments may include operations on forest lands, such as plantation, maintenance, harvesting, and transportation. For a hydroelectric project, examples may include improvement of the energy distribution grid, or plans for a future mining project that would be located within the impoundment area of the proposed dam.

### 3.3.3 Presentation of the project developer and the EIA Consultant

In this section, the project developer will introduce its company's experience and activities in the Lao PDR and overseas; its volume and capacity of production; its environmental experience; and how the company has addressed socioeconomic conditions in its activities and projects, among other aspects.

The project developer shall provide the following contact details:

- name of the company;
- main postal address, telephone, fax and e-mail details for the company;
- name of the main contact person, including his or her direct postal address, telephone, fax and e-mail details.

The EIA Consultant should present the team of experts participating in preparation of the Scoping Report, including both permanent and contract staff, and associated organizations.

### 3.4 Overview of the Policy, Legal and Institutional Framework

The current Lao PDR environmental and social policy, legal and institutional framework applicable to the project should be briefly summarized. This section of the report should also indicate and briefly summarize applicable international or regional conventions and treaties signed or ratified by the Lao PDR. The project developer should present its corporate environmental and social policies, if such policies exist. If the project is supported by funding from international financial agencies, their policies, guidelines and standards should be identified and listed.

If applicable, the status of concession agreements or MOUs between the project developer and the Government of the Lao PDR should be presented.

The “Overview of the Policy, Legal and Institutional Framework” section should include the following sub-sections:

- Corporate Environmental and Social Policies;
- Lao PDR Policy and Legal Framework;
- International Conventions and Treaties;
- Lao PDR Government Institutional Framework; and,
- International Policies, Guidelines and Standards (if applicable)

### 3.5 Project Description and Alternatives

The project description is a crucial part of the scoping report. Scoping is often done at a stage in project development where certain fundamental decisions such as choice of technology or location are still under consideration. Therefore, the scoping study should assess relevant and realistic alternatives to ensure that appropriate decisions are made.

The “Project Description and Alternatives” section should include the following sub-sections:

- Project description (and, if relevant, project alternatives for each project phase);
  - Pre-Construction
  - Construction
  - Operation
  - Decommissioning, closure and post-closure
- Comparison and Selection of Project Alternatives

#### 3.5.1 Presentation of the Project and Description of Alternatives

The project description should provide enough details to allow preliminary assessment of the project alternatives and potentially significant negative impacts. Any uncertainties should be highlighted in the project description.

The structure and content of a project description will vary from project type to project type. However, in general, the structure and content of the project description should follow the guidelines presented in Table 3.1.



**Table 3.1 Generic Structure and Content of a Project Description**

Brief Presentation		Guidance Notes
<b>1. Sector and Subsector</b>		e.g., energy production, hydroelectric power
<b>2. Size</b>		Size may be expressed in terms of area, length (for a road or other linear project), production capacity, category/type, number of employees, or project investment.
<b>3. Location</b>		Provide an overview map, typically at a scale of 1:300,000 for linear projects and 1:20,000 for single-point projects. The map should include main natural features, like water bodies, forest, etc., existing infrastructure (roads, bridges, etc.) and human settlements in the vicinity of the project. In the case of an urban development, sensitive areas (schools, markets, monuments or cultural sites, commercial areas, etc.) should be clearly indicated.
<b>4. Project Components</b>		Main production facilities Internal infrastructure Ancillary infrastructure and facilities
<b>5. Overall Time Schedule</b>		Present a diagram with the planned timing of: <ul style="list-style-type: none"> <li>- Studies (including the EIA study);</li> <li>- Permitting/licensing;</li> <li>- Concession agreements;</li> <li>- Detailed design, contracting;</li> <li>- Pre-construction activities;</li> <li>- Construction activities;</li> <li>- Operations;</li> <li>- Decommissioning, closure and post-closure</li> </ul>
<b>6. Project Organization</b>		Organization chart, management, roles and responsibilities, etc
<b>Pre-Construction and Construction Phases</b>		
<b>7. Activity Schedules</b>		Diagram with the main components and their respective main construction activities and related mitigation measures
<b>8. Location of Project Components</b>		Site map (1:50,000 for linear projects and 1:10,000 for single-point projects), with location of project components such as roads, camps, mines, processing plant, storage areas, tailing dams, reservoirs, power

	house, transmission lines, bridges, etc.
<b>9. Project Characteristics</b>	<p>Description of the main characteristics of:</p> <ul style="list-style-type: none"> <li>- Materials (amounts, types, sources)</li> <li>- Equipment, machinery</li> <li>- Conceptual design drawings</li> </ul> <p>List the alternatives considered and assessed. Only consider realistic and reasonably feasible alternatives.</p>
<b>10. Labor</b>	<p>Expected workforce, and, if possible, a brief description of the workforce by job type;</p> <p>Expected origin of the workforce</p>
<b>Operational Phase</b>	
<b>11. Overview of Operations</b>	<p>Brief description of project components including production processes and technologies, facilities and infrastructure</p> <p>Visual presentation of the completed project (e.g., a freehand drawing, layout)</p> <p>Presentation of production data:</p> <ul style="list-style-type: none"> <li>- Input materials (amounts/year, types, qualities and characteristics, sources)</li> <li>- Water and energy consumption and sources</li> <li>- Outputs: Products (amounts, characteristics) by-products, waste and other emissions)</li> </ul>
<b>12. Operations Schedule</b>	Time diagram presenting the main components and the main operations/processes and their respective mitigation measures
<b>13. Site Layout Maps</b>	Site layout maps (1:20,000 or larger scale) showing the location of the main operational components
<b>14. Components</b>	<p>Description of each component:</p> <ul style="list-style-type: none"> <li>- Facilities, technology, processes with simplified flow diagram</li> <li>- Location and visual presentation</li> <li>- Conceptual design drawings</li> <li>- Flow diagram: Materials, water, energy, waste and other emissions</li> <li>- Materials handling, storage</li> <li>- Waste and wastewater management</li> <li>- Transportation (mode, timing, loads, routes)</li> </ul>

<b>15. Labor</b>	Expected workforce (if possible workforce per job type) Expected origin of workforce
<b>Decommissioning, Closure and Post-Closure Phase</b>	
<b>16. Overview</b>	Closure Plan Requirements (Strategy, Policy, Main Objectives, time schedule, budgets, etc.)

As shown in Table 3.1, the project description should include a listing and short presentation of the alternatives considered. Detailed analyses of the alternatives are best presented in a separate subsection.

The scoping report should describe each alternative in reasonable detail to enable all major potential environmental, economic, social, health, cultural and visual impacts to be identified/predicted and evaluated.

In describing the reasonable alternatives, the use of maps, plans, drawings and figures is required to provide effective visual presentations of the alternatives.

### 3.5.2 Comparison and Selection of Project Alternatives

Alternatives are essentially different ways in which the project developer can feasibly meet the project's objectives, for example by carrying out a different type of activity, by choosing an alternative location, or by adopting a different technology or design for the project. At the more detailed level, alternatives merge into mitigating measures, where specific changes are made to the project design or to methods of construction or operation to avoid, reduce or remedy environmental effects. Therefore, the alternatives considered and presented in the report should only include significant, realistic and reasonably feasible alternatives to the developer's preferred location, design or choice of technology. It follows that such alternatives are also seen from the perspective of the project developer.

The "no project" alternative must always be considered as the baseline against which the environmental impacts of the project should be considered.

The process of identifying alternatives and selecting the optimal alternative should include an assessment of:

- the capacity to satisfy the demand (i.e., objectives, problems and needs);
- legal and technical feasibility (e.g., land tenure, zoning, topography, civil engineering works, and availability of human resources);
- the economic benefit of the project;
- the ability to limit the significance of negative impacts and to maximize positive impacts on the natural and human environment, including impacts on local employment.

As much as possible, the comparison between the proposed alternatives should be based on quantitative data.

One common method is to apply weights and ranks to the various impacts, and then to aggregate the results by assigning numerical values to the expected impacts on each valued environmental or social component. Then, each alternative is compared based on a single overall measure of impacts. The greater the aggregate value for an alternative, the more serious the environmental or social impact. Numeric weights can be assigned by using the informed opinions of stakeholders.

## 3.6 Description of the Environment

To understand how the project may affect the environment, and in particular, how significant such impacts could be, it is necessary to describe the physical, biological, social, economic, cultural and visual characteristics of the environment. This can be done using secondary information available from government offices (national, provincial, district and village) and from NGOs involved in the project area. Use of recent satellite imagery is required in all cases. With this information, it is possible to make a preliminary identification of sensitive environmental, social, cultural and visual features within the study area. Direct information on these sensitive areas, as well as the social context of the study area, will be collected by carrying out field visits.

The “Description of the Environment” section of a Scoping Report should include the following sub-sections:

- Setting the Study Limits
- Physical Components
- Biological Components
- Socio-Economic Components
- Cultural Components
- Visual Components

### 3.6.1 Setting the Study Limits

The Scoping Report should define the boundaries of the study areas and justify the chosen limits. The area or areas identified (i.e., there may be more than one study area) will include all anticipated direct and indirect impacts, as well as all project-related activities such as access roads.

The study area should be presented on a map at a scale of 1:300,000 for linear projects and 1:20,000 for single-point projects (or larger scale when possible). The information illustrated on the map should include the project location; administrative boundaries; infrastructure and main resources of the area (roads, watercourses, industrial parks, residential areas, etc.); existing and future residential, industrial, tourism, and cultural developments; sensitive areas and valued ecosystem components (VECs) of the environment identified during the scoping process.

### 3.6.2 Physical Components

The physical components of the study area should be described briefly according to their importance for identification of project impacts. Physical components may include a brief description of the climate, topography, geology, geomorphology, soil, seismology, surface hydrology, surface water quality, etc., of the study area. For example, for a project that will discharge contaminated water into a river, more detailed data on water flow and water quality will be needed.

Specific reference should be made to physical components involved in the potential natural hazards of the area, including potential hazards that may arise due to climate change.

### 3.6.3 Biological Components

The biological components should be described briefly according to their importance in identifying project impacts.

Environmentally sensitive areas should be described in the text and presented on maps to facilitate interpretation of the data, and to highlight areas that should be protected by the project.

#### 3.6.4 Socio-Economic Components

The socio-economic components of the project study area are very important to consider, especially when resettlement is required. The following information is readily available and accessible at the village or district level: population data; health conditions; the main economic activities of the affected people; education levels; and the presence of vulnerable groups.

Information on socio-economic components that should be presented in the scoping report includes:

Demographic information:

- Name of district(s) and villages affected;
- Population (including gender and age distribution, if possible);
- Ethnicity and languages;
- Main economic activities and means of livelihood of men and women;
- Education level and access to educational services;
- Main sources of water and energy;
- Other development projects in the area (hydroelectric power, plantations, road construction, mining or industrial activities).

Community Health:

- Prevalence and rates of infectious diseases (e.g., malaria, dengue fever, tuberculosis, HIV/STDs, etc.) and chronic diseases (e.g., arthritis, cardiovascular diseases, diabetes, nutritional disorders, etc.);
- Trends in existing health problems;
- Access to health services;
- Availability of clean water and sanitation.

Infrastructure (presented on a map):

- Roads, airports, bridges, ports, transmission lines, irrigation systems, etc. in the study area;
- Schools, temples, markets, hospitals or clinics.

Data such as average income, cost of living, life expectancy and birth rate, average number of persons per household, and presence of vulnerable groups should also be included if available. In the case of resettlement, information on both the villages to be relocated and the host communities where the residents will be resettled should be included.

Significant events in the community in the last 15 years, like natural disasters, previous resettlements, and conflicts should be mentioned, as well as whether the area is affected by UXO. The socio-economic components should include reference to areas or people who may be vulnerable to the natural hazards of the study area.



Visits in the villages will also help to identify the main socio-economic issues facing the affected people, and to verify the information provided by secondary sources. These data will be summarized in this section of the Scoping Report.

### 3.6.5 Cultural Components

Cultural components in the study area that may be affected by the project should be presented briefly in this section of the Scoping Report. Examples of cultural components include religions and beliefs, local values and costumes, sites of traditional or historical value, use of natural resources, traditional livelihood, main institutions and organizations.

### 3.6.6 Visual Components

Features of visual value within the study area should be identified. Features may include landscape, nature, monuments, natural or cultural features, tourist attractions, etc. that will be affected or visually disrupted by the project. Such features should be listed, described briefly, and illustrated by photography and/or presented on a map.

## 3.7 Preliminary Environmental Impact Assessment and Mitigation Measures

This section should include a preliminary identification and assessment of key impacts and potential risks of and to the project for all project phases (i.e., pre-construction, construction, operation and decommissioning, closure and post-closure). The significance of the potential impacts must be determined using appropriate methodology and criteria.

The generic structure of this section is as follows:

- Methodology;
- Identification of potential environmental and social impacts;
- Potential impacts, mitigation measures and residual impacts

### 3.7.1 Methodology and Approach

In this section, the methodology and approach used for preliminary identification of the social and environmental impacts, and for assessment of their importance for the scoping report, must be briefly described. There is no mandatory methodology for impact assessment, but it is recommended that a well-recognized, proven methodology that is appropriate for the complexity of the project and for the sensitivity of environmental setting (including social, health, cultural, and visual components) be used. The impact assessment methodology used for the scoping can be different and simpler than the impact assessment methodology used for the subsequent EIA studies.

Scoping is a quick and simple form of EIA in which key potential impacts and risks are identified and assessed on a preliminary basis. The following two elements need to be considered:

- **A basic understanding of the project** and related activities: these include the main characteristics of the project during all project phases, and the environmental impacts that these could generate. Examples of project characteristics, activities and associated impacts that may be expected for construction of a transmission line project are presented in **Erreur ! Source du renvoi introuvable..**

- An **initial understanding of the value of the environment** in which the project will be located: these include the physical, natural and socio-economic characteristics of the area likely to be affected by the project and its activities, and an idea of their value or importance (e.g., whether the area is home to an endemic bird species found nowhere else, whether the area is characterized by farmland or primary forest, etc.).

Based on these two elements, likely impacts and issues of potential importance can be identified. Note that the emphasis above is on a “brief” understanding of the project and an “initial” understanding of the environment.

### **Box 3.1 Examples of Project Activities and Potential Environmental Impacts of a Transmission Line Project**

Examples of project activities during construction that could affect the environment may include:

- Land / vegetation clearing;
- Disposal of spoil and vegetation;
- Erection of structures;
- Movement of construction vehicles;
- Employment of construction workers;
- Establishment of construction work camps;
- Provision of sanitation facilities for construction workers.

Environmental impacts associated with these activities may include:

- Loss of species and biodiversity;
- Dust generation;
- Soil erosion;
- Changes to local groundwater and surface water regimes;
- Visual changes to the landscape;
- Noise;
- Air pollution.

Socio-economic impacts associated with these activities may include:

- Resettlement;
- Demographic changes (temporal migration of workers and eventually their followers);
- Increased levels of infectious and waterborne diseases;
- Increased levels of respiratory problems;
- Traffic accidents;
- Disruption of traditional livelihoods;
- Restricted access to natural resources traditionally used for food and fuel.

One technique that can be used to determine the issues and scope for an EIA is to complete a Preliminary Impact Identification and Assessment Matrix as described in Box 3.2 and illustrated in Appendix 3.

### **Box 3.2    Developing a Preliminary Impact Identification and Assessment Matrix for Scoping**

1. List the project components or activities that could affect the environment down the left hand column of a blank matrix. These characteristics could be broken down into phases (e.g., movement of residents / farmers, clearing of land, disposal of spoil, erection of structures, etc.) or into types (e.g., emissions to air, discharges to water bodies, generation of wastes, etc.).
2. List the environmental components in the area likely to be affected by the project along the top row of the matrix, including physical, biological and human environmental characteristics (e.g., water quality, noise, air quality, aesthetics, cultural property, traditional livelihood, public health, etc.).
3. Taking into account an understanding of the importance of the environmental and social characteristics, for each square marked, determine approximately whether the impact will be positive or negative, and, if negative, whether the impacts are expected to be of high, medium or low significance.

A methodology for determining the significance of the impacts is proposed in Section 4.6 of these guidelines.

#### **3.7.2 Identification of Potential Environmental Impacts**

The project developer will identify and summarize the major potential sources (i.e., project activities) of impacts to the physical, biological, health, social, economic, cultural, and visual components of the environment for the following project phases:

- Pre-Construction
- Construction
- Operation
- Decommissioning, closure and post-closure

Identification of potential impacts related to natural hazards and climate change should also be considered at this stage of the Scoping Report.

#### **3.7.3 Key Potential Environmental Impacts, Mitigation Measures and Residual Impacts**

In this section, the project developer must identify the major potential impacts of the proposed project alternatives, and must summarize the assessment, proposed mitigation measures, and residual impacts by project and by activity.

Potential impacts, and exposure of the environment and society to natural hazards and potential impacts that could increase the vulnerability of the socio-economic components to disasters and/or natural hazards should be described.

This section of the Scoping Report should be divided into the following subsections:

- Pre-Construction
- Construction
- Operation
- Decommissioning, closure and post-closure

The methodology used by the project developer to determine the significance of the impact should be systematically used for identification and description of each major project impact. The preliminary impact matrix used for scoping (if applicable), results of map overlays, etc., should be presented in the chapter or in an appendix to the Scoping Report.

### 3.8 Public Consultation and Disclosure

Involving the public in preparation of the EIA is fundamental to increasing the understanding and acceptance of the project, to understanding how the project may affect their living conditions, as well as to identifying impacts and issues that are not immediately obvious to the EIA preparation team. The earlier in the project preparation process the public can be involved, the more likely it is that a trusting relationship can be built and useful recommendations made.

In the Lao PDR, the project developer shall undertake a process of consultation during the EIA study involving the affected communities and the project stakeholders. This consultation shall be conducted in coordination with local authorities on a continuous basis starting as early in the EIA process as possible.

The following sub-sections should be included in the “Public Consultation and Disclosure” section:

- Methodology and Approach
- Summary of Consultation Activities Undertaken
  - Overview of consultation activities
  - Summary of the opinions of the people or communities consulted
- Results of Consultations During Project Scoping
  - Issues identified by stakeholders and groups affected by the project
  - How these issues were taken into account
- Recommendations for Consultations to be Undertaken During the EIA Studies

#### 3.8.1 Methodology and Approach

The methodology and approach used to identify stakeholders and conduct public consultation should be described in this section of the Scoping Report. The methodology and approach used for public consultation will vary according to the project developer and the scale of the project. In general, the following consultation activities should be undertaken to understand and take the opinions of the affected people into account in the project design and implementation:

- Identification of Stakeholders and Groups affected by the project;
- Conducting Public Consultation;
- Disclosure.

##### 3.8.1.1 *Identification of Stakeholders and Groups Affected by the Project*

This section should include a preliminary identification and listing of stakeholders and groups affected by the project. Stakeholders are defined as individuals, groups or communities external to the core operations of a project who may be affected by the project or have an interest in it. This may include individuals, businesses, communities, or local governments (IFC, 2012).

The three main groups of organizations and individuals whom it may be appropriate to consult during scoping are:

- government authorities;
- other interested organizations;
- the general public.

Types of organizations to be included in these three groups are listed in Box 3.3.

<b>Box 3.3 Checklist of Groups and Individuals to be Consulted During Scoping</b>
<ol style="list-style-type: none"> <li>1. Government Authorities <ul style="list-style-type: none"> <li>• National, provincial, district and local authorities;</li> <li>• Authorities responsible for pollution control, including water, waste, soil, noise and air pollution;</li> <li>• Authorities responsible for protection of nature, cultural heritage and the landscape;</li> <li>• Health and safety authorities;</li> <li>• Land use control, spatial planning and zoning authorities;</li> <li>• Authorities in neighboring countries where trans-boundary impacts may be an issue.</li> </ul> </li> <li>2. Other Interested Parties <ul style="list-style-type: none"> <li>• Local, national and international environmental, social and development interest groups<sup>1</sup>;</li> <li>• Government departments responsible for agriculture, energy, forestry, fisheries, etc., whose interests may be affected;</li> <li>• International agencies whose interests may be affected, e.g., Mekong River Commission;</li> <li>• Local employers' and business associations, such as chambers of commerce, trade associations, etc.;</li> <li>• Mass organizations such as Lao Women's Union, Lao Youth Union, Lao Front for Reconstruction, etc.</li> <li>• Employees' organizations such as trade unions;</li> <li>• Groups representing users of the environment, e.g., farmers, fishermen, women using NTFs for their own consumption and trade, tourism operators; Research institutes, universities and other centers of expertise</li> </ul> </li> <li>3. The General Public <ul style="list-style-type: none"> <li>• Landowners and residents;</li> <li>• Ethnic groups in the affected area</li> <li>• Elected representatives and community figures such as religious leaders or teachers;</li> <li>• Local community groups, residents' associations, etc.;</li> <li>• General members of the local and broader public.</li> </ul> </li> </ol>

### 3.8.1.2 Conducting Public Consultations

Public consultation is an important responsibility of the proponent, and is recognized as a crucial step toward building understanding and acceptance of the project by the

<sup>1</sup> For organizations in the Lao PDR, consult the following website: [www.directoryofngos.org](http://www.directoryofngos.org)

<sup>2</sup> Guidelines for the executive summary are taken from Lao PDR Department of Electricity, Ministry of Industry and Handicrafts (2001), "Environmental Management Standard, Environmental Impact Assessment for Electricity Projects," DOE (2001) no.



stakeholders. Public consultation provides the proponent with feedback and information about “valued environmental components” of the communities affected by the project. According to the *Decree on Environmental Impact Assessment* (112/PM, Article 12), public consultations shall be conducted at different times during preparation of the EIA.

At the scoping stage, information meetings shall be organized by the project developer and the district authorities to inform villagers about the project development plan and possible environmental and social impacts, as well as to collect opinions of the people affected by the investment project. Information from the Scoping Report should serve as a basis in preparing for these meetings. The population from villages directly or indirectly affected by the project should be consulted.

A summary of the public consultation meetings shall be included in the Scoping Report. All summary reports shall be signed by the chairperson and some of the participants. According to the *EIA Decree* (112/PM, article 12(4)(h)), the minutes of each meeting shall also be signed by the project developer and the consultant who prepares the report. The name of the participants and information about how the meetings were organized shall be provided in the Scoping Report. A summary of the results of each public consultation shall be presented, including the opinions of the participants, comments from stakeholders, and responses from the project developer.

#### 3.8.1.3 *Disclosure*

The Decree on EIA (112/PM) requires that the proponent make suitable information available to stakeholders in a language and format that is understandable to them to facilitate meaningful consultation with groups affected by the project, civil society organizations, and NGOs active in the project area. The project developer shall provide stakeholders sufficient time to review and understand the project and its issues to enable them to participate effectively during consultation.

For the public consultation meetings, the project information provided to the people affected by the projects and the stakeholders should include the Scoping Report and the presentation materials. This information shall be provided in Lao and in English.

### 3.8.2 *Summary of Consultation Activities Undertaken*

#### 3.8.2.1 *Overview of Consultation Activities*

Public consultation and disclosure should start at the planning phase and continue throughout preparation of the Scoping Report. If consultation activities have been undertaken before preparing the Scoping Report, these activities should be described in this section of the report.

The project developer should present the methodology and approach used during the planning phase. The consultation process should be described in terms of activities, schedule, participants, and results.

#### 3.8.2.2 *Summary of the Opinions of the People Consulted*

The list of the individuals consulted during the planning activities should be summarized in this section of the Scoping Report. The full list of participants including details such as the organization they represent (if any), telephone numbers or other contact information should be included in appendix to the Scoping Report.

### 3.8.3 Results of Consultations during Project Scoping

#### 3.8.3.1 Issues Identified by Stakeholders and Groups Affected by the Project

Environmental, socio-economic or cultural issues identified by stakeholders during the scoping phase should be presented in terms of opinions raised during discussions, meetings and workshops. It is appropriate to present participants' opinions in a table showing the name of each participant and the corresponding response from the project developer in terms of solutions or action proposed. If participants are reluctant to register their names, the list may indicate only their sex and age.

The minutes of meetings and workshops, including the opinions raised by the population and the responses from the project developer and other stakeholders, should be presented in an appendix of the Scoping Report, along with the signature of the chairperson and some of the participants.

#### 3.8.3.2 How Issues Were Taken Into Account

The project developer should explain how the issues raised by the stakeholders during the scoping phase have been incorporated in the project. In some cases (e.g., resettlement and compensation), government authorities may be responsible for issuing the responses.

### 3.8.4 Recommendations for Consultations to be Undertaken During the EIA

The consultation process is an ongoing activity that will take place throughout the project implementation cycle. The Scoping Report should define the future consultation process in terms of:

- objectives of consultations during preparation of the EIA Report;
- the participants to be involved in future consultations;
- information disclosure.

## 3.9 Conclusions and Recommendations

The project developer should present the conclusions and recommendations, which will serve as the basis for preparing the TOR for the EIA Study.

The following sub-sections should be included in the “Conclusions and Recommendations” section:

- Main issues to be examined in more detailed studies;
- Project alternatives that should be taken into account in these studies;
- Spatial and temporal scale over which impacts should be assessed;
- Stakeholders that should be consulted; and
- Important data gaps or restrictions.

## 3.10 Terms of Reference for the EIA Study

The Terms of Reference are a primary outcome of the Scoping Report. They will serve as the basis for determining of the scope of the EIA Report and the ESMMP. The TOR should be as detailed as possible to minimize gaps in preparing the EIA, and to ensure that the project developer allocates enough time to prepare the EIA.

All baseline studies (e.g., biodiversity research, socio-economic survey, health survey) and/or impact assessment studies (e.g., water quality modeling, air quality modeling, hazard, exposure and vulnerability assessments) should be described in the TOR.

The structure of the detailed TOR is presented in Appendix 4. This structure should be adapted to the scoping results for each project, but in general, most of these items (sections, subsections, components, etc.) should be included in the EIA Report.

Resettlement and compensation issues, as well as preparation of the development plans, are not fully covered in the TOR, since these matters may be addressed in specific studies carried out in parallel with preparation of the Scoping Report.

### 3.11 Reporting

The Scoping Report will:

- form the basis for an agreement with MONRE on the scope of the EIA;
- allow stakeholders to see how their views will be taken into account during preparation of the EIA;
- provide the basis for the information to be supplied to the responsible authorities;
- provide input to the EIA report; and,
- present the TOR for the EIA study, and give advice on a suitable budget and time schedule for this and any other required studies.

The Scoping Report should present visual material such as photos, maps, and figures to facilitate understanding of the information presented in the report. It is usually requested to present the project location on topographic maps and the environmentally sensitive areas on thematic maps at a scale of 1:300,000 for a linear project (Example in Appendix 5) or 1:20,000 for a single-point project (or at a larger scale where possible).

### 3.12 Approval

Once the Scoping Report and TOR are completed, the project developer shall send the documents to MONRE for review and approval. MONRE will complete the review within 15 public workdays and inform the project developer of any comments. The project developer shall obtain MONRE's approval of the scoping/TOR before commencing the actual EIA studies.

It is advisable that the Scoping Report/TOR for the EIA be made available to people affected by the project, to local residents and to local NGOs. For complex projects, MONRE may undertake public consultations to ensure that the stakeholder opinions have been fully considered.

Although scoping can be considered as a discrete phase of the EIA process that ends with issuance of the TOR for the EIA, the activity of scoping should continue throughout the EIA so that the scope of work can be amended in the light of new issues and new information. The scope of the EIA should be flexible enough to allow new issues that emerge during the course of the environmental studies, as a result of design changes, or through consultations to be incorporated. It is important to remember that the *Decree on EIA* allows competent authorities to request additional information at a later phase in the EIA process, even if this information was not requested when they issued a formal Scoping Approval. For this reason, continuous review of the scope of the EIA is important to avoid delays caused by such requests.

## 4. ENVIRONMENTAL IMPACT ASSESSMENT REPORT

### 4.1 Overview

Preparation of the EIA Report constitutes the second step required for completion of the environmental impact assessment (Decree 112/PM), the first step being preparation of the Scoping Report and the TOR for the EIA (Chapter 3).

The impact assessment phase is quite similar to the scoping phase in terms of approach, although a greater level of detail is required.

Preparation of a social assessment report is required in cases where resettlement and compensation are important issues (*Regulation on Resettlement and Compensation*, a regulation for implementing Decree 192/PM on *Compensation of People Affected by Development Project* no. 1432/STEA, Article 9). It is also requested that social, economic, cultural and health components be included in the EIA Report (Decree 112/PM, Article 3, EIA definition) in order to have a full assessment of all project impacts.

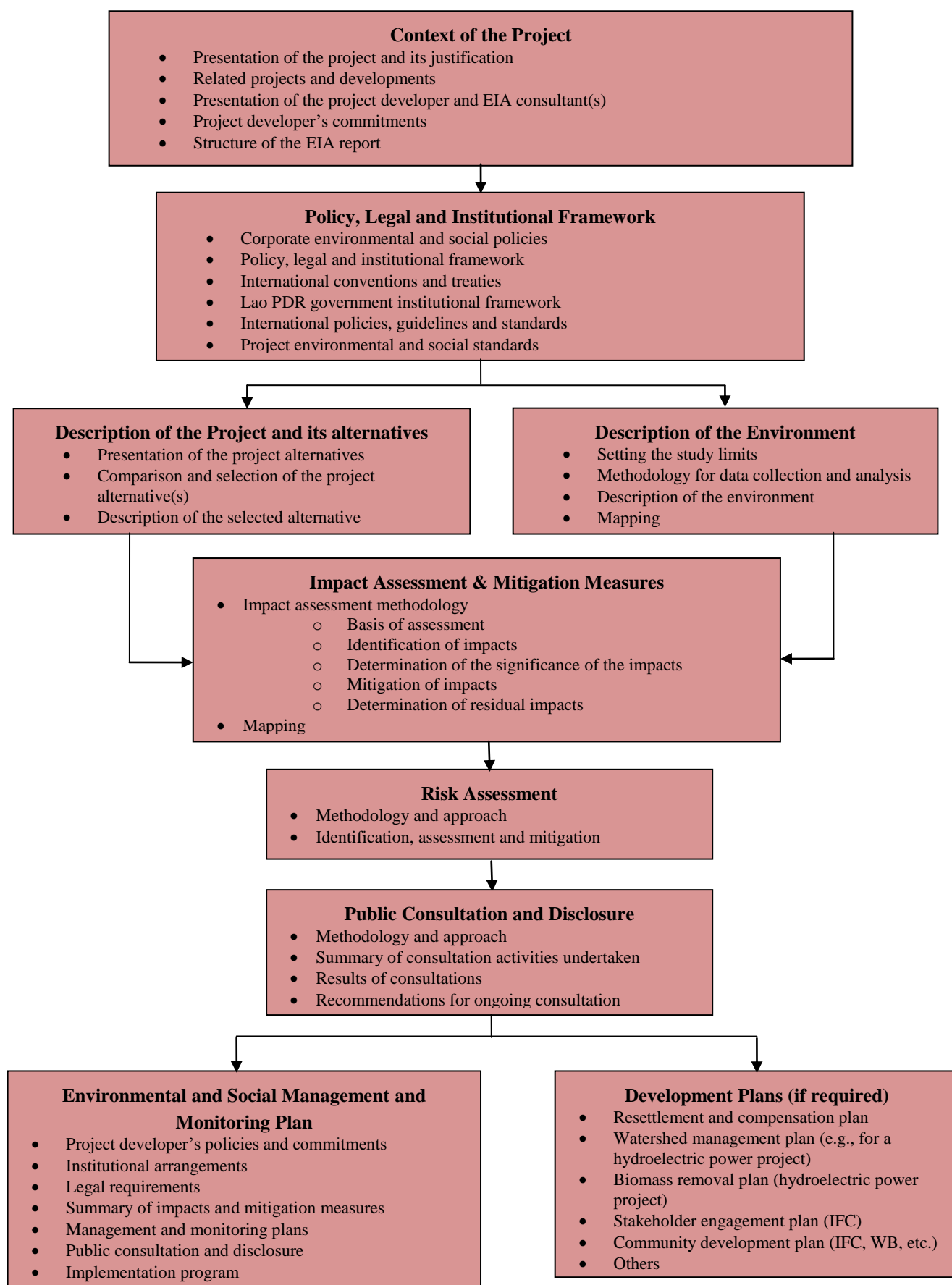
The EIA Report may be presented in a series of volumes and specialist reports according to the complexity of the project. Specific environmental and social studies (e.g., fisheries, resettlement, etc.) may be presented in separate reports, but should be summarized and their results included in the EIA Report.

The EIA Report should include the main sections presented in Figure 4.1 and summarized as follows:

- Executive Summary
- Context of the Project
- Policy, Legal and Institutional Framework
- Project Description and Alternatives
- Description of the Environment (including social aspects)
- Impact Assessment and Mitigation Measures
- Cumulative Impact Assessment
- Risk Assessment
- Public Consultation and Disclosure
- Development Plans

An Environmental and Social Management and Monitoring Report (ESMMP) shall be prepared for each EIA Report. The ESMMP should be presented in a separate volume attached as an appendix to the EIA Report (see Appendix 6, Table of Contents of EIA Report, Volume 2).

**Figure 4.1: General Structure for Preparation of an Environmental Impact Assessment**





## 4.2 Executive Summary<sup>2</sup>

EIA report shall include an executive summary, which accurately and concisely summarizes the significant findings and recommendations of the main reports and appendices. The executive summary should be able to be read and understood as a standalone document, with all information necessary to provide a clear understanding of the project, its environment, potential impacts and associated mitigation and management measures. The Executive Summary shall be written in Lao and in English.

The Executive Summary should include as a minimum the following information:

- an introduction, which will present the purpose and extent of the EIA report, and any pertinent background information such as details on the project's history, the project developers and consultants;
- a summary of the project's EIA history, including any previous studies such as scoping and TOR, etc.;
- a summary of activities undertaken during the EIA;
- the main project alternatives studied and the results of the comparative analysis, including a description of and the justification for selection of the recommended alternative;
- a description of the environment to be affected by the project. This will include details on the environmental study areas, baseline information on the physical, biological, economic, social and cultural components;
- each significant environmental and social impact of the recommended alternative, including sufficient detail on the importance, scope, and approach to management of the impacts, monitoring requirements, and institutional arrangements. This description shall consider all project phases, including design, pre-construction, construction, operation and decommissioning, closure and post-closure;
- the public involvement process undertaken, including a summary of public events, the results of these events, the main comments received, and how they were addressed in the EIA reports. This section should also include any additional public involvement activities that are required to be conducted;
- a summary of the Environmental and Social Management and Monitoring Plans (ESMMP), including the budget for implementing the mitigation and compensation measures, the human resources assigned by the project developer to implement the ESMMP, and internal and external monitoring requirements;
- a summary of any Development Plans required for the project;
- the economic assessment (cost/benefit analysis) of the environmental and social impacts and their management;
- the recommendations of the EIA;
- maps, tables, photographs and figures to provide effective visual presentation of the project, and the type and significance of the impacts.

## 4.3 Context of the Project

The introduction of the EIA Report provides the background to the EIA and the overall context of the project, including the main findings of the previous technical, economic, environmental and social studies.

The "Context of the Project" section should be divided into the following sub-sections:

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<sup>2</sup> Guidelines for the executive summary are taken from Lao PDR Department of Electricity, Ministry of Industry and Handicrafts (2001), "Environmental Management Standard, Environmental Impact Assessment for Electricity Projects," DOE (2001) no. 585/MIH.

- Presentation of the Project
- Related Projects and Developments
- Presentation of the Project Developer and EIA Consultant(s)
- Project Developer's Endorsement of the EIA Report
- Structure of the EIA Report

#### 4.3.1 Presentation of the Project

The project developer shall present the project, including the status of the project (planning, pre-feasibility, feasibility, design phases); the main elements of the project (location, capacity, type of project, length, voltage, time schedule, budget, etc.); a brief history of the project; the current status of the existing infrastructure related to the project; and the need for the project, including a detailed justification and project objectives.

The justification and need for the project should be as detailed as possible, including economical, technical, environmental, social and cultural components. The benefits to the country, the province, the district and the affected population should be well demonstrated, rather than based on general statements. Quantification of the benefits will be very useful in establishing the justification for the project.

The project developer shall summarize the main findings identified in the Scoping Report and EIA Report preparation, especially the major physical, biological, economic, social, cultural and visual issues, and the main concerns of the affected population and communities.

Any other relevant background information, such as previous technical, economic, environmental, social and cultural studies, should be presented.

A map showing the project location and the sensitive environmental and technical project components should be included with this presentation (see example in Appendix 5).

Box 4.1 presents a summary of the information that is needed to explain the project context and its justification.

Box 4.1 Information Needed to Explain the Project Context
<ul style="list-style-type: none"> <li>• Current status, including a brief project history, the current status of the existing infrastructure, available energy supply (quantity and source), etc.;</li> <li>• The scope of the project and its main components;</li> <li>• The need for the project (i.e., detailed justification);</li> <li>• Constraints due to legally established protected areas;</li> <li>• Technical and economic requirements to construct and operate the project (e.g., size of the project and schedule for completion, based on existing plans and programs);</li> <li>• Alignment with GOL Policies, socioeconomic development plans (national, provincial and district) and sector development plans;</li> <li>• Opinions of project-affected people and local communities.</li> </ul>

#### 4.3.2 Related Projects and Developments

Projects or developments related to the construction and operation of the project should be presented. For example, for a transmission line project, the related projects or developments may include the construction of a hydroelectric or thermal power plants,

distribution of electricity in the country, establishment of industrial parks or economic zones, or improvement of the energy grid. Projects that may conflict or be incompatible with the proposed project should also be presented (e.g., a mining project planned within the impoundment area of a proposed hydroelectric power plant).

#### 4.3.3 Presentation of the Project Developer and EIA Consultant(s)

The contact details for the project developer are requested, including the name of the company; the main postal address, telephone, fax, e-mail, and website details for the company; the name of the main contact person and direct postal address, telephone, fax, and e-mail details.

Recent experience of the project developer (company) with similar projects in the Lao PDR and/or other countries should be presented with appropriate references. If the project is proposed by a consortium, the experience of the consortium as well as the relevant experience of each partner should be presented.

The experience of the environmental consultant and its partners that will carry out the EIA Study should be summarized. The team leader and experts should be introduced, including their specific expertise and input to the EIA study. In addition, the name and accreditation of the laboratory that will perform the chemical or biological sampling and analysis should be provided.

#### 4.3.4 Project Developer's Endorsement of the EIA Report(s)

The project developer is fully responsible for the accuracy, completeness and soundness of the data, information, assessments, mitigation measures and budget allocations presented in the EIA Report(s). The project developers shall clearly state and document their full endorsement of the EIA Report(s), and their full commitment to implementing all measures, including the provision of necessary funds and human resources. Appendix 7 presents the Endorsement Letter that shall be filled out and attached to the EIA Report(s).

#### 4.3.5 Structure of the EIA Report

The developer should present the structure and content of the EIA report to help the reader locate information within the document.

### 4.4 Policy, Legal and Institutional Framework

This section should provide an overview of current environmental and social policies, and the legal and institutional framework under which the project is regulated, including international or regional conventions and treaties signed or ratified by the Lao PDR that are applicable to the project and the EIA study.

In addition to Lao PDR legislation, standards, directives and guidelines, this section should clarify whether the project and the EIA adhere to the environmental and social policies, standards, directives or guidelines of the project donors or other institutions.

The following sub-sections should be included in the "Policy, Legal and Institutional Framework" section of an EIA Report:

- Corporate Environmental and Social Policies
- Policy and Legal Framework
- International Conventions and Treaties
- Lao PDR Government Institutional Framework
- International Policies, Guidelines and Standards (if applicable)
- Project-Specific Environmental and Social Standards

#### 4.4.1 Corporate Environmental and Social Policies

The project developer's corporate commitments in terms of environment, social conditions, employment opportunities and health and safety policies should be summarized. These should include corporate commitments to international standards such as ISO 14001 (environmental management systems), OHSAS 18001 (Occupational health and safety management systems), AS 8003 (corporate social responsibility) or industry-specific environmental, social, security and safety codes of practice.

The current environmental, social, health, and cultural plans, strategies and systems in force within the developer's organization, including EMS manuals, procedures, forms and registers should be briefly described. Recent projects underway or completed under the developer's environmental and social management system and procedures should be presented.

Since the developer may retain a contractor and subcontractors to carry out portions of the construction or operation work, the developer shall indicate how it will ensure that its corporate environmental and social policies will be implemented.

The internationally recognized environmental and social "best practices" or "codes of practice" that will be implemented by the project developer during the construction and operation periods will be introduced.

#### 4.4.2 Policy and Legal Framework

The project developer shall describe the policies, laws and regulations of the Lao PDR that are applicable to the project or the EIA study. This presentation shall highlight which particular provisions should be taken into account in planning and implementing the project.

#### 4.4.3 International Conventions, Treaties and Agreements

The Lao PDR is a signatory to several international conventions, treaties and agreements. Those that are potentially relevant to the project should be presented, and the main elements that should be considered during project preparation and implementation should be summarized.

An **indicative** list of conventions, treaties and agreements signed or ratified by the Lao PDR as of May 2011 is presented below:

- International Plant Protection Convention (1955);
- ASEAN Agreement on the Conservation of Nature and Natural Resources (1985);
- Convention on the Protection of the Ozone Layer (1985);
- Convention Concerning the Protection of World Cultural Heritage and Natural Heritage (1987);
- The Montreal Protocol on Substances that Deplete the Ozone Layer (1987);
- UN Framework Convention on Climate Change (1992);
- International Convention to Combat Desertification (1994);
- Mekong River Commission Agreement on the Cooperation for the Sustainable Development of the Basin (1995);
- Convention on Biological Diversity (1996);
- Kyoto Protocol (2003);
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (2004).

#### 4.4.4 Lao PDR Government Institutional Framework

The jurisdictions involved in the project, and the cooperation mechanisms that will be put in place to ensure the success of the EIA and implementation of its results should be presented. The project developer should use an organizational chart to facilitate understanding of the Lao PDR government institutional organizations involved in the project.

The responsibilities of each organization during the preparation, review, approval and implementation of the EIA Report will be summarized.

This description shall ensure that the project developer understands the requirements of the Lao PDR institutions, and that these requirements are considered in preparing and implementing the EIA.

#### 4.4.5 International Policies, Guidelines and Standards (if applicable)

Projects funded by international organizations or funding agencies (e.g., World Bank Safeguard Policies, ADB Safeguard Policies, etc.) may request adherence to their own environmental and social safeguard policies, guidelines or standards. If the project is funded by an international organization, the project developer shall summarize its environmental and social policies, guidelines and standards.

Financial institutions may request that the project developer follow the Equator Principles and IFC Performance Standards during project design and implementation. The project developer shall then present the Equator Principles and the IFC Performance Standards that will be used.

If the project developer refers to policies, laws, decrees, regulations, standards from other countries, these documents shall be summarized and, if not available on the internet, the developer should provide a copy of these documents (in English) with the EIA report to ensure that the reviewing agencies can consider this information.

#### 4.4.6 Project Environmental and Social Guidelines and Standards

As a rule, the project should always adhere to the Lao National Environment Standards. However, there may be cases where a project developer is required to follow more stringent or additional standards for business reasons, due to membership in an organization, or due to contract provisions. In any case, the project developer shall specify all of the applicable standards. It should however be noted that the final decision regarding which standards are applicable lies with the competent authority of the GOL.

It is suggested that the Lao National Standards that may apply to the project be presented in a table. If needed, columns may be added to the table to show standards from other countries or international agencies (e.g., WHO, IFC, EU, USEPA). The project developer shall then identify which standards will be selected for each parameter. If the selected parameter is not the more stringent one, an explanation should be provided for this selection.

The project developer shall indicate which environmental, economic, social and health guidelines will apply to the project. For example, in the case of resettlement issues, the project developer may indicate that the IFC guidelines will be followed, rather than the Lao PDR guidelines.



## 4.5 Description of the Project and Alternatives

The project description is a crucial step in preparing an EIA report. Without detailed information on the project description, it becomes impossible to assess the environmental, economic, social, health, cultural and visual impacts of the project accurately, or to propose specific mitigation measures. Technical information about the project will be provided by the engineering team of the project developer.

The project description presented in the Scoping Report should be improved at this stage, since additional technical information and/or new project alternatives are available.

The following sub-sections should be included in the “Description of the Project and Alternatives” section of an EIA Report:

- Presentation of the Project and Description of Alternatives
- Comparison and Selection of Alternatives
- Description of the Selected Alternative
  - Technical description of the selected alternative
  - Detailed Design
  - Pre-Construction
  - Construction
  - Operation
  - Decommissioning, closure and post-closure

### 4.5.1 Presentation of the Project and Description of Alternatives

A general presentation of the project should be included in this section of the EIA Report. This presentation shall include the objectives of the project, proposed technical components by phase (i.e., pre-construction, construction, operation and decommissioning, closure and post-closure), implementation schedule, investment cost, and other details.

The EIA Report shall include the description of realistic alternatives for achieving the basic development objectives of the project. Alternatives that have already been analyzed and rejected during the scoping phase should be presented.

The EIA Report shall describe each alternative in reasonable detail to enable all potential environmental, economic, social, health, cultural and visual impacts to be identified or predicted and evaluated. At least two alternatives plus the option of not proceeding with the project should be described. This should include alternatives to the project, for example, alternate transmission line routes, alternate sources of energy, alternate project locations, different project sizes, etc. All alternatives should be considered to the same degree.

Use of maps, plans, drawings and figures to provide effective visual presentations of the alternatives is required in describing the reasonable alternatives.

### 4.5.2 Comparison and Selection of the Alternative

Based on a comparative analysis of three or more of the most pertinent alternatives, the developer must select a preferred alternative, and highlight the critical environmental, social, economic, and technical aspects of the chosen alternative. If there is only one alternative at this phase, the study shall explain the reasons for choosing this alternative and indicate why the other alternatives have not been retained for further comparison. As a minimum, the “no project” alternative shall be included in the comparative analysis.

The process to select alternatives or to select an optimal alternative shall use a comprehensive comparison method and shall satisfy at least the following criteria:

- the capacity to satisfy the demand (i.e., objectives, problems and needs);
- legal and technical feasibility (e.g., land tenure, zoning, topography, civil engineering works, and availability of human resources);
- the economic benefit of the project;
- the ability to limit the significance of negative impacts and to maximize positive impacts on the natural and human environment;
- the ability to minimize the number of people affected, and the number to be resettled;
- creation of local employment and training opportunities.

Comparison of the project alternatives should be based on environmental, social, technical and economic factors. As much as possible, the comparison between the proposed alternatives should be based on quantitative data. The final selected alternative shall be the focus of the EIA, and shall be described in detail in the following subsection.

In some cases, analysis of the alternatives may involve comparing impacts that are not easily quantifiable (i.e., that are not measured using the same criteria), and that vary in time and space. In the analysis of alternatives, biophysical and socio-economic effects are represented numerically or visually (e.g., dots or histograms that vary in size according to magnitude).

One common method is to apply weights and ranks to the various impacts, and then to aggregate the results by assigning numerical values to the expected impacts on each valued environmental or social component. Then, each alternative is compared based on a single overall measure of impacts. The greater the aggregate value for an alternative, the more serious the environmental or social impact. Numeric weights can be assigned by using the informed opinions of stakeholders.

### 4.5.3 Description of the Selected Alternative

#### 4.5.3.1 Technical Description of the Selected Alternative

The selected alternative(s) should be characterized, including describing the activities, infrastructure, construction work, and equipment required for all project phases, as well as temporary and permanent infrastructure and related installations. A cost estimate and a time schedule for the different phases of the selected alternative should be determined.

The description of the selected project alternative for the pre-construction, construction, operation and decommissioning, closure and post-closure phases should follow the generic structure and content of a project description presented in Table 4.1.

**Table 4.1 Generic Structure and Content of a Project Description**

Brief Presentation	Guidance Notes
<b>1. Sector and Subsector</b>	e.g., energy production, hydroelectric power
<b>2. Size</b>	Size can be expressed in terms of area (or length, for a road or other linear project), capacity (output or production), category/type, economic value and number of employees
<b>3. Location</b>	Overview map, typically at a scale of 1:20,000 (linear project) and 1:5,000 (single-point project). The map should include main natural features, such as water bodies, forest, existing infrastructure (roads, bridges, etc.) and human activities in the vicinity of

	the project. Human sensitive areas (schools, markets, sites or monuments of cultural importance, commercial areas, etc.) should be clearly indicated.
<b>4. Project Components</b>	Main production facilities Internal infrastructure Ancillary infrastructure and facilities
<b>5. Overall Time Schedule</b>	Present a diagram with the planned timing of: <ul style="list-style-type: none"> <li>- Studies (including the EIA study)</li> <li>- Permitting/licensing</li> <li>- Concession agreements</li> <li>- Detailed design, contracting</li> <li>- Pre-construction activities</li> <li>- Construction activities</li> <li>- Operation (lifespan)</li> <li>- Decommissioning, closure and post-closure</li> </ul>
<b>6. Project Organization</b>	Organization chart, management, roles and responsibilities, etc.
<b>Pre-construction Phase (if required)</b>	
<b>7. Overview</b>	Objectives, main activities, magnitude of the pre-construction activities, duration, etc
<b>8. Pre-Construction Activity Schedules</b>	Diagram pre-construction activities, including proposed measures to protect the environment (e.g., sedimentation basin at the site drainage outflow to reduce effect on water quality)
<b>9. Location of Project Components</b>	Site map (1:20,000 for linear projects and 1:5,000 for single-point projects) with location of project components such as temporary roads, workers camps, storage areas, clearing areas, temporary bridges, etc
<b>10. Pre-Construction Project Characteristics</b>	Detailed technical specifications for the pre-construction activities;  Topographical survey (e.g., identification of center line, vegetation clearing activities) and/or geotechnical survey (location, period of the year, duration, size);  Access negotiations;  Site preparation and pre-construction activities (deforestation, vegetation clearing, clearing of line debris, dynamiting, borrow material excavation, river crossings, removal of arable soil, use of heavy

	<p>machinery, removal of old infrastructure, etc.);</p> <p>Temporary infrastructure and related activities (access roads, bridges, heavy equipment storage areas, fuels deposits, material storage and handling areas, labor camps, sanitary facilities, project offices, etc.);</p> <p>Solid and liquid wastes (volume produced, storage and disposal areas);</p> <p>Excavation and filling (volume, source, transport, storage and deposition);</p> <p>Material and equipment used characteristic (e.g., trucks, graders, etc.)</p>
<b>11. Labour</b>	<p>Expected workforce, if possible short description of workforce per job type);</p> <p>Working hours;</p> <p>Expected origin of workforce</p>
<b>Construction Phase</b>	
<b>12. Overview</b>	Objectives, main activities, scale of the pre-construction activities, duration
<b>13. Construction Activity Schedules</b>	Construction schedule and duration (start and end dates and general sequence)
<b>14. Location of Project Components</b>	Site map at an appropriate scale, illustrating linear projects (1:20,000) or single-point projects (1:5,000), as well as the planned components. Recent air photos (satellite images) of the project area are recommended. Indicate the locations of project components such as roads, camps, mines, processing plant, storage areas, tailing dams, reservoir, power house, transmission lines, bridges, etc.
<b>15. Construction Project Characteristics</b>	<p>Detailed technical specifications for the construction activities (e.g., for a transmission line project (type of line, pylon structures, voltage capacity, servitude or ROW width) and for a substation (land occupation, project area, voltage, equipment, technical process, type of connection to the electrical network, etc.) ;</p> <p>Site preparation and construction activities (e.g., deforestation, vegetation clearing, clearing of line debris, dynamiting, borrow material excavation, river crossings, removal of arable soil, use of heavy machinery, removal of old infrastructure, etc.);</p> <p>Excavation and filling (volume, source, transport, storage and deposition);</p> <p>Number and type of construction equipment present on the construction site (noise level by mechanical</p>

	<p>equipment, duration of the construction activities with using mechanical equipment, etc.); (substation)</p> <p>Temporary infrastructure and related activities (access roads, bridges, heavy equipment storage areas, fuels deposits, material storage and handling areas, sanitary facilities, project offices, etc.);</p> <p>Permanent and temporary construction camps (location, regulations, best practices, sanitary facilities, shower, food, potable water, solid waste facilities, etc.);</p> <p>Solid and liquid wastes (volume produced and storage and disposal areas);</p> <p>Storm water treatment systems, such as retention ponds or infiltration basins; (substation);</p> <p>Rehabilitation work;</p> <p>Others</p>
<b>16. Labour</b>	<p>Health and safety measures for permanent and temporary employees (health check, first aid kits, clinic, safety devices, etc.);</p> <p>Expected workforce, if possible short description of workforce per job type);</p> <p>Working hours;</p> <p>Expected origin of workforce</p>
<b>17. Business opportunities</b>	<p>Prioritize the use of local contractor;</p> <p>Business development strategy;</p> <p>Development of partnerships with local businesses;</p> <p>Communication on the requirements of the project regarding business opportunities</p>
<b>Operational Phase</b>	
<b>18. Overview of operations</b>	<p>Project operation activities shall cover the whole project activities including, transportation, reception and storage, production process, management of the waste including storage, transport and elimination of the wastes and any other residues;</p> <p>Brief description of project components including production processes and technologies, facilities and infrastructure;</p> <p>Visual presentation of the completed project (e.g., a freehand drawing, layout);</p> <p>Presentation of production data:</p> <ul style="list-style-type: none"> <li>- Input materials (amounts/year, types, qualities and characteristics, sources);</li> </ul>



	<ul style="list-style-type: none"> <li>- Water and energy consumption and sources;</li> <li>- Outputs: Products (amounts, characteristics) by-products, waste and other emissions)</li> </ul>
<b>19. Operations schedule</b>	Time diagram presenting the main components and the main operations/processes and their respective mitigation measures
<b>20. Site layout maps</b>	Site layout maps (1:2,500 or better scale) showing the location of the main operational components
<b>21. Description of operation activities</b>	<p>Material and equipment used characteristic (e.g., transformer, noise level, oil types, containment for oil spillage, transport of equipment, etc.);</p> <p>Indicate, describe and quantify all activities producing contaminant in the environment (including air emissions, noise, water discharge, etc.) and the means and mechanisms proposed to reduce the pollution from these sources;</p> <p>Present simplified production process including drawing, sketch, etc. with the identification of inputs, outputs, management procedures and location of point source emissions and pollution (e.g., gases, liquids, solids, noise);</p> <p>Determine and characterize the liquid, solid and gaseous discharge from the production process;</p> <p>Demonstrate the capacity of the project to respect the standards for each source of pollution;</p> <p>Indicate how the project will optimize the management of the waste using the conservation principle for the resources (water, energy, raw materials, etc.);</p> <p>Flow diagram: materials, water, energy, waste and other emissions;</p> <p>Hazardous products (name and quantity, storage facility, etc.);</p> <p>Quantity of hazardous wastes;</p> <p>Materials handling, storage;</p> <p>Waste and wastewater management;</p> <p>Transport (means, timing, loads, routes);</p> <p>Others.</p>
<b>22. Labour</b>	<p>Expected workforce (if possible workforce per job type);</p> <p>Working hours;</p> <p>Expected origin of workforce</p>

	Employment program Job Opportunities (recruitment policies, skilled and unskilled jobs, labor intensive work, duration, etc.)
<b>23. Business opportunities</b>	Used of local contractors; Business development training; Development of partnerships with local businesses; Communication on the requirements of the project developer in terms of business opportunities
<b>Decommissioning, Closure and Post-Closure Phase</b>	
<b>24. Overview</b>	Closure Plan Requirements (Strategy, Policy, Objectives, performance objectives and indicators, budgets (binding estimate for closure costs), etc)
<b>25. Decommissioning Closure/Post-closure Schedule</b> /	Time diagram presenting the main activities of the decommissioning, closure and post-closure
<b>26. Decommissioning Closure/Post-closure Plans</b> /	Prepare a conceptual rehabilitation, decommissioning, closure and post-closure plan covering all project components
<b>27. Description of Decommissioning Closure/Post-closure activities</b> /	Presentation of the decommissioning, closure and post-closure activities for each project component. Presentation of the cost for implementing the decommissioning, closure and post-closure activities and funding sources
<b>28. Labour</b>	Expected reduction of workers; Social development plan; Time period for lay out

Visual aids such as maps, cross-sections, 3D views, freehand drawings, technical design drawings, and diagrams are very useful and helpful for providing the reader with a good understanding of the project.

#### 4.5.3.2 Detailed Design

Usually, an EIA study is carried out during the feasibility study phase of project planning, i.e., before the detailed design phase. On one hand, this means that the results of the EIA can be fully integrated into the detailed design and construction contract specifications. On the other hand, it also means that changes made during the detailed design may have significantly different impacts than those foreseen in the EIA. Such changes may require supplementary or even revised EIA studies. There are no fixed thresholds for when additional EIA studies may be required. The best way to avoid this situation is for the project developer to maintain an open dialogue with the competent authorities throughout the EIA studies, to report all uncertainties, and to make clear where decisions have yet to

be finalized. The developer may then come to an understanding with the authorities on how to deal with such cases.

For example, in large projects, it is not uncommon for the exact design and location of certain facilities to be decided quite late in the detailed design phase. If these facilities have well known, predictable and manageable impacts, then the usual way of managing such situations is to define the design and location criteria in the EIA Report, then include the selected design and location in the subsequent updated Construction Phase ESMMP and/or Operational Phase ESMMP for approval. However, in other cases, the design and location may be crucial to the significance of impacts and their mitigation. If not clarified and defined in advance, failure to base the EIA studies on the final design and location may render the studies incomplete.

## 4.6 Description of the Environment

The description of the baseline conditions of the existing environment shall detail information on the physical, biological, economic, social, cultural and visual components. This description shall also include details of the interrelationships between the components and the importance of such relationships.

The results of the Scoping Report shall be used to identify the level of detail required for the description of the environment. It is important to describe only the physical, biological, economic, social, cultural and visual components that are needed for the assessment in this section. Descriptions that provide general information at the scale of the country as a whole should be limited, given that the EIA should focus on the project and its surrounding area.

The following sub-sections should be included in the “Description of the Environment” section of an EIA Report:

- Setting the Study Limits
- Description of the Environment
  - Physical Components
  - Biological Components
  - Socio-Economic Components
  - Cultural Components
  - Visual Components
- Mapping

### 4.6.1 Setting the Study Limits

The EIA shall define the boundaries of the study areas and justify the chosen limits. The study areas should already have been defined in the Scoping Report, but may be adjusted due to changes in the project during the feasibility study and/or EIA study. The area or areas identified (i.e., there may be more than one study area) will include all anticipated direct and indirect impacts, as well as all project-related activities such as access roads.

For example, for a transmission line project, an area 2 km wide surrounding the selected route is analyzed in order to identify the environmental, social, cultural and visual impacts of the line (Appendix 8). The width of 2 km is dictated by visual impacts. The level of detail requested is at a scale of 1:20,000, or larger if a valued ecosystem component is present. If the transmission line crosses an urban or residential area, the level of detail will be studied and presented at a scale of 1:10,000 or larger.

For a substation, the study area will be defined as a circle of 2 km radius around the substation. The level of detail requested is at a scale of 1:10,000, or larger if a sensitive environmental or social component is present.

For an industrial project, the limits of the study area may depend on the impacts of air emissions, water contamination and noise. The study area will be presented at different scales according to the information illustrated. For example, for air emissions, the study area may cover an area of 5 or 10 km around the site, so it will be better to present the air pollution contours at a scale of 1:50,000 or 1:100,000. However, for valued ecosystem components near the factory, the level of detail requested will be at a scale of 1:10,000 or larger.

#### 4.6.2 Methodology for Data Collection and Analysis

Baseline environmental and social data will be collected in a systematic and logical way, using nationally or internationally recognized methodology for each specific physical, biological, economic, social, cultural and visual component. Sampling and analysis shall be conducted using calibrated and certified equipment, and certified laboratories. The procedures used by the consultant to ensure adequate quality control shall be detailed.

The sources of secondary data for each physical, biological, socio-economic, cultural and visual sub-component must be clearly identified. The value of this information shall be assessed considering the methodology used to collect and analyze these data, as well as the date of the sampling or data collection.

The EIA Report shall clearly indicate which information is primary or secondary data.

For health impact assessment, the project developer should use the methodology proposed in the *Practical Guideline on Health Impact Assessment in the Lao PDR (draft)* prepared by the Ministry of Health.

Recent high-resolution satellite imagery should be used for description and presentation of the physical, biological, economic, social, cultural and visual components of all projects. This information will improve the accuracy of the data provided in the EIA Report (i.e., land use, vegetation cover, etc.), and will facilitate the assessment of the project impacts.

#### 4.6.3 Description of Environment

The EIA shall describe the state of the environment in the study area before the start of construction activities. The current condition of sensitive physical, biological, economic, social, cultural and visual components that could be affected by the project should be described. These descriptions should focus on and be supported by quantitative and qualitative data that are relevant to the project.

The project developer shall carry out field surveys to collect relevant data using state-of-the-art methodologies. In addition, the developer should use secondary data from government offices, NGOs, regional organizations (MRC, ADB, etc.) to complete the baseline data. The sources of the secondary data should be clearly identified.

The information collected should be summarized on maps to facilitate understanding of the environmental and social context, and the analysis of environmental and social impacts. The scale of the maps at this phase should be at 1:20,000 in rural areas and 1:5,000 (or more detailed) in urban areas (see example in Appendix 8).

##### 4.6.3.1 Physical Components

The physical components selected for study and the level of detail at which they are described should correspond to their importance or value in the study area(s). The Scoping Report and the TOR will provide a basis for selection of the physical components to be studied and the level of information requested about these components. During preparation of the EIA study, it is possible that previously unforeseen impacts that may be identified that may require additional surveys.

The physical components typically described in an EIA Report are:

- Climate (existing data cumulated on a period of several years)
  - Rainfall (dry and rainy season),
  - Humidity
  - Evaporation
  - Temperature and
  - Wind;
  - Climate change
- Topography;
- Geology (including risk of earthquakes);
- Geomorphology;
- Soil: Nature of the soil and arable land surface, potentially contaminated sites, lithology, slopes, areas sensitive to erosion and land movements / landslides;
- Sediments:
  - Metals
  - Sedimentation process (i.e., erosion and accumulation areas).
- Surface water hydrology
  - Bathymetry and hydrodynamic conditions (i.e., water flow at the surface and at the bottom);
  - Runoff, flood flows, low flows, evaporation
  - Flooding areas;
- Surface water: Aquatic and semi-aquatic environments, wetlands, and flood-prone protection areas for each location where a water crossing or encroachment is proposed:
  - Physical, chemical, and bacteriological quality of the surface water;
  - Total suspended solids, pH, conductivity, alkalinity, sulfate, metals, nitrogen compounds
  - Nature of the substratum of the watercourse bed;
  - Use of the watercourse;
- Groundwater
  - Location of groundwater sources (wells, springs, etc.)
  - Quality (pH, conductivity, alkalinity, sulfate, metals, nitrogen compounds)
  - Flows, volume
- Ambient air quality. For example, in residential areas, emissions and their concentrations due to road traffic and other sources of air pollution (particulate matter PM<sub>10</sub>);
- Ambient noise
  - Noise level (L<sub>Aeq</sub> 1 hour, L<sub>Aeq</sub> 24 hours, L<sub>90</sub>, L<sub>50</sub>, L<sub>10</sub>)
  - Location of sampling points in sensitive areas (hospital, school, residential areas, recreation areas, etc.)
  - Isophone contour map illustrating the following three period L<sub>Aeq</sub> day (7h – 19h), evening (19h – 22h), night (22h – 7h)
  - All detailed information providing the context of the measurement results.

The description of the physical components should include the potential natural hazards of the area, including potential hazards due to climate change.

#### 4.6.3.2 Biological Components

The biological components selected for study and the level of detail at which they are described should correspond to their importance or value in the study area(s). The Scoping Report and the TOR will provide a basis for selection of the physical components to be studied and the level of information requested about these components. During preparation of the EIA study, it is possible that previously unforeseen impacts that may be identified



that may require additional surveys. To the extent possible, the description of the natural (physical and biological) environmental components should present the functional relationships and interactions between these components. This will enable particularly sensitive or important ecosystems to be identified. For example, the presence and abundance of animal species and relevant aspects of their life cycle (e.g., migration, reproduction, and food supply habits) should be highlighted. The inventories should reflect the social, cultural, and economic values assigned to the described component.

In some cases, the components may require preparation of technical reports by a biological expert. For example, an ornithologist may be required to provide information on bird migration and risks associated with a transmission line. These technical reports may be attached as appendices to the main EIA report, and summarized in the EIA report.

The biological components typically described in an EIA report are:

- Wetlands
  - Characteristics
  - Existing and future use
  - Presence of fragile or exceptional wetland
- Flora species and their habitats
  - Abundance
  - Distribution
  - Diversity
  - Rare, endangered, or vulnerable species
  - Riparian vegetation
  - Species of social, economic, cultural, or scientific interest (i.e. NTFP, etc.)
- Fauna species and their habitats (Mammalians, Reptiles, Amphibians, Birds)
  - Abundance
  - Distribution
  - Diversity
  - Migration
  - Rare, endangered, or vulnerable species
  - Species of social, economic, cultural, or scientific interest (i.e. NTFP, etc.)

#### *4.6.3.3 Socio-Economic Components*

The socio-economic components selected for study and the level of detail at which they are described should correspond to their importance or value in the study area(s). The Scoping Report and the TOR will provide a basis for selection of the physical components to be studied and the level of information requested about these components. During preparation of the EIA study, it is possible that previously unforeseen impacts that may be identified that may require additional surveys.

If resettlement and compensation constitute a major socio-economic impact of the project, the results of the Resettlement Action Plan should be summarized and included in the EIA Report.

The typical socio-economic components described in an EIA Report are:

- Social and health profiles of the communities (mapping the location the potentially affected population)
  - Social profile, including key demographic indicators of the potentially affected villages, compared with the district and national indicators:
    - Total number of people and families who will be required to leave the villages and district;
    - Total number of people living in the villages and district;
    - Population density;
    - Ethnic distribution of people living in the community/villages;

- Age distribution of people living in the community by ethnicity;
  - Sex distribution of people living in the community by ethnicity;
  - Dependency ratios (ratio of non-working children and elderly population to adult population capable of earning income) by ethnicity;
  - Type of domestic and family units (e.g., single family households versus multiple family unit compounds, or both; single parent versus married couple “nuclear family” households) by ethnicity;
  - Demographic problems, such as high immigration or emigration rates;
  - Significant changes in any of the above during the past 50 years;
  - Political and social organizations;
  - Education:
    - formal educational structure, and alternatives or complementary educational systems (e.g., religious education);
    - median adult educational achievement level, and the adult literacy level of the population;
    - access to education services, and barriers to educational achievement;
  - Housing conditions;
  - Gender issues;
  - Vulnerable groups.
- Health profile of communities in the study area. Health indicators should be compared with district and national values.
    - Mortality and morbidity;
    - Incidence of infectious diseases such as malaria, dengue fever and other waterborne diseases, tuberculosis (TB), HIV/AIDS, and STDs;
    - Incidence of chronic diseases, including cardiovascular diseases, cancer, and respiratory diseases such as asthma and bronchitis;
    - Diet and nutrition;
    - Mental health and wellbeing, mentioning rates of substance abuse, suicide, criminality;
    - Health-seeking behavior, including traditional medicine, birth practices, etc.
    - Health programs in the area, NGO interventions, etc.
    - Availability of health services, including transport, network and access to medicines;
    - Access to drinking water, sanitation and waste management.
- Local, district and provincial economy
    - employment sectors and unemployment levels;
    - traditional production systems, including gender roles;
    - use of the forest and other natural resources;
    - household income;
    - cost of living;
    - land ownership;
    - local business.
- Existing and planned use of the territory according to national, provincial, and district development plans, and to the laws, decrees and policies in force. Describe and illustrate on a map where relevant:
    - Existing housing concentrations, urban or residential areas, residential development projects;
    - Industrial and commercial areas and future developments;
    - Agricultural areas, agricultural activities, irrigation and drainage;

- Forest areas;
    - Protected forest;
    - Conservation forest;
    - Productive forest.
  - Areas with recreational, educational, historical, or aesthetic value;
  - Public infrastructure and access to public services
    - Roads;
    - Navigation and ports;
    - Airports;
    - Transmission lines;
    - Electricity;
    - Potable water distribution systems;
    - Sewers;
    - Pipelines;
    - Hospitals;
    - Kindergartens;
    - Schools;
    - Temples;
    - Cemeteries.
  - Water sources, including private and public wells, and other installations for collecting water;
  - Protected areas around the water-collecting installations;
  - Energy sources.
- UXO;
  - Concerns and opinions of the local communities, especially the affected population.

The socio-economic components should include reference to populations who may be vulnerable to natural hazards in the study area.

#### *4.6.3.4 Cultural Components*

Cultural components should be described in a way that enhances understanding of local communities, their use of various environmental components, and their views on the project. As for the other components, the relevant cultural components should already have been identified in the Scoping Report and TOR.

The cultural components typically described in an EIA report are:

- Cultural heritage
  - Archaeological sites;
    - Potential archaeological areas;
  - Cultural, traditional and/or tourism sites;
  - Other elements of heritage interest, whether protected by law or not.
- Ethnic Groups
  - Location;
  - History;
  - Cultural norms and social forms;
  - Traditional way of life.

#### 4.6.3.5 Visual Components

Visual components should be described, especially in sensitive areas like urban centers, tourism sites, protected areas, etc. The EIA Report should include photographs of visual components that will be affected. Visual analyses should be performed by experts using appropriate methodology.

The visual components typically described in an EIA Report are:

- Local topography;
- Karst relief;
- Woodland extent and type;
- Other vegetation types;
- Built forms (architecture);
- Settlement patterns;
- Land use;
- Details of local materials, styles, etc.;
- Prominent watercourses;
- Cultural and religious identity;
- Visual features; and
- Landmarks.

#### 4.6.4 Mapping

Mapping should be presented at two different levels of detail. Initially, thematic maps at a scale of 1:300,000 showing the major environmental and social components at the district or provincial level should be presented to illustrate the location of these components within and surrounding the project study area. The thematic map should locate the most sensitive components of the project (residential areas, historical places, paths of particular landscape value, viewing points, roads, bird migratory corridors, land use, forest conservation areas, natural hazards, etc.).

The physical, biological, socio-economic, cultural and visual components should be mapped at a scale of 1:20,000 for linear projects. For major developments such as hydroelectric or mine projects, these components should be mapped at a scale of 1:20,000 to 1:10,000, according to the significance of the environmental and social potential issues identified. The study area for an industrial project should be mapped at a scale of 1:10,000. The physical, biological, socio-economic, cultural and visual components will be identified with an appropriate legend that shows all spatial information presented in the EIA report (name of villages, watercourses, roads, etc.).

Examples for preparation of thematic maps (project presentation) and descriptions of the environment (environmental and social baseline data) are presented in Appendices 7 and 8, respectively.

### 4.7 Impact Assessment and Mitigation Measures

The project developer shall identify the impacts of the project for each project phase (i.e., pre-construction, construction, operation and decommissioning, closure and post-closure), and assess the significance of impacts using appropriate methodology and criteria.

The following sub-sections should be included in the “Impact Assessment and Mitigation Measures” section of an EIA Report:

- Impact Assessment Methodology
- Identification of impacts
  - Pre-Construction

- Construction
- Operation
- Decommissioning
- Impacts, mitigation measures and residual impacts
  - Pre-Construction
  - Construction
  - Operation
  - Decommissioning, closure and post-closure

#### 4.7.1 Impact Assessment Methodology and Approach

The EIA Report shall describe the approach and methodology applied for identification and assessment of impacts. The methods and techniques used for the identification and determination of the significance of the impacts should be as objective, concrete, and reproducible as possible. Once the methodology is defined, the project developer shall use it systematically for each identified impact.

For health impact assessment, the project developer shall follow the methodology presented in the *Practical Guideline on Health Impact Assessment in the Lao PDR (draft)* prepared by the Ministry of Health.

A trans-boundary impact assessment should be conducted if the project may cause impacts in neighboring countries.

##### 4.7.1.1 Scope of Assessment

This section should present the context of the assessment. It is important to describe any agreement that can affect the scope of the assessment. For example, some impacts may not be included in the assessment since these activities were completed by the Lao PDR Government before the start of the project (e.g., if resettlement and compensation have been completed before the project start).

##### 4.7.1.2 Identification of Impacts

Generally accepted impact identification tools are presented in Appendix 3. Use of control tools (checklists, matrixes, and/or other available instruments) to identify impacts on the environmental components is highly recommended. These control tools should be presented in the EIA Report to facilitate the review, and to ensure that all impacts have been considered carefully.

The source of the impacts should be clearly identified, as well as the environmental, socio-economic, cultural or visual components affected.

##### 4.7.1.3 Determination of Impact Significance

The methodology for the assessment should consider project-related impacts that are positive, negative, direct, indirect, and, if applicable, impacts that are cumulative, synergistic, reversible, and irreversible. Impact significance should be clearly presented. The significance of an impact depends on a number of factors such as:

- The intrinsic value of the affected ecosystem component(s) (i.e., sensitivity, uniqueness, rareness, and reversibility);
- The social, cultural, economic, and aesthetic values attributed to the component(s) by the population. The more the population values a component in an ecosystem, the more likely the impact on this component will be considered significant;



- The level of concern of the population regarding health and safety issues, or regarding protection of their archaeological sites;
- Whether the affected environmental component(s) have already undergone modifications.

The impact intensity is determined by the degree of disturbance and the environmental value of the component under consideration. The degree of disturbance assesses the magnitude of the modifications to the structural and functional characteristics of the affected components. The environmental value reflects the importance of the intrinsic and social values of the components affected by the project. Impact determination should also consider the spatial extent of the impact (distance or relative area impacted, proportion of the component affected) and the temporal duration of the impact on the project-affected component. The criteria and procedures to establish impact significance are presented in Appendix 9.

In terms of presentation, it is highly recommended to describe each specific impact by presenting the following elements in succession:

- the assessment
- proposed mitigation measures
- residual impact
- additional mitigation or compensation measures, if required to minimize the residual impact.

Dividing the project impacts and the description of the mitigation measures into separate chapters of the assessment is not recommended.

The assessment of each project impact should be performed systematically. The presentation of the impacts should clearly indicate the source of impact (how), the duration (when), the reason this impact occurs (why), and the intensity and the significance of the impact.

### Modeling

Modeling may be required to determine the significance of the project impacts for various kinds of projects (industry, mining, hydroelectric power, substation, etc.), and to ensure the efficiency of the mitigation measures. Modeling may also be used to assess natural hazards and climate change impacts. Modeling should be performed using international models and standards, and should be based on quantitative data.

In most cases, modeling can be performed for hydrology, water quality, noise, air quality and impacts on climate, biology and ecology.

Results from spatial models (e.g., noise contours) should be presented on a map at an appropriate scale. For example, noise contours along a road should be presented at a scale of 1:5,000 (or larger) to enable the components affected by the project to be identified and located (e.g., number of houses, schools, hospitals, etc.).

Results from dynamic models, for example, models that produce water quality time series data, should be presented as curves or bar charts. The temporal resolution shall match the time scale inherent in the system being modeled (e.g., a river catchment model with a 1-day time step should not be used to simulate 100-year scenarios).

Results from models that are both dynamic and spatial can be presented as animated contours. Both temporal and spatial scales used by the models shall match the scales of the system being modeled.

#### 4.7.1.4 Mitigation of Impacts

The purpose of impact mitigation is to reduce the negative effects of the predicted adverse impacts on the environment. Detailed objectives of mitigation measures are described in Box 4.2.

##### **Box 4.2: Objectives of Mitigation Actions Intended to Reduce Adverse Impacts**

Mitigation measures are intended to eliminate, offset, or reduce adverse environmental impacts, and could have a range of objectives, such as:

- *Avoidance:* Avoiding projects or activities that could result in adverse impacts; avoiding certain types of resources or areas considered to be environmentally sensitive. This approach is most effective when applied in the earliest phases of project planning.
- *Prevention:* Measures intended to prevent the occurrence of negative environmental impacts.
- *Preservation:* Preventing any future actions that might adversely affect an environmental resource. This is typically achieved by extending legal protection to selected resources beyond the immediate needs of the project.
- *Minimization:* Limiting or reducing the degree, extent, magnitude or duration of adverse impacts. This can be achieved by scaling down, relocating, or redesigning elements of a project.
- *Rehabilitation:* Repairing or enhancing affected resources, such as natural habitats or water sources, particularly when previous development has resulted in significant resource degradation.
- *Restoration:* Restoring affected resources to an earlier, and possibly more stable and productive state, typically to “pristine” condition.
- *Compensation:* Creation, enhancement, or protection of the same type of resource at another suitable and acceptable location to compensate for lost resources. It should be noted that compensation may be a suitable mitigation measure for certain impacts of certain projects, but it is often not a long-term solution.

*Source:* EMP Guidelines, South Africa, June 2005

For each project phase, the EIA Report shall specify the actions, infrastructure, design modifications, additions, or any other actions required to reduce the intensity of the impact. Mitigation measures can also be used to improve the benefit of positive impacts. Detailed, site-specific mitigation measures shall be defined for each impact identified.

Mitigation measures shall be as detailed as possible. Vague or uncertain commitments (e.g., where possible, if necessary, if required, etc.) are generally unacceptable. Impacts and mitigation measures that can be located by geographic coordinates should be presented on a map. The cost of implementing the mitigation measures should be estimated and presented in the EIA Report. Indicators that evaluate the efficiency of the mitigation measures should also be provided.

#### *Incorporate Mitigation Measures into the Design and Procurement Documents*

For the results of the EIA to be effectively incorporated into the project design, the environment team shall coordinate with the technical / engineering team during the preliminary and detailed design process. Important mitigation measures should be incorporated into the project technical specifications and/or the Bill of Quantities. Non-technical measures (e.g., compensation and resettlement) should be dealt with at the appropriate level and with the appropriate responsible institutions. Responsibility for

implementing each mitigation measure should always be clearly defined and accepted by the responsible agency.

For mitigation measures that are to be incorporated into the design, drawings / maps should be prepared to locate the impacts and define exactly what needs to be done in the design.

#### *4.7.1.5 Determination of Residual Impacts*

Where mitigation measures are unable to eliminate or reduce the impacts to an acceptable level (residual impacts), the EIA Report should determine how these impacts will be addressed. For example, “in kind” compensation is sometimes done by replanting trees in other areas to compensate for deforestation in the project area.

#### *4.7.1.6 Mapping*

Impacts that can be located on a map should be presented on an impact identification and assessment map at a scale of 1:20,000 for linear projects or 1:5,000 for single-point projects (e.g., factory, mine, etc.).

### *4.7.2 Identification of Impacts*

The project developer shall identify all potential sources of impacts to the physical, biological, health, social, economic, cultural and visual components of the environment for the following project phases:

- Pre-Construction;
- Construction;
- Operation;
- Decommissioning.

For each subsection below, the project activities should be summarized in a matrix or table to enable identification of project impacts. The matrix or table (see example at Appendix 3) will show the relationship between the main sources of impacts and the potentially affected physical, biological, social, economic, cultural and visual components of the environment.

#### *4.7.2.1 Pre-Construction*

During the pre-construction phase, the main sources of impact generated by the project will depend of the type of activities carried out. For example, pre-construction activities may include:

- Topographic survey;
- Site leveling;
- Resettlement;
- Construction of resettlement sites;
- Construction of access road;
- Exploration (drilling, access road, construction of platform, accommodation camps, airport, etc.);
- Presence of workforces;
- UXO detection and clearance, etc.

#### *4.7.2.2 Construction*

Impact sources during the construction phase depend on the type of construction activities undertaken, the construction methods and construction equipment used, the plant equipment fabricated onsite, chemicals or materials used, source and amount of utility usage, duration of site work, etc. Construction impacts may be generated at the main construction site as well as in other areas that need to be considered.

Project construction activities and sources of impact may include:

- Building access roads;
- Opening and operation of borrow pits, quarry sites, etc.;
- Site clearing;
- Topsoil removal;
- Earthwork and excavation, including using dynamite and drilling;
- Installation of structures;
- Pipeline installation;
- Cleaning and hydraulic testing;
- Transportation of materials;
- Power generation;
- Painting activities;
- Welding and cutting activities;
- Presence of workforce;
- Air emissions;
- Noise;
- Wastewater discharges;
- Solid wastes;
- Hazardous wastes;
- Accidents;
- Workers' accommodation;
- In-migration
- Employment
- Local business development; etc.

#### *4.7.2.3 Operation*

The project activities or sources of impact during the operational phase will vary greatly from one project to another. For an industrial project, these may include air emissions, noise, liquid effluents, solid wastes, hazardous wastes, etc. generated from the process units. These project activities or sources of impacts may include:

- Operation (fluctuation of water levels in the reservoir for a hydroelectric power plant, increase in road traffic for a new road, etc.);
- Maintenance activities (vegetation clearing for a transmission line or for a road, etc.);
- Transportation;
- Air emissions;
- Noise;
- Water supply;
- Wastewater discharges;
- Solid wastes;
- Hazardous wastes;

- Workers' accommodation;
- Employment;
- Accidents;
- Site restoration; etc.

#### *4.7.2.4 Decommissioning, closure and post-closure*

The sources of impact during the decommissioning, closure and post-closure phase are often difficult to determine since the project life could last for 50 or 75 years. However, it is important to undertake the exercise of identifying the post-closure impacts to ensure that the major consequences can be planned for and incorporated in the feasibility and design phases. These sources of impacts may include:

- Demolition of buildings and infrastructure (pipelines, access roads, water supply sources, etc.);
- Removal and disposal of residues, including hazardous wastes;
- Site decontamination;
- Site rehabilitation;
- Maintenance of structures (tailings, etc.);
- Wastewater discharges;
- Transportation;
- Solid wastes;
- Hazardous wastes;
- Accidents.

### *4.7.3 Impacts, Mitigation Measures and Residual Impacts*

#### *4.7.3.1 Overview of the Impacts*

The description of each project phase should start with an overview of the identified impacts, their causes, significance, mitigation and residual impacts. This overview may be thematic (air, water, waste etc.) and/or site specific.

#### *4.7.3.2 Description of the Impacts, Mitigation Measures and Residual Impacts*

The description of the impacts will present the assessment of the impacts, the proposed mitigation measures, and the residual impacts by project phase (pre-construction, construction, operation, decommissioning, closure and post-closure).

The primary impacts, mitigation measures and residual impacts may be described and assessed thematically, or by site. While there are no clear or stringent rules for selection of themes, the following themes are commonly used:

- **Physical Impacts:**
  - Surface Water Quality;
  - Groundwater Quality;
  - Surface Hydrology;
  - Erosion and Sediment;
  - Air Quality;
  - Noise;
  - Vibration;
  - Climate;
  - Others
- **Biological Impacts:**



- Forest;
  - Flora;
  - Fauna (e.g., facilitation of wildlife trade);
  - Biodiversity;
  - Terrestrial Ecosystems;
  - Aquatic Ecosystems;
  - Riparian Ecosystems;
  - Others
- **Socioeconomic Impacts:**
    - Economic development;
    - Employment;
    - Education and training;
    - Resettlement, land acquisition and compensation;
    - Public health and nutrition (e.g., infectious diseases, chronic diseases, nutritional disorders, physical injuries, mental health and wellbeing);
    - Occupational health and safety;
    - Demographic changes (e.g., in-migration, emigration);
    - Gender;
    - Ethnic groups;
    - Vulnerable groups;
    - Land use change;
    - Traditional livelihoods and production systems;
    - Access to natural resources: (e.g., NTFP, water, fisheries, wood for fuel, etc.);
    - Local business and existing productive activities (e.g., fisheries, agriculture, forestry, industry, mineral resources, tourism, etc.);
    - Communication and transportation, including navigation;
    - Vulnerability to natural hazards and climate change;
    - UXO;
    - Others
  - **Cultural Impacts**
    - Cultural Heritage;
    - Archaeology;
    - Traditional Values and Lifestyle;
    - Others
  - **Visual Impacts**
    - Aesthetics;
    - Landscape (e.g., karst);
    - Cultural, traditional or tourism site;
    - Others

### Large or Complex Projects

If the project is large in area and includes many sites affecting different ecosystems (e.g., for projects such as a mine, hydropower, transportation projects, etc.), it is advised that the impacts be reported both thematically and site-specifically.

An example of the structure of this section of the EIA report for such site-specific large projects is presented in Box 4.3. The same format should be used for all project phases.

### Box 4.3 Example of Site Specific Presentation of Impacts, Mitigation Measures and Residual Impacts for a Bauxite Mine and Refinery Project

1. Bauxite mine	2. Refinery
1.1 Pre-construction phase	2.1 Pre-construction phase
1.1.1 Physical impacts	2.1.1 Physical impacts
1.1.1.1 Erosion	2.1.1.1 Noise
<ul style="list-style-type: none"> <li>• Project activities</li> <li>• Potential impacts</li> <li>• Mitigation measures</li> <li>• Residual impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Project activities</li> <li>• Potential impacts</li> <li>• Mitigation measures</li> <li>• Residual impacts</li> </ul>
1.1.1.2 Others	2.1.1.2 Others
1.1.1 Biological impacts	2.1.2 Biological impacts
1.1.1.1 Fauna	2.1.2.1 Fauna
<ul style="list-style-type: none"> <li>• Project activities</li> <li>• Potential impacts</li> <li>• Mitigation measures</li> <li>• Residual impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Project activities</li> <li>• Potential impacts</li> <li>• Mitigation measures</li> <li>• Residual impacts</li> </ul>
1.1.2 Socioeconomic impacts	2.1.3 Socioeconomic impacts
1.1.3 Cultural impacts	2.1.4 Cultural impacts
1.1.4 Visual impacts	2.1.5 Visual impacts
1.2 Construction phase	2.2 Construction phase
1.3 Operation phase	2.3 Operation phase
1.4 Decommissioning, closure and post-closure phase	2.4 Decommissioning, closure and post-closure phase

#### Description of the Impacts, Mitigation Measures and Residual Impacts

Each impact will be described in detail, with the description of the project activities that are the source of impact; the reasons why the impact occurs; its intensity, duration, extent and significance. The mitigation measures for each impact will determine exactly which actions need to be taken and will be budgeted. The responsible authority for implementation of the mitigation measures will be identified. The result of the proposed implementation measures should be determined, and the residual impacts assessed.

The description of the each impact should include the following sub-sections:

- Project Activities;
- Potential Impacts;
- Mitigation Measures;
- Residual Impacts;
- Responsibility for Implementation;
- Responsibility for Monitoring

The methodology used by the project developer to determine the significance of the impact should be applied systematically for each project impact.

## 4.8 Risk Assessment

### 4.8.1 Overview

The project developer is requested to conduct a qualitative hazard and risk assessment to identify and assess the key risks of each major component of the project and associated facilities, during the construction, operation, and decommissioning, closure and post-closure phases. Hazards and risks to people (including both project-related personnel and the general public) and to the environment should be assessed.

Hazard and risk identification and reduction workshops should be held during the detailed design and initial site mobilization phases. These workshops allow the assessment to be refined, and further controls to be incorporated in the final project design as necessary.

The following sub-sections should be included in the “Risk Assessment” section of an EIA report:

- Context of the qualitative risk assessment
- Methodology and approach
- Results of the qualitative risk assessment
  - Construction
  - Operation
  - Decommissioning, closure and post-closure
- Quantitative risk assessment (if needed)

### 4.8.2 Context of the Qualitative Risk Assessment

The external, internal and risk management context in which the rest of the process will take place should be determined. Criteria against which risk will be evaluated should be established and the structure of the analysis defined.

### 4.8.3 Methodology and Approach

Hazards and risks to humans and facilities, including natural hazards and climate change, are defined as those which are considered to be possible but unlikely to occur during the normal course of project implementation.

The methodology used for identification, assessment and mitigation of hazards and risks that should be considered in preparing the EIA should be presented by the project developer.

The hazard and risk assessment should be based on the experience of the project developer, engineers and environmental consultant in developing and operating similar projects in similar environmental and social settings. Hazards and risks should be identified in close collaboration between the project engineers and the environmental and social consultants.

The risk assessment should be conducted by examining the potential consequences (i.e., a measure of severity of the impact) and the likelihood that those impacts will occur. The assessment of ‘likelihood’ applies specifically to the resulting impact. Often a final impact results from a chain of events, each with an associated likelihood. These ‘conditional likelihoods’ should be considered when determining the final likelihood of the impact occurring.

The risks should be qualitatively evaluated, whereby a number of categories are used to describe the consequences of each impact and the likelihood of that impact occurring. Appendix 10 presents an example of the methodology used for qualitative risk assessment.

If extreme risks are identified and assessed qualitatively, the project developer shall undertake a specific quantitative risk assessment to better evaluate and manage the risk.

#### 4.8.4 Results of the Qualitative Risk Assessment

The results of the risk assessment should be presented for the following project life-cycle phases:

- Pre-Project
- Construction
- Operation
- Decommissioning, closure and post-closure

For the pre-project period, the EIA Report shall present the existing risk (i.e., before the start of the project), such as, for example, the risk of bush fires.

All risk assessments shall include a description of the risks, their assessment (likelihood, consequence and significance of the risks), proposed mitigation measures, and residual risks.

Based on the impact and risk assessments, the project developer shall adopt design, operating and control measures with the specific objective of preventing accidents associated with development and operation of the project. In addition, the project developer shall adopt the following general safeguards during the life of the project:

- Develop and implement emergency response plans (including spill response), and procedures for accidents and hazardous events;
- Coordinate and communicate emergency response plans to local authorities and involved institutions, and inform the local population;
- Develop and implement corporate and operational risk management plans;
- Conduct induction training and periodic refresher training for all employees and contractors on all aspects of safety, including site-specific safety regulations;
- Perform government statutory compliance, notification and liaison requirements and procedures.

These control measures should be included in the ESMMP as specific Management and Monitoring Plans. The requirement for these specific management plans will ensure that the risk for each of the key environmental and social factors is reduced to ALARP (“as low as reasonably practicable”).

#### 4.8.5 Results of the Quantitative Risk Assessment

The project developer shall undertake A specific quantitative risk assessment if significant residual risk is identified. This quantitative risk assessment should be performed by a specialist following internationally recognized methodology. The quantitative risk assessment should be presented in a separate volume, and a summary presented in this section of the EIA Report. The ESMMP shall include the Management and Monitoring Plan resulting from this analysis.

### 4.9 Cumulative Impact Assessment

Preparation of a cumulative impact assessment is required for projects that may affect other investment projects (Decree 112/PM, Article 4(5)). International institutions such as the IFC request assessment of cumulative impacts for all projects.

The project developer will be required to carry out a cumulative impact assessment if critical cumulative environmental or social issues have been identified during the Scoping Report, and/or during preparation of the EIA Report, or upon the request by MONRE.

The following sub-sections should be included in the “Cumulative Impact Assessment” section of an EIA Report:

- Methodology and approach;
- Determination of valued ecosystem components;
- Determination of a spatial and temporal framework;
- Cumulative impact assessment;
- Development of a management framework.

#### 4.9.1 Methodology and Approach

##### 4.9.1.1 Definition

Cumulative impacts can be defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.”

In the context of an EIA, cumulative impacts refer to the combined impacts of different projects or activities, in conjunction with the proposed project, within a defined spatial and temporal context.

##### 4.9.1.2 Methodology

A simple methodology for determining cumulative effects is proposed as follows:

- Step 1: Identify incremental effects of the proposed project on selected Valued Ecosystem Components (VECs) within the area affected by the project. In this case, VECs are defined as “any part of the environment that is considered important by the project developer, public, scientists and government involved in the assessment process. Importance may be determined on the basis of cultural values or scientific concern.”
- Step 2: Identify other past, present and reasonably foreseeable actions (projects and activities) within time and space that have been or could contribute to cumulative impacts on each VEC or its indicator. Establish appropriate temporal and spatial boundaries;
- Step 3: Assemble information on VECs, and assess their historical and current conditions, including any consideration of thresholds or limits;
- Step 4: Connect the proposed project and other projects or activities in the defined cumulative impact assessment area to the VECs. This activity could involve a range of tools and techniques (e.g., air emission modeling for each industrial source in the project area). Emphasis should be given to the aggregation of impacts on each VEC;
- Step 5: Assess the significance of cumulative impacts on each VEC over the timeframe identified. It is suggested that the same methodology as was used to define the significance of impacts in the EIA be applied. The significance of the residual cumulative impact should be determined considering that the proposed mitigation measures have been implemented (Step 6);
- Step 6: For each VEC, identify mitigation or management actions, including joint cumulative impact management mechanisms.

#### 4.9.2 Determination of Valued Ecosystem Components

The first step in the cumulative impact assessment of the project is to determine a list of Valued Ecosystem Components (VECs). VECs are those elements of the environment that are considered important by the project developer, the public, the scientific and academic



community, non-government organizations and government involved in the EIA process. They are defined through a consultative and iterative process to produce a list of valued environmental and social concerns to the society that could be affected by the project or by other project actions.

Once the VECs have been identified by the project developer and confirmed by stakeholders, they should be evaluated in terms of their trends from historical to current conditions. This should also include identification of any thresholds or limits that may indicate their sensitivity to disturbance.

This list of VECs should be validated and discussed with project stakeholders through a detailed and comprehensive consultative process throughout the affected area. The outcome should be to compile a focused list of stakeholders' key issues and concerns in the project area.

#### 4.9.3 Determination of a Spatial and Temporal Framework

The project developer should define spatial and temporal boundaries to establish a frame of reference for assessing cumulative environmental impacts and to facilitate their identification. Such boundaries can also influence the assessment in a variety of ways. If large boundaries are defined, only a superficial assessment may be possible, and uncertainty will increase. If the boundaries are small, a more detailed examination may be feasible, but an understanding of the broad context may be sacrificed.

The project developer may perceive assessments with large boundaries as onerous or unfeasible, whereas the public may think small boundaries do not adequately encompass all of the project's environmental impacts. In addition,

- different boundaries may be appropriate for different cumulative environmental effects. For example, the boundaries selected for cumulative environmental effects on air quality might be quite different than those chosen for effects on a particular wildlife species;
- spatial boundaries should extend beyond a project's immediate site to include the area likely to be affected;
- temporal boundaries may extend beyond the timing of construction and operation to include the period when the effects may occur.

Spatial and temporal boundaries should be established using the following criteria, listed in order of importance:

- The size and nature of the project and its potential effects;
- The availability of existing data and knowledge about the project, its environmental effects, and the feasibility of collecting new data and knowledge if there are data or knowledge gaps;
- The size, nature and location of past and future projects and activities in the area, and the significance of their adverse environmental effects;
- Relevant ecological boundaries, including physiography, vegetation, land use, habitat, soil and surface materials and climate;
- Relevant aquatic boundaries, including watersheds, sub-watersheds, drainage basins, and hydrogeological discontinuities; and,
- Relevant jurisdictional boundaries, including village, district or province boundaries.

#### 4.9.4 Cumulative Impact Assessment

Once the VECs and a spatial and temporal framework for the CIA have been developed, the project developer shall determine the contribution of each project or activity. The determination of cumulative effects could involve the following approach:

- Finalize spatial and temporal boundaries.
- Finalize list of included projects and activities.
- Identify trends for each VEC, and their sensitivity to disturbance.
- Identify environmental aspects for each project/activity and potential environmental and social impacts.
- Link the projects/activities and their impacts to each VEC, and try to understand the aggregated impact of projects/activities on each VEC. This could involve a range of modified tools including:
  - Checklists
  - Matrices
  - Linkage diagrams
  - Overlays/GIS analysis
- The objective of this exercise is to determine the aggregation of anticipated cumulative effects on each VEC.
- Assess the significance of effects on each VEC over the identified timeframe.
- Identify specific mitigation or management actions to address negative incremental effects of the proposed project and other projects or activities.

#### 4.9.5 Development of a Management Framework

The project developer should develop a management framework to manage the cumulative effects arising from the various interests present in the project area. The intent of the management framework is to identify a number of coordinated management actions to address key impacts on each VEC identified in the CIA process. The management framework should be coordinated by MONRE, with involvement of the provincial authorities, other stakeholders, and the project developer.

### 4.10 Public Consultation and Disclosure

Involving the public in preparation of the EIA is fundamental to increasing the public's understanding and acceptance of the project (e.g., how the project may affect or improve their living conditions). Public involvement also enables members of the public to identify and bring forward impacts and issues that are not immediately obvious to the EIA preparation team. The earlier in the project preparation process the public can be involved, the more likely that a trusting relationship can be built and useful recommendations made.

In the Lao PDR, the project developer shall undertake a process of consultation during the EIA study involving the affected communities and the project stakeholders. Consultations should take place on a continuous basis starting as early as possible in the EIA process.

The following sub-sections should be included in the “Public Consultation and Disclosure” section of an EIA report:

- Introduction
  - Background and objectives of the project
  - Purpose of consultation in EIA preparation
  - Lao PDR requirements
- Methodology and approach
- Summary of consultation activities undertaken

- Overview of how consultation was undertaken, when, with whom and by whom
- Summary of the opinions of the persons consulted
- Results of consultations during project scoping
  - Issues identified by stakeholders
  - How these issues were taken into account
- Results of consultations on preparation of the EIA report
  - Issues identified by stakeholders
  - How these issues were taken into account
- Results of consultations on the first draft of the EIA report
  - Issues identified by stakeholders
  - How these issues were taken into account
- Results of consultations during EIA review
  - Issues identified by stakeholders
  - How these issues were taken into account
- Recommendations for ongoing consultation
- Appendices:
  - Summary of the project as presented during the public consultations (should provide a brief project description, potential impacts of the project, and mitigation measures for some significant impacts)
  - Detailed proceedings / minutes for each consultation activity
  - Complete list of participants for each consultation activity

#### 4.10.1 Introduction

##### *4.10.1.1 Background and Objectives of the Project*

The project developer should briefly introduce the project background and objectives that have been used to define the public consultation and disclosure process. The administrative limits of the study area should be described with the names of the province and district affected.

The project developer's efforts in carrying out the public consultation and disclosure activities should be presented in terms of the specialists involved and time schedule.

##### *4.10.1.2 Purpose of Consultations in EIA Preparation*

This section should present the methodology and purposes of the consultations conducted during the EIA studies. In general, the purposes of the consultations can be summarized as follows:

- to collect information for identification of stakeholders and potentially affected persons
- to collect baseline social and environmental data and information
- to inform stakeholders and potentially affected persons about the project and its likely impacts;
- to record public concerns about the project; and
- to record public ideas for impact mitigation, and for maximizing any environmental or social benefits of the project.

#### 4.10.1.3 Lao PDR Requirements

The project developer should describe the public consultation and disclosure requirements of the Lao PDR and funding agencies that have been followed for preparation of the EIA report.

These requirements shall include, as a minimum, those defined in Part II of the *Decree on Environmental Impact Assessment* (no. 112/PM, 16 February 2010). Chapter 2 of part II defines the public involvement process to be followed in preparing an EIA study, and provides details on the rights and duties of people affected by the project and other stakeholders (Article 7), and the participation process (Article 8). This enables reviewers and stakeholders to examine the extent to which the public has been involved in the EIA process, and whether their views and values have been adequately addressed.

Articles 12 and 13 of the Lao PDR *Decree on Compensation and Resettlement of People Affected by Development Projects* (no. 192/PM, 7 July 2005) describe additional requirements when the project involves resettlement and compensation.

The *Public Involvement Guidelines* (WREA, 2011) provide information on the dissemination, participation and consultation activities to be carried during the EIA process.

#### 4.10.2 Methodology and Approach

The methodology and approach used for public consultation will vary according to the project developer and the scale of the project. The following subsections describe the consultation activities that should be undertaken to understand and incorporate the opinions of the affected people.

##### 4.10.2.1 Identification of Stakeholders and Groups Affected by the Project

The stakeholders relevant to the project should have been identified early in the project scoping phase. The project developer should refer to the identification of the stakeholders and groups affected by the project presented in the Scoping Report.

The list of stakeholders and groups affected by the project prepared during the Scoping Report should be revised at the start of the EIA study and improved during the public consultation process.

##### 4.10.2.2 Public Participation Process

The public participation process can be broken down into four key phases, each of which is a prerequisite for the next:

- **Information gathering:** collection of baseline data from the public to feed into the description of the environment and impact prediction;
- **Information dissemination:** stakeholders are informed about the project;
- **Consultation:** stakeholders are given the opportunity to voice their views about the project; and
- **Participation:** an extension of consultation, where stakeholders become joint partners in the design and implementation of projects (mitigation measures, community development activities, etc.) and take part in decision making.

Different techniques can be used for each phase as described in Box 4.4.

Box 4.4 Selection of Techniques for Public Participation			
Information Gathering	Information Dissemination	Consultation	Participation
Questionnaires / surveys	Media (radio, TV, newspapers)	Focus groups / workshops	Village committees
Key informant interviews	Displays, exhibits	Conferences / seminars	Round tables
Participatory appraisal techniques	Public meetings	Participatory appraisal techniques	Consensus building activities

The project developer should describe the techniques used during the public consultation process.

#### 4.10.2.3 Conducting Public Consultation

Public consultation is recognized as a crucial step to preventing or minimizing environmental and social impacts. According to the *Decree on Environmental Impact Assessment* (112/PM, Article 12), public consultations must be conducted at several different stages during preparation of the EIA.

At the beginning of the EIA study, village dissemination meetings need to be organized by the project developer and the local administration to inform villagers about development plans for the project, about possible environmental and social impacts, and to collect the opinions of the people affected by the investment project. Information from the Scoping Report may serve as a basis for preparing these meetings. Only the population from the villages either directly or indirectly affected by the project will be consulted.

During preparation and review of the EIA report and the ESMMP, MONRE, the local administration, the responsible agencies, and the project developer shall organize consultation meetings at the village, district, and provincial levels. These consultation meetings provide a forum for the people affected by the project and other stakeholders to share their opinions and provide their comments on the report and plans, from the first drafts through the final drafts.

A summary of the public consultation meetings should be included in the EIA Report. All summary reports should be signed by the chairperson and some of the participants. According to the *Decree on EIA* (112/PM, Article 12 (4. h)), the minutes of each meeting must also be signed by the project developer and the consultant who prepared the report. The names of the participants and information on how the meetings were organized should also be provided in the EIA report. A summary of the results of each public consultation should be presented, including the opinions of the participants, the comments from the stakeholders, and the responses from the project developer.

#### 4.10.2.4 Disclosure

To facilitate meaningful consultation with groups affected by the project and local NGOs, the *Decree on EIA* (112/PM) requires that suitable information be made available to stakeholders in a language and form that is understandable to them. The project developer must provide stakeholders sufficient time to review and understand the project and its issues to enable them to participate effectively during consultation.



### Stakeholders and Public Consultation

For the public consultation meetings, the information to be provided to the people affected by the project and the stakeholders should include the Scoping Report, the initial and final executive summary of the EIA Report and the presentation materials. This information should be provided in Lao and in English.

### Project Implementation

The project developer should define how information will be disclosed during project implementation. According the *Decree on EIA* (112/PM, Article 31), the EIA Report and the environmental and social management and monitoring plan (ESMMP) will be made available in Lao and in English at project developer information centers within the area of the investment project, and in related districts.

#### 4.10.3 Summary of Consultation Activities Undertaken

The sub-sections 3.7.2 and 3.7.3 of these EIA Guidelines present the summary of consultation activities undertaken before and during scoping. The information regarding consultation activities provided in the Scoping Report should be used for this summary.

#### 4.10.4 Result of Consultation during preparation of EIA Report

##### 4.10.4.1 Overview

During preparation of the EIA Report, especially during the collection of the baseline data, the project developer and its consultant are requested to collaborate “with local administrations such as the District Water Resources and Environment Offices, the Provincial or Capital Water Resources and Environment Offices, to organise public information meetings at village level to explain general situation of the investment project, as well as the benefits, impacts on the environments and society which may arise from the investment project, measures to prevent and minimize impacts on environment and society, and summarize the comments and opinions given in the meetings to incorporate into the report” (Decree 112/PM, Article 12 (4. d)).

In this section of the EIA Report, the project developer should present the results of all formal and informal consultations undertaken with key stakeholders before preparing the first draft EIA Report, including consultations with national, provincial and district government officials, and affected individuals and communities.

Informal consultation should include regular discussions with local residents and local government staff. Formal consultation should include structured meetings with government authorities and village authorities, as well as individual household surveys.

The information provided during these discussions should be made available for further review. The information collected should be registered and referenced in the EIA Report. All significant project impacts and proposed mitigation measures should be clearly presented to the participants.

##### 4.10.4.2 Issues Identified by Stakeholders

The project developer should carry out several types of consultation with stakeholders, including the people affected by the projects, during preparation of the EIA. The main issues identified during these consultations should be presented in the EIA Report.

The issues raised by the stakeholders during these consultations should be summarized in a table organized according to affected components.

The summary of these consultations, including questionnaires and opinions raised by the stakeholders, should be made available for prior review, and attached as an appendix to the EIA Report. These summaries must be signed by the project developer and consultant, and by representatives of the participants at village meetings or district workshops.

#### *4.10.4.3 How These Issues Were Taken Into Account*

The project developer should explain how the issues raised by the stakeholders during the EIA study have been incorporated into the project documents, for example, in new designs, additional mitigation measures, better compensation rates, etc. In some cases (e.g., resettlement and compensation), the government authorities may be responsible for responses to these issues.

#### *4.10.5 Result of Consultation on First Draft EIA Report*

##### *4.10.5.1 Overview*

Decree 112/PM, Article 12 (4. f) requests that the project developer collaborate “with local administrations like District Water Resources and Environment Offices, to organize meetings at villages, with participation of the people affected by the project by the investment project and other stakeholders to deliberate the **first draft** of the report on the EIA and ESMMP, and then revise the report and the plans in accordance with the resolution of the meetings, and then disseminate them back to the people affected by the project by the investment project and other stakeholders to revise them before district meetings.”

The summary of these consultations shall be written and signed by the project developer and consultant (Decree 112/PM, Article 12 (4.h)), and signed by the participants or their representatives. The participants will receive a hardcopy of the information provided, and should keep it for future discussion with the government authorities. The project developer shall attach a copy of the minutes of the meeting to the EIA Report for subsequent review and verification.

##### *4.10.5.2 Issues Identified by Stakeholders*

The project developer shall carry out several consultations on the first draft of the EIA report with stakeholders at the village level, including the people affected by the projects. The main issues raised during these consultations should be identified and presented in the EIA report, in terms of opinions and solutions proposed by the project developer or government authorities. The opinions of the participants should be presented in a table indicating the names of the participants and the response from the project developer in terms of the solutions or actions proposed.

The minutes of these meetings and workshops, including the opinions raised by the population, should be presented in an appendix to the report, with the signatures of the chairperson and some of the participants, as well as the project developer and the consultant.

##### *4.10.5.3 How These Issues Were Taken Into Account*

The project developer shall explain how the issues raised by the stakeholders during the EIA study have been incorporated into the project documents, such as new designs, additional mitigation measures, better compensation rates, etc. The solutions proposed by the project developer or the government authorities should be as specific as possible.

In some cases (e.g., resettlement and compensation), the government authorities may be responsible for responses to issues raised by the affected people.

#### 4.10.6 Result of Consultation During MONRE EIA Review

##### 4.10.6.1 Overview

Decree 112/PM, Article 12 (4. g) requests that the developer collaborate “with the local administrations like Provincial or Capital Water Resources and Environment Offices, to organize district-level meetings, with participation of the representatives of people affected by the project by investment projects, from each village, the concerned provincial or Capital offices, mass organizations and other district organizations to deliberate the report which was revised in compliance with the resolution of the village meetings.”

The same article requests that the “district-level-revised report must be made either in Lao or in English in which the abstract/executive summary, the ESMMP shall be made in both Lao and English, before submitting them to the MONRE to review.”

The summary of these consultations must be written and signed by the project developer and consultant (Decree 112/PM, Article 12 (4.h)), as well as by the participants or their representatives. The participants will receive a hardcopy of the information provided, and should keep it for future discussion with the government authorities. The project developer shall attach a copy of the minutes of the meeting to the EIA Report for subsequent review and verification.

##### 4.10.6.2 Issues Identified by Stakeholders

The project developer shall carry out consultation(s) on the final draft of the EIA report with stakeholders at the district level, including the people affected by the projects. The main issues raised during these consultations should be identified and presented in terms of opinions and solutions proposed by the project developer or government authorities in the EIA report. The participants' opinions should be presented in a table indicating the name of the participant and the corresponding response from the project developers in terms of solutions or actions proposed.

The minutes of these meetings and workshops, including the opinions raised by the population, should be presented in an appendix of the EIA Report, with the signatures of the chairperson, some of the participants, as well as the signatures of the project developer and consultant.

##### 4.10.6.3 How These Issues Were Taken Into Account

The project developer should explain how the issues raised by the stakeholders during the EIA study have been incorporated in the project documents, such as new designs, additional mitigation measures, better compensation rates, etc. The solutions proposed by the project developer or the government authorities shall be as specific as possible.

#### 4.10.7 Recommendations for Future Consultation

The consultation process is an ongoing activity that will continue throughout the project implementation cycle. The EIA Report should define the future consultation process in terms of:

- Objectives of consultations during
  - Construction
  - Operation
  - Decommissioning, closure and post-closure

- Participants involved in future consultation
- Creation and management of Consultation Committee(s)
- Complaints and Grievance Mechanisms
- Information disclosure.

Action plans designed for the project, such as Resettlement Action Plans, Social Development Plans, ESMMP, etc., can also involve consultation activities that should be carried out during the project implementation cycle. Any such consultation activities should also be included in that Public Consultation section of the EIA Report in order to provide an overview of the ongoing consultation process.

#### 4.10.8 Appendices

The following information should be attached as appendices to the EIA Report:

- Summary of project presented during the public consultations. The summary should provide a brief project description, potential impacts of project, and mitigation measures for certain significant impacts.
- Presentation materials used during the discussions, meetings, workshops, etc.;
- Materials distributed (booklets, brochure, etc.);
- Detailed proceedings / minutes for each consultation activity;
- Complete list of participants for each consultation activity.

### 4.11 Development Plans

Development Plans may be required by legislation or due to specific characteristics of the project. For example, in the case of hydroelectric power project, preparation of a watershed management plan and/or biomass removal plan may be required. These plans should be prepared and submitted as separate volumes attached to the EIA Report, but summarized in the appropriate section of the EIA report

Social development plans may also be required by international funding agencies or financial institutions, or due to project impacts. In particular, projects having major impacts on the local population (e.g., resettlement, vulnerable groups, disruption of traditional livelihoods and access to natural resources, etc.) will require preparation of social development plans, such as:

- Resettlement and Compensation Plan (Lao PDR Decree 192/PM, IFC, WB, ADB, etc.);
- Stakeholder Engagement Plan (IFC);
- Livelihood Restoration Plan (IFC, WB, etc.);
- Vulnerable Groups Development Plan (IFC, WB, etc.);
- Community Development Plans: intended to resolve community problems, either pre-existing, or caused or exacerbated by the project. Plans may include training, development of alternative livelihood opportunities, strengthening of community organizations, improvement of community services and infrastructure, etc. Such plans are agreed to by the authorities and community representatives. Responsibility for implementing the community development plans is normally shared between the local authorities and the community.
- Others

These social development plans should also be presented in a separate volume attached to the EIA Report, and their content summarized in the EIA Report.

## 5. Environmental and Social Management and Monitoring Plan (ESMMP)

### 5.1 Overview

The *EIA Decree* requires that the project developer prepares an Environmental Management and Monitoring Plan (EMMP) and a Social Management and Monitoring Plan (SMMP). However, in practice, these two plans should be presented together as a single coherent, integrated plan. For this reason, the management and monitoring plans are referred to in this guide as a single document called the "Environmental and Social Management and Monitoring Plan" (ESMMP). It should be noted that resettlement and compensation matters are not part of an ESMMP, but should be presented separately.

An environmental and social management and monitoring plan (ESMMP) is an essential tool for ensuring that mitigation of the negative impacts and enhancement of the positive impacts is carried out effectively throughout the life of the project. An ESMMP should be systematically improved on a regular basis to ensure that best available technologies (BATs) and best environmental management practices are implemented in a manner that is pragmatic, efficient and cost-effective.

The *EIA Decree* requires that the ESMMP be prepared in both Lao and English (no. 112/PM, 16 February 2010), Article 12. (4.g.)). The purpose of the ESMMP is to ensure that the recommended mitigation measures are implemented throughout the life of the project. For this reason, the ESMMP should be prepared as a standalone document. This means that there will be some repetition of information from other parts of the EIA documents.

It should be noted that, in accordance with article 18 of the *EIA Decree*, the project developer is required to prepare an ESMMP specifically for the operational phase, and shall submit this plan to MONRE for review and approval six months prior to commencement of operations. The project developer must revise the operational phase ESMMP every 2-5 years, and submit the revised plans to MONRE for review and approval.

In addition, complex projects such as hydroelectric power and mining projects may also be required to prepare a separate construction phase ESMMP.

### 5.2 Generic Content of an ESMMP

The ESMMP should be structured in three main parts:

- Part I: General Matters
- Part II: Plans and Programs
- Part III: Procedures and Support Programs

A generic table of contents for each part is presented in Appendix 6.

### 5.3 General Overview

This section of the ESMMP should present the project and its objectives. This section should contain a review of the justification for the project; a summary of the environmental and social activities implemented before and during preparation of the EIA Report, including public consultations; and the presentation of the project developer and



its environmental and social consultants. This section should also present the scope and the structure of the ESMMP.

## 5.4 Legal Requirements, Environmental and Social Policies and Commitments

This section should present the laws, decrees, regulations, standards, guidelines and corporate policies related to environmental and social matters of the project.

Note that the Confirmation and Letter of Undertaking (see Appendix 7), which the project developer is required to complete and sign, also covers the ESMMP. This means that the project developer confirms the compliance commitments stated in this section.

The section should be divided into three subsections:

- 1) Applicable Laws;
- 2) Contractual and other commitments; and
- 3) Governing parameters.

In accordance with MONRE's normal review and approval procedures, the final approved ESMMP would include the corrections required by MONRE. In addition, the project developer must comply with any conditions that MONRE may include in the Environmental Compliance Certificate. The project developer shall exercise due diligence to ensure that the legal framework presented is complete, accurate and up-to-date. However, it is important to keep in mind that the applicable legal framework is not limited to the laws etc. listed in the ESMMP.

Compliance with environmental legal obligations is an essential project requirement that needs to be considered in the ESMMP. Failure to meet legal obligations could result in the environmental authorization for the project being withdrawn, and could effectively result in operations being halted until such non-compliances are addressed and resolved.

### 5.4.1 Applicable Laws

This subsection presents the legal framework for the project, which includes applicable laws, decrees, regulations and guidelines of the Lao PDR, as well as international conventions ratified by the Lao PDR. Reference should only be made to those laws and obligations that are relevant to the project and its social or environmental issues.

It should be noted that the project must also comply with any new or revised laws or obligations that are applicable to the project. The ESMMP shall therefore include procedures for ensuring that the project developer is always fully updated with respect to applicable laws and standards.

The following format for presenting the legal framework should be used for each of the following categories: i) Laws, ii) Decrees, iii) Regulations, iv) International Conventions, and v) GOL Guidelines

**Table 5.1 Presentation of the Legal Framework of the Lao PDR applicable for the project**

Lao PDR - Legal Framework	Summary and Relevance	Year
<b>Law</b>		
1. Title, number and issuing authority	Summary of relevant articles and their implications for the project  Indicate the project component affected by the article	Year of promulgation
<b>Decree</b>		
1. Title, number and issuing authority	Summary of relevant articles and their implications for the project  Indicate the project component affected by the article	Year of promulgation

#### 5.4.2 Contractual and Corporate Commitments

The second category of commitments includes those that are not directly required by Lao PDR law, but those to which the project developer is committed through concession agreements, contracts, loan agreements, or membership in associations, as well as commitments that project developer has made voluntarily as part of its corporate policy.

The typical commitments in this category comprise IFC performance standards, IFC environmental, health and safety guidelines, ISO and IEC Standards, ADB environmental and social safeguards, EQUATOR Principles, and sustainability reporting guidelines under the Global Reporting Initiative. Applicable sector-specific commitments, such as a commitment to follow the International Cyanide Management Code or the International Commission On Large Dams (ICOLD) Guidelines, should also be mentioned here.

The following format should be used:

**Table 5.2 Presentation of the Contractual and Corporate Commitments**

Guideline or Standard	Origin of Commitment	Scope and Relevance	Year
1. <b>Title and issuing organization</b>	Title and type of Commitment, e.g., Concession Agreement between [developer and other party], dated [date].	Summary of relevant articles and their implications for the project  Indicate the project component relevant to the article	Year of promulgation
<i>See example below for a gold mining operation</i>			
2. <b>Title: International</b>	Loan Agreement between [developer company] and [name of	Cyanide Management Code  Cyanide shall be managed,	2009

<b>Cyanide Management Code (ICMC)</b>  <b>Issued by:</b> <b>International Cyanide Management Institute</b>	development bank] dated [dd/mm/yyyy]	transported, stored, handled, used, treated and disposed of in strict compliance with the ICMC.  An ICMC verification audit shall be conducted upon commencement of operations, and every three years thereafter by independent qualified auditors.	
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#### 5.4.3 Governing Parameters

This subsection deals with the specific emission limit values and ambient environmental quality standards to which the project must adhere. Such parameters may be derived from any of the above listed laws, decrees, regulations, standards or guidelines, and the project developer commits to comply with these limit values.

The governing parameters should be presented and structured as follows:

- 1) Emissions
  - a) Emissions to air
    - i) Project Components
  - b) Emissions to water (may in some cases have to be subdivided according to type and classification of water bodies)
    - i) Project Components
  - c) Noise and vibration emissions
    - i) Project Components
- 2) Ambient Environmental Quality Standards
  - a) Ambient Water
    - i) Water Body
  - b) Ambient Air
    - i) Particulate matter
    - ii) Gases
    - iii) Noise and vibrations
  - c) Soil
- 3) Occupational Health and Safety Standards
  - a) Workplace air quality
  - b) Workplace noise
  - c) Drinking water

As a general rule, where different emission limit values or environmental quality standards are listed in two or more of the applicable laws or contractual or other commitments, the developer must comply with the more stringent limit or standard, which will be listed under the governing parameters in this section. There may be exceptional cases where this is not feasible. In such cases, the project developer shall justify any such deviations and explain how they will be compensated.

Note that as part of the review and approval procedure of the EIA/ESMMP, MONRE may require revisions to the Emission Limit Values (ELV) or Environmental Quality Standard (EQS) or additional ELV or EQS. MONRE may also, at its own discretion, determine ELV and EQS in conditions to the Environmental Compliance Certificate (ECC) for the project.

An ELV may be defined as a concentration value and/or a load value. Load values are particularly important in cases where an EQS shall be met. In calculating and proposing a load-based ELV, the project developer should take into consideration that there may be other existing or future sources of pollution in the area, and the load should therefore only contribute to a portion of the relevant EQS. For example, IFC EHS Guidelines on Air Emissions and Air Quality, 2007 suggests that, as a general rule, 25% of the applicable air quality standards should be held in reserve to allow for additional, future sustainable development in the same airshed.

If the project developer proposes to apply governing parameters from other countries, it must provide a translation of the original copy of these parameters to MONRE.

Any use of modeling or engineering calculations should be clearly explained and referenced.

A generic format for presenting governing parameters is presented below.

**Table 5.3 Presentation of the Governing Parameters**

Emission Limit Values for Project Component			
Parameter	Unit	Emission Limit Value	Source / Reference
See example below for work camps, sanitary facilities, domestic wastewater and landfill effluent			
Biochemical Oxygen Demand (BOD) in receiving water bodies	mg/L	30	IFC General Guidelines Wastewater and Ambient Water Quality, April 30, 2007

## 5.5 Organization Structure, Roles and Responsibilities

The roles and responsibilities of the key parties involved in implementing the ESMMP (in particular, the management actions and monitoring requirements), in meeting the conditions of the ECC, and in meeting the environmental and social obligations of any concession agreements that may have been entered into should be clearly defined. The key parties may include:

- Project Developer
  - Presentation of the organization chart of the developer for this project, including the Environmental and Social Department (ESD)
  - Presentation of the ESD, including its roles and responsibilities, the staff members, and the relationship between the ESD, the contractor and subcontractors;
  - Clearly define the transfer of responsibility for implementing the ESMMP from the project developer to the contractor and subcontractors during the construction and operation phases
- Government Authorities
  - MONRE
  - Sector Ministries
  - Provincial Authorities
  - District Authorities
  - Village Authorities
  - Environmental Management Unit (EMU)
  - Others

Note that if a project involves resettlement, MONRE has developed a detailed organizational model complete with duties, responsibilities and memberships. This model can be obtained from MONRE upon request.

A flow diagram should be included showing responsibilities and communication channels. Where specific ESMMP responsibilities are assigned to contractors or subcontractors, these should be clearly stipulated and included in the contract documentation.

The roles of MONRE, the Provincial and District Authorities, and Environmental Management Units (where such have been or are expected to be established by MONRE) related to environmental and social matters of the project should be described. The purpose of clearly describing these roles is mainly internal, to make sure that the developer's management and personnel concerned have a good understanding of the roles and functions of government authorities. As mentioned above, for projects that are under the concession agreement system, MONRE has developed a “Standard Environmental and Social Obligations” or SESO, which includes the roles and duties of the EMUs and government authorities concerned.

## 5.6 Description of Project Phase

### 5.6.1 Instructions for Presentation

**Note that the content of the ESMMP should follow the structure indicated in Section 5.2, “Generic Content of an ESMMP,” and in Appendix 6.**

Each project phase, i.e., construction (including pre-construction), operation; and decommissioning, closure and post-closure should be described in separate chapters in the ESMMP. The ESMMP should describe the environmental and social mitigation or enhancement measures and monitoring plans for each of these project phases. In this way, all issues and key information related to a particular phase of the project are contained in one coherent chapter of the ESMMP.

However, for the sake of simplicity and convenience, the instructions and guidance in this Guideline are not divided by project phase, but aggregated under the following two headings: 5.6.2 Description of Activities and Installations; and 5.7 Management and Monitoring.

### 5.6.2 Description of Activities and Installations

As mentioned above, the instructions and guidance provided in Section 5.6.2, “*Description of Activities and Installations*,” apply to all project phases, i.e., construction (including pre-construction), operations, and decommissioning, closure and post-closure.

To a certain extent, the description of project phase activities and installations should borrow from the project description section of the EIA report itself. Accordingly, the instructions and guidance provided in Section 4.5.3 of this Guideline also apply here, except that, in the ESMMP, there is no discussion of alternatives: the description should focus solely on presenting the activities and installations of the particular phase of the project being considered.

The description of the activities and installations should be accompanied by maps developed in accordance with this Guideline.

It is important to include an implementation schedule indicating the timing of activities and operations, together with the related environmental engineering works and inspection and monitoring schedule of the project developer. A template for such an implementation schedule is provided in Table 5.4 below.



The implementation schedule is particularly important for the construction phase activities and installations.

**Table 5.4 Template for Implementation Schedule**

Implementation Schedule	month/ year	month/ year	month/ year	month/ year	month/ year	month/ year	month/ year	month/ year	month/ year
Site									
Activities/ Operations									
Environmental Engineering Measures									
Environmental and Social Monitoring and Inspection									

Implementation schedules should be site specific, and there should be references to maps, site specific management and monitoring plans, and/or relevant thematic management plans.

## 5.7 Management and Monitoring

**Note again that the content of the ESMMP should follow the structure indicated in Section 5.2, “Generic Content of an ESMMP” and in Appendix 6.**

This means that each project phase, i.e., construction (including pre-construction), operation, and decommissioning, closure and post-closure should be described in separate chapters in the ESMMP. The ESMMP should describe the environmental and social measures and monitoring plans for each of these project phases. In this way, all issues and key information related to a particular phase of the project are contained in one coherent chapter of the ESMMP.

However, for the sake of simplicity and convenience, the instructions and guidance in this Guideline are not divided by project phase, but aggregated under the following two headings: 5.6.2 Description of Activities and Installations; and 5.7 Management and Monitoring.

### 5.7.1 Overview of Impacts and Mitigation Measures

The ESMMP must be based upon the impacts and mitigation measures identified in the EIA Report, as well as any additional requirements in the ECC and Concession Agreement. A summary of the project impacts, proposed mitigation measures, responsibilities and costs for implementation of these mitigation measures must be presented for each project phase, i.e., construction (including pre-construction), operation, and decommissioning, closure and post-closure.

Example summaries of impacts and mitigation measures is presented in Table 5.5 (Thematic) and in Table 5.6 (Site Specific).

**Table 5.5 Thematic Overview of Impacts and Mitigation Measures**

Environmental Aspect / Issue	Impacts and causes of impacts, their geographic location and impacted area	Measures to avoid, prevent, remedy or compensate the impacts	Residual Impacts (duration and timing, reversible/ irreversible, scale and magnitude)	Compliance: (Reference to applicable Standards, BAT, Best Practices, guidelines)	Responsible Unit and Reference to Sub-Plans or Site Specific Plans
<b>Theme: Water Quality</b>					
Reservoir water quality					
Downstream water quality					
Effluents					
<b>Theme: Fauna – Aquatic Life</b>					

**Table 5.6 Site Specific Overview of Impacts and Mitigation Measures**

Site or Area/ Environmental Aspect / Issue	Impacts and causes of impacts	Measures to avoid, prevent, remedy or compensate the impacts	Residual Impacts (duration and timing, reversible/ irreversible, scale and magnitude)	Compliance: (Reference to applicable Standards, BAT, Best Practices, Guidelines)	Responsible Unit and Reference to Sub-Plans or Site Specific Plans
<b>Theme: Water Quality</b>					
Reservoir water quality					
Downstream water quality					

Effluents					
<b>Theme: Fauna – Aquatic Life</b>					

### 5.7.2 Thematic and Site Specific Management and Monitoring Plans

The management and monitoring plans provide the core information of the ESMMP. As highlighted above, these plans should be presented for each phase of the project.

Specific requirements to implement the mitigation measures may need to be developed during the detailed design, and as part of the bidding and sub-contracting process for the construction phase. These specific requirements must be included in the updated version of the ESMMP and approved by MONRE.

For each project phase, a series of management and monitoring plans must be developed. These management and monitoring plans can be divided into two main categories: 1) Thematic Management and Monitoring Plans; and 2) Site Specific Management and Monitoring Plans.

The most important criterion for deciding on which themes and sites should be covered by individual management plans is **operational feasibility**. For large projects, this means that the management and monitoring plans should match the project developer's organization (or vice versa) as much as possible.

Typical **Thematic Management and Monitoring Plans** are listed below:

- Noise management plan
- Air quality management plan
- Erosion and sedimentation management plan
- Natural hazards management plan
- Climate change adaptation management plan
- Water quality management plan
- Water use management plan
- Leak and spillage management plan
- Wastewater and storm water management plan
- Materials handling and storage management plan
- Solid waste management plan
- Hazardous material handling management plan
- Biodiversity and conservation management plan
- Visual protection management plan
- Site clearing and landscaping plan
- Rehabilitation and re-vegetation management plan
- Worker accommodations management plan
- Occupational health and safety management plan
- Employment and training management plan
- Emergency plans
- In-migration management plan
- Traffic management plan
- Communicable diseases management plan
- Community health and safety management plan
- Archaeological and cultural heritage management plan

- Investment and procurement management plan
- Visual protection management plan
- Others, etc.

For the same project, development of **Site Specific Management and Monitoring Plans** may also be required to address issues that can be located within a particular area or component of the project, for example:

- Processing plants
- Main structures and installations e.g., a dam
- Access roads
- Pipelines
- Transmission lines
- Waste disposal or treatment facilities
- Storage facilities (fuels, chemicals)
- Reservoirs
- Borrow pits
- Work camps
- Mine pits

### 5.7.3 Description of Management and Monitoring Plans

The description of each management and monitoring plan shall include the following sub-sections:

- Objectives
- Context
- Legal Requirements
- Management Actions (or Mitigation Measures)
- Monitoring Program
- Performance Specifications
- Implementation Schedule
- Responsibilities

#### 5.7.3.1 Objectives

The objectives of each management and monitoring plan should be clearly defined and should address the identified project impacts, including the opinions raised during the public consultation and the conditions stipulated in the ECC and Concession Agreement.

#### 5.7.3.2 Context

The context should include background information and a brief description of the current environmental and social setting relevant to the management theme.

#### 5.7.3.3 Legal Requirements

This subsection should present the legal requirements that must be followed or reached for the specific management and monitoring plan. This will of course to some degree repeat information from the section on “Legal Requirements and Environmental and Social Policies and Commitments” (see Section 5.4), but the reasons for including this information in each of the management plans are to make it clear where the requirements are applicable, which will also make inspection and monitoring more straightforward. The

other main reason is that an individual management plan sometimes is pulled out of the ESMMP and given to a contractor or operator for implementation.

Additional reference to Environmental Best Practice and Best Available Techniques for this particular Management Plan should be described.

#### 5.7.3.4 Management Actions or Mitigation Measures

Management actions or mitigation measures are actions that are feasible, practical and cost-effective, and that need to be implemented to achieve the objectives described above. These actions are based on the mitigation and enhancement actions identified in the EIA, together with additional information that may become available subsequent to completing the EIA. The project developer should specify a program for implementing the management actions, including by whom, when and how each action will be completed, as well as what resources should be allocated.<sup>3</sup>

Key requirements for determining whether management actions are clearly defined are provided in Box 5.1. Potential negative secondary impacts as a result of management actions should be taken into consideration in the design and implementation of the ESMMP.

#### **Box 5.1: Requirements for Determining Whether Management Actions are Clearly Defined**

To determine whether the management actions are adequately defined, they need to satisfy the following key requirements:

- *Written:* Management actions should be stipulated in writing. This forces the originators to think through each action carefully.
- *Dated:* A management action must indicate a specific time by which the action should be implemented.
- *Risk- or impact-specific:* Each management action must link to a specific impact (either positive or negative) or environmental risk, and should be worded in specific rather than general terms.
- *Time and space specific:* Indicate the how often the management action will be applied (continuously or only in the event of contingencies). The time (such as the season or time of day) and location of application should also be specified.
- *Measurable:* Management actions must, where possible, be quantitatively defined. A standard with which performance can be compared should be set. Objectives and targets of the management action must be clearly stated.
- *Achievable:* The management action must be realistic, feasible and achievable;
- *Reasonable:* The management action must be readily implementable within the time and budget constraints of the project.
- *Timely:* Measures must be put in place to coincide with specific project activities (milestones).
- *Understandable:* Management actions must be described simply, using clear, non-technical language where possible.

Source: EMP Guidelines, South Africa, June 2005

<sup>3</sup> EMP Guidelines-South Africa, June 2005



### 5.7.3.5 Monitoring Program

Monitoring serves the following objectives:

- to measure the impacts that occur during project construction, operation, and decommissioning, closure and post-closure;
- to ensure compliance with legal requirements and corporate commitments;
- to determine the effectiveness of mitigation measures and other environmental or social protection measures, such as enhancement measures;
- to determine the accuracy of impact predictions;
- to facilitate impact management by warning of unanticipated impacts.

The monitoring programs (e.g., air quality or groundwater monitoring) should be designed by specialists in consultation with the project developer and relevant stakeholders, depending on the complexity of the monitoring required. Where monitoring programs are required, these should be designed to be pragmatic and to provide immediate results. This allows appropriate management actions to be taken as soon as possible in the event of non-compliance with ELV, EQS or committed performance levels.

**Table 5.7 Template for Thematic Overview of Environmental Monitoring**

Environmental Aspect / Issue	Compliance: (Standards, BAT, Best Practices)	Monitoring methods	Monitoring frequency	Responsible Unit	Reference to Management Plans
<b>Theme: Water Quality</b>					
Reservoir water quality					
Downstream water quality					
Effluents					
<b>Theme: Fauna – Aquatic Life</b>					

**Table 5.8 Template for Site or Area Specific Overview of Environmental Monitoring**

Environmental Aspect / Issue	Compliance: (Standards, BAT, Best Practices)	Monitoring methods	Monitoring frequency	Responsible Unit	Reference to Management Plans
<b>Reservoir</b>					
Water quality					

Hydrology					
Fisheries					
Navigation					
Bank Erosion					
<b>Dam Site</b>					
Water Release					
Water Quality					

Parameters need to be selected for monitoring of each of the environmental media. The parameters should reflect the characteristics that are important and relevant to the media being monitored, and those most likely to be impacted by project development. For example, Table 5.9 shows the test parameters for each medium (13 for surface water, 14 for waste water and 13 for water supply) selected for monitoring of a hydroelectric power project and its potential impacts on water bodies. Analysis of water is to be carried out both in the field and at the laboratory.

**Table 5.9 Parameters Selected for Water Quality Monitoring**

No.	Parameters	Surface Water	Waste Water	Water Supply	Analysis
1	pH	√	√	√	Field
2	Temperature	√	√		Field
3	Dissolved Oxygen (DO)	√	√		Field
4	Total Dissolved Solids (TDS)	√		√	Field
5	Conductivity (EC)	√	√		Field
6	Turbidity	√	√	√	Field
7	Residual Chlorine (Cl <sub>2</sub> )		√		Field
8	Sludge Volume (SV30)		√		Field
9	Chemical Oxygen Demand (COD)		√		Lab
10	Total Suspended Solids (TSS)	√	√		Lab
11	Nitrate nitrogen (NO <sub>3</sub> -N)	√			Lab
12	Ammonia nitrogen (NH <sub>3</sub> -N)	√	√		Lab
13	Phosphate (PO <sub>4</sub> )		√		Lab
14	Nitrite (NO <sub>2</sub> )			√	Lab
15	Nitrate (NO <sub>3</sub> )			√	Lab
16	Sulfate (SO <sub>4</sub> )			√	Lab
17	Iron (Fe)	√		√	Lab
18	Aluminum (Al)			√	Lab
19	Manganese (Mn)	√		√	Lab
20	Total Coliform (TC)		√	√	Lab
21	Fecal Coliform (FC)			√	Lab
22	Color, true			√	Lab

23	Total Hardness (CaCO <sub>3</sub> )			√	Lab
24	Biological Oxygen Demand (BOD)	√	√		Lab
25	Oil and Grease		√		Lab
26	Hydrogen Sulfide (H <sub>2</sub> S)	√			
	<b>Total Parameters</b>	<b>13</b>	<b>14</b>	<b>13</b>	

The monitoring program could be comprised of three main aspects:

- **Baseline measurement:** This should occur prior to the start of the project or activity in order to determine the level and status of the environmental and social components prior to any impacts associated with the project or activity. Baseline monitoring would normally have been completed as part of the EIA studies, but in many cases, the time lapse between the EIA studies and project implementation means that the baseline data need to be updated.
- **Performance monitoring:** Performance monitoring should be implemented throughout the project life cycle to ensure that environmental and social impacts are within the predicted levels, and that specified environmental and social performance targets are being achieved.
- **Compliance monitoring:** Compliance monitoring should be implemented to ensure that the prescribed mitigation measures are having the predicted and desired effect. This type of monitoring is typically conducted periodically, the timing of which will vary from project to project. It should be used to check that the levels of specific environmental and social parameters comply with the applicable laws, regulations, standards or guidelines. The program should provide for effective remedial measures to be implemented in the event of non-compliance, e.g., when mitigation measures are inadequate or when impacts have been underestimated in the EIA.

The ESMMP should include a description of how the final monitoring arrangements will be accepted by the competent authority. For example, the following information must be included:

- measuring equipment, and precision of equipment;
- use of certified measurement equipment (Certification by accredited laboratory must be provided);
- environmental specialist(s) required for measurement and sampling, and to ensure quality control;
- accredited laboratories (for measurement, sampling, analysis, etc.);
- certified methods of testing; and
- Specifications for calibration, testing, measurement and sampling methods.

Detailed monitoring and analytical methods, or at least reference to appropriate methods, should be included in the ESMMP.

The following additional aspects should be addressed in the description of the monitoring activities where relevant:

- Indication of the linkages between the impacts identified in the EIA;
- Environmental and social parameters to be monitored;
- Indicators to be measured;
- Mitigation objectives;
- Targets for optimum performance (minimum environmental and social impact);

- Thresholds;
- Monitoring methods to be used (where a range of alternative methods exist);
- Sampling locations;
- Frequency of monitoring measurements;
- Detection limits (where appropriate);
- Definition of thresholds that will signal the need for corrective action;
- Responsibility for monitoring;
- Responsibility for corrective action;
- Details of how results will be analyzed to determine whether corrective actions are necessary;
- Quality control procedures (e.g., blind sample, etc.);
- Reporting procedures; and
- Opportunities that will be provided for interest and affected parties to contribute input into the revision of the ESMMP and to the design of corrective actions where appropriate

The design of the monitoring activities should be based on the type of information required to determine whether the objectives and targets are being met. Not all projects, nor all impacts of any one project, need to be monitored. Monitoring will be necessary and appropriate if:

- there are residual negative impacts that could not be avoided through changes to the project design, or reduced by implementing other mitigation measures;
- indirect negative impacts arise as a result of the mitigation measures;
- there is significant public concern or controversy about an impact;
- potential impacts are complex and poorly understood, or, for example, if there is disagreement among the specialists employed for the EIA;
- the outcome of the recommended mitigation measure(s) is uncertain.

The management actions and monitoring need to take into account the following three scenarios:

- Normal operations
- Abnormal situations (e.g., planned shutdown to service equipment)
- Emergency situations (e.g., unexpected oil spill).

The monitoring programs shall be divided into two sections, as requested by the EIA Decree 112/PM (Article 13). The first section shall present the monitoring activities of the project developer, and the second, the monitoring activities of the government agencies concerned.

#### *5.7.3.6 Performance Specifications*

Performance specifications (e.g., criteria or targets) should be provided for each management action, or mitigation measure or monitoring activity, in order to assess whether the actions have been effective. Performance specifications could be based on the level at which an environmental condition must remain (e.g., habitat in a part of the site that must not be disturbed), the level to which the environmental condition should be restored (e.g., habitat rehabilitation), legislated or agreed limits (e.g., air quality standards), or the level of socio-economic benefits to be realized through the project (e.g., use of local labor and enterprises). Where possible, these performance specifications should be quantitative. The performance specifications should be revised during implementation of the ESMMP, in the spirit of promoting continuous improvement.

#### 5.7.3.7 Implementation Schedule

An implementation schedule should be prepared showing the sequence and timing (including frequency and duration) of the management actions, mitigation measures and monitoring activities of the ESMMP. Where monitoring reports are to be produced, the timing of such reports should be indicated. The schedule should be drawn up with the project developer to ensure that the necessary links are made between the implementation schedule for the ESMMP and the overall project schedule.

#### 5.7.3.8 Responsibilities

Responsibilities for each of the various parties involved in implementing the management actions, mitigation measures and monitoring activities must be clearly defined.

When identifying the responsibilities, the project developer should ensure that the responsible authorities have agreed to take on an assigned role, that they have the budget, experienced staff, training, and facilities (equipment, vehicle, etc.) required, and that they have the capacity to adhere to the time schedule allocated to implement a particular management action or monitoring activity.

The contractor and subcontractors are often responsible for implementing the management actions or mitigation measures during the construction phase. If the developer assigns the task to a contractor or/and subcontractor, the developer shall incorporate the terms and conditions of the ESMMP into the contract to ensure that the subcontractors implement the plan comprehensively (EIA Decree 112/PM, Article 13 h, 2). The developer shall ensure that the contractor or/and subcontractor will implement the management plans within the approved timeframe.

As part of implementing the management actions, method statements should be prepared by the contractor and/or subcontractor. These method statements should specify how they will manage potential environmental impacts in line with the requirements of the ESMMP, and, where relevant, environmental best practices; and how they will ensure that the objectives of the ESMMP are achieved in practice.

MONRE may ask the developer to revise and resubmit the ESMMP if it finds that the plan does not identify potential problems as required, if sufficient measures to minimize and solve the problems are not provided, or if the ESMMP fails to achieve the required goals (EIA Decree 112/PM, Article 13 h, 3).

#### 5.7.4 Emergency Plan

The ESMMP shall include an emergency plan to address risks associated with accidents or emergencies during construction and operation, as requested in Article 13 c of Decree 112/PM. This emergency plan should be linked to other local emergency plans. In general, the emergency plan should include:

- a description of the different potential situations that could arise;
- pertinent information in case of emergency (e.g., contact information of the responsible authorities, available equipment, and maps with prioritized routes);
- the command structure in case of an emergency, and the mode of communication with the local or regional authorities;
- a list of priority actions in case of emergency (e.g., emergency calls, traffic detours, road signs, and methods of evacuation);
- methods to update and reassess the emergency measures.



## 5.8 Public Consultation and Disclosure

The consultation process will continue throughout the construction, operation and decommissioning, closure and post-closure phases. The ESMMP Report should define the future consultation process in terms of:

- Objectives of the consultation for each project phase
- Consultation committee(s)
- Complaint and grievance mechanisms
- Disclosure

### 5.8.1 Objectives of the Consultation

The objectives of the consultation shall be adapted to the project context and be clearly defined in the ESMMP. Article 7 (6) of Decree 112/PM stipulates that the people affected by the project and other stakeholders should participate in discussions on implementation of the environmental and social activities, as well as the ESMMP of the investment project. Article 7 (7) affirms that people affected by the project and other stakeholders have the right and duty to make a written proposal to solve the environmental and social problems caused by the investment project to the local administrations at each level, or directly to MONRE if the problems have not yet been solved.

The consultation process during the construction, operation and decommissioning, closure and post-closure phases should focus on the major residual impacts on the affected people. The objectives of the consultation will be to reduce these residual impacts to an acceptable level.

At the same time, the project developer should enhance the positive impacts of the project for the affected people, particularly in terms of employment, local development, health and safety, etc.

### 5.8.2 Consultation Committee(s)

The establishment of Consultation Committee(s) should help to maintain ongoing linkages with the public, and to receive opinions about how the project is being implemented and current impacts.

For example, the project developer may establish:

- a project liaison committee that will ensure that effective communication with all stakeholders is maintained during the construction, operation and decommissioning, closure and post-closure phases.
- a project mediation committee to help solve environmental and social issues, especially complaints and grievances from the public and the affected population.

The project developer shall indicate how it will maintain communication with the affected people and the local authorities in the ESMMP.

### 5.8.3 Complaints and Grievances Mechanism

The project developer shall establish a complaints and grievances mechanism (CGM) related to environmental and social issues arising during the construction, operation and decommissioning, closure and post-closure phases. It is suggested that this CGM be managed by the project developer with involvement of local authorities. This may be accomplished by setting up a project mediation committee that will meet on a regular basis, or in response to a particular incident.

The project developer should indicate how it will manage complaints and grievances in the ESMMP.

#### 5.8.4 Disclosure

Disclosure of information is an important part of the project developer's engagement process during the construction, operation and decommissioning, closure and post-closure phases. At the start of the construction phase, the project developer should prepare and distribute informational materials about the construction activities. Information disclosure should be focused on the local and district levels.

All informational material shall be provided in Lao and in English, and written in non-technical terms to make it easy to understand by the population. Regular contact with the district and local authorities will help to ensure that the information is distributed to the local population. During construction, information should be disclosed on subjects such as:

- construction activities;
- recruitment policies and job opportunities;
- supplier opportunities;
- transportation and traffic in the project area, including road access restrictions or diversions;
- health and safety awareness programs;
- environmental and social issues;
- local worker training;
- management of workers' accommodation camps, including codes of conduct for workers;
- complaint and grievance process.

Maintaining a dedicated information center within the study area and near the affected people is recommended to facilitate information disclosure.

### 5.9 Procedures and Support Programs

#### 5.9.1 Training and Capacity Building

Training is essential for ensuring that the provisions of the ESMMP are implemented efficiently and effectively. Training needs should be identified based on the existing and available capacity of the site and project personnel (including the developer, contractors and subcontractors) to undertake the required management actions and monitoring activities.

A training program should be presented in this section of the ESMMP. The training program should be developed and delivered by suitably qualified personnel, in a language and medium understood by workers or employees.

#### 5.9.2 Awareness Environmental and Social Program

Environmental and social awareness should be fostered among the project's workforce to encourage implementation of environmentally and socially sound practices throughout the duration of the project (construction, operation, decommissioning, closure and post-closure). The awareness program ensures that environmental accidents are minimized, and environmental compliance maximized. The onus is on the different parties involved in the various phases of the project to be environmentally and socially conscious. Contractors should forward internal environmental awareness procedures to the project developer for comment prior to beginning work on the project.

Environmental and social awareness could be fostered in the following manner:

- induction course for all workers before beginning work on site;
- refresher courses as required;
- daily awareness talks at the start of each day, where all workers on site may be alerted to particular environmental or social concerns associated with their tasks for that day, or the area/habitat in which they are working.

### 5.9.3 Supporting Databases

The project developer shall develop and maintain computer-based environmental management databases in order to keep track of all data collected or to be collected during project preparation and implementation. The databases should include:

- Monitoring information such as:
  - location code, description (including elevation) and map reference;
  - sampling interval;
  - sampling date and time;
  - the variable measured;
  - unit of measure;
  - result;
  - comparison with relevant guideline;
  - quality assurance / quality control information.

The databases should be readily accessible to relevant personnel to allow timely and informed decisions to be made.

### 5.9.4 Documentation and Record Keeping

A document control system shall be established to ensure accurate updating of ESMMP documents, and that all documents required for effective operation of the ESMMP are available. The document control system should be devised by the project developer and/or contractor, and agreed upon by all key parties. Responsibilities shall be assigned to relevant personnel for ensuring that the ESMMP documentation system is maintained and that document control is maintained by ensuring that the appropriate documents are accessed by and distributed to identified personnel.

Supplementary ESMMP documentation could include:

- ESMMP implementation specifications (including method statements);
- standard operating procedures;
- site instructions;
- quality assurance reports;
- emergency preparedness and response procedures;
- incident reporting and responses records;
- personnel induction and training records;
- site inspection reports;
- monitoring reports;
- auditing reports; and
- complaints received and actions taken.

The developer's environmental and social department should be responsible for ensuring that all relevant ESMMP documentation is registered and updated.

#### 5.9.5 Reporting Procedures

Reporting procedures for conveying information from the monitoring activities should be developed to ensure that management is able to take rapid corrective action should certain thresholds be exceeded.

Project-specific ESMMPs should include reporting procedures for dealing with:

- internal monitoring and inspection
- incidents, accidents and emergencies
- measuring performance indicators, interpreting the results and taking action based on them;
- training programs, and evidence of appropriate levels of skills or abilities developed.

In addition, monthly and annual reports should be prepared and sent to MONRE for informational purposes.

#### 5.9.6 Auditing

A procedure for conducting ESMMP audits should be developed by the project developer. This procedure should incorporate processes for scheduling and reporting, as well as the timing and frequency of the audits.

The audit should assess whether ESMMP implementation has been undertaken according to planned arrangements, and whether the ESMMP itself is being updated appropriately. The audit should confirm that identified corrective actions have been undertaken, and assess the effectiveness of such actions. The timing of the audits should be included in the implementation schedule of the ESMMP.

The audit should also assess whether objectives and targets have been met, and whether there are discrepancies from the stipulated ESMMP and legal requirements.

#### 5.9.7 Responding to Non-Compliance

The system employed by the project developer for dealing with non-compliances with the ESMMP requirements (e.g., incentives for compliance or disincentives for non-compliance) will vary depending on the type and specific nature of the project.

The system should be described in the ESMMP, included in the tender documents and contracts, and made clear to all project workers.

#### 5.9.8 Management, Review and Approval of the ESMMP

ESMMPs should be dynamic, flexible, and subject to periodic review before and during each project cycle phase. The extent to which ESMMPs should be reviewed will vary depending on the project or activity. Where the major negative impacts are associated with the construction or operation phases, the ESMMP may require revision during these phases. Significant changes in the ESMMP shall be submitted to MONRE for review and approval.

The project developer shall describe the method and frequency for reviewing the ESMMP and the related environmental management system. Such reviews shall ensure the continuing suitability, adequacy and effectiveness of the ESMMP and its environmental management system. Reviews shall include assessing opportunities for improvement and the need for changes. Records of the management reviews shall be retained. As a general rule, the following situations would require revision of the ESMMP and submission to MONRE for review and approval:

- changes in the legislation applicable to the environmental or social issues of the project;
- the measures are insufficient or inadequate to mitigate the actual or likely impacts of the project, i.e., environmental performance does not meet the required level despite implementation of the mitigation measure;
- new information becomes known about how harmful the adverse impacts of the project are, or are likely to become;
- the project has adverse impacts that were not foreseen at the time the ESMMP was approved, or the ECC was issued;
- the adverse impacts of the project are greater than the anticipated impacts that formed the basis for preparation, submission and approval of the ESMMP and ECC;
- the size or boundaries of the project change, or an extension or second or subsequent phase of development is proposed, thereby changing the basis for the initial measures;
- new techniques that meet the definition of “best available techniques” become available, which would significantly reduce the impacts or increase the benefits of the project;
- the adverse impacts of the project can be reduced through applying best practices without commercially significant extra cost to the project developer;
- the measures of the ESMMP or conditions of the ECC are unnecessary or ineffective in mitigating the adverse impacts.

#### 5.9.9 Implementation Budget

The budget for implementing the ESMMP (Example in Appendix 11) shall include the following costs:

- project developer Environmental and Social Department costs;
- costs for implementation of management plans (management actions), broken down by management action plan and project phase;
- internal monitoring, including the budget for purchasing, operating and maintaining measuring equipment. These costs will be broken down by management plan and project phase;
- external monitoring;
- auditing;
- public consultation;
- training;
- worker and public awareness.

The budgets for external institutional monitoring will be presented for:

- Project ESMU
  - Equipment
  - Staff
  - Training
  - Vehicle
  - Office
- MONRE
  - Transportation
  - Accommodation



- Allowances
- Monitoring costs

These budgets will be updated each year and after any revision of the ESMMP, as stipulated in the *EIA Decree* or the ECC conditions.

## 6. MONRE Requirements for EIA Reporting

### 6.1 Methodology Requirements

The Scoping Report, EIA Report, Environmental and Social Management and Monitoring Plan (ESMMP), and development plans must be presented in a clear and concise way, and must be limited to the elements pertinent to the understanding of the project and its impacts. The methods and criteria used must be presented and explained. When possible, the reliability, degree of accuracy and limits of interpretation of numerical data should be explained. For the description of the environment, information that would enable the quality of the data to be assessed must be provided. For example, for field surveys, the locations and dates of sampling, the techniques used and their limitations should be clearly explained. Sources of information must be provided in references. The name, occupation and the job title of the persons who contributed to the preparation of the study must also be indicated.

The information and data collected or produced during preparation of the EIA, both quantitative as well as qualitative, should be analyzed and summarized in tables, figures, drawings, or other formats that aid in interpretation of the data. Information with a geographic component should be presented on maps at an appropriate scale. Additional information that facilitates understanding or interpretation of the data, such as inventory methods, should be provided in a separate section in order to facilitate comprehension of the text.

The International Standard System of Units (SI or *Système International d'unités*) must be used within the EIA Report, ESMMP and appendices. If another system of measurement is used, the conversion to SI units must also be presented.

If there is sufficient evidence to prove that the report has been copied from another investment project, the report will be rejected (*EIA Decree* 112/PM, Article 15, f (2) (c)).

### 6.2 Confidentiality Issues

The Lao PDR *Decree of Environmental Impact Assessment* (no. 112/PM, 16 February 2010, Article 32) defines the management of confidential information during the EIA process. In general, MONRE may consider keeping some information presented in the EIA Report and ESMMP confidential upon written request (enclosed with the information in question) from the project developer. This information includes:

- Information on the privacy of individuals;
- Information on property;
- Information on licenses.

Within 25 public working days, MONRE shall conclude whether all or some part of the information in question is confidential. If the submitted information is considered confidential, it should be kept confidential for 4 years. If the project developer wishes to extend this period, a request must be submitted to MONRE 60 public working days prior to the expiry date. Otherwise, the information will not be regarded as confidential information any longer.

## 6.3 Requirements for Report Preparation and Printing

### 6.3.1 Scoping Report and TOR for EIA

The project developer shall initially send 4 hardcopies and an electronic copy (PDF, Portable Document Format) of the Scoping Report and TOR for EIA to MONRE, including colour maps, diagrams, layouts, etc. After administrative review has been completed and the Scoping Report and TOR have been accepted for technical review, the project developer shall send 10 additional hardcopies and an electronic copy of the Scoping Report and TOR for EIA, including color maps, diagrams, layouts, etc.

For each additional revision, the project developer shall prepare 10 hardcopies and an electronic copy of the Scoping Report and TOR for EIA.

### 6.3.2 EIA Report, ESMMP and Development Plans

The project developer shall initially send 4 hardcopies and an electronic copy of the EIA Report, ESMMP and development plans to MONRE for administrative review, including color maps, figures, diagrams, layouts, etc. If MONRE is not satisfied with the report, an additional 4 hardcopies and an electronic copy of the revised version of those reports and plans, including color maps, figures, diagrams, layouts, etc., should be prepared and sent to MONRE for completion of the administrative review. The revised softcopy should be presented in two different files, one with change tracking activated to facilitate review of the updates made since the previous version was submitted, and one “clean” version without change tracking.

When this first review step is completed and the EIA Report, ESMMP and development plans are accepted for technical review, the project developer shall send an additional 15 hardcopies of these reports and plans, including color maps, figures, diagrams, layouts, etc.

For each additional revision, the project developer shall provide two additional hardcopies and an electronic copy of the EIA Report, ESMMP and/or development plans to MONRE. MONRE will inform the project developer if additional copies are required.

When the EIA Report, ESMMP and Development Plans are accepted by MONRE, the project developer shall provide 15 hardcopies and an electronic copy of the final versions to MONRE, including colour maps, figures, diagrams, layouts, etc.

Note that the number of hardcopies may be higher or lower according to the scope of the project and number of stakeholders requesting the document. Requirements for information disclosure (e.g., making the reports available in information centers to be maintained by the developer) are not included, and should be the responsibility of the project developer, under the supervision of MONRE.

## 6.4 Other Requirements from MONRE

If MONRE requires revision of the Scoping Report, TOR for EIA, EIA Report and/or ESMMP, the project developer shall provide an electronic copy of the report with change tracking activated, an electronic copy without change tracking, and a summary of the modifications that have been made to the report.

These EIA Guidelines will undergo a trial period of 2 years. During this period, it is requested that project developers, EIA consultants and other EIA practitioners follow these guidelines rigorously. If any improvements are required, the project developers, EIA consultants, EIA practitioners or stakeholders should contact the Department of Environmental and Social Impact Assessment of MONRE.

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## Appendix 1: List of Projects Subject to EIA



### **Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity**

**The Prime Minister Office  
Water Resources and Environment Administration of Lao PDR**

**No. 697 /PMO -MONRE  
Vientiane Capital, 12 Mar 2010**

#### **Agreement on List of Investment Projects subject to IEE and EIA**

- Pursuant to Decree of Prime Minister on Nomination and TOR of MONRE, No. 149/PM, dated 10 May 2007
- Pursuant to Decree of Prime Minister on Environment Impact Assessment, No. 112/PM, dated 16 February 2010

**Minister of Prime Minister's office**

#### **Head of Water Resources and Environment Administration**

Article 1: List of Projects subject to IEE and EIA. They are separated into 2 groups: Project classifies under Group I is required to perform IEE and project classifies under Group II is required to perform EIA. The list of project subject to IEE and EIA is hereby promulgated.

Article 2: Individual, entity, public and private sectors must comply with the Decree.

Article 3: DESIA (MONRE) has the responsibility to coordinate with the stakeholders.

Article 4: This decree shall enter into force on the date it is signed.

Minister of Prime Minister's office  
Head of Water Resources and Environment Administration

Khampheng Pholsena

**List of Investment Projects subject to perform IEE or EIA**

The project lists are including of project type, project size. There were separated in to 2 groups: Group I is required to perform FS to IEE and Group II is required to perform FS to EIA. There are 5 types of sectors as follow: (1) Energy Sector; (2) Agriculture and Forestry Sector); (3) Industrial Sector; (4) Infrastructure Sector; (5) Mining Sector

		Category 1	Category 2
Type of investment projects		IEE	EIA
<b>I. Energy Sector Development Project</b>			
1.1	Hydro power plant project	< 15 MW or reservoir capacity < 200,000,000 m <sup>3</sup> or reservoir area < 1,500 ha	≥ 15 MW or reservoir capacity > 200,000,000 m <sup>3</sup> or reservoir area > 1,500 ha
1.2	Nuclear power plant project		All
1.3	Natural gas power plant project	5-50 MW	> 50 MW
1.4	Coal power plant project	≤ 10 MW	> 10 MW
1.5	Gas and oil pipeline project		All
1.6	Oil refinery project		All
1.7	High voltage electrical power line project		
1.7.1	High voltage >230 kV	≤ 50 km	> 50 km
1.7.2	High voltage <230 kV	All	If the transmission line goes through NPAs or urban areas
1.7.3	High voltage transformer substation	< 10 ha	> 10 ha
<b>II. Agriculture and Forestry Development Project</b>			
2.1	Forest plantation project	20 – 300 ha	> 300 ha
2.2	Agricultural products and herbal flora plantation for supplying to industrial work	20 – 500 ha	> 500 ha
2.3	Irrigation construction project	100 – 2,000 ha	> 2,000 ha
2.4	Cattles farm (e.g., cow, buffalo, horse and others)	> 500 units	
2.5	Poultry farm	> 1,000 chickens	
2.6	Pig farm	> 200 pigs	
2.7	Fish raising and aquaculture project (fish raising in the pond)	>10 ha	
2.8	Fish raising and aquaculture project (fish cage raising in the river)	>300 m <sup>3</sup>	
2.9	Crocodile farm	>100 Ton	
<b>III. Industrial Sector Development Project</b>			
3.1	Meat production, processing and	≤ 20 Ton/day	> 20 Ton/day

	storages and production factory		
3.2	Fish processing, storages and production factory	$\leq 20$ Ton/day	$> 20$ Ton/day
3.3	Fruit/vegetable processing and storages and production factory	All	
3.4	Milk manufacturing plant	$\leq 40$ Ton/day	$> 40$ Ton/day
3.5	Tapioca factory	50 – 100 Ton/day	$> 100$ Ton/day
3.6	Feedstuff factory	All	
3.7	Sugar factory	$\leq 50$ Ton/day	$> 50$ Ton/day
3.8	Foodstuff factory	$> 1$ Ton/day	
3.9	Alcohol, wine, beer production factory	$\leq 500,000$ L/yr	$> 500,000$ L/yr
3.10	None alcoholic production factory (soda, soft drink, mineral waters production)	All	
3.11	Pure drinking water factory	All	
3.12	Tobacco factory	All	
3.13	Fabric, thread, fibre production factory	All	
3.14	Clothes, decoration and painting, animal hairs production factory	All	
3.15	Animal skin processing factory	All	
3.16	Leather production factory (handbag, luggage, saddle, etc.)	$\leq 1,000,000$ Pc/yr	$\leq 1,000,000$ Pc/yr
3.17	Leather shoes production factory	$\leq 1,000,000$ Pair/yr	$> 1,000,000$ Pair/yr
3.18	Handicraft Factory (using wood, bamboo, straw, etc.)	All	
3.19	Bamboo production factory	$\leq 100,000$ m <sup>2</sup> /yr	100,000 m <sup>2</sup> /yr
3.20	Paper and pulp production plant project	$\leq 50$ Ton/day	$> 50$ Ton/day
3.21	Printing service and stationary production plant project	All	
3.22	Petroleum industry		All
3.23	Basic chemical production factory besides chemical fertilizer and production that contained acid	$\leq 500$ Ton/yr	$> 500$ Ton/yr
3.24	Pesticide and chemical fertilizer production factory		All
3.25	Medical supplies, equipment and traditional medicine factory	$\leq 500$ Ton/yr	$> 500$ Ton/yr
3.26	Soap and detergent, cleansing material, brush, perfume and other cosmetic factory	$\leq 10$ Ton/day	$> 10$ Ton/day

3.27	Chemical production factory		All
3.28	Rubber processing factory	100 – 300 Ton/yr	> 300 Ton/yr
3.29	Plastic factory project	$\leq 500$ Ton/yr	> 500 Ton/yr
3.30	Glass industry and glass production factory	All	
3.31	None metallic ores production factory	All	
3.32	Cement, lime and plaster cement factory	$\leq 30$ Ton/hr	> 30 Ton/hr
3.33	Steel and iron smelting factory	$\leq 120$ Ton/day	> 120 Ton/day
3.34	Non-Ferrous metal smelting factory	$\leq 50$ Ton/day	> 50 Ton/day
3.35	Steel processing factory	$\leq 50$ Ton/day	> 50 Ton/day
3.36	Non-Ferrous metal processing factory	All	
3.37	Metal frame, tank, basin/sink production factory	All	
3.38	Dynamo production factory	All	
3.39	Domestic appliances production factory	All	
3.40	Office material equipment, accounting stationeries and computer production plant	All	
3.41	Generator and apparatus production factory	All	
3.42	Battery and dry cell battery production factory	$\leq 100$ Ton/yr	> 100 Ton/yr
3.43	Radio, television and communication device and tool production factory	All	
3.44	Medical equipment, meter and eyesight, watch and clock factory	All	
3.45	Vehicle assembly plant (light truck, heavy truck and semi-trailer, etc.)	All	
3.46	Spare parts and vehicle parts and engine factory	$\leq 1,000$ Ton/yr	>1,000 Ton/yr
3.47	Bicycle and wheel of disable people	$\leq 10,000$ Unit/yr	> 10,000 Unit/yr
3.48	Furniture factory	$\leq 10,000$ products/yr	> 10,000 products/yr
3.49	Storage of solid waste not producing hazardous	All	
3.50	Disposal of solid waste producing hazardous		All
3.51	Solid waste treatments and environment management		All



3.52	Water supply factory	All	
<b>IV. Infrastructure and Service Development Project</b>			
4.1	Lake, river, channel land filling project impacts on public		All
4.2	Dormitories, resettlement construction project	> 50 rooms	
4.3	Golf course construction plant project	9 holes	
4.4	Multi-games sport project		All
4.5	Petrol depot construction project	600 – 60,000 barrels	
4.6	Industrial zone construction and development project		All
4.7	Special economic zone construction and development project		All
4.8	Inland waterway navigation project	All	
4.9	Waste water treatment plant project (waste water from district, hospital and industrial processing factory)		All
4.10	Road construction through national or provincial protected areas		All
4.11	New railway construction project		≥ 100 km
4.12	New road construction project (national, provincial, district, urban, extra construction)		All
4.13	Road improvement project (national, provincial, district, extra road improvement)	All	
4.14	Road rehabilitation or upgrading project (national, provincial road rehabilitation)	All	
4.15	New runway airport construction project	1,000 – 2,500 m	>2,500 m
4.16	Hospital construction project	≤ 100 beds	> 100 beds
4.17	Hotel or resort construction project near the river	≤ 80 rooms	> 80 rooms
4.18	Hotel or resort construction project	≤ 50 ha	>50 ha
4.19	Tourism and resort development project in the National or provincial protected area		All
4.20	Solid domestic waste recycle plant project	All	
4.21	Incinerator for domestic solid		All

	waste project		
4.22	Incinerator for industrial solid waste project		All
4.23	Project using part or whole national or provincial protected area, historical or cultural vestiges, or unique landscape, conservation area of local authorities		All
4.24	Telecommunication network construction project	All	
4.25	River communication (improvement of river channel for boat)	$\leq 200$ Ton	$> 200$ Ton
4.26	Port construction project		
4.26.1	Passenger port	$\leq 500$ Ton DWT	$> 500$ Ton DWT
4.26.2	General transportation port	$\leq 500$ Ton DWT	$> 500$ Ton DWT
4.26.3	Transportation port producing hazardous such as chemical, engine oil		All
4.27	Embankment construction project		$> 1$ km
4.28	Community solid waste management construction	$\leq 50$ ha	$> 50$ ha
4.29	Solid waste management construction		All
4.30	Industrial solid waste landfill site project		All
<b>V. Mining and extractive industry</b>			
5.1	The use of groundwater resources for industrial, agricultural, and urban consumption	$\leq 4,500$ m <sup>3</sup> /day	$> 4,500$ m <sup>3</sup> /day
5.2	Project for extraction of rock and sand from a river	1,000 – 50,000 m <sup>3</sup> /yr	$> 50,000$ m <sup>3</sup> /yr (per point)
5.3	Project for rock extraction and crushing	$\leq 50$ Ton/day	$> 50$ Ton/day
5.4	Project for extraction of surface materials (soil, rock, sand) for construction	$< 100,000$ m <sup>3</sup> /yr	$\geq 100,000$ m <sup>3</sup> /yr
5.5	Project for extraction of solid mineral ore (without using chemicals)		All
5.6	Project for extraction and processing of mineral ore with the use of hazardous chemicals		All
5.7	Project for processing of solid mineral ore	$\leq 50,000$ Ton/yr	$> 50,000$ Ton/yr
5.8	Project for extraction of		$> 5,000$ m <sup>3</sup> /day

	groundwater		
5.9	Project for use of surface water		> 10,000 m <sup>3</sup> /day
5.10	Project for extraction of natural mineral waters (surface and groundwater) for usage and/or consumption		> 1,000 m <sup>3</sup> /day
5.11	Project for extraction of natural mineral waters (surface and groundwater) for bathing, medicinal (skin diseases) and other purposes		> 500 m <sup>3</sup> /day
5.12	Project for extraction of mineral ore using chemicals		All
5.13	Project for extraction of oil and natural gas		All

Remark: For Investment Project under Industrial Sector which are not included in this list (section III), please refer to the list of projects of Ministry of Industry and Commerce.

## Appendix 2: Scoping Report – Table of Contents

### Scoping Report – Table of Contents

1. Executive Summary
2. Context of the Project
  - 2.1 Presentation of the Project and its justification
  - 2.2 Related Projects and Developments
  - 2.3 Presentation of the project developer and the EIA consultant
3. Overview of the Policy, Legal and Institutional Framework
  - 3.1 Overview of Corporate Environmental and Social Policies
  - 3.2 Overview of Policy and Legal Framework in the Lao PDR
  - 3.3 International Conventions, Treaties and Agreements
  - 3.4 Lao PDR Government Institutional Framework
  - 3.5 International Policies, Guidelines and Standards (if applicable)
4. Project Description and Alternatives
  - 4.1 Presentation of the Project and Description of Alternatives
  - 4.2 Comparison and Selection of the Project Alternatives
5. Description of the Environment
  - 5.1 Setting the Study Limits
  - 5.2 Physical Components
  - 5.3 Biological Components
  - 5.4 Socio-Economic Components
  - 5.5 Cultural Components
  - 5.6 Visual Components
6. Preliminary Environmental Impact Assessment and Mitigation Measures
  - 6.1 Methodology and Approach
  - 6.2 Identification of Potential Environmental Impacts
  - 6.3 Key Potential Environmental Impacts and Mitigation Measures
    - 6.3.1 Pre-Construction
    - 6.3.2 Construction
    - 6.3.3 Operation
    - 6.3.4 Decommissioning, closure and post-closure
7. Public Consultation and Disclosure
  - 7.1 Methodology and Approach
    - 7.1.1 Identification of stakeholders and groups affected by the project
    - 7.1.2 Conducting public consultation
    - 7.1.3 Disclosure
  - 7.2 Summary of Consultation Activities Undertaken
    - 7.2.1 Overview of consultation activities
    - 7.2.2 Summary of the opinions of the persons consulted
  - 7.3 Results of Consultation during Project Scoping
    - 7.3.1 Issues identified by stakeholders and groups affected by the project
    - 7.3.2 How these issues were taken into account
  - 7.4 Recommendations for Consultation to be undertaken during the EIA
8. Conclusions and Recommendations

Appendix1: Terms of Reference for EIA

# Appendix 3: Example of Impact Identification and Assessment Matrix



# APPENDIX 3 - ROAD PROJECT - IMPACT IDENTIFICATION AND ASSESSMENT MATRIX BY PROJECT

ENVIRONMENTAL AND SOCIO-CULTURAL ASPECTS  PROJECT COMPONENTS	PHYSICAL RESOURCES			BIOLOGICAL RESOURCES			HUMAN AND ECONOMIC DEVELOPMENT													QUALITY OF LIFE VALUES																
	Air	Soil	Water																																	
	Air Quality	Noise and Vibration	Erosion and Sedimentation	Soil Quality	Surface Water Hydrology	Surface Water Quality	Groundwater Quality	Terrrestrial Vegetation	Terrrestrial Fauna	Aquatic Flora	Aquatic Fauna	Endangered Species	Protected areas	Population and Communities	Settlements	Infrastructure Facilities	Industries	Trade and Commerce	Agricultural Activities	Livestock	Religion	Education	Health	Road Safety	Road Traffic	Land Use	Land Take	Tourism Resources	Police	Occupational Health & Safety	Public Health	Recreational Resources	Aesthetic Values	Historical Treasures	Cultural Values	
Pre-Construction																																				
Topographic survey																																				
Pegging out alignment																																				
Land acquisition - compensation																																				
Identification of materials sites																																				
Construction																																				
Site clearance																																				
Relocation of services																																				
Campsite operation																																				
Earthworks: excavation, filling, backfilling																																				
Drainage works																																				
Quarry site operation																																				
Borrow pits																																				
Watercourse crossing																																				
Gravel pavement layers																																				
Crushed aggregate base course																																				
Prime and curing membranes																																				
Bituminous base course																																				
Asphalt surfacing																																				
Transport and traffic																																				
Explosives																																				
Toxic material																																				
Stockpiling																																				
Stone crushing plant																																				
Bitumen plant																																				
Spoil and construction waste disposal																																				
Water management																																				
Dust management																																				
Landscaping and grassing																																				
Operation of equipment																																				
Road furniture and markings																																				
Operation																																				
Presence of the infrastructure																																				
Traffic																																				
Maintenance works																																				
Notes: a) Numerical value of 3 means probable major impact, 2 means intermediate and 1 means significant but relatively minor. b) Numbers without parentheses represent negative impacts. c) Numbers with parentheses represent positive impacts. d) Numbers in double parentheses represent combination of positive and negative impacts.																																				

## Appendix 4: TOR for EIA – Table of Contents

### Terms of Reference for EIA – Table of Contents

#### Executive Summary

#### 1.0 Introduction

- 1.1 Presentation of the project developer
- 1.2 Presentation of the Environmental and Social Consultant
- 1.3 Presentation of the Associate Organizations
  - 1.3.1 Laboratory (including accreditations)
  - 1.3.2 University
  - 1.3.3 Others
- 1.4 Project Outline
- 1.5 Report Layout

#### 2.0 Policy, Legal and Institutional Framework

*Briefly describe the Policy, Legal and Institutional Framework that will be followed during project implementation.*

- 2.1 Corporate Environmental and Social Policies (if applicable)
- 2.2 Policy and Legal Framework
- 2.3 International Conventions, Treaties and Agreements
- 2.4 Lao PDR Government Institutional Framework
- 2.5 International Policies, Guidelines and Standards (if applicable)
- 2.6 Project' Environmental and Social Standards

#### 3.0 Project Description and Alternative Selection

*Review briefly the project description including the potential alternatives, the methodology for comparison and selection of alternative, and the project description by phase.*

- 3.1 Project Rationale and Background
- 3.2 Project Location
- 3.3 Project Infrastructure
- 3.4 Alternatives to the Project
- 3.5 Comparison and Selection of Alternative
  - 3.5.1 Methodology
- 3.6 Description of the Selected Alternative
  - 3.6.1 Technical Description of the Selected Alternative
  - 3.6.2 Pre-Construction Activities
  - 3.6.3 Construction Activities
  - 3.6.4 Operation Activities
  - 3.6.5 Decommissioning, closure and post-closure Activities

#### 4.0 Baseline Study

*The limit of the study area(s) for the project shall be identified based on the results from the Scoping Report., The project developer shall provide the level of effort that will be spent to collect adequate information for each Physical, Biological, Socio-Economic, Cultural and Visual Component that must be described for the preparation of the EIA Report. Item 4.2.4.2 provides example of what kind of information should be included in the TOR for EIA.*

- 4.1 Setting the Study Limits
- 4.2 Outline of Content
  - 4.2.1 Related Issues
  - 4.2.2 Objectives of Study

- 4.2.3 Scope of Study
- 4.2.4 Method of Study
  - 4.2.4.1 Compilation of secondary data
  - 4.2.4.2 Survey for primary data collection (description of activities)
    - This information will be provided for each component and sub-component that will require primary data collection. Primary data collection may not be required for all the sub-components listed in sections 4.3, 4.4, 4.5 and 4.6. It will depend of the project potential environmental and social impacts.
    - e.g., for Physical and Biological surveys the following information shall be provided
      - *Sampling and analysis (including methodologies and parameters, calibration requirements)*
      - *Field Analysis(including methodologies and parameters)*
      - *Laboratory Analysis(including methodologies and parameters, laboratory accreditation)*
      - *Analytical result interpretation and assessment*
    - e.g., for Socio-economic surveys the following information shall be provided
      - *Type of survey (specific socio-economic surveys like household survey, collection of data from government organizations at national, provincial, district levels, field survey for land use characteristics, water supply quality (chemical and physical parameters), data collection from health centers and field investigations related to health surveys, archaeological surveys, identification and mapping of sites of spiritual or traditional value, field surveys related to housing and living conditions, identification and profile of vulnerable groups, gender studies, etc.*
      - *Area of survey*
      - *Field Analysis(including methodologies and parameters)*
      - *Laboratory Analysis(including methodologies and parameters)*
      - *Analytical result interpretation and assessment*
  - 4.2.4.3 Mapping
  - 4.2.4.4 Level of Efforts
    - 4.2.4.4.1 Qualification of specialists
    - 4.2.4.4.2 Time for literature review
    - 4.2.4.4.3 Time for field surveys by specialist
    - 4.2.4.4.4 Time for reporting by specialist
    - 4.2.4.4.5 Number of field surveys
- 4.3 Physical Components
  - 4.3.1 Climate/Meteorology (including climate change)
  - 4.3.2 Topography
  - 4.3.3 Geology/Seismology
  - 4.3.4 Soils
  - 4.3.5 Natural Hazards
  - 4.3.6 Hydrology
  - 4.3.7 Erosion and Sedimentation
  - 4.3.8 Surface and Groundwater Quality
  - 4.3.9 Mineral Resources
  - 4.3.10 Noise and Vibration
  - 4.3.11 Air Quality
  - 4.3.12 Others
- 4.4 Biological Components
  - 4.4.1 Terrestrial Ecology/Wildlife
  - 4.4.2 Forest/Vegetation Cover
  - 4.4.3 Aquatic Biota and Habitats
  - 4.4.4 Wetlands

- 4.4.5 Protected Areas
- 4.4.6 Biodiversity
- 4.5 Socio-Economic Components
  - 4.5.1 Administrative Organizations and Limits
  - 4.5.2 Population and Communities
  - 4.5.3 Social Profile
  - 4.5.4 Health Profile
  - 4.5.5 Vulnerable Groups
  - 4.5.6 Gender Issues
  - 4.5.7 Economic Activities
  - 4.5.8 Employment
  - 4.5.9 Traditional Production Systems
  - 4.5.10 Land Use (current and planning)
  - 4.5.11 Infrastructure Facilities
  - 4.5.12 Water Use and Water Supply
  - 4.5.13 Transportation
  - 4.5.14 Energy Sources
  - 4.5.15 Agriculture
  - 4.5.16 Forestry
  - 4.5.17 Fisheries/Aquaculture
  - 4.5.18 Industries
  - 4.5.19 Mineral Development
  - 4.5.20 Tourism
  - 4.5.21 Residential, Commercial, Tourism and/or Industrial Developments
  - 4.5.22 UXO
  - 4.5.23 Concerns of local communities
  - 4.5.24 Others
- 4.6 Cultural Components
  - 4.6.1 Archaeology
  - 4.6.2 Sites of Natural, Spiritual or Cultural Values
  - 4.6.3 Ethnic Groups
  - 4.6.4 Others Elements of Heritage Interest
- 4.7 Visual Components
  - 4.7.1 Landmarks
  - 4.7.2 Point of Interests
  - 4.7.3 Landscape
  - 4.7.4 Details of Local Materials, Styles, etc.
  - 4.7.5 Others

## **5.0 Impact Assessment and Mitigation Measures**

*The project developer will provide information (summary) on the methodology that will be used for the assessment of the impact, the limits of the study area, the modeling activities that will be required according to the potential impacts of its project and the potential impacts of the project that will be studied during each phase of project implementation.*

- 5.1 Impact Assessment Methodology
  - 5.1.1 Scope of Assessment
  - 5.1.2 Geographical Scope: Study Area Boundaries
  - 5.1.3 Temporal Scope
  - 5.1.4 General Methodology
  - 5.1.5 Methodology for the determination of Significance
  - 5.1.6 Mapping
  - 5.1.7 Key Issues and Selection of Valued Ecosystem Components
  - 5.1.8 Modeling Requirements
    - 5.1.8.1 Outline of Content
      - 5.1.8.1.1 Methodology
      - 5.1.8.1.2 Model
      - 5.1.8.1.3 Specialist
    - 5.1.8.2 Air Emissions
    - 5.1.8.3 Green-house Gases

- 5.1.8.4 Surface Water Quality
- 5.1.8.5 Groundwater Quality
- 5.1.8.6 Noise
- 5.1.8.7 Climate Change
- 5.1.8.8 Natural Hazards
- 5.1.8.9 Others (as required)
- 5.1.9 Outline of Content
  - 5.1.9.1 Pre-Construction Phase
    - 5.1.9.1.1 Potential Impacts
    - 5.1.9.1.2 Proposed Mitigation Measures
    - 5.1.9.1.3 Residual Impacts
    - 5.1.9.1.4 Proposed Monitoring
  - 5.1.9.2 Construction Phase
    - 5.1.9.2.1 Potential Impacts
    - 5.1.9.2.2 Proposed Mitigation Measures
    - 5.1.9.2.3 Residual Impacts
    - 5.1.9.2.4 Proposed Monitoring
  - 5.1.9.3 Operation Phase
    - 5.1.9.3.1 Potential Impacts
    - 5.1.9.3.2 Proposed Mitigation Measures
    - 5.1.9.3.3 Residual Impacts
    - 5.1.9.3.4 Proposed Monitoring
  - 5.1.9.4 Decommissioning, closure and post-closure Phase
    - 5.1.9.4.1 Potential Impacts
    - 5.1.9.4.2 Proposed Mitigation Measures
    - 5.1.9.4.3 Residual Impacts
    - 5.1.9.4.4 Proposed Monitoring
- 5.2 Physical Impact Assessment
  - 5.2.1 Air Quality
  - 5.2.2 Noise
  - 5.2.3 Surface Water Quality
  - 5.2.4 Groundwater Quality
  - 5.2.5 Erosion and Sedimentation
  - 5.2.6 Others
- 5.3 Biological Impact Assessment
  - 5.3.1 Fish and Fish Habitat
  - 5.3.2 Ecosystem
  - 5.3.3 Terrestrial Mammals, Amphibians and Reptiles
  - 5.3.4 Birds and Bats
  - 5.3.5 Protected Areas
  - 5.3.6 Others
- 5.4 Socio-Economic Impact Assessment
  - 5.4.1 Economic Development
  - 5.4.2 Employment
  - 5.4.3 Education and Training
  - 5.4.4 Resettlement, Land Acquisition and Compensation
  - 5.4.5 Demographic Changes
  - 5.4.6 Public Health and Nutrition
  - 5.4.7 Occupational Health and Safety
  - 5.4.8 Gender
  - 5.4.9 Ethnic Groups
  - 5.4.10 Vulnerable Groups
  - 5.4.11 Land Use Changes
  - 5.4.12 Traditional Livelihoods and Production Systems
  - 5.4.13 Access to Natural Resources (NTFP, Water, Hunting Areas, etc.)
  - 5.4.14 Local Business
  - 5.4.15 Existing Productive Activities (e.g., Fisheries/Aquaculture, Agriculture, Forestry, Mineral Resources, Tourism, etc.)
  - 5.4.16 Communication and Transport



- 5.4.17 Vulnerability to Natural Hazards and Climate Change
- 5.4.18 Others
- 5.5 Cultural Impact Assessment
  - 5.5.1 Archaeology
  - 5.5.2 Cultural Heritage
  - 5.5.3 Traditional Values and/or Lifestyles
  - 5.5.4 Others
- 5.6 Visual Impact Assessment
  - 5.6.1 Aesthetic
  - 5.6.2 Cultural, Traditional and/or Tourism Sites
  - 5.6.3 Particular Landscape
  - 5.6.4 Others
- 6.0 Risk Assessment**
  - 6.1 Methodology
  - 6.2 Qualitative Risk Assessment
    - 6.2.1 Pre-Construction Phase
    - 6.2.2 Construction Phase
    - 6.2.3 Operation Phase
    - 6.2.4 Decommissioning, closure and post-closure Phase
  - 6.3 Quantitative Risk Assessment
- 7.0 Cumulative Impact Assessment**
  - 7.1 Methodology and Approach
  - 7.2 Determination of Valued Ecosystem Components
  - 7.3 Determination of a Spatial and Temporal Framework
  - 7.4 Cumulative Impact Assessment
  - 7.5 Development of a Management Framework
- 8.0 Environmental and Social Management and Monitoring Plan**
  - 8.1 Context of the ESMMP
    - 8.1.1 Context of the Project
    - 8.1.2 project developer's Environmental and Social Policies and Commitments
    - 8.1.3 Institutional Arrangements
    - 8.1.4 Legal Requirements
    - 8.1.5 Summary of Impacts and Mitigation Measures
  - 8.2 Management and Monitoring Plans

*Briefly describe the content of each management and monitoring plan applicable for your project. These plans will be required for each phase of project implementation. Note that the list of Thematic Management and Monitoring Plans and the Site Specific Management and Monitoring Plans is indicative and will depend to the project's impacts.*

    - 8.2.1 Outline of Content
      - 8.2.1.1 By Project Phases
        - 8.2.1.1.1 Design
        - 8.2.1.1.2 Pre-Construction
        - 8.2.1.1.3 Construction
        - 8.2.1.1.4 Operation
        - 8.2.1.1.5 Decommissioning, closure and post-closure
      - 8.2.1.2 Content of each Management and Monitoring Plans
        - 8.2.1.2.1 Objectives
        - 8.2.1.2.2 Context
        - 8.2.1.2.3 Legal Requirements
        - 8.2.1.2.4 Management Actions
        - 8.2.1.2.5 Monitoring Plans
        - 8.2.1.2.6 Implementation Schedule
        - 8.2.1.2.7 Responsibilities
    - 8.2.2 Management and Monitoring Plans (Examples)
      - 8.2.2.1 Thematic Management and Monitoring Plan
        - 8.2.2.1.1 Noise management plan
        - 8.2.2.1.2 Air quality management plan
        - 8.2.2.1.3 Erosion and sedimentation management plan

- 8.2.2.1.4 Water quality management plan
- 8.2.2.1.5 Site clearing and landscaping plan
- 8.2.2.1.6 Rehabilitation and re-vegetation management plan
- 8.2.2.1.7 Biodiversity and conservation management plan
- 8.2.2.1.8 Worker accommodations management plan
- 8.2.2.1.9 In-migration management plan
- 8.2.2.1.10 Solid waste management plan
- 8.2.2.1.11 Water use management plan
- 8.2.2.1.12 Materials handling and storage (e.g., hazardous substances) management plan
- 8.2.2.1.13 Leak and spillage management plan
- 8.2.2.1.14 Wastewater and stormwater management plan
- 8.2.2.1.15 Transportation management plan
- 8.2.2.1.16 Communicable diseases management plan
- 8.2.2.1.17 Occupational health and safety management plan
- 8.2.2.1.18 Community health and safety management plan
- 8.2.2.1.19 Archaeological and cultural heritage management plan
- 8.2.2.1.20 Employment and training management plan
- 8.2.2.1.21 Investment and procurement management plan
- 8.2.2.1.22 Visual protection management plan
- 8.2.2.1.23 Others
- 8.2.2.2 Site Specific Management and Monitoring Plan
  - 8.2.2.2.1 Temporary access road management plan
  - 8.2.2.2.2 Permanent access road management plan
  - 8.2.2.2.3 Borrow pit management plan
  - 8.2.2.2.4 Workers camp management plan
  - 8.2.2.2.5 Refinery management plan
  - 8.2.2.2.6 Others
- 8.2.3 Emergency Plan
- 8.2.4 Public Consultation and Disclosure
- 8.2.5 Implementation Program

## **9.0 Public Consultation and Disclosure**

*Briefly indicate what has been done so far in the project in terms of public consultation activities, what efforts you will make to meet the key stakeholders and the affected population, and how you will do that (disclosure, numbers of meetings, types of meetings, means of information disclosure, how the opinions and comments of the key stakeholders and the affected populations will be integrated, Suggested mechanisms for complaints and grievance mechanisms?*

- 9.1 Overview
- 9.2 Consultation to Date
  - 9.2.1 Government
  - 9.2.2 Affected Peoples
- 9.3 Further Proposed Consultation
  - 9.3.1 Meetings with Local Administrations
  - 9.3.2 Meetings with Affected Communities and Peoples
  - 9.3.3 Presentation of the First Draft EIA Report
  - 9.3.4 Presentation of the Final EIA Report
- 9.4 Disclosure
  - 9.4.1 Preparation and distribution of booklets (in Lao)
  - 9.4.2 Local Radio

## **10.0 Development Plans**

*Development Plans are required by the Law, Decree, and Regulations and/or by the Funding Agency. The plans must also integrate monitoring activities to control their implementation*

- 10.1 Watershed Management Plan (for Hydroelectric power or Dam Project)
- 10.2 Biomass Removal Plan (for Hydroelectric power or Dam Project)

- 10.3 Resettlement and Compensation Plan
- 10.4 Stakeholder Engagement Plan
- 10.5 Livelihood Restoration Plan
- 10.6 Community Development Plan
- 10.7 Vulnerable Groups Development Plan
- 10.8 Others

**11.0 Visual and Graphic Presentation**

*The project developers shall identify the methodology that they will use to provide mapping support during preparation of the EIA for the project description, the alternatives, the description of the environment, social, cultural and visual components and sub-components that can be affected by the project. The scale of the maps and the resolution of the satellite images used for the project shall be provided.*

11.1 GIS (utilization during the baseline study)

- 11.1.1 Related Issues
- 11.1.2 Objectives
- 11.1.3 Scope
- 11.1.4 Method

11.2 Remote Sensing Application

- 11.2.1 Related Issues
- 11.2.2 Objectives
- 11.2.3 Scope
- 11.2.4 Method

11.3 Mapping

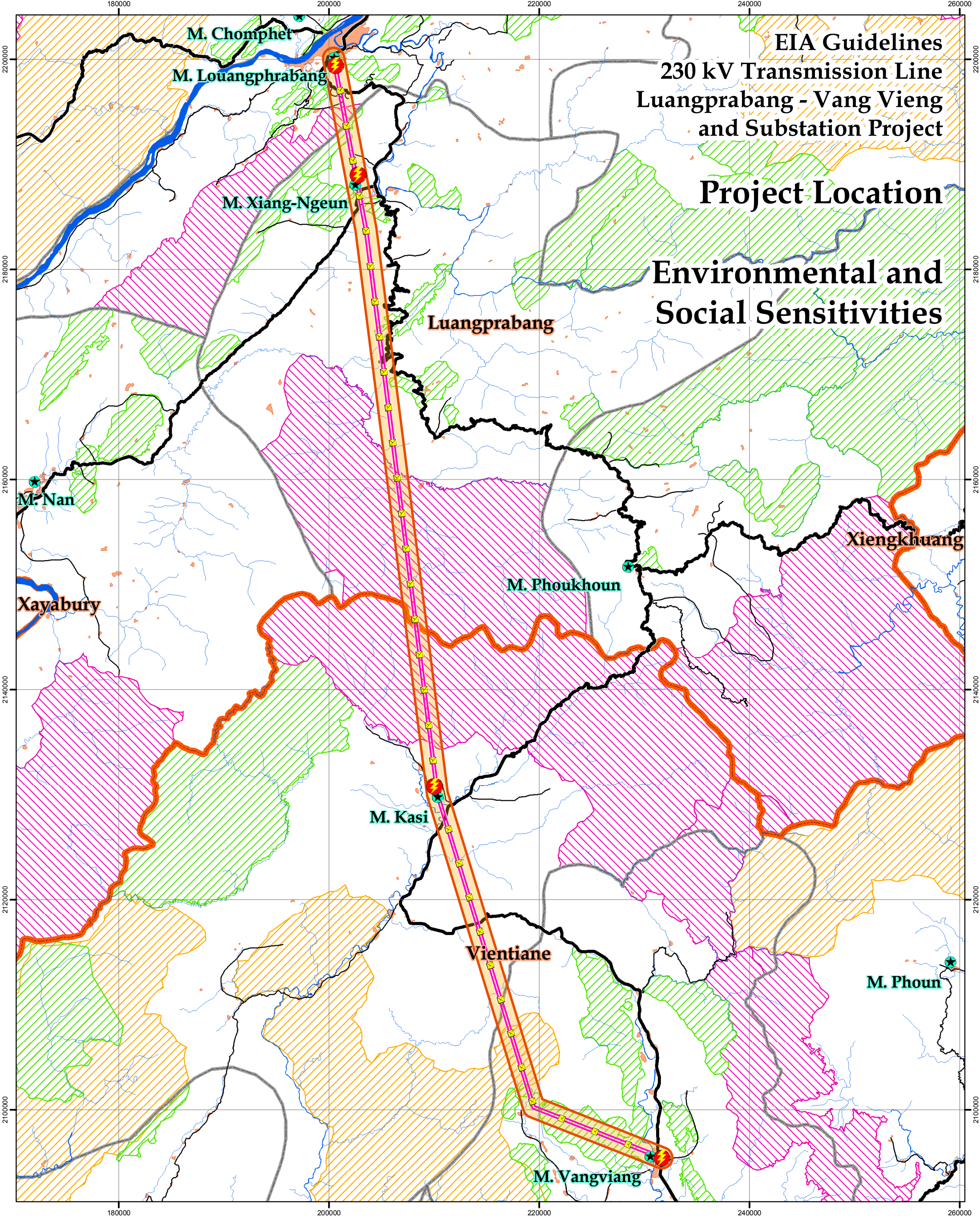
- 11.3.1 Related Issues
- 11.3.2 Objectives
- 11.3.3 Scope
- 11.3.4 Method

**12.0 Implementation Program**

- 12.1 Time Schedule
- 12.2 Team Qualifications and Experience
- 12.3 Involvement by Specialists

# Appendix 5: Mapping – Project Presentation





**Environmental and Socio-Economic Description**

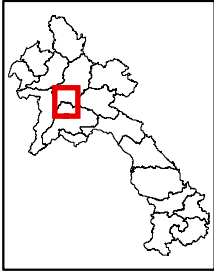
- |  |                 |  |                     |
|--|-----------------|--|---------------------|
|  | District Center |  | Provincial Boundary |
|  | National Road   |  | District Boundary   |
|  | Road            |  | Built-Up Area       |
|  | River/Stream    |  | Main River/Water    |

**Project Components**

- |  |                   |
|--|-------------------|
|  | Substation        |
|  | Transmission Line |
|  | Study Area        |

**Biological Environment**

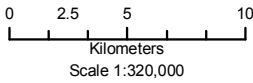
- |  |                            |
|--|----------------------------|
|  | Production Forest          |
|  | Protection Forest          |
|  | District Protection Forest |



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Environmental Management Support Programme (EMSP)  
Vientiane Capital, Lao PDR  
P.O. BOX 7864, Tel: (+856) 21 222 752

Sources:  
- Protected Area provided by FIPD  
- Administration boundaries and road data provided by NGD

Map Datum: WGS 84  
Projection: UTM Zone 48N





# Appendix 6: EIA Report – Table of Contents

## Volume 1: EIA Report

### Executive Summary

#### 1.0 Context of the Project

- 1.1 Presentation of the Project and its justification
- 1.2 Related Projects and Development
- 1.3 Presentation of the project developer and the EIA Consultant(s)
- 1.4 project developer' Commitments
- 1.5 Structure of the EIA Report

#### 2.0 Policy, Legal and Institutional Framework

- 2.1 Corporate Environmental and Social Policies
- 2.2 Policy and Legal Framework
- 2.3 International Conventions, Treaties and Agreements
- 2.4 Lao PDR Government Institutional Framework
- 2.5 International Policies, Guidelines and Standards (if applicable)
- 2.6 Project' Environmental and Social Standards

#### 3.0 Project Description and Alternatives

- 3.1 Presentation of the Project and Description of Alternatives
  - 3.1.1 Project Rationale and Background
  - 3.1.2 Project Location
  - 3.1.3 Project Infrastructure
  - 3.1.4 Alternatives
- 3.2 Comparison and Selection of Alternative
  - 3.2.1 Methodology
  - 3.2.2 Comparison and Selection of Alternative
- 3.3 Description of the Selected Alternative
  - 3.3.1 Technical Description of the Selected Alternative
    - 3.3.1.1 Pre-Construction Activities
    - 3.3.1.2 Construction Activities
    - 3.3.1.3 Operation Activities
    - 3.3.1.4 Decommissioning, closure and post-closure Activities
  - 3.3.2 Detail Design

#### 4.0 Description of the Environment

- 4.1 Setting the Study Limits
- 4.2 Physical Components
  - 4.2.1 Climate/Meteorology (including climate change)
    - 4.2.1.1 Methodology
    - 4.2.1.2 Description
  - 4.2.2 Topography
  - 4.2.3 Geology/Seismology
  - 4.2.4 Soils
  - 4.2.5 Natural Hazards
  - 4.2.6 Hydrology
  - 4.2.7 Erosion and Sedimentation
  - 4.2.8 Surface and Groundwater Quality
  - 4.2.9 Mineral Resources
  - 4.2.10 Noise and Vibration
  - 4.2.11 Air Quality
  - 4.2.12 Mapping
- 4.3 Biological Components
  - 4.3.1 Terrestrial Ecology/Wildlife
  - 4.3.2 Forest/Vegetation Cover
  - 4.3.3 Aquatic Biota and Habitats
  - 4.3.4 Wetlands

- 4.3.5 Protected Areas
- 4.3.6 Biodiversity
- 4.3.7 Mapping
- 4.4 Socio-Economic Components
  - 4.4.1 Administrative Organizations and Limits
  - 4.4.2 Land Use
  - 4.4.3 Social Profile
    - 4.4.3.1 Communities
    - 4.4.3.2 Demography
    - 4.4.3.3 Education
    - 4.4.3.4 Housing Conditions
    - 4.4.3.5 Vulnerable Groups
    - 4.4.3.6 Ethnic Groups
    - 4.4.3.7 Gender Situation
    - 4.4.3.8 Religion
    - 4.4.3.9 Political and Social Organizations
  - 4.4.4 Health Profile
    - 4.4.4.1 Mortality and Morbidity
    - 4.4.4.2 Incidence of Infectious Diseases
    - 4.4.4.3 Incidence of Chronic Diseases
    - 4.4.4.4 Diet and Nutrition
    - 4.4.4.5 Mental Health and Well Being
    - 4.4.4.6 Health Seeking Behavior
    - 4.4.4.7 Access to Health Services
    - 4.4.4.8 Access to Drinking Water, Sanitation and Waste Management
    - 4.4.4.9
  - 4.4.5 Economic Profile
    - 4.4.5.1 Employment
    - 4.4.5.2 Traditional Production System
    - 4.4.5.3 Household Income
    - 4.4.5.4 Cost of Living
    - 4.4.5.5 Land Ownership
    - 4.4.5.6 Local Business
    - 4.4.5.7 Existing Productive Activities (e.g., Fisheries, Agriculture, Forestry, Mineral Resources, Tourism, etc.)
    - 4.4.5.8 Others
  - 4.4.6 Infrastructure Facilities
    - 4.4.6.1 Roads
    - 4.4.6.2 Navigation and Ports
    - 4.4.6.3 Airports
    - 4.4.6.4 Transmission Lines
    - 4.4.6.5 Electricity
    - 4.4.6.6 Pipelines
    - 4.4.6.7 Hospitals and Health Care Centers
    - 4.4.6.8 Schools and Educational Centers
    - 4.4.6.9 Day Care Centers and Kindergartens
    - 4.4.6.10 Temples
    - 4.4.6.11 Cemeteries
  - 4.4.7 Water Sources, Use and Supply
  - 4.4.8 Energy Sources, Use and Supply
  - 4.4.9 UXO
  - 4.4.10 Mapping
  - 4.4.11 Concerns of Local Communities
- 4.5 Cultural Components
  - 4.5.1 Archaeology
  - 4.5.2 Temples, Monuments
  - 4.5.3 Minority Groups
  - 4.5.4 Mapping
- 4.6 Visual Components

- 4.6.1 Aesthetic
- 4.6.2 Point of Interests
- 4.6.3 Landscape
- 4.6.4 Mapping

## **5.0 Impact Assessment and Mitigation Measures**

- 5.1 Impact Assessment Methodology
  - 5.1.1 Scope of Assessment
  - 5.1.2 Geographical Scope: Study Area Boundaries
  - 5.1.3 Temporal Scope
  - 5.1.4 Methodology
    - 5.1.4.1 Assessment and Mitigation
    - 5.1.4.2 Thematic Presentation
    - 5.1.4.3 Site Specific Presentation
  - 5.1.5 Mapping
  - 5.1.6 Modeling Requirements
    - 5.1.6.1 Air Quality
      - 5.1.6.1.1 Methodology
      - 5.1.6.1.2 Results
      - 5.1.6.1.3 Mapping
    - 5.1.6.2 Surface Water Quality
    - 5.1.6.3 Groundwater Quality
    - 5.1.6.4 Noise
    - 5.1.6.5 Others
- 5.2 Identification of Impacts
- 5.3 Impacts, Mitigation Measures and Residual Impacts
  - 5.3.1 Biophysical Impact
    - 5.3.1.1 Air Quality
      - 5.3.1.1.1 Pre-Construction
      - 5.3.1.1.2 Construction
      - 5.3.1.1.3 Operation
      - 5.3.1.1.4 Decommissioning, closure and post-closure
    - 5.3.1.2 Surface Water Quality
    - 5.3.1.3 Groundwater Quality
    - 5.3.1.4 Erosion and Sedimentation
    - 5.3.1.5 Water Resources
    - 5.3.1.6 Fish and Fish Habitat
    - 5.3.1.7 Ecosystem
    - 5.3.1.8 Terrestrial Mammals, Amphibians and Reptiles
    - 5.3.1.9 Others
  - 5.3.2 Social Impact Assessment
    - 5.3.2.1 Communities and Services
      - 5.3.2.1.1 Pre-Construction
      - 5.3.2.1.2 Construction
      - 5.3.2.1.3 Operation
      - 5.3.2.1.4 Decommissioning, closure and post-closure
    - 5.3.2.2 Economic Development
    - 5.3.2.3 Employment
    - 5.3.2.4 Education and Training
    - 5.3.2.5 Resettlement, Land Acquisition and Compensation
    - 5.3.2.6 Demographic Changes
    - 5.3.2.7 Public Health and Nutrition
    - 5.3.2.8 Occupational Health and Safety
    - 5.3.2.9 Gender
    - 5.3.2.10 Ethnic Groups
    - 5.3.2.11 Vulnerable Groups
    - 5.3.2.12 Changes in Land Use
    - 5.3.2.13 Traditional Livelihoods and Productive Systems
    - 5.3.2.14 Access to Natural Resources (e.g., NTFP, Water Sources, Hunting Areas, etc.)

- 5.3.2.15 Local Business
- 5.3.2.16 Existing Productive Activities (Fisheries, Agriculture, Forestry, Mineral Resources, Tourism, etc.)
- 5.3.2.17 Communication and Transport
- 5.3.2.18 Water Sources and Water Supply
- 5.3.2.19 Vulnerability to Natural Hazards and Climate Change
- 5.3.2.20 Others
- 5.3.3 Cultural Impact Assessment
  - 5.3.3.1 Archaeology
    - 5.3.3.1.1 Pre-Construction
    - 5.3.3.1.2 Construction
    - 5.3.3.1.3 Operation
    - 5.3.3.1.4 Decommissioning, closure and post-closure
  - 5.3.3.2 Cultural Heritage
  - 5.3.3.3 Traditional Values and Lifestyles
  - 5.3.3.4 Others
- 5.3.4 Visual Impact Assessment
  - 5.3.4.1 Aesthetic
    - 5.3.4.1.1 Pre-Construction
    - 5.3.4.1.2 Construction
    - 5.3.4.1.3 Operation
    - 5.3.4.1.4 Decommissioning, closure and post-closure
  - 5.3.4.2 Point of Interests
  - 5.3.4.3 Particular Landscape
  - 5.3.4.4 Others

## **6.0 Risk Assessment**

- 6.1 Context of the Qualitative Risk Assessment
- 6.2 Methodology
- 6.3 Results of the Qualitative Risk Assessment
  - 6.3.1 Pre-Construction Phase
  - 6.3.2 Construction Phase
  - 6.3.3 Operation Phase
  - 6.3.4 Decommissioning, closure and post-closure Phase
- 6.4 Results of the Quantitative Risk Assessment

## **7.0 Cumulative Impact Assessment**

- 7.1 Methodology and Approach
- 7.2 Determination of Valued Ecosystem Components
- 7.3 Determination of a Spatial and Temporal Framework
- 7.4 Cumulative Impact Assessment
- 7.5 Development of a Management Framework

## **8.0 Environmental and Social Management and Monitoring Plan**

Only a Summary of the ESMMP should be presented in that section to ensure that the ESMMP is in line with the impact assessment and proposed mitigation measures. The full ESMMP should be presented in Volume 2.

- 8.1 Summary of the ESMMP
- 8.2 Reference to ESMMP

## **9.0 Public Consultation and Disclosure**

- 9.1 Introduction
- 9.2 Methodology and Approach
- 9.3 Summary of Consultation Activities Undertaken
- 9.4 Results of Consultation during Project Scoping
- 9.5 Results of Consultation during preparation of EIA Report
- 9.6 Results of Consultation on First Draft EIA Report
- 9.7 Results of Consultation during EIA Review
- 9.8 Recommendations for Ongoing Consultations

## **10.0 Development Plans**

- 10.1 Summary of Development Plans (if required)
  - 10.1.1 Watershed Management Plan (for Hydroelectric power or Dam Project)
  - 10.1.2 Biomass Removal Plan (for Hydroelectric power or Dam Project)

- 10.1.3 Resettlement Action Plan
- 10.1.4 Stakeholder Engagement Plan
- 10.1.5 Livelihood Restoration Plan
- 10.1.6 Community Development Plan
- 10.1.7 Vulnerable Groups Development Plan
- 10.1.8 Others
- 10.2 Reference (if other volumes or specialist reports are prepared for this EIA Report)

**Appendices: (for example, could be a separate Volume)**

- Appendix 1: Mapping
  - Project Description
  - Description of the Environment
  - Impacts and Mitigation Measures
- Appendix 2: Description of the Project
  - Flow Diagrams
  - Layouts
  - Others
- Appendix 3: Specialist Reports
  - Fisheries Study
  - Sedimentation and Erosion Study
  - Socio-Economic Study
  - Others
- Appendix 4: Modeling Reports (if required)
  - Air Quality
  - Surface Water Quality
  - Groundwater Quality
  - Noise
  - Others
- Appendix 5: Public Consultation and Disclosure
  - Minutes of Meetings

**Volume 2: ESMMP**

**PART I GENERAL MATTERS**

- 0.0 Terms and Definitions
- 1.0 General Overview
- 2.0 project developer's environmental and social policies and commitments
- 3.0 Legal Requirements and Environmental and Social Policies and Commitments
  - 3.1 Applicable Laws
  - 3.2 Contractual and Corporate Commitments
  - 3.3 Governing Parameters
- 4.0 ESMMP Organizational Structure, Roles and Responsibilities
- 5.0 Authorities and other Stakeholders

**PART II PLANS AND PROGRAMS**

- 6.0 Construction Phase
  - 6.1 Description of Construction Works
  - 6.2 Management and Monitoring Plans
    - 6.2.1 Site or Area Specific Plans
    - 6.2.2 Thematic Plans and Programs
- 7.0 Operational Phase
  - 7.1 Description of Operations
  - 7.2 Management and Monitoring Plans
    - 7.2.1 Site or Area Specific Plans
    - 7.2.2 Thematic Plans and Programs
- 8.0 Decommissioning, Closure and Post-closure
  - 8.1 Description of Decommissioning, Closure and Post-closure



8.2 Management and Monitoring Plans

8.2.1 Site or Area Specific Plans

8.2.2 Thematic Plans and Programs

**PART III: PROCEDURES AND SUPPORT PROGRAMS**

9.0 Management Procedures

9.1 Competence, training and awareness

9.2 Internal and External Communication

9.3 Documentation (GIS, GPS, photos, video recording, forms and reports, etc.)

9.4 Control of Documents

9.5 Operational Control

9.6 Emergency preparedness and response

10.0 Checking

10.1 Monitoring, measurements

10.2 Evaluation of Compliance

10.3 Non-compliance, corrective action and prevention action

10.3.1 Non-compliance Level and Communication

10.3.2 Non-compliance procedure

10.4 Control of Records

10.5 Internal Audit

10.6 External Audit

11.0 Management review

12.0 Cross Reference of ISO 14001:2004 Requirements and Sections in the ESMMP-OP

13.0 Cross Reference to Standards

14.0

**Volume 3: Development Plans (if required)**

- Watershed Management Plan
- Biomass Removal Plan
- Resettlement Action Plan
- Stakeholder Engagement Plan
- Livelihood Restoration Plan
- Community Development Plan
- Vulnerable Groups Development Plan
- Others

## Appendix 7: Form of Confirmation and Letter of Undertaking for EIA/ESMMP

### **[Letterhead of Company (or if Company not yet formed, of the Lead Sponsor)]**

Ministry of Natural Resources and Environment

[\_\_\_\_\_]

[\_\_\_\_\_]

Vientiane, Lao PDR

Attn: [\_\_\_\_\_] Department]

**Re: Environmental Impact Assessment Report in respect of the  
[\_\_\_\_\_] Project (the “EIA including ESMMP”)**

Dear [\_\_\_\_\_] ,

We refer to the captioned EIA which was prepared and finalized by *[insert name of Consultant(s) preparing the EIA)]*<sup>1</sup> in accordance with the *[\_\_\_\_\_ insert name of law / regulation establishing the requirement for preparation / submission of the EIA and the matters it is required to address]* under instruction by *[the Lead Sponsor]*, dated [\_\_\_\_\_] and formally submitted by *[\_\_\_\_\_ insert name of entity submitting the EIA]* to *[\_\_\_\_\_ insert name of receiving Department at MONRE]* under letter dated [\_\_\_\_\_].

Intending to be legally bound hereby and financially liable to *[GOL / MONRE]* hereunder, we:

- a. Endorse and confirm to *[GOL / MONRE]* the accuracy and completeness of the EIA,
- b. Confirm and undertake to *[GOL / MONRE]* that the EIA has been prepared in strict compliance with applicable Lao PDR law including EIA Decree No. 112/PM and with the Terms of Reference dated [\_\_\_\_\_] as approved by *[GOL / MONRE]* on [\_\_\_\_\_] as evidenced by the *[\_\_\_\_\_ Certificate / Letter of Approval]* issued on such date], and
- c. Confirm and undertake to *[GOL / MONRE]* that the Project Company established by *[the Lead Sponsor]* in respect of the [\_\_\_\_\_] Project shall at all times comply fully with: (i) any and all commitments and obligations as set forth in the EIA, and (ii) any and all plans and the various components thereof including without limitation impact avoidance, mitigation, and remediation measures, and with respect to both (i) and (ii), including but not limited to such commitments, obligations, plans and measures as relate to the development, construction, commissioning, operation and maintenance of the Project, and any circumstance in which work done or to be done, or services performed or to be performed in connection with the Project’s development, construction, commissioning, operation and maintenance is carried out

---

<sup>1</sup> NOTE: If more than one Consultant has prepared the EIA (or OP-ESMMP), or if the Lead Sponsor and / or other Sponsors or the Project Company have had any role in preparing the EIA, a table clearly and comprehensively outlining the division of work among each shall be attached as a Schedule to this confirmation letter. Note, further, that regardless of who has prepared the EIA, the entity submitting this confirmation letter shall bear full responsibility for the EIA and its contents, completeness and accuracy.

or intended or required to be carried out by any contractor, subcontractor or other party.

- d. We acknowledge and agree that any failure to so comply shall subject us to liability for breach of this undertaking and that, in addition to making financial compensation to [**GOL / MONRE**] and the payment of any applicable penalties under law or under the Project's Concession Agreement and its appendices, [**we / Project Company**] shall be responsible to [**GOL / MONRE**] to carry out and to bear all costs of the immediate and proper rectification of the event of non-compliance and any effects thereof.
- e. We acknowledge and agree, further, that any failure to so comply may be treated by [**GOL / MONRE**] as a breach by the Project Company under the Concession Agreement which, if not rectified in accordance with the terms and conditions of the Concession Agreement, and may lead to termination or other due exercise by GOL of remedies available to it thereunder.

The issuance of this confirmation and undertaking has been duly authorized by all necessary corporate action and a copy of the resolution of the [**shareholders / Board of Directors**] authorizing it and the Power of Attorney explicitly granting signing authorization to the individual who has signed below are attached as schedules hereto.<sup>1</sup>

[\_\_\_\_\_ **C., LTD.**]

By \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Schedules attach

---

<sup>1</sup> NOTE: MONRE should require an extract of the shareholders / Board resolution to be certified (by the CEO / General Manager) and attached to this undertaking along with a certified copy of a Power of Attorney properly empowering the named individual who has signed the confirmation and undertaking.

## Appendix 8: Mapping – Environmental Baseline Data – Example



EIA Guidelines

230 kV Transmission Line  
Luangprabang – Vang Vieng

Environmental  
Baseline Data  
Map 1 (ST 1 - 19)

Environmental and Socio-Economic Description

**Built Environment**

School

Hospital

Industrial Area

Residential Area

Planned Development

**Agriculture**

Irrigation network

Rice Field

Fruit Trees

Rubber Plantation

**Vegetation**

National Protected Area

Natural Forest

Regenerated Forest

Teak Plantation

Wetlands

**Fauna**

Fish Habitat

Bird Habitat

**Archaeology and Heritage**

Temple

**Physical Resources**

River

**Tourism Area**

Resort

Cave

Kayaking

Rafting

**Infrastructure**

National Road

Provincial Road

District Road

Village Road

Potable Water Intake

Meteorological Station

Telecommunication Tower

Borrow Pit

**Administrative Limit**

Provincial Boundaries

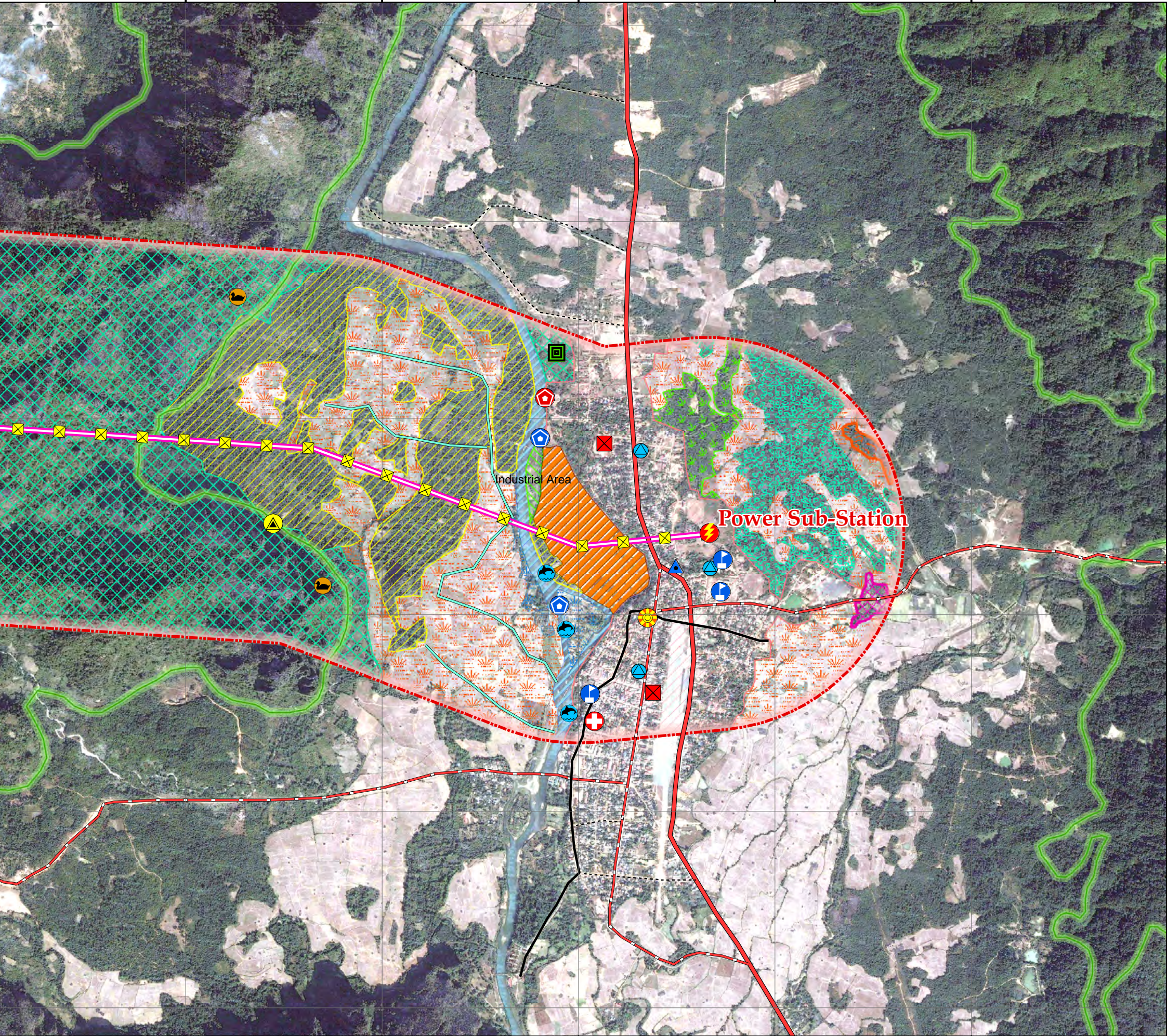
District Boundaries

**Project Components**

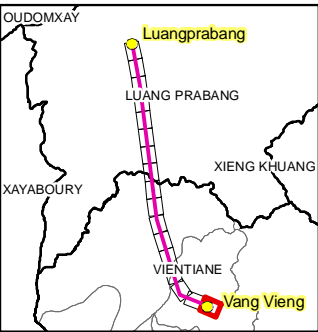
Project Study Area

230 kV Transmission Line

230/115/22 kV Substation



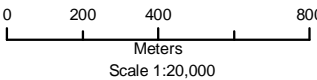
Sheet 1 of 19



Ministry of Natural Resources and Environment (MONRE)  
Environmental Management Support Programme (EMSP)  
Vientiane Capital, Lao PDR  
P.O. BOX 7864, Tel: (+856) 21 222 752

Sources:  
- Google Earth Satellite Imagery  
- Protected Area provided by FIPD  
- Administration boundary and road data provided by NGD

Map Datum.....WGS 84  
Projection.....UTM Zone 48N



September 2012





# Appendix 9: Impact Assessment Methodology - Example

## IMPACT ASSESSMENT METHODOLOGY

The assessment of environmental impacts is carried out in two steps: their identification and their evaluation. Sections 1 and 2 below describe each of these steps.

### *1. Identification of Impacts*

The identification of positive or negative impacts caused by project implementation is based on the analysis of effects resulting from interactions between the affected environmental components and the various equipment or activities to be carried out. The equipment and activities are thus considered as sources capable of producing changes in one or many of the sensitive environmental components.

Every element of the project is examined accordingly to its potential effects on each of the environmental components. The possible interactions between the different environmental components (indirect effects) are equally considered. The elements of the project linked to construction, operation, maintenance and closure phases are all considered.

During construction, the potential impact sources include:

- Building access roads;
- Development of the work site installations;
- Transportation and traffic caused by the moving of labour, machinery and construction materials;
- Deforestation;
- Earthwork and excavation, including dynamiting and drilling;
- Operating quarry and borrow pits;
- Disposal of excavated material;
- Work in watercourse (bridges, dams, port, etc.);
- Construction and development of facilities and the appurtenant structures;
- Waste disposal;
- Management of contaminated products;
- Job creation;
- Workforce accommodations;
- Procurement of goods and services;
- Others

During the operation, maintenance and closure period, activities that are sources of impacts are related to:

- Operation of equipment (noise, atmospheric emission, waste and dangerous goods management, purchase of goods and services, and job creation);
- Equipment maintenance and eventually equipment restoration;
- Equipment dismantling at end of its useful life.

The physical, biological or human environmental components which may be affected by the project are the sensitive elements in the study area, that is, those likely to change significantly because of components or activities linked to the project. They include:

- Air quality;
- Noise;
- Water quality;
- Sediment quality

- Soil Quality
- Terrestrial and aquatic vegetation
- Fauna;
- Threatened species
- Land use;
- Infrastructure;
- Cultural and archaeological heritage;
- Landscape;
- Economic activities;
- Others

## *2. Impact Assessment*

When all the potential effects of a project on an environmental component have been identified, the importance of the predicted modifications of this component is evaluated.

For this second step, the methodological approach followed is adapted from impact assessment methods recommended by Hydro-Québec (1990), by the ministère des Transports du Québec (1990), by the ministère de l'Environnement et de la Faune du Québec (1996), by the Canadian Environmental Assessment Agency (1999) and by the World Bank (1991) and International Finance Corporation (Dec. 1998).

The approach used to assess environmental impacts of the project determines the **Intensity**, **Extent**, and **Duration** of the anticipated positive or negative impact. These three qualifiers are grouped under one synthesis indicator, the **Significance** of the impact. This indicator provides an overall assessment of the anticipated impacts on a given environmental component. Figure 1.1 schematically presents the basic process leading to assessment of the impact Significance.

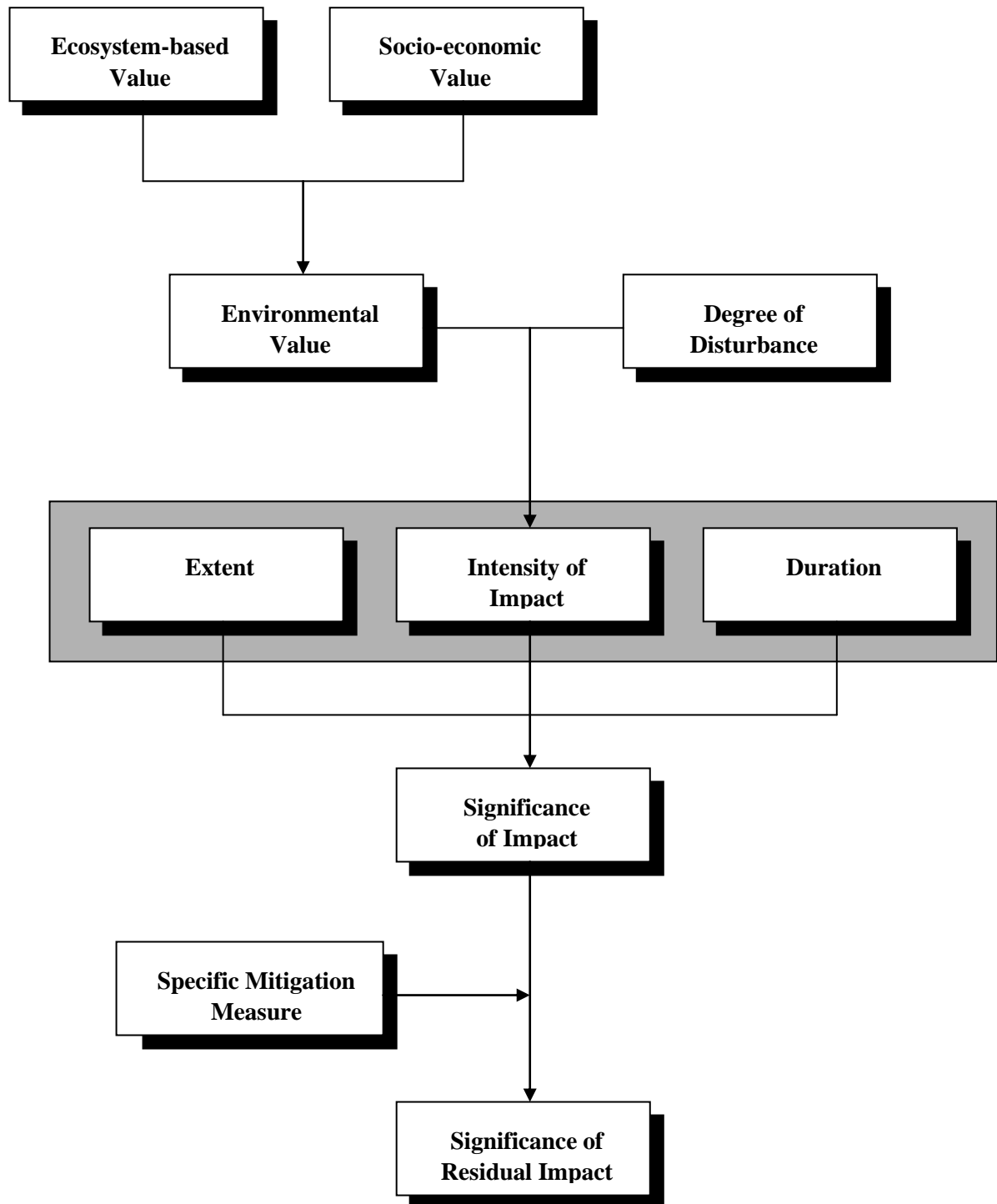
Although the impacts on the physical environment are described and quantified as accurately as possible, they cannot be assigned a value in and of themselves. Impacts on physical components, for example water quality, can only be assessed in terms of their resulting impacts on biological and human components, and not through its intrinsic value. The effects of changes on the physical environment, therefore, serve as input to the assessment of impacts on the biological and human environments.

### *2.1 Intensity of the Impact*

The **Intensity** of an impact expresses the relative importance of consequences attributable to a change in an environmental component. The **Intensity** of impact is an integration of the component's **Environmental Value** with its **Degree of Disturbance** and can be either positive or negative.

The **Environmental Value** of a component is the synthesis of its **Ecosystem-Based Value** and its **Social Value**.

**Figure 1: Impact Assessment Methodology**



The **Ecosystem-Based Value** expresses the relative importance of a component to the ecosystem as measured by its function or role. It integrates other notions as representativeness, patterns of use, diversity, or rare or unique characteristics. This value is the result of the judgment of specialists based on a systematic analysis of the characteristics of the environmental component.

The **Ecosystem-Based Value** of a given component is considered:

- **High**, when the component is of major interest in terms of its ecosystem-based function, biodiversity, or exceptional qualities and there is a consensus in the scientific community that it should be conserved or protected;
- **Medium**, when the component is of strong interest and recognized qualities, and there is concern, although not consensus, for its conservation or protection; and
- **Low**, when the component holds little interest, has few notable qualities, and there is little concern for its conservation or protection.

The **Social Value** of a component expresses the relative importance attributed to the component by the public, the various levels of government, or any other legislative or regulatory authority. The **Social Value** indicates the popular or political desire or will to conserve the integrity or the original character of a component. This will is expressed through the legal protection that the component is accorded, or by the concern of the local or regional public for the component. The **Social Value** evaluation is based on information gathered during various public consultations in the study zone.

The **Social Value** of a given component is considered:

- **High**, when the component is the object of legislative or regulatory measures (threatened or endangered species, conservation parks, etc.) or is essential to human activities (e.g., potable water);
- **Medium**, when the component is valued or used by a significant portion of the concerned population, but is not legally protected; and
- **Low**, when the component is of little concern or is not used by the population.

The **Environmental Value** integrates the **Ecosystem-Based Value** and the **Social Value** and retains the higher of the two values as shown in Table 1.1.

**TABLE 0.1 Grid for Determining Environmental Value**

Social Value	Ecosystem-Based Value		
	High	Medium	Low
High	High	High	High
Medium	High	Medium	Medium
Low	High	Medium	Low

The **Degree of Disturbance** for a component defines the scope of the changes that affect the component given its sensitivity to the proposed project. The changes for a given component may be negative or positive and the effect on the environmental component may be direct or indirect. The cumulative, synergetic, or delayed impacts, beyond the simple relation of cause and effect, could amplify the degree of disturbance of an environmental component when the environment is especially fragile. The **Degree of Disturbance** is:

- **High**, when an impact affects the continued viability of the environmental component, strongly and irreversibly impairs the component, or restricts its use in a significant way.
- **Medium**, when the impact changes, either by reducing or increasing, the quality or use of the environmental component affected, without, however, compromising its integrity;

- **Low**, when the impact affects the quality, use or integrity of the environmental component in a way that is barely perceptible; and
- **Undetermined** when it is impossible to assess how and to what extent the component will be affected. When the **Degree of Disturbance** is undetermined, the impact assessment cannot be completed for that component.

The **Intensity** of the impact results from the interaction of the three **Degrees of Disturbance** (High, Medium and Low) with the three classes of **Environmental Value** (High, Medium and Low). Table 1.2 shows the possible combinations of these inputs and the resulting Intensity.

**TABLE 0.2**                      **Grid for Determining Intensity of an Impact**

Degree of Disturbance	Environmental Value		
	High	Medium	Low
High	Very High	High	Medium
Medium	High	High	Low
Low	Medium	Low	Low

## 2.2 Extent of the Impact

The **Extent** of the impact expresses the spatial influence of the effects produced by an intervention on the environment. This refers either to a distance or an area over which a component will undergo changes. It could also refer to the portion of the population that will be affected by the changes.

The three levels of extent are:

- **Regional**, when an impact affects a large geographic area or a number of components located a significant distance from the project, or when it is experienced by the entire population or by a significant portion of the population in the study area;
- **Local**, when the impact affects a relatively restricted area located within, near, or at a limited distance from the project site; or when it is experienced by a limited portion of the population in the study area; and
- **Site-Specific**, when the impact affects only a very restricted area in the proximity of the project site; or is experienced by only a small number of individuals in the study area.

## 2.3 Duration of the Impact

The **Duration** of the impact describes the period of time during which a component undergoes changes due to the impact. **Duration** is not necessarily equivalent to the period of time during which the direct source of impact is active. It must also take into consideration the frequency when the impact is intermittent. **Duration** is characterized as:

- **Long**, when the effects are experienced continuously for the life of the facility, or even beyond if the effect is irreversible;
- **Medium**, when the effects are experienced over a relatively prolonged period of time, but less than the duration of the life of the facilities; and
- **Short**, when the effects are experienced over a limited period of time, generally corresponding to the period of construction, the start-up period, a single season, etc.



## 2.4 *Significance of the Impact*

The interaction between the **Intensity**, **Extent**, and **Duration** defines the **Significance** of an impact on a given environmental component. Table 1.3 presents the grid for determining **Significance** and differentiates between five levels of significance, ranging from Very High to Very Low.

The relative importance of each impact is assessed based on the understanding that general mitigation measures will be integrated into the baseline project. For example, if the project states as a general mitigation measure that forests will be protected near water courses, the impact analysis assumes that all forests will be untouched wherever there will be activities near water courses. Here is another example applicable to an industrial project: if it is anticipated that a silencer should be installed on a chimney, the evaluation of noise impacts will take into account the noise reduction attributable to the silencer. However, if no such equipment was anticipated at the beginning of the project and that the noise level is unacceptable, a mitigation measure will be suggested (ex: installing a silencer on the chimney). When the general mitigation measures reduce impacts to the point of rendering them negligible they are excluded from further analysis.

Once the **Significance** of an impact is established as more than negligible, it is described and additional, specific mitigation measures may be proposed to allow optimal integration of the project into the environment.

The final assessment phase consists of determining the residual significance of the impact after all mitigation measures are taken in consideration. The issue here, then, is to clarify how the mitigation measure changes one or several of the inputs in the impact assessment process described above.

- The thought processes leading to the impact assessment are summarized in **Impact Sheets**, which are filled for each significant impact. When required, the uncertainty level that affects the assessment as well as the probability that the impact occurs are indicated on the **Impact Sheets**.

**Table 1.3: Grid for Determining Impact Significance**

<b>Intensity</b>	<b>Extent</b>	<b>Duration</b>	<b>Significance</b>
Very High	Regional	Long Medium Short	Very High Very High Very High
	Local	Long Medium Short	Very High Very High High
	Site-specific	Long Medium Short	Very High High High
High	Regional	Long Medium Short	Very High High High
	Local	Long Medium Short	High High Medium
	Site-specific	Long Medium Short	High Medium Medium
Medium	Regional	Long Medium Short	High Medium Medium
	Local	Long Medium Short	Medium Medium Low
	Site-specific	Long Medium Short	Medium Low Low
Low	Regional	Long Medium Short	Medium Low Low
	Local	Long Medium Short	Low Low Very low
	Site-specific	Long Medium Short	Low Very low Very low

## Appendix 10: Methodology for Qualitative Risk Assessment – Example

### METHODOLOGY FOR QUALITATIVE RISK ASSESSMENT

Risk is defined as the product of the potential consequence (or severity) of an event and the likelihood (or probability) of that consequence occurring.

Typically a risk assessment includes:

- Setting the risk context, including objectives and the proposed activities;
- Identification of potential impacts associated with the relevant environmental factors;
- Determination of management measures for each of the identified potential impacts. Depending on the phase of the project, these measures are based on existing controls and standard practice or are additional mitigation controls required to lessen the risk to 'As Low as Reasonably Practicable' (ALARP); and
- Assignment of a severity and likelihood factor for each potential impact to determine the risk rating and its significance as either low, minor, moderate, major or critical.

The risk assessment methodology used to identify and rank the potential environmental impacts associated are compliant with AS/NZS 4360 Risk Management.

The descriptors used in this example are based on the Standards Australia's HB 203:2006 (Standards Australia, 2006b) and the South Australian Guidelines for miners: preparation of a mining lease proposal or mining and rehabilitation program in South Australia (PIRSA, 2009). These descriptors are more appropriate for a mining project (Table 1).

**Table 1. Descriptors used to classify likelihood and qualitative measures of impact**

Level	Descriptor	Detail of Description
<b>Likelihood</b>		
A	Almost certain	Is expected to occur in most circumstances, or is of a continuous nature, or likelihood is unknown.
B	Likely	Will probably occur during mine lifetime.
C	Possible	Could occur in most mines.
D	Unlikely	Could occur in some mines, but not expected to occur.
E	Rare	Occurs only in exceptional circumstances.
<b>Consequence</b>		
1	Catastrophic	Health – death or widespread health effects, or toxic release off-site with detrimental effect. Environmental – extreme permanent changes to the natural environment (not able to be practically or significantly rehabilitated or alleviated). Social – major public outrage. Financial – huge financial loss (greater than A\$500 million). Or the consequences are unknown.
2	Major	Health – extensive injuries or significant staff numbers incapacitated resulting in a loss of production capability.

		<p>Environmental – substantial and significant changes to the natural environment or only partially able to be rehabilitated or alleviated.</p> <p>Social – will attract public concern in wider community.</p> <p>Financial – major financial loss (A\$100 to 500 million).</p> <p>Or changes will be substantial if cumulative effects are considered.</p>
3	Moderate	<p>Health – medical treatment required.</p> <p>Environmental – significant local changes, but can be rehabilitated or alleviated with difficulty at significant cost and with outside assistance.</p> <p>Social – will attract concern of adjoining community.</p> <p>Financial – high financial loss (A\$10 to 100 million).</p>
4	Minor	<p>Health – first aid treatment required.</p> <p>Environmental – on-site release immediately contained very local consequence with no significant long-term changes or may be simply rehabilitated. Social – not of significant concern to wider community.</p> <p>Financial – medium financial loss (A\$1 to 10 million).</p>
5	Insignificant	<p>Health – no injuries.</p> <p>Environmental – negligible environmental impact.</p> <p>Social – unlikely to be noticed by public.</p> <p>Financial – low financial loss (less than A\$1 million)</p>

The level of risk for each potential impact was then determined by combining consequences and likelihood using the risk matrix shown in Table 2.

**Table 2. Qualitative risk analysis matrix**

			Severity of Consequence				
			1	2	3	4	5
			Catastrophic	Major	Moderate	Minor	Insignificant
Likelihood of Consequence	A	Almost Certain	Extreme	Extreme	Extreme	High	High
	B	Likely	Extreme	Extreme	High	High	Moderate
	C	Possible	Extreme	Extreme	High	Moderate	Low
	D	Unlikely	Extreme	High	Moderate	Low	Low
	E	Rare	High	High	Moderate	Low	Low

## Appendix 11: Budget for Social and Environmental Management and Monitoring

### Budget for Social and Environmental Management and Monitoring Mining Project – Example

Management aspects	Costs		
	Capital	Operating (per year)	Closure
<b>Community Management</b>			
Stakeholder Liaison			
Government Liaison			
Contractors / Consultants			
Community relations budget			
Public Consultation			
Public Awareness			
Training – Workers			
Sub-total			
<b>Environmental Management</b>			
Miscellaneous network and equipment:			
Water quality multi-parameter probe (2 units)			
Air quality monitoring equipment (2 units)			
Noise monitoring equipment (1 unit)			
Digital camera (2 units)			
Handheld GPS (2 units)			
Equipment Maintenance (5% of capital cost)			
Aquatic Fauna - Biennial Monitoring			
Socio-Economic Surveys (every 2 years)			
Analytical Equipment and Reagents			
Internal Monitoring			
External Monitoring			
Environment & Social Auditing			
Progressive Rehabilitation			
Sub-total			
<b>Company Environmental and Social Management Staffs</b>			
Risk Manager (1)			
Superintendent (1)			
Senior Officers (2)			
Officers (4)			
Senior assistants (6)			



Assistants (25)			
Vehicles (2)			
Computers			
Sub-total			
<b>Closure Management</b>			
Mine Site/Waste Dumps			
Process Site Plants			
Tailings Storage Facility			
Closure Investigations			
Other, erosion control and stabilization, etc.			
Sub-total			
<b>External Institutional Monitoring</b>			
<b>Project EMU</b>			
- Equipment			
- Sound Level Meter			
- Air Quality Monitoring Equipment			
- Water Quality Monitoring Equipment			
- Digital camera (2 units)			
- Handheld GPS (2 units)			
- Equipment Maintenance (5% of capital cost)			
- Others			
- Staff			
- 1 EIA Manager			
- 1 Sociologist			
- 1 Biologist			
- Training (twice / year)			
- Vehicle (operation and maintenance)			
- Office (Rent, Furniture, AC, Internet...)			
<b>MONRE</b>			
- Bi-Annual Monitoring Session : 5 MONRE Staffs / 5 days per session)			
- Transportation			
- Accommodation			
- Allowances			
- Monitoring Costs			
Sub-total			
<b>Total Costs</b>			
Total			

# Submission Form

## Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: 23<sup>rd</sup> June 2016

*(Required)*

Submitted by (provide individual and STWG contact information):

Philippe Karpe

STWG 6 Exploration and Mineral Exploitation Management

*(Required, including relevant STWG, if any.)*

### 1. Issue:

*(Please provide a brief description of the issue that is addressed by the recommendation included in number 4 [“4. Recommendation”] below.).*

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

**Book 1** - General Provision

**Title 1** – General Provisions

**Article 3: Scope of the Code**

This Code regulates environmental protection activities; policies, measures and resources for protection of the environment; and the rights and obligations of organizations, community, family households and individuals with respect to protection of the environment.

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

*(Please include here the text of the recommendation to address the issue provided in number 1 [“1. Issue”] above. If needed, note “See Attachment” for corresponding documents.)*

We may pay attention to the last french environmental law: **PROJET DE LOI POUR LA RECONQUÊTE DE LA BIODIVERSITÉ, DE LA NATURE ET DES PAYSAGES: proposition d'Article L110-1**

5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

7. Drafting Team Analysis/Response (to be included in public database):

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Date of Submission: 23<sup>rd</sup> June 2016

(Required)

Submitted by (provide individual and STWG contact information):

Philippe Karpe

STWG 6 Exploration and Mineral Exploitation Management, 0:5 Special rights of vulnerable persons in environmental matters, including women, children, disabled persons, and ethnic minority groups and indigenous peoples

(Required, including relevant STWG, if any.)

#### 1. Issue:

(Please provide a brief description of the issue that is addressed by the recommendation included in number 4 ["4. Recommendation"] below.)

#### 2. Reference to Code Book and Chapter Title (if applicable):

(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)

**Book 1** - General Provision

**Title 1** – General Provisions

Article13: Principle of Gender Equality for Natural Resources Decisions

The involvement of women is promoted in environmental decision-making at all levels so as to integrate gender concerns and perspectives into policies and programs for sustainable development and into the implementation of this Code.

Impact assessments for development projects and environmentally relevant policies will include mechanisms to effectively assess the impacts on women.

xxx

#### 3. Comparative Experience (if any):

(Please include any Cambodian and international examples and experience.)

#### 4. Recommendation:

karpe 6/14/2016 6:24 PM

**Comment [1]:** We mustn't limit the principle to the decision

karpe 6/14/2016 6:24 PM

**Comment [2]:** Add a new principle concerning the youth

karpe 6/14/2016 6:24 PM

**Comment [3]:** We may enlarge this principle to become a new principle and the link between environment and well being of vulnerable groups

*(Please include here the text of the recommendation to address the issue provided in number 1 [“1. Issue”] above. If needed, note “See Attachment” for corresponding documents.)*

**Book 1** - General Provision

**Title 1** – General Provisions

Article 13: Principle of Gender Equality for Natural Resources Decisions

The involvement of women is promoted in environmental decision-making at all levels so as to integrate gender concerns and perspectives into policies and programs for sustainable development and into the implementation of this Code.

Impact assessments for development projects and environmentally relevant policies will include mechanisms to effectively assess the impacts on women.

**5. Proposed Language to be Inserted into the Draft Code (if any):**

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

**6. Cambodian Laws to be Abrogated or Modified (if any):**

*(Please include the law title and the titles of specific articles and clauses.)*

**7. Drafting Team Analysis/Response** (to be included in public database):

karpe 6/14/2016 6:25 PM

**Comment [4]:** We mustn't limit the principle to the decision

karpe 6/14/2016 6:25 PM

**Comment [5]:** Add a new principle concerning the youth

karpe 6/14/2016 6:25 PM

**Comment [6]:** We may enlarge this principle to become a new principle and the link between environment and well being of vulnerable groups



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- *If needed, please submit large documents as an attachment.*
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Date of Submission: 23<sup>rd</sup> June 2016

*(Required)*

Submitted by (provide individual and STWG contact information):

Philippe KARPE

STWG 6 Exploration and Mineral Exploitation Management, STWG 6:6 Community land tenure and sustainable resource access and use rights

*(Required, including relevant STWG, if any.)*

### 1. Issue:

*(Please provide a brief description of the issue that is addressed by the recommendation included in number 4 [“4. Recommendation”] below.)*

Legal status of the COMMONS. An alternative to community or participative mangament

### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

**Book 3** – Environmental Management and Sustainability Mechanisms

**Title 3** – Community Management

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

**Madagascar.** Loi n° 96-025 du 30 septembre 1996 relative à la gestion locale des ressources naturelles renouvelables Repoblikan'i Madagasikara. Loi no. 96-025 relative à la gestion locale des ressources naturelles renouvelables [Law no. 96-025 on the local management of renewable natural resources]. Antananarivo, Madagascar; 30th September 1996

**Sénégal.** Loi n° 64-46 du 17 juin 1964 relative au Domaine National Act n° 64-46 of June 17, 1964 relating to National Land

#### 4. Recommendation:

*(Please include here the text of the recommendation to address the issue provided in number 1 [“1. Issue”] above. If needed, note “See Attachment” for corresponding documents.)*

##### **Description of the Commons**

**"Any general features of the Commons: Commons are the opening and general pattern of Humanity** to secure the appropriation of territories and rights about resources. Always a third of Humanity are commoners. Commons were known more or less by all the civilizations but never along the same solutions; **Commons are founded on the paradigm of sharing** (that is "cutting" and gathering) and not exchange. Societies differ on what is precisely shared (always many "goods") and pluralistics rules of sharing **to maintain inclusive relations**. Exchange becomes prevailing with Capitalism and exclusivism; **Commons are not only wealth**. There are a complex whole of communities, specific resources and rules for governance, (Bollier) where the main constraint is "communing" (infra) and not producing"<sup>1</sup>.

##### **Aim of the Commons**

By "communing", one pursue a shared and balanced management of the same space for the benefit of one and all at once.

"The drama of communing is an active, living process (...) Trying to define the commons using definition and methodologies from the natural science is futile. Communing involves so much idiosyncratic creativity, improvisation situational choices, and dynamic evolution that it can only understood as aliveness. It defies simple formula or analysis. (...) Theory and practice must be in intimate conversation (...) If the primary focus of commons is not on resources, goods or things, but on interpersonal and human/nature relationships, then institutions of any kind (...) must reliably promote three things : **respect for ecological boundaries, stable community and voluntary cooperation**. (...) importance of empathy, social relationship and culture (...) Commons, at their core, are relational social frameworks"<sup>2</sup>.

##### **Content of the Commons law**

Some general aspects:

- "in a communautarian ideology, nobody may be excluded, excepted for his own injuries. When somebody is excluded from a common (too small, too precarious, and so on) he may share an other common, material or immaterial, in another place or moment. Always an another or more large possible attachment to a collective of commoners. To exclude is here positive ; to gather at another scale"<sup>3</sup>.
- "observed empirically, never ordered by an external authority but managed by commoners on basis of a fonctionnal logic. The « need », nor « the reason », is the criterium of pragmatic adjustments"<sup>4</sup>.

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<sup>1</sup> "The Two Faces of the Commons", Presentation by Etienne Le Roy at "Commons tenure for a common future" Discussion Forum on the first day of the Global Landscapes Forum 2015, in Paris, France alongside COP21.

<sup>2</sup> David BOLLIER, Silk HELFRISH, "Patterns of Communing", Amherst, Mass., Off The Common Books, 2015, p. 3.

<sup>3</sup> "The Two Faces of the Commons", Presentation by Etienne Le Roy at "Commons tenure for a common future" Discussion Forum on the first day of the Global Landscapes Forum 2015, in Paris, France alongside COP21.

<sup>4</sup> "The Two Faces of the Commons", Presentation by Etienne Le Roy at "Commons tenure for a common future" Discussion Forum on the first day of the Global Landscapes Forum 2015, in Paris, France alongside COP21.

- "functionnal logic of the commons is superimposable with institutional logic of property rights and ownership when use is compatible with exclusivity of property rights"<sup>5</sup>.
- these spaces may overlap, coordinate, merge and then untie.
- "we must recognize the importance of different types of property, just as various kinds of commons exist. Yet the physical areas devoted to specific *common activities* bear witness to longstanding common practices even on "private property," e.g., playing fistball or gathering forest fruits. That was my first lesson. It was to be confirmed in the Amiénois, my own area of Picardy: a "common" function which is thus inherent and not made explicit can be superimposed on a right of ownership that is exclusive and absolute in principle. That function would then limit the exercise of this right, to the benefit of all members of a certain community insofar and as long as this function requires it. In the absence of players, for example, the fistball fields were transformed into community squares, flowerbeds, places for storing materials, and the like.<sup>6</sup> Functional logic triumphs over institutional logic!"<sup>7</sup>.
- "using the intercultural concept, that of *maîtrise*,<sup>8</sup> of dominance and control, which one defines as follows: "The concept of control mastery suggests a power and a force that grants particular responsibility to those who reserve the rights to a territory more or less exclusively because they are actually affected by what happens there. The concept permits sovereignty and property to be combined – the two concepts provide a "frame" for the debate about land use (...) – by emphasizing that rights and responsibilities can arise from a concrete relationship to space (Translator's note: Here: "land,") and that this responsibility must be retained or ensured at its core." (Le Roy 1995: 489)"<sup>9</sup>.

One example: Sénégal, Loi n° 64-46 du 17 juin 1964 relative au Domaine National / Act n° 64-46 of June 17, 1964 relating to *National Land*, *Journal officiel de la République du Sénégal*, 11 juillet 1964, p. 905 et 906: "A substantial part of this very brief law– just seventeen articles – is concerned with these *zones de terroirs* that are managed by rural collectivities (*communautés rurales*). This is where the most references to commons are to be found. The law states that "the land in rural areas (*zones de terroirs*) are used by members of the local municipalities who guarantee its management and conduct it under state control (...)" (Article 8) and that the decision-making power for specific uses (Article 9) or setting aside land (Article 15) lies with the relevant councils of the municipality rural community in question. That is one provision that would actually have authorized self-organization among people to create and formalize a culture of the commons – had party politics had not interfered. And this is where real life comes into play"<sup>10</sup>.

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<sup>5</sup> "The Two Faces of the Commons", Presentation by Etienne Le Roy at "Commons tenure for a common future" Discussion Forum on the first day of the Global Landscapes Forum 2015, in Paris, France alongside COP21.

<sup>6</sup> Professor Carol Rose notes that British legal doctrine once recognized the right of localities to uphold "customs of the manor" overriding common law: "To be held good, the custom in question must have existed without dispute for a time that supposedly ran beyond memory, and it had to be well defined and 'reasonable.'....Custom thus suggests a route by which a 'commons' may be managed – a means different from ownership either by individuals or by organized governments. The intriguing aspect of customary property rights is that they vest property rights in groups that are indefinite and informal yet nevertheless capable of self-management. Custom can be the medium through which such an informal group acts; indeed the community claiming customary rights was in some senses not an 'unorganized' public at all, even if it was not a formal government either." "The Comedy of the Commons: Custom, Commerce and Inherently Public Property," [Chapter 5] in Carol M. Rose, *Property and Persuasion: Essays on the History, Theory and Rhetoric of Ownership* (Boulder, Colorado: Westview Press, 1994) pp. 123-124.

<sup>7</sup> Etienne Le Roy, "How I Have Been Conducting Research on the Commons for Thirty Years Without Knowing It", dans David Bollier and Silke Helfrich (eds.), *Patterns of Commoning* (Amherst, MA, Off the Common Books, 2015, pp. 277-296). German edition: Silke Helfrich, David Bollier und Heinrich-Böll-Stiftung (Hg.): *Die Welt der Commons. Muster gemeinsamen Handelns* (transcript Verlag, 2015).

<sup>8</sup> Editors' note: "*Maîtrise*" can also be translated as "mastery" in the sense of "mastering something/performing something well," but what is meant is dominance and control over one's own living conditions.

<sup>9</sup> Etienne Le Roy, "How I Have Been Conducting Research on the Commons for Thirty Years Without Knowing It", dans David Bollier and Silke Helfrich (eds.), *Patterns of Commoning* (Amherst, MA, Off the Common Books, 2015, pp. 277-296). German edition: Silke Helfrich, David Bollier und Heinrich-Böll-Stiftung (Hg.): *Die Welt der Commons. Muster gemeinsamen Handelns* (transcript Verlag, 2015).

<sup>10</sup> Etienne Le Roy, "How I Have Been Conducting Research on the Commons for Thirty Years Without Knowing It", dans David Bollier and Silke Helfrich (eds.), *Patterns of Commoning* (Amherst, MA, Off the Common Books, 2015, pp. 277-296). German edition: Silke Helfrich, David Bollier und Heinrich-Böll-Stiftung (Hg.): *Die Welt der Commons. Muster gemeinsamen Handelns* (transcript Verlag, 2015).

## The Patterns of the Commons's Law

The challenge is to enact laws which can accompany the Commons and not to contradict and to infringe them.

Two important *preliminary remarks*:

- "[...] opening up the topic of the commons triggers a kind of domino effect. As soon as the first domino falls over – by invoking the commons -- many of the concepts on which the idea of modern Western civilization rests lose their apparent balance, and the whole edifice, previously believed to be well-founded, collapses onto itself: the state, the law, the market, the nation, work, contracts, debts, giving, the juristic person, private property, as well as institutions such as kinship, marital law, and the law of succession are suddenly called into question. We often consider these concepts to be universally valid, but intercultural comparison reveals that they are only a custom, a folkway that deeply influenced our modern Western legal tradition (which itself proves to be a folk law of its own)"<sup>11</sup>.
- "all things or wealth being sharing on a long or short terme basis and more or less publicly, **there are no nomenclature, typology or models judicious for all and always. Here, is prevailing a thinking binding any members of a corporate group, things or "goods" (always specified) and discreet or secret regulations said as "agreement" or "customs"**. An other specificity is that Commons are determined by a **functional** ( pragmatic) logic and not by an institutionnal one. Consequently, a big problem with 'Law'"<sup>12</sup>.

Some lessons learned from african experiences:

- we may prefer enacting a single law on "development spaces" or on "commons" than many *sector-specific laws* (land law, forest law, law on participative management, etc.)
- we may set up an observatory of the Commons which may help to recognize, to support and to monitor practices and to serve as a decision support tool.

## 5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

May we have a discussion?

## 6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

### Land law, 2001

#### CHAPTER 3 – COLLECTIVE OWNERSHIP

##### Part 2: Immovable Property of Indigenous Communities

#### Article 26

Ownership of the immovable properties described in Article 25 is granted by the State to the indigenous communities as collective ownership. This collective ownership includes all of the rights and protections of ownership as are enjoyed by private owners. But the community does not have the right to dispose of any collective ownership that is State public property to any person or group.

The exercise of all ownership rights related to immovable properties of a community and the specific conditions of the land use shall be subject to the responsibility of the traditional authorities and mechanisms for decision-making

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<sup>11</sup> Etienne Le Roy, "How I Have Been Conducting Research on the Commons for Thirty Years Without Knowing It", dans David Bollier and Silke Helfrich (eds.), *Patterns of Commoning* (Amherst, MA, Off the Common Books, 2015, pp. 277-296). German edition: Silke Helfrich, David Bollier und Heinrich-Böll-Stiftung (Hg.): *Die Welt der Commons. Muster gemeinsamen Handelns* (transcript Verlag, 2015).

<sup>12</sup> "The Two Faces of the Commons", Presentation by Etienne Le Roy at "Commons tenure for a common future" Discussion Forum on the first day of the Global Landscapes Forum 2015, in Paris, France alongside COP21.

of the community, according to their customs, and shall be subject to the laws of general enforcement related to immovable properties, such as the law on environmental protection.

The provisions of this article are not an obstacle to the undertaking of works done by the State that are required by the national interests or a national emergency need.

**Article 27**

For the purposes of facilitating the cultural, economic and social evolution of members of indigenous communities and in order to allow such members to freely leave the group or to be relieved from its constraints, the right of individual ownership of an adequate share of land used by the community may be transferred to them.

Immovable property that is subject to such private individual ownership cannot fall under the general definition of public properties of the State.

What does it mean by: article 8: "**Cambodian communities**" ?

7. Drafting Team Analysis/Response (to be included in public database):



## Submission Form

### Recommendations from the STWGs to the Secretariat of the Project to Develop the Environmental Code of Cambodia

Email to: Lim Nalin at Vishnu Law Group: [limn@vishnulawgroup.com](mailto:limn@vishnulawgroup.com)

- *For comments on the draft Code, please copy and paste selected text into this form and use Track Changes.*
- *If needed, please submit large documents as an attachment.*
- *Please submit all comments in Khmer and English when possible.*

Date of Submission: 23<sup>rd</sup> June 2016

*(Required)*

Submitted by (provide individual and STWG contact information):

Philippe Karpe

STWG 6 Exploration and Mineral Exploitation Management, 0:5 Special rights of vulnerable persons in environmental matters, including women, children, disabled persons, and ethnic minority groups and indigenous peoples

*(Required, including relevant STWG, if any.)*

#### 1. Issue:

*(Please provide a brief description of the issue that is addressed by the recommendation included in number 4 [“4. Recommendation”] below.)*

#### 2. Reference to Code Book and Chapter Title (if applicable):

*(Please provide the Book and Chapter titles and not just the number; the Book and Chapter numbers may change from one draft to the next if the Code is reordered.)*

**Book 1** - General Provision

**Title 1** – General Provisions

**Article 2: Objective**

The Environmental Code has the following objectives:

1. Conserve Cambodia's biodiversity, ecosystems and ecosystem services;
2. Protect the environment from harm and damage, and sustainably manage natural resources, in accordance with Article 59 of the Constitution of the Kingdom of Cambodia;
3. Preserve and promote national culture, preserve ancient monuments and artifacts, and restore historic sites, in accordance with Article 69 of the Constitution of the Kingdom of Cambodia;
4. Guarantee the health of the people, in accordance with Article 72 of the Constitution of the Kingdom of Cambodia;
5. Safeguard the individual and collective rights of indigenous people as postulated in Sub-decree No 83 (No 83 ANK.BK) and So Chor No 653 (653 So Chor No SR).
6. Ensure that environmental protection and sustainable development objectives are fully integrated into national and regional economic planning and into natural resources planning and management;
7. Implement the National Environmental Strategy and Action Plan;

8. Promote a co-operative approach and common responsibility to the protection and management of the environment involving government, the community, land-holders, indigenous people and business;
9. Assist the implementation of Cambodia's international environmental responsibilities;
10. Implement the key principles of environmental law and policy as described in Chapter 2;

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**Comment [1]:** You may add the others vulnerable groups

### 3. Comparative Experience (if any):

*(Please include any Cambodian and international examples and experience.)*

### 4. Recommendation:

*(Please include here the text of the recommendation to address the issue provided in number 1 ["1. Issue"] above. If needed, note "See Attachment" for corresponding documents.)*

#### **Book 1 - General Provision**

#### **Title 1 – General Provisions**

#### **Article 2: Objective**

The Environmental Code has the following objectives:

11. Conserve Cambodia's biodiversity, ecosystems and ecosystem services;
12. Protect the environment from harm and damage, and sustainably manage natural resources, in accordance with Article 59 of the Constitution of the Kingdom of Cambodia;
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14. Guarantee the health of the people, in accordance with Article 72 of the Constitution of the Kingdom of Cambodia;
15. Safeguard the individual and collective rights of indigenous people as postulated in Sub-decree No 83 (No 83 ANK.BK) and So Chor No 653 (653 So Chor No SR).
16. Ensure that environmental protection and sustainable development objectives are fully integrated into national and regional economic planning and into natural resources planning and management;
17. Implement the National Environmental Strategy and Action Plan;
18. Promote a co-operative approach and common responsibility to the protection and management of the environment involving government, the community, land-holders, indigenous people and business;
19. Assist the implementation of Cambodia's international environmental responsibilities;
20. Implement the key principles of environmental law and policy as described in Chapter 2;

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**Comment [2]:** What does it mean by "cooperative"?

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**Comment [3]:** You may add the others vulnerable groups

### 5. Proposed Language to be Inserted into the Draft Code (if any):

*(Optional. Note: when proposing modifications to existing draft Code text, please extract the relevant text and insert here, in track changes if possible.)*

### 6. Cambodian Laws to be Abrogated or Modified (if any):

*(Please include the law title and the titles of specific articles and clauses.)*

### 7. Drafting Team Analysis/Response (to be included in public database):