



# Cambodia REDD+ Roadmap

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UN-REDD PROGRAMME 5<sup>TH</sup> POLICY BOARD  
MEETING

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4-5 November 2010  
Washington D.C., USA



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## Abbreviations

C/S Fund	Commune/Sangkat Fund
CCCA	Cambodia Climate Change Alliance
CDCF	Cambodia Development Cooperation Forum
CIFs	Commune Investment Funds
CDM	Clean Development Mechanism of the Kyoto Protocol
CDPs	Commune Development Plans
CF	Community Forestry
CFi	Community Fisheries
CLUP	Commune Land-use Planning
COP	Conference of the Parties
CPA	Community Protected Area
D&D	Decentralisation and Deconcentration
EIA	Environmental Impact Assessment
ELCs	Economic Land Concessions
ESIA	Environmental and Social Impact Assessments
FCPF	Forest Carbon Partnership Facility
FPIC	Free, Prior and Informed Consent
GDANCP	General Department of Administration for Nature Conservation and Protection
GEF	Global Environment Facility
GERES	Groupe Energies Renouvelables, Environnement et Solidarités
GHG	Greenhouse Gas
FA	Forestry Administration
FAO	Food and Agriculture Organisation of the United Nations
FiA	Fisheries Administration
FLEG	Forestry, Law Enforcement and Governance
JMI	Joint Monitoring Indicators
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEF	Ministry of Economy and Finance
MoE	Ministry of Environment
Mol	Ministry of Interior
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MRD	Ministry of Rural Development
MRV	Monitoring, Reporting and Verification for REDD+ (also called the REDD+ Monitoring System)
NCCC	National Climate Change Committee
NCDD	National Committee for Democratic Development at Sub-national Levels
NPASMP	National Protected Area Strategic Management Plan
NFP	National Forestry Programme
NGO	Non-Governmental Organisation
NRM	Natural Resource Management
NSDP	National Strategic Development Plan
PA	Protected Area
R-PP	Readiness Preparation Proposal
RECOFTC	Regional Community Forestry Training Center – Center for People and Forests
REL/RL	Reference Emission Level / Reference Level (also called the REDD+ Baseline or Reference Scenario)
RGC	Royal Government of Cambodia
REDD	Reduced Emissions from Deforestation and forest Degradation
REDD+	REDD, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks
SA	Strategic Assessment
SESA	Strategic Environmental and Social Assessment
SIA	Social Impact Assessment
SFM	Sustainable Forest Management
SLCs	Social Land Concessions
tCO <sub>2</sub> e	Tonnes of CO <sub>2</sub> equivalent (a measure of greenhouse gases)
TWGs	Technical Working Groups

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TWGF&E	Technical Working Group on Forestry and Environment
UNDP	United Nations Development Program
UNDRIP	United Nations Declaration on Rights Indigenous People
UNEP	United Nations Environment Program
UN-REDD	United Nations REDD Programme
WCMC	UNEP World Conservation Monitoring Centre
WCS	Wildlife Conservation Society

## **Background: International Framework for REDD+ Implementation**

Reducing Emission from Deforestation and forest Degradation (REDD) evolves from the COP11 in Canada, now REDD+. Currently, there is good progress in REDD+ negotiation in the UNFCCC. REDD+ activities involves solely on forestry sector.

### *Scope of REDD+*

Based on decisions of the UNFCCC Conference of the Parties (4/CP.15) decision, REDD+ is defined as:

*“Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries”*

Activities eligible for crediting under REDD+ according to the draft UNFCCC negotiating texts are:

- a. Reducing emissions from deforestation; (RED)
- b. Reducing emissions from forest degradation; (the second ‘D’)
- c. Conservation of forest carbon stocks; (included in the ‘+’)
- d. Sustainable management of forests; (included in the ‘+’)
- e. Enhancement of forest carbon stocks; (included in the ‘+’)

### *Financing for REDD+*

Financing for REDD+ is initially available from donor-based grants, and from the Voluntary Carbon Market or Afforestation/Reforestation Clean Development Mechanism (CDM, for projects). In the future finance may also be available from:

- Payments for results from funds (fund-based mechanisms)
- Sales of carbon credits to compliant (regulatory) markets (market-based mechanisms)

### *Phases of REDD+ Implementation*

REDD+ is expected to be implemented in three phases (called the Phased Approach, after the Options Assessment Report by the Meridian Institute, 2009). These are as follows (diagram from the Technical Working Group report, 2010<sup>1</sup>):

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<sup>1</sup> Technical Working Group, 2010. A Registry Approach to REDD+. [www.climateregistryoption.org](http://www.climateregistryoption.org).

## Phase 1: Readiness



### Activities may include:

- National REDD+ strategy development, including:
  - Identification of drivers of deforestation and forest degradation and barriers to REDD+
  - Identification of REDD+ policies and legislative action
- National consultations
- Institutional strengthening
- Pilot RED+ demonstration activities and voluntary carbon market projects

## Phase 2: Implementation



### Activities may include:

- Land tenure and governance reforms
- Forest law enforcement
- Improved forest management
- Sustainable agriculture
- Protected area law enforcement
- Subnational demonstration

## Phase 3: Performance-based Payments



Consistent with performance contract: payments are made upon verified achievement of agreed benchmarks, including reduced or avoided GHG emissions. Reference scenario is established and Monitoring System is in place.

## Phase 1

would be funded by donor-based grants

**Phase 2** may be financed through donor-based grants, payments from funds, and sale of carbon credits on markets

**Phase 3** may be financed through payments from funds and sale of carbon credits on markets

International support for REDD+ Readiness is currently being channelled through three separate modalities:

1. Bilateral agreements between developed and developing countries, for both national-level Readiness activities (e.g. Government of Norway with Tanzania, Australian Government with Indonesia), and project-level demonstration (e.g. Australia and Germany with Indonesia).
2. Forest Carbon Partnership Facility (FCPF). The World Bank launched the FCPF at the Bali COP in 2007. It includes two funds: a Readiness Fund to support national-level REDD+ Readiness, and a Carbon Fund to purchase emissions reductions from participating countries. The Readiness Fund initially contained pledges of just over \$100 million, and was designed to support only 20 countries. However, a total of 37 countries, including Cambodia, have now applied to join the FCPF and been accepted, although only the first 20 are currently eligible for support. The World Bank is therefore aiming to increase the size of the Readiness Fund to \$185 million in order to meet current demand. The Carbon Fund currently has pledges of around \$50 million.
3. UN REDD Programme. The UN REDD Programme was launched in 2008 and focuses exclusively on national REDD+ Readiness (Phase 1) for nine countries: Bolivia, Democratic Republic of Congo, Indonesia, Panama, Papua New Guinea, Paraguay, Tanzania, Vietnam and Zambia. Current pledges are around \$107 million. Additional countries have applied to join and been accepted as observer status only, the first of which were Cambodia and Ecuador.

Despite these three funding modalities, Cambodia is not currently eligible for support under any of the existing mechanisms, since it was not in the first 20 countries selected under the FCPF or the initial 9 countries identified by UN REDD.

### *Scale of Implementation of REDD+*

Decision on methods at COP15 (4/CP.15):

*'national forest monitoring systems and, if appropriate, sub-national systems as part of national monitoring systems'*

DRAFT Decision on implementation at COP15:

*'a national strategy or action plan and, if appropriate, a subnational strategy'*

Key word is and: countries can have subnational approaches, so long as they are nested within a national system.

This is different from the CDM, which is project-based only.

### *Methods for REDD+ Monitoring and establishing National REDD+ Strategies:*

The COP15 decision of methods (4/CP.15).

*'Article 1. Requests developing country Parties, on the basis of work conducted on the methodological issues set out in decision 2/CP.13, paragraphs 7 and 11, to take the following guidance into account for activities relating to decision 2/CP.13, and without prejudging any further relevant decisions of the Conference of the Parties, in particular those relating to measurement and reporting:*

- a) To identify drivers of deforestation and forest degradation resulting in emissions and also the means to address these;*
- b) To identify activities within the country that result in reduced emissions and increased removals, and stabilization of forest carbon stocks;*
- c) To use the most recent Intergovernmental Panel on Climate Change guidance and guidelines, as adopted or encouraged by the Conference of the Parties, as appropriate, as a basis for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes.'*

Paragraphs (a) and (b) refer to the development of national REDD+ strategies and paragraph (c) refers to IPCC 2003 Good Practice Guidance for Land Use, Land Use Change and Forestry (LULUCF) and the IPCC 2006 GHG Inventory guidelines for the agriculture, forestry and other land use (AFOLU) sector.

Many references on methods also refer to the 2005 LULUCF Sourcebook<sup>2</sup> and 2009 REDD Sourcebook<sup>3</sup>. The Sourcebooks are reference guides only at the stage and have not yet been adopted by the Conference of the Parties, unlike the IPCC guidance and guidelines.

### *Setting national baselines against which to measure REDD+ performance*

The COP15 decision of methods (4/CP.15):

*'Article 7. Recognizes that developing country Parties in establishing forest reference emission levels and forest reference levels should do so transparently taking into account historic data, and adjust for national circumstances, in accordance with relevant decisions of the Conference of the Parties.'*

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<sup>2</sup> Pearson, T., Walker, S. and Brown, S. 2005. Sourcebook for Land-use, Land-use Change and Forestry Projects. BioCarbon Fund, World Bank, DC and Winrock International, Arlington.

<sup>3</sup> GOF-C-GOLD, 2009. A sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals caused by deforestation, gains and losses of carbon stocks in forests remaining as forests, and forestation. Report version COP15-1. GOF-C-GOLD Project Office, Natural Resources Canada, Alberta, Canada. Ed: Achard, F, Brown, S., De Fries, R., Grassi, G., Herold, M., Mollicone, D., Pandey, D. and Souza, C.

What is meant by 'adjusted for national circumstances' is not clear in the COP Decision but could include socio-economic factors, drivers of deforestation and the national policy context. Reference levels (RLs) and Reference Emissions Levels (RELS) are often referred to as the Reference Scenario or baseline for REDD+.

### *REDD+ Safeguards*

DRAFT Decision on implementation at COP15:

'Article 2. Further affirms that when undertaking [REDD+ activities], the following safeguards should be promoted and supported:

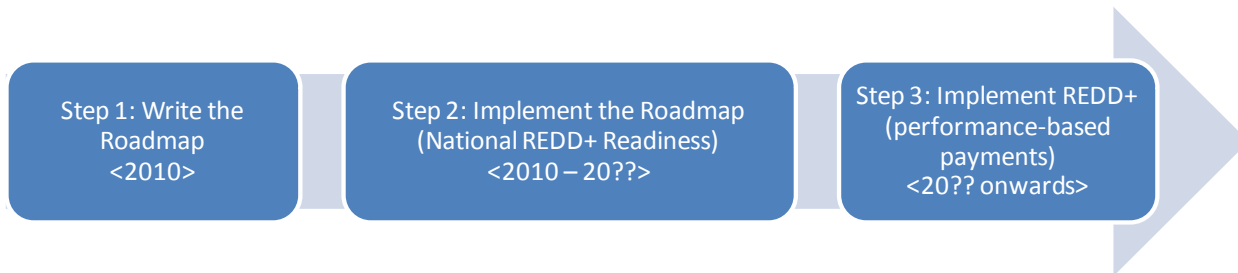
- a) *Actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;*
- b) *Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;*
- c) *Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;*
- d) *Full and effective participation of relevant stakeholders, including, in particular, indigenous peoples and local communities in [REDD+ activities] and [the REDD+ monitoring system];*
- e) *Actions that are consistent with the conservation of natural forests and biological diversity, ensuring that actions [REDD+ activities] are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;*
- f) *Actions to address the risks of reversals;*
- g) *Actions to reduce displacement of emissions;'*



## Background: Cambodia REDD+ Roadmap

### *The Roadmap*

The Cambodia REDD+ Roadmap is a national plan for how the RGC wants to move ahead with REDD+ Readiness. Following initial stakeholder consultations in late 2009 and early 2010, the government agencies created the inter-ministry REDD+ Taskforce in January 2010, with an interim mandate to develop the Cambodia REDD+ Roadmap. The Taskforce is primarily composed of technical officials. It was chaired by the Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries, and includes the Departments of Wildlife and Biodiversity, Forestry and Community Forestry, and Forest Plantation and Private Forest of the FA, the Departments of Climate Change and National Parks of the General Department for Administration of Nature Conservation and Protection (GDANCP) of the Ministry of Environment and the Ministry of Land Management, Urban Planning and Construction. The Clinton Climate Initiative and RECOFTC (the Regional Community Forestry Training Center) served as civil society representatives on the REDD+ Taskforce. Development partners are represented by WCS and FAO. The REDD+ Taskforce's initial mandate was for an initial interim period only, with the expectation that it would be replaced by more permanent National REDD+ management arrangements at the end of the Roadmap process. The approximate steps in the Cambodia REDD+ Readiness process are:



During Step 2, the implementation of the Roadmap, Cambodia would put in place the necessary capacity to implement REDD+ at the national level. This could include capacity-building, and development of new policies and legislation. Only during Step 3 would Cambodia start to implement REDD+, which might include fund-based payments and eventual transitions to compliant markets.

The Cambodia REDD+ Roadmap is expected to be completed by September 2010, and is used as the basis for:

1. The UN-REDD National Programme Document.
2. Any future Readiness Preparation Proposal (R-PP) by the RGC to the FCPF.

Funding for the Roadmap has been provided by UNDP and FAO, with the technical support of the UN-REDD Programme and the UNEP-World Conservation Monitoring Centre (UNEP-WCMC).

The six main sections of the Cambodia REDD+ Roadmap are:

1. Management of National REDD+ Readiness
2. Consultation, stakeholder engagement and awareness-raising plan
3. Development and selection of REDD strategies
4. Implementation framework (including benefit-sharing and safeguards)
5. Development of the Reference Scenario against which performance will be measured (Reference Levels or Reference Emissions Levels, RLs/RELs)
6. Development of the Monitoring System for national Monitoring, Reporting and Verification (MRV)

### *Forest Land Management and REDD+ in Cambodia*

Forests in Cambodia fall under the general jurisdiction of the Ministry of Agriculture, Forestry and Fisheries (MAFF), with the Forestry Administration of MAFF charged as the responsible Government Authority (Forestry Law 2002, Article 3), the Ministry of Environment is responsible for Protected Areas, and the Fisheries Administration of MAFF is responsible for flooded forest and mangrove areas (Fisheries Law 2006, Article 3). Cambodian Law is hierarchical, therefore all subsidiary regulations should respect the differentiation of

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responsibilities laid out in the Forestry Law (and other Laws, see below), i.e. subsidiary regulations cannot amend responsibilities laid out in a Law. As a consequence, management and regulatory jurisdictional authority over forest resources in Cambodia falls under the responsibility of several different government agencies under Cambodian Law (Fisheries Law 2006, Forestry Law 2002, Land Law 2001, Protected Areas Law 2008, Environmental Protection and Natural Resources Management Law 1996, 1993 Royal Decree on Creation and Determination of Nature Reserves, 2009 Subdecree #83 on Registration of Land of Indigenous Communities, etc). These are set out below and are shown in Figure 1 (Oberndorf and Nhean, 2010, Cambodia REDD+ Legal Review):

**Forestry Administration, Ministry of Agriculture, Forestry and Fisheries:**

*Permanent Forest Reserve (State Public Property):*

- Production Forests, including:
  - Community Forests
  - Concession Forests
- Protection Forests
- Conversion Forests (which can be transferred to *state private property* for other land-uses such as economic or social land concessions)

*Private Forests (Private Property), including:*

- Privately-owned forests

*(The Permanent Forest Reserve and Private Forests together comprise the Permanent Forest Estate)*

**Ministry of Environment:**

*Protected Areas (State Public Property), including:*

- Community Protected Areas
- Flooded Forests and Mangroves *inside* Protected Areas<sup>4</sup>

**Fisheries Administration, Ministry of Agriculture, Forestry and Fisheries:**

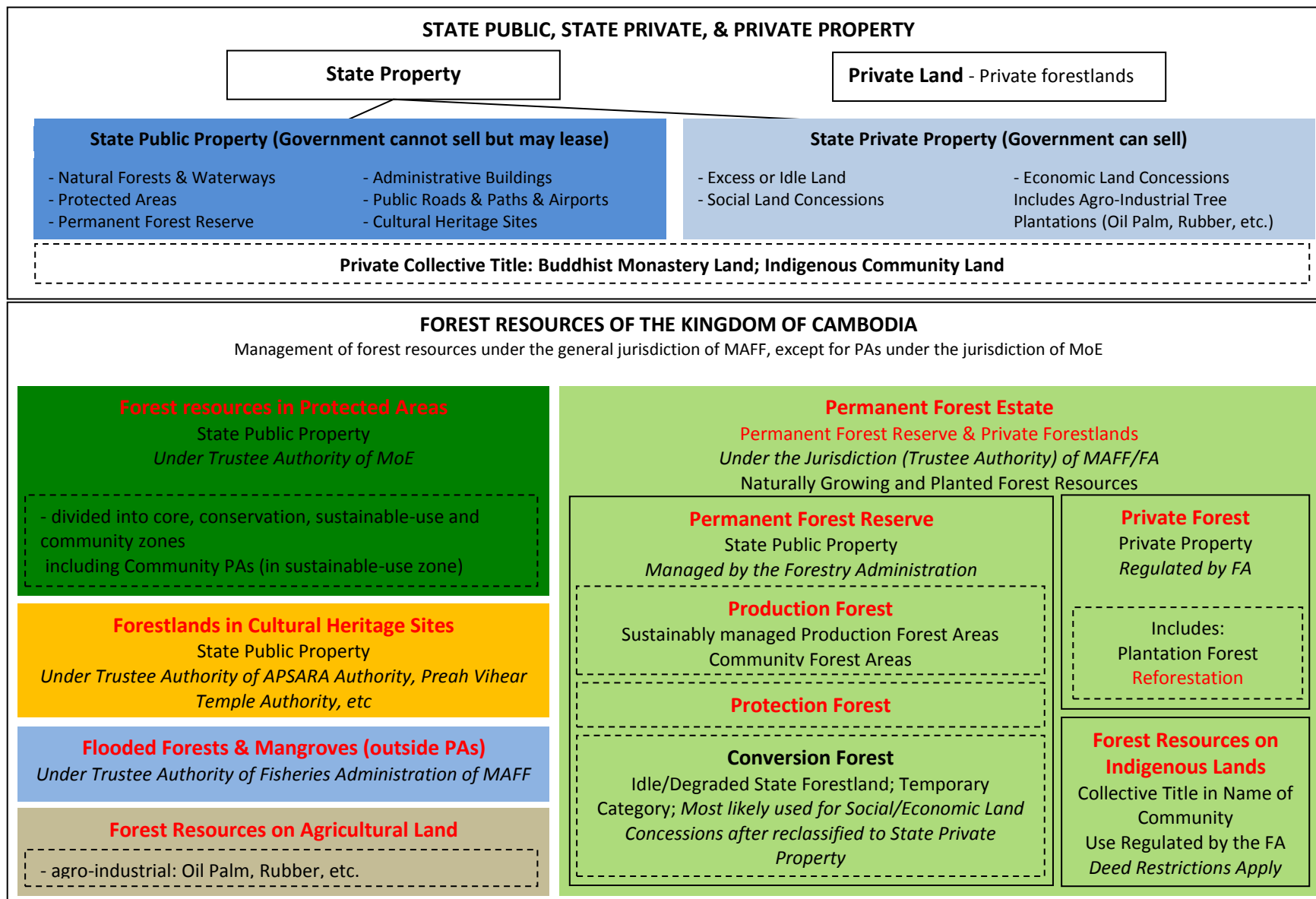
*Flooded Forests and Mangroves inside fisheries domains (State Public Property) outside Protected Areas<sup>4</sup>, including:*

- Community Fisheries
- Fishing Lots
- Fisheries Protected and Conservation Areas

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<sup>4</sup> Protected Areas include the core areas of the Tonle Sap Biosphere Reserve but not the sustainable-use or transition zones (Protected Area Law 2008).

Figure 1. Land Classification – Forestland Management in Cambodia



**Apsara Authority and other Temple Authorities:**

*Forested Areas around temple complexes (State Public Property)*

**Indigenous Peoples:**

*Forest Resources within lands of indigenous peoples, registered as collective title (State Public Property)*

The relevant management plans are:

- National Forestry Programme (2010) for the Permanent Forest Estate
- National Protected Areas Strategic Management Plan for Protected Areas (to be written)
- Strategic Planning Framework for Fisheries (2010-2019) for fisheries areas, and the 3-year Fishery Development Action Plan

*Forest carbon and carbon credit ownership and sale*

Most forests in Cambodia are state public property (except for forests under indigenous land title and private forests), therefore most forest carbon is owned by the state. Forest carbon in private forests belongs to the owners.

FA/MAFF is responsible for the Permanent Forest Estate (including management of the Permanent Forest Reserve), GDANCP/MoE for Protected Areas, and FiA/MAFF for flooded forest areas under the Law. The FA, GDANCP and FiA are the state authorities entrusted with forest management, they do not have the right to sell, lease, transfer or otherwise dispose of these state properties without permission from the RGC, unless given specific delegation of authority. Sales of forest carbon are not covered by current legislation, except for 2008 Circular #699 (relating to Oddar Meanchey) and the FA’s responsibilities under 2008 Subdecree #188 (see below).

Table 1 provides the approximate estimate of the percentage of Cambodia’s forest carbon in each type of forestland management unit, and gives details of the forestland owner, managing agent and regulatory agent. This table is based on an initial assessment by the United Nations Environment Program’s World Conservation Monitoring Center, and the numbers are approximate estimates based on Cambodia data and default values for under-sampled forest types<sup>5</sup>.

**Table 1. Forest Carbon management in Cambodia<sup>5</sup>**

	Forest Classification	% Forest Carbon stock estimate <sup>1</sup>	Land/Forest Owner	Managing Agent	Regulatory Agent
Permanent Forest Estate	Forestry Concessions (Production Forest, PFR)	30%	State (State Public Land)	Forestry Concession	FA
	Community Forests (Production Forest, PFR)	3% [overlaps with other types]	State (State Public Land)	Forestry Community	FA
	Protection Forests (Permanent Forest)	14%	State (State Public)	FA (usually with support of a	FA

<sup>5</sup> Leng, C., Ravilious, C., Kapos, V., Bertzky, M., Osti, M., Clements, T., Dickson, B. (2010) Carbon, biodiversity and ecosystem services: Exploring co-benefits. Cambodia. UNEP-WCMC, Cambridge, UK

	Reserve)		Land)	donor/NGO)	
	Conversion Forests gazetted as Economic Land Concessions	12% [overlaps with other types]	State (State Private Land)	Economic Land Concession holder	MAFF/ELC holder
	Other Forests (could be private forests, or plantations)	19%	State (State Public Land) or Private	Unclear	FA
	Private Forests	? <1%	Individuals (can sell, transfer, etc.)	Individuals	FA
	Indigenous Land Title	? <1%	Registered Indigenous community (cannot sell, transfer, etc.)	Registered Indigenous community	FA
Protected Areas	Protected Areas	26% (all PAs)	State (State Public Land)	GDANCP (sometimes with support of a donor/NGO)	GDANCP/ MoE
	Community Protected Areas		State (State Public Land)	Protected Area Community	GDANCP/ MoE
Flooded forests & Mangroves	Community Fisheries	<1%	State (State Public Land)	Fishery Community	FiA
	Fishing Lots	<1%	State (State Public Land)	Concession holder	FiA
	Other flooded forest areas	<1%	State (State Public Land)	FiA	FiA

Note: the total percentage of forest carbon adds up to approximately 105% due to overlaps between forestland management units. Most of these overlaps are community forests (declared within forest concessions for example) and economic land concessions (declared within forest concessions, protection forests, protected areas, etc.). Data is based on forest management units in 2010 against the 2006 forest cover assessment. Forest carbon stock estimates include aboveground and belowground biomass but not soil carbon.

#### *National Responsibilities with respect to REDD+*

Whilst the legal framework for management of forest resources is clear, the national coordination and regulation framework with respect to REDD+ is not yet fully defined. Nevertheless, the general framework can be determined based on the existing jurisdictions of relevant Government ministries and institutions. Additional processes will need to be established during the national REDD+ Readiness process to clarify decision-making and create appropriate subsidiary regulations.

The Ministry of Economy and Finance (MEF) acts as the executive agency of the RGC in managing state properties (including forest carbon) in terms of selling, leasing, transferring, and other arrangements, and granting of various state concessions or contracts on management of state property. All contracts for sale of forest carbon would therefore have to be approved by the RGC, based on MEF's recommendation.

The National Climate Change Committee (NCCC) is responsible for preparing, coordinating and monitoring implementation of the Royal Government policies, strategies, regulations, plans and programs related to climate change. The NCCC's roles and responsibilities include (2010 Subdecree #99, replacing 2009 Subdecree #174 and 2006 Subdecree #35):

- coordinating and cooperating with concerned ministries and institutions in the preparation of draft policies, strategies, regulations, plans and programs on climate change;
- determining the national negotiation positions and strategies for participation in international negotiations on climate change;
- reviewing and adopting reports to the UNFCCC;
- managing and coordinating the CDM of the Kyoto Protocol; and
- coordinating and monitoring implementation of projects, programs and activities related to climate change.

Therefore, the NCCC's role is primarily focus on coordinating, monitoring and promoting in cooperation with concerned ministries and institutions of the RGC.

Under 2008 Subdecree #188 (amending the 2000 Sub-Decree #17 on the Organisation and Function of MAFF) the Forestry Administration of MAFF's general responsibilities for forest carbon are specifically:

- conducting assessments to determine the quantity of national forest carbon stocks; and
- developing and arranging for forest carbon trades and forest services to increase revenue for effective forest operations and development (Article 4 of 2008 Subdecree #188).

The Forestry Administration therefore currently has authorization to develop forest carbon sales, however based on the law this applies only to the Permanent Forest Estate that lies under the jurisdiction of the FA. Based on the two exclusions in Article 3 of the Forestry Law, management of Protected Areas is under the Ministry of Environment and flooded forest and mangrove areas fall under the jurisdiction of the Fisheries Administration of MAFF.

The FA has additionally been designated as the agent of the RGC for arranging the sale of REDD credits from the Oddar Meanchey REDD+ pilot project, under the Council of Ministers Circular (SaraChor) #699, 26 May 2008. Under Circular #699 final approval for the forest carbon sales remains with the RGC (as the seller of forest carbon). The RGC also decided that revenue from selling the forest carbon from the Oddar Meanchey project should be used to (a) improve the quality of the forest, (b) maximize the benefit flows to local communities who are participating in the project activities, and (c) study potential sites for new forest carbon credit REDD projects. Revenue from the sale of Oddar Meanchey REDD credits will be channeled through the Technical Working Group on Forestry and Environment (TWGF&E) during the first five years of the project.

The Department of Climate Change of GDANCP of MoE acts as the secretariat of the NCCC and has the following relevant roles and responsibilities (see Art. 4 of 2009 Sub-Decree #175 amending 1997 Sub-Decree #57 on MoE Organization and Function):

- developing national strategies, action plans and policies and regulations related to climate changes in cooperation with concerned institutions;

- implementing decisions of the UNFCCC;
- preparing national reports and greenhouse gas inventories for Cambodia under UNFCCC;
- coordinating implementation of CDM and carbon credit projects;
- proposing projects and programs and coordinating, monitoring and evaluating implementation of all projects and programs related to climate change;
- serving as focal point for the UNFCCC, Kyoto Protocol, the CDM, international negotiations on climate change, and preparing the national position for these negotiations;
- serving as secretariat of NCCC;
- cooperating with concerned institutions in the establishment and management of climate change trust funds and carbon credit policies; and
- strengthening cooperation among national institutions, development partners, civil society and the private sector in implementing measures to respond to climate changes as well as for effective implementation of decisions of the UNFCCC.

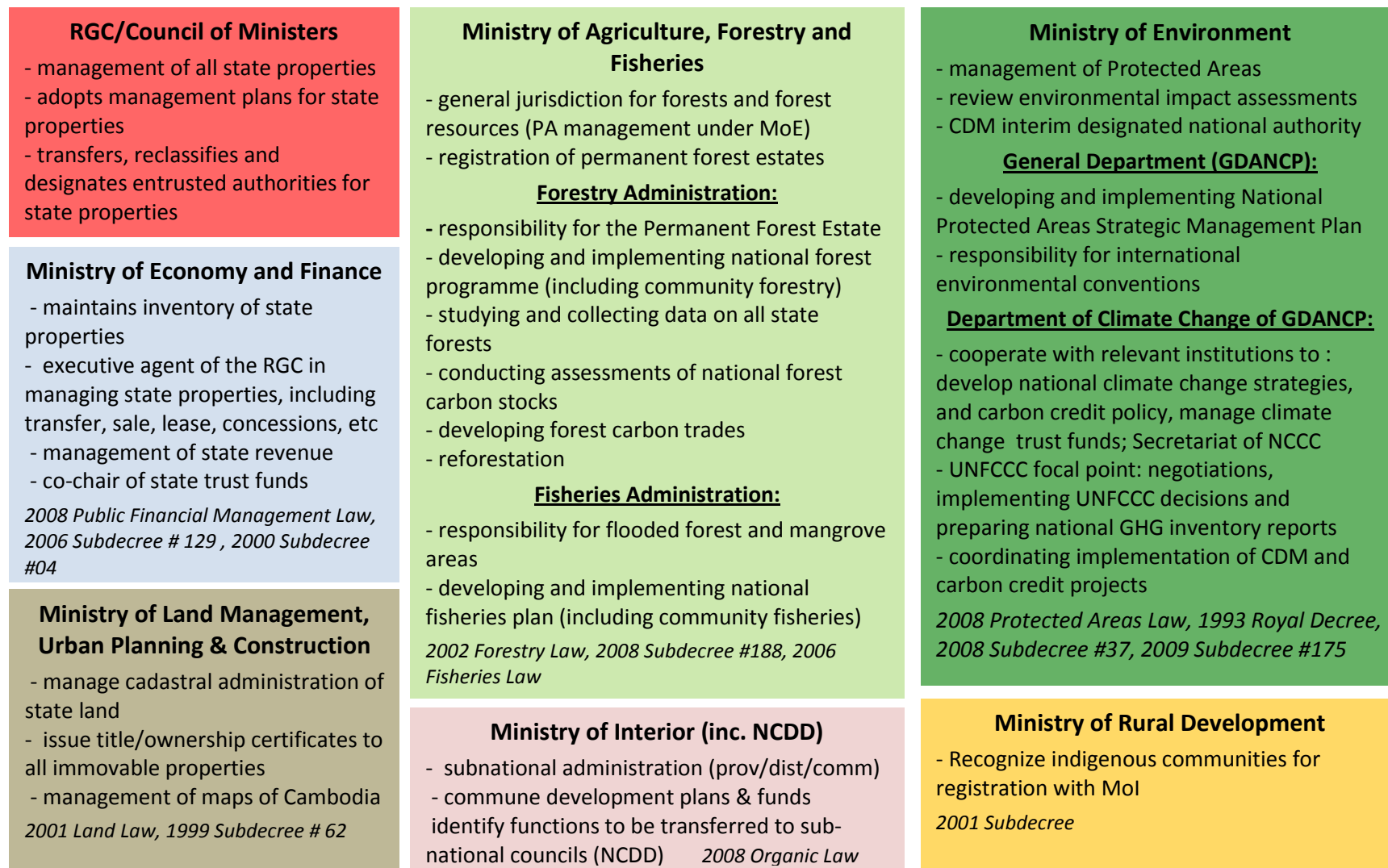
The Ministry of Land Management, Urban Planning and Construction (MLMUPC) has various responsibilities relating to land management including (1999 Subdecree #62, 2001 Land Law, 2009 Land Policy):

- Cadastral administration of state land (public and private state land) and individuals' private land registration, issuing land titles throughout Cambodia;
- Carrying out cadastral surveying and mapping;
- Managing and disseminating all kinds of maps of the Kingdom of Cambodia to national mapping standards by cooperating with relevant institutions which produce sectoral maps; and
- Geographical Information Systems (GIS) coordination.

**Figure 2. Inter-ministerial bodies relevant for REDD+ Readiness in Cambodia**

<p>Council for Land Policy; Cadastral Commission; National Committee for Land Management; National Committee for Addressing Disputes in Relation to Creation of Permanent Forest Reserve Areas; Forest Land Encroachment Committee; National Authority for Land Disputes/Conflict Resolution; National Committee for Subnational Democratic Development (NCDD); Expropriation Committee</p>	<p><b>National Climate Change Committee</b> Honorary Chair: Prime Minister, Chair: Minister of Environment, Deputy Chairs: MAFF, MIME, MOWRAM, MoC; 20 line agency members Role: to develop, coordinate and monitor the implementation of policies, strategies, regulations, plans and programs of the Royal Government to respond to climate change Duties: coordinate and cooperate with concerned ministries and institutions in preparation of draft policies, strategies, promote conservation and improvement of carbon sinks, manage and coordinate the CDM of the Kyoto Protocol, adopting reports to UNFCCC</p>
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**Figure 3. National Responsibilities for REDD+ Readiness in Cambodia**





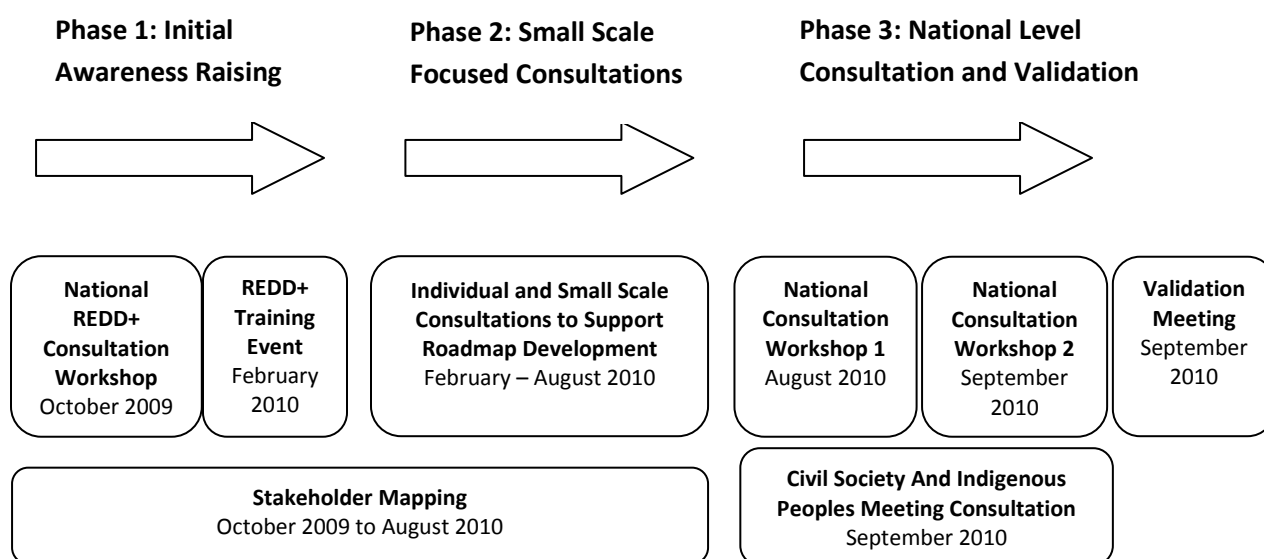
*Consultation and Participation Process on the Roadmap drafts*

The objectives of the Consultation and Participation process during Roadmap development were to:

- Undertake a mapping of key stakeholders, and their potential role in REDD+ (see Section 7 of the Cambodia REDD+ Readiness Background document);
- Increase awareness and understanding of REDD+ and the National REDD+ Planning process in Cambodia amongst Key stakeholders at national level – in particular within key Government bodies;
- Gain input from key stakeholders within and outside of Government on the content of the Roadmap; and
- Develop a clear understanding of what the next steps are for engaging stakeholders within the REDD+ planning process in Cambodia.

In addressing these objectives the interim REDD+ taskforce has sought to learn from the lessons of past processes. The result has been a flexible process that has used different techniques to raise awareness of and consult on the roadmap. This process can be divided broadly into three phases (shown in Figure 4) which overlap and have progressed at different speeds for different stakeholders.

**Figure 4. Cambodia REDD+ Roadmap Consultation and Participation Process**



Phase 1: Initial Awareness Raising

Initial awareness raising occurred through two national level workshops in October 2009 and February 2010 (see Box 1) as well as through presentations to the Technical Working Group on Forestry & Environment (TWGF&E), the main forum for multi-stakeholder consultation on 7 September and 23 December 2009 by the Forestry Administration. The TWGF&E presentations were particularly important to announce the start of the planning process to all stakeholders, including Government agencies, development partners, NGOs and civil society, who are represented on the TWGF&E. In addition, presentations by taskforce members were undertaken at the majority of platforms identified during the stakeholder mapping exercise (see Section 7 and Table 2 below). This has been followed by more focused individual technical consultations and awareness raising to inform the development of the draft Roadmap. During this phase the Taskforce has worked hard to engage different Government agencies and departments as well as representatives from national and international Civil Society.

**Box 1: National Multi-stakeholder Awareness Raising Events**

**First National Forum on REDD+**

The first National Forum on REDD Readiness was held on 14 October 2009 in cooperation with Woods Hole Research Center, USA, with participation from government agencies, development partners, civil society, local and indigenous people. The workshop looked to increase awareness of REDD+ and provide a forum for an open discussion on how Cambodia can engage in REDD+.

**National Capacity building workshops on REDD**

This event held from the 24<sup>th</sup> to 26<sup>th</sup> of February 2010 in cooperation with IGES-RECOFTC-INA looked to:

- increase awareness of REDD+;
- develop a shared knowledge base amongst participants;
- strengthen civil society and Government partnerships; and
- identify capacity constraints for different stakeholders.

The workshop was attended by over 40 participants including Government staff and NGOs with some community representatives, particularly from Oddar Meanchey (one of the REDD+ pilot project sites). One recommendation from the workshop was that stakeholder specific training needed to be carried out to allow for differing levels of understanding and interests.

**Presentations to the Technical Working Group on Forestry & Environment (TWGF&E)**

The TWGF&E is the principle mechanism for multi-stakeholder coordination in the forestry sector, and meetings are attended by representatives from Government agencies, development partners, NGOs and civil society. Two presentations were made to the TWGF&E during the start of the Roadmap planning process. The first, on 7 September (23<sup>rd</sup> TWGF&E meeting), outlined progress on REDD+ to date and suggested the importance of starting a national REDD+ Readiness planning process. The second on 23 December (24<sup>th</sup> TWGF&E meeting), discussed the formation of an interim REDD+ Taskforce to represent key stakeholders and lead on development of the national REDD+ Readiness Plan Proposal. A further presentation was given on the 20 May 2010 (26<sup>th</sup> TWGF&E meeting) on progress to date.

**Table 2. Key Stakeholder Groups engaged through the Roadmap development process**

<b>Group</b>	<b>Means of Engagement</b>
Government	REDD+ Taskforce – regular meetings held Internal Government agency review meetings
Donors/ Government / Private Sector / NGO's	Technical Working Group on Forests and Environment Technical Working Group on Agriculture and Water
Donors	Individual Meetings
Private Sector	Individual Meetings
Environmental and Conservation NGO's working on REDD+	Informal NGO REDD Working Group
Climate Change NGO's	Coordination through the National Climate Change Network
Community Forestry groups	National Community Forestry Program Coordination Committee NGO Forum Forestry Network Regional/Provincial/Local networks in areas with REDD projects, such as Oddar Meanchey Community Forestry network
Indigenous peoples and civil society organisations	Representative organisations such as ICSO, IRAM and CIYA Meetings facilitated by NGO Forum Regional/provincial/local networks in areas with REDD projects

## Phase 2: Small Scale Focused Consultation

Following the development of a draft document small group sessions were held with key stakeholder groups to inform them of the Roadmap's progress and to further raise awareness of key issues within the document. A series of meetings with Civil Society groups were arranged to increase their level of understanding of REDD+ and the REDD+ process in Cambodia. Two short information sharing and discussion meetings on REDD+ and the Roadmap were held with the informal NGO Working Group on 4 March and 7 June 2010. Presentations on overall progress were made at various high-level events, including the Asia-Europe Meeting in Phnom Penh on 6 May 2010.

Initial small consultations were held with key representatives from civil society and indigenous peoples on 13 and 17 August 2010. These meetings were partly facilitated by NGO Forum but were generally focused on grassroots civil society as opposed to national or international NGOs. At the request of the civil society and indigenous peoples representatives a further 2-day workshop facilitated by NGO Forum and key members from the community networks was held on 2-3 September 2010 in order to gain their input into the Roadmap and particularly the development of a consultation and participation plan for the Readiness phase. About 50 participants from community forestry, community networks, indigenous peoples and other grassroots civil society networks attended the meeting. The minutes from the working were taken and a report is available.

## Phase 3: National Level Consultation

Two national consultation events were held on 20 August and 10 September 2010. These workshops provided a forum for all stakeholders to discuss of key topics within the Roadmap and for the Taskforce to consolidate this feedback. All stakeholders were invited to attend. The workshops were deliberately structured around facilitated group discussions to allow for open debate of key issues. Minutes from the plenary and group discussions were taken and reports from both workshops are available. Based on the results of the first workshop a table of key comments and revisions made to the Roadmap documents was compiled, so that stakeholders could easily see how their comments had been reflected in the drafts.

The Roadmap document was circulated by email in English prior to both workshops, and a Khmer version was available for the second national consultation. An email address was specifically created for submission of written comments, and these were also compiled prior to the second national consultation.

Following the second national consultation the Roadmap document was revised a second time to reflect comments received and a validation meeting for key stakeholder representatives to approve the document was held on in late September 2010.

# Cambodia Readiness Plan Proposal on REDD+ (Cambodia REDD+ Roadmap)

## General Principles

The development of Cambodia REDD+ Readiness should...

- first and foremost *build national capacity* within Government institutions and non-Government stakeholders: REDD+ is new and complex and substantial increases in understanding are required before decisions can be made;
- support implementation of *existing policies and strategies for management of forest resources* that have been developed over the past 10-15 years;
- be *inclusive and balanced*, both between Government agencies and non-Government stakeholders;
- *learn lessons* from previous policy development processes;
- be based on the *existing mandates* of Government institutions, rather than creating new institutions in an already crowded and complex institutional environment;
- make use of *existing coordination mechanisms*, rather than building new fora for discussions;
- seek to provide *predictable and substantial finance* for implementation and scaling-up of existing forest management strategies;
- *build awareness*;
- be *consistent* with the international negotiations process;
- be based on *existing REDD+ pilot projects*; and
- recognise the importance of *demonstration* and adopting a *learning-by-doing* approach.

## Section 1: Management of REDD+ Readiness

Definition: How REDD+ Readiness activities will be coordinated and managed in Cambodia

Key parts:

- What future role for the REDD+ Taskforce?
- Decide roles and responsibilities of different line agencies
- How to coordinate with other policy processes? E.g. D&D, NCCC, etc.
- How to relate to government-donor coordination mechanisms? E.g. TWGs, etc.

### Background to National REDD+ Readiness

The current REDD+ Taskforce has an interim mandate to develop the Cambodia REDD+ Roadmap. However, it is proposed that the current working arrangements, involving key technical officers from MAFF, MoE and MLMUPC, has been very effective and is a sound basis for future inter-agency cooperation.

Figure 3 (above) gives the responsibilities of key government agencies with respect to REDD+ Readiness. Representatives from these Government agencies should be included in future REDD+ Readiness activities.

General understanding of REDD+ and REDD+ Readiness activities is low, as is capacity to implement REDD+ and REDD+ Readiness activities. Overall levels of awareness and capacity will need to be substantially increased before key decisions are made through the REDD+ Readiness process. Awareness-raising should avoid increasing expectations that REDD+ revenues will be available soon.

### Draft arrangements for Management of REDD+ Readiness

#### *Cambodia REDD+ Taskforce*

Based on these considerations, it is proposed that the REDD+ Taskforce's is renewed for two years, with a mandate to manage the initial National REDD+ Readiness process. The Taskforce membership would be revised to:

**Table 3. Membership of the Cambodia REDD+ Taskforce**

<b>Government Agency</b>	<b>Function in REDD+</b>
<b>MAFF</b>	General Jurisdiction over Forests, Fisheries and Agriculture
<b>- Forestry Administration</b>	Regulation of Permanent Forest Estate, including: tree planting, community forestry, protection forests, national forest cover monitoring, forest carbon stock assessment and regulating forest carbon trades. Focal point for UNFF, UNCCD and CITIES.
<b>- Fisheries Administration</b>	Management of Flooded Forests & Mangroves inside the fishery domain
<b>- Technical Secretariat for ELCs</b>	Regulation of Economic Land Concessions for industrial agriculture

<b>MoE</b>	Protected Areas, International Environmental Treaties, Reviewing Environmental Impact Assessments, UNFCCC focal point & CDM Interim Designated National Authority, Convention on Biological Diversity Focal Point
<b>- General Department of Administration for Nature Conservation and Protection</b>	Management of Protected Areas and Community Protected Areas Climate Change policy coordination: Secretariat of NCCC, UNFCCC reporting & GHG Inventories, Cooperating in development of climate change strategies and carbon credit policy, Coordination of CDM and carbon credit projects Convention on Biological Diversity
<b>MEF</b>	Management of State Properties, including sales, transfers, leases, concessions etc. Management of State Revenue, including co-chair of trust funds
<b>MLMUPC</b>	Management of Cadastral Administration of State Immovable Properties Issue title/ownership certificates to all immovable properties Registration of collective title for lands of indigenous communities Mapping and Land-use planning
<b>MoI</b>	NCDD & Subnational administration (including commune development plans & Commune/Sangkat fund)
<b>MRD</b>	Indigenous Peoples policy

The FA serves as the chair and GDANCP serves as the deputy chair of the REDD+ Taskforce. All decisions are made on a consensus basis of FA, GDANCP and FiA, as the agencies responsible for forest land management. All reports of the Taskforce that require signature by the chair will also be initialled by the deputy chair. Both the Chair and the Deputy Chair should nominate their alternates to be present if they are absent. If the Chair is absent the Deputy Chair should fill their function.

Draft Terms of Reference for the Taskforce have been prepared (see Annex 1).

During the two year period the Taskforce would agree long-term REDD+ management arrangements, which might lead to a policy statement by the RGC if required.

The Taskforce should have a Secretariat, which will be responsible for day-to-day management of the REDD+ Readiness process. The Taskforce Secretariat would have the following membership:

- FA serves as Chair of the secretariat
- GDANCP serves as Vice chair of the secretariat and lead representative of GDANCP responsible for decisions relating to GDANCP
- FA representatives
- GDANCP representatives
- Other line agency representatives as appropriate
- Non-Government Coordinator
- Support staff
- International Advisors

Draft Terms of Reference for the Taskforce Secretariat have been prepared (see Annex 1).

#### *REDD+ Taskforce Technical Teams*

The REDD+ Taskforce should establish separate Technical Teams in order to develop technical recommendations on particular key issues. The Technical Teams would be composed of technical

officers from different line agencies responsible for the issue under discussion as well as other stakeholders as identified, including civil society and indigenous peoples representatives. Non-government members could be drawn from organisations represented in the Consultation Group (see below). The membership and terms of reference for each Technical Team will be decided by the REDD+ Taskforce. Currently at least four Technical Teams are planned, and more may be required through the Readiness process:

1. REDD+ Projects Technical Team. Composed of FA, GDANCP, FiA, and other line agencies as appropriate, development partner and civil society representatives. Responsible for developing guidelines for REDD+ pilot projects, to ensure that projects are undertaken in a way that allows them to be nested into the national REDD+ system.
2. REDD+ Benefit-sharing and Revenue-distribution Technical Team. Composed of FA, GDANCP, MEF, other line agencies as appropriate, development partner and civil society representatives. Responsible for considering how to manage REDD+ revenues in Cambodia and guidelines for local benefit-sharing arrangements.
3. MRV/REL Technical Team. Composed of FA, GDANCP, FiA, MLMUPC, and other line agencies, development partners and civil society as appropriate. Responsible for implementation of Sections 5 and 6 of the Roadmap: development of Cambodia's REL(s) and establishment of the MRV system.
4. Consultation and Safeguards Technical Team. Composed of FA, GDANCP and other line agencies, development partners and civil society as appropriate. Responsible for developing the consultation plan (Section 2) and the strategic environmental and social assessment framework (Section 4).

#### *National Coordination, Reporting and Government-Donor Coordination*

REDD+ Taskforce members are responsible for reporting to and consulting with their respective line agencies.

The Taskforce sends reports to National Climate Change Committee, as the main coordination mechanism on climate change. The National Climate Change Committee adopts reports to the UNFCCC, as per Sub-decree No. 99 dated 18 August 2010. The Ministry of Environment is responsible for sending national reports to the UNFCCC

Government-development partner sectoral coordination happens through the TWGs, e.g. TWGF&E is responsible for coordination in the forestry sector, TWGF<sub>i</sub> for coordination in the fisheries sector, whilst there are currently proposals under discussion to establish a new Government-development partner coordination mechanism for protected areas and climate change issues.

#### *REDD+ Advisory Group*

A REDD+ Advisory Group of 4-6 people is created to advise the Taskforce. Advisory Group members will be representatives of development partners and key experts invited by the Taskforce on an adhoc basis. Advisory Group members join Taskforce meetings and are asked to review the REDD+ Readiness process, draft reports and proposed decisions of the REDD+ Taskforce. New members may be invited by the Taskforce to join the REDD+ Advisory Group as new development partner programs are designed. The REDD+ Advisory Group members are responsible for coordination with other Development Partners and mobilisation of further resources for REDD+ Readiness.

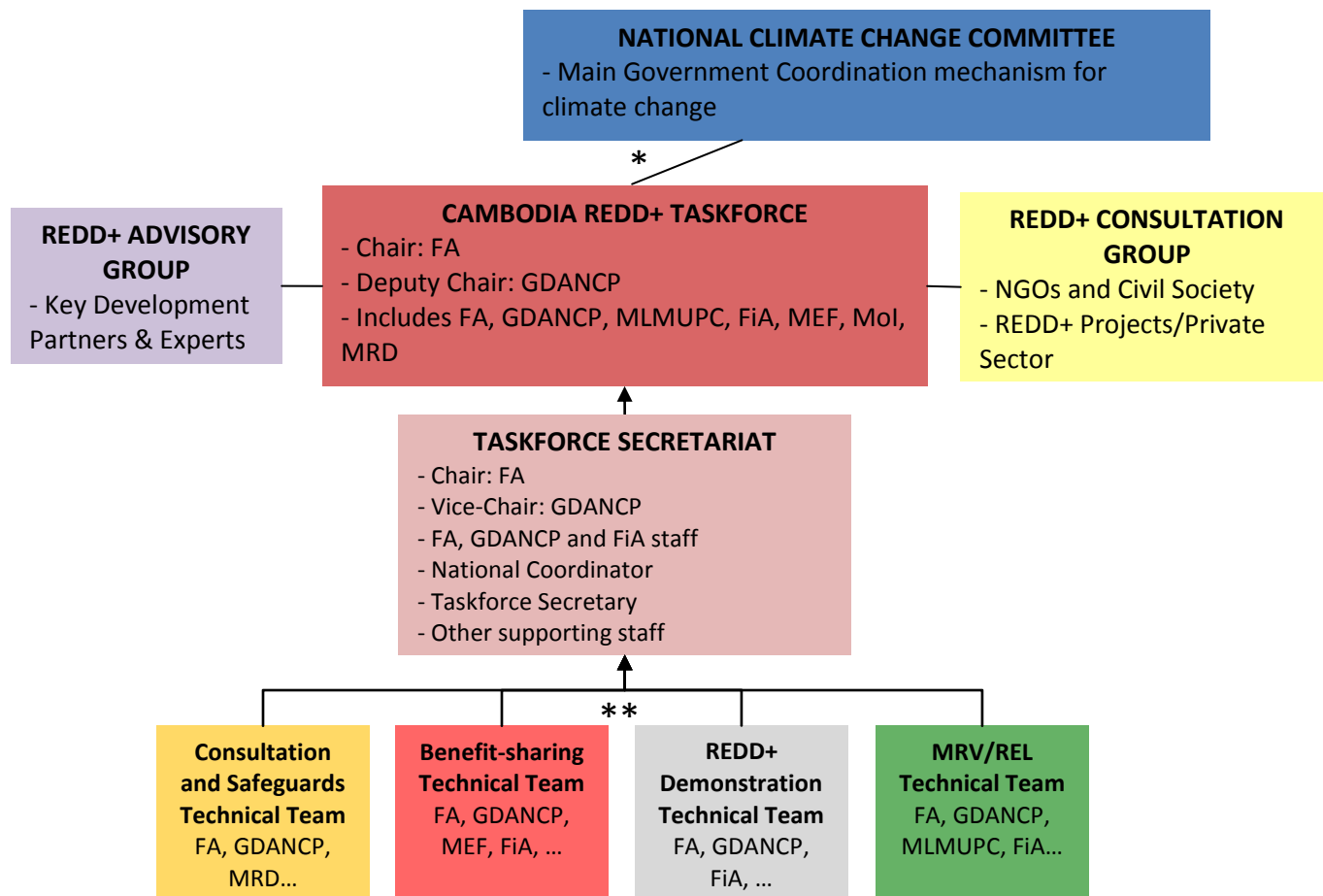
The REDD+ Advisory Group will need to join Taskforce meetings, and comment on minutes of meetings, draft reports and proposed decisions of the REDD+ Taskforce. Advisory Group members would also meet monthly with the Taskforce Secretariat, or more often as required, to discuss the REDD+ Readiness process. Members of the REDD+ Advisory Group, or their representatives, may be invited by the REDD+ Taskforce to join specific Technical Teams (see above) to work more closely with the Government agencies on technical issues. The REDD+ Advisory Group's role will particularly include advising on key issues such as consultation and participation or social and environmental safeguards.

#### *REDD+ Consultation Group*

A REDD+ Consultation Group of up to 10 people is created to represent civil society, indigenous peoples, NGOs, private sector and academic institutions. Taskforce members, the Taskforce Secretariat and Advisors will meet with the Consultation Group on a monthly basis to review progress with and provide comments on the National REDD+ Readiness process. Minutes of these meetings will be taken and circulated widely. The Taskforce will send reports and decisions to the Consultation Group for their comments, and will respond to comments raised. Consultation Group members may also be invited to join Taskforce meetings as appropriate. At least four Consultation Group members should represent indigenous peoples groups and civil society. Other Consultation Group members could include representative(s) from NGO/REDD project developers, private sector, and academic institutions. Some Consultation Group members should be representative of a particular constituency, and may have an interim mandate whilst that constituency is deciding how to elect representatives.



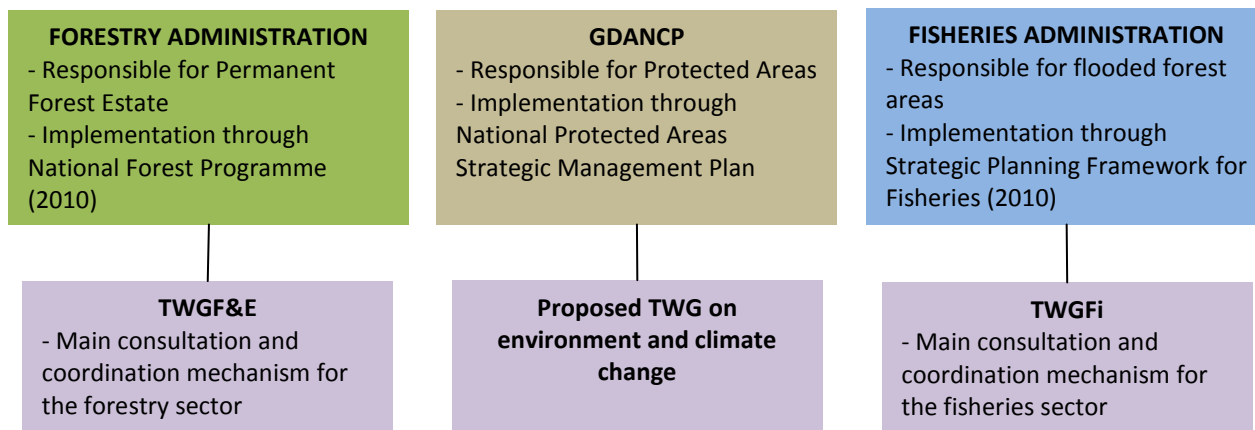
Figure 5. Proposed National Coordination Arrangements



\*Represents reports from the Taskforce sent to the NCCC

\*\*Taskforce Technical Teams will include Government and non-Government representatives as appropriate

Figure 6. Proposed Arrangements for Sectoral Implementation and Coordination



## **Annex to Section 1. Terms of Reference**

### Cambodia REDD+ Taskforce

#### 1. Objectives

The Cambodia REDD+ Taskforce is responsible for:

- Overall management of the REDD+ Readiness process
- Developing the National REDD+ strategy and Implementation Framework, including recommendations for legal and institution changes
- Establishing standards and guidelines for REDD+ demonstration activities

#### 2. Membership

Membership of the taskforce is based on relevance of mandates, jurisdictions, responsibilities and activities in areas relevant to REDD readiness as reflected in sections of the REDD+ roadmap (see list above).

The number of representatives from each agency still needs to be agreed.

The REDD+ Advisory group will be invited to attend all Taskforce meetings as observers and may be called on to comment on specific issues.

#### 3. Decision-making

The FA serves as the chair and GDANCP serves as the deputy chair of the REDD+ Taskforce. All decisions are made on a consensus basis of all the Taskforce member agencies. All reports of the Taskforce that require signature by the chair will also be initialled by the deputy chair. Both the Chair and the Deputy Chair should nominate their alternates to be present if they are absent. If the Chair is absent the Deputy Chair should fill their function.

#### 4. Responsibilities

- Overall management of the National REDD+ Readiness process
- Compiling and approving National REDD+ Readiness workplans and budgets produced by line agencies
- Developing the National REDD+ strategy and Implementation Framework
- Establish Technical Teams, reporting to the Taskforce, to review key technical issues as set out in the REDD+ Roadmap
- Establishing standards and guidelines for REDD+ demonstration activities
- Review and approve proposed consultants and advisors proposed to work with the REDD+ Taskforce on REDD+ Readiness by development partners
- Approve and supervise all consultancy inputs
- Oversight of Stakeholder Consultation and awareness-raising
- Seeking financial support on REDD+ Readiness process
- Regular meetings with REDD+ Advisory Group
- Information collection and institutional mapping about ongoing REDD activities
- Participation in trainings, meetings on REDD

- Coordination, including liaison with development partners and activities by NGOs
- Reporting by line agency members to their respective line agency

## 5. Reporting

REDD+ Taskforce members are responsible for reporting to and consulting with their respective line agencies. Members can request additional time on specific issues if they feel it is of high importance to their line agency and further discussion is needed.

The Taskforce sends reports to National Climate Change Committee, as the main coordination mechanism on climate change. NCCC adopts reports to the UNFCCC, as per Sub-decree No. 99 dated 18 August 2010. MoE is responsible for sending national reports to the UNFCCC.

For the FA, sectoral coordination will happen through the TWGF&E and for FiA sectoral coordination will happen through the TWGFiA. For GDANCP, sectoral coordination will happen through the proposed new TWG on environment and climate change. Other TWGs may be informed as appropriate.

Minutes of Taskforce meetings will be taken, summarising the members present and the key conclusions reached. These minutes will be made available to relevant Government agencies and development partners.

## 6. Duration and timing

The Cambodia REDD+ Technical Taskforce will meet monthly, or more frequently if required.

It is expected that members will be required to work between 5 and 10 days per month, depending on activities.

Timings of the meetings will be announced sufficiently in advance and relevant documents must be provided to all members including the Advisory Group within a reasonable time period.

### Taskforce Secretariat

#### 1. Objectives

The Taskforce Secretariat serves the Taskforce and is responsible for day-to-day management of the REDD+ Readiness process.

#### 2. Membership

The Taskforce Secretariat would have the following membership:

- FA serves as Chair of the secretariat
- GDANCP serves as Vice chair of the secretariat and lead representative of GDANCP
- FA representatives
- GDANCP representatives
- FiA representatives
- Other line agency representatives as appropriate

- Non-Government Coordinator
- Support staff
- International Advisors

### 3. Decision-making

FA, GDANCP and FiA lead representatives are responsible for decision-making on activities under the management of their line agency. Other decisions are made by consensus.

### 4. Responsibilities

The Taskforce Secretariat is responsible for:

- Day to day communication, administration and accounting
- Producing draft workplans and budgets for National REDD+ Readiness activities for submission to the Taskforce for consideration and approval
- Consolidating workplans and budgets produced by individual line agencies, Taskforce Technical Teams, and other units undertaking REDD+ Readiness activities
- Supervising activities of the Taskforce Technical Teams
- Day-to-day management of the National REDD+ Readiness process
- Producing quarterly reports and financial statements on the National REDD+ Readiness process
- Facilitating communication and coordination between Taskforce, the REDD+ Advisory Group and the Stakeholder Group

### 5. Reporting

The Taskforce Secretariat reports to the Cambodia REDD+ Taskforce

### 6. Duration and timing

Taskforce Secretariat members would work full-time.

### 7. Location

Taskforce Secretariat would be housed in the FA and GDANCP, but representatives would meet regularly to ensure appropriate coordination.

Terms of Reference for the REDD+ Advisory Group and Consultation Group to be added.

**Section 1: Management of REDD+ Readiness:**

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
<b>Component 1: Management of REDD+ Readiness</b>					
1.1 National REDD+ Readiness Coordination Mechanism established	FAO	Cambodia REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Multi-government agency Taskforce responsible for overall management of REDD+ Readiness and reporting to national policy coordinating bodies</li> <li>- Draft Taskforce ToR agreed</li> <li>- Regular meetings of Cambodia REDD+ Taskforce</li> <li>- Review by national policy coordinating committees</li> <li>- Review of current institutional mandates and discussion of National REDD+ management arrangements</li> <li>- Draft National REDD+ management arrangements and/or RGC policy statement</li> </ul>	Taskforce ToR and reporting agreed in first three months; Monthly meetings; Six monthly updates to national policy coordinating bodies; draft national REDD+ management arrangements	\$500,000 (FAO: \$150,000)
1.2 Support to National REDD+ Readiness process	UNDP	Taskforce Secretariat and REDD+ Advisory Group	<ul style="list-style-type: none"> <li>- Establishment of Taskforce Secretariat for day-to-day management of Readiness process</li> <li>- Establishment of REDD+ Advisory Group with approved ToR to provide support to the Cambodia REDD+ Taskforce</li> <li>- Regular meetings of Cambodia REDD+ Taskforce and Advisory Group</li> <li>- Training and capacity-building to Taskforce, Secretariat and Government agencies</li> </ul>	Taskforce Secretariat and Advisory Group ToR and reporting agreed in the first six months; Monthly reports; Training reports; overall completion of Roadmap activities	\$1,000,000 (UNDP: \$500,000)

## Section 2: Stakeholder consultation and participation

**Definition:** How stakeholders – Government agencies, local people, civil society – will be consulted with through implementation of the Roadmap, and how local stakeholders will be engaged in the process. Stakeholder engagement is very important if REDD+ is to be accepted and achieve broad support.

**Background paper:** see Sections 7 and 8 of Cambodia REDD+ Background Document

**Key parts:**

- Deciding who key stakeholder groups are
- Designing plans for stakeholder consultation, awareness-raising and training
- Recognising where stakeholders can be engaged in implementation
- How to ensure respect for the knowledge and rights of indigenous peoples and members of local communities, taking into account relevant international obligations, national circumstances and laws, including the United Nations Declaration on the Rights of Indigenous Peoples.

### Background to Consultation Processes

Multi-stakeholder consultation and participation in national policy development remains under constant development in Cambodia<sup>6</sup>. Within the forest sector public consultation on the National Forestry Programme marked an initial step in engaging a wider stakeholder group in sector policy development. A review of the NFP process recognised the significant achievements in bringing different groups together but also that the development of working relationships between different actors and the capacity for these relationships to be fully productive required time to develop<sup>7</sup>.

The development of the Cambodia Readiness Plan Proposal on REDD+ ('the Roadmap') by an inter-ministerial REDD+ Taskforce with civil society members, with dedicated consultation with civil society and indigenous peoples, marked another step in developing these relationships and the capacity of the actors involved. Similar modalities should be maintained through the REDD+ Readiness phase.

It is recommended that the processes of consultation and participation in the REDD+ Readiness phase helps to support the building of this capacity and trust further through the development of forums for communication between stakeholder groups (both formal and informal). The process will look to learn from past experience both within Cambodia (the NFP and REDD+ Roadmap processes, as well as REDD+ pilot projects) and from other countries (for instance UN REDD's efforts to develop a process for Free Prior Informed Consent on REDD+) to ensure that the result is a process that is nationally relevant, meets international standards and delivers outcomes that are owned by all relevant stakeholders.

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<sup>6</sup> Hughes and Un (2007) Cambodia Country Governance Assessment. Governance and Social Development Resource Centre

<sup>7</sup> Fraser Thomas (2009) Joint Appraisal of the National Forest Programme, Cambodia 4-14 August, 2009, Ministry of Foreign Affairs, Denmark

### **Box 2: Lessons Learned from Past National Consultation Processes**

Analysis of previous consultation processes in Cambodia provides some important lessons for the development of a consultation and participation process on REDD+. Lessons include:

- The consultation processes must be well planned and adequately resourced
- Stakeholders should be engaged early – awareness raising and information sharing prior to consultation are critical to gaining effective inputs from all stakeholders
- Information should be provided to stakeholders in a way that is comprehensive and easily comprehensible – document translation, summary documents
- Awareness raising and consultation within and across Government agencies is critical
- Stakeholders and stakeholder representatives at the grassroots level need support to understand, communicate and to respond to the issues they are to be consulted on
- Local or national non-governmental organisations can act as effective intermediaries in consultation both informing and gathering views from stakeholder groups
- Well trained Independent facilitators can improve consultation events
- High levels of transparency improve the effectiveness of and trust in consultation processes with stakeholders this includes clear statements of objectives and work plans, the availability of consultation meeting minutes and clear responses to comments raised during meetings

### **Box 3: Lessons on Consultation and Participation Learned from Oddar Meanchey**

The Oddar Meanchey REDD+ Project was officially launched in March 2008. As the first REDD+ project in Cambodia it is at the forefront of REDD+ development and is one of the first locations globally to have gone through a practical process of consultation at the grassroots level. This experience provides important lessons for developing REDD+ consultations in the future.

- Levels of understanding of climate change are very limited amongst local villagers, local and provincial officials and representatives of the police and military
- Utilisation of existing local partners and organisations to conduct awareness raising, facilitation and consultation can be effective
- A high level of resources and time are required to build stakeholder understanding
- Development of a Community Forestry Federation was critical in sharing experiences between communities, maintaining engagement and addressing representation
- Forestry Administration commitment to the project was critical to resolving conflicts between different stakeholders during the development process
- Local groups require legal and technical support to discuss and negotiate elements of a project including details of benefit sharing agreements with project developers – standards for community benefits in projects would help this process

*Adapted from Bradley A (2009) Communities and Carbon: Establishing a Community Forestry REDD+ Project in Cambodia*

### Stakeholder mapping and potential roles of stakeholders in REDD+

The development of REDD+ in Cambodia will have impacts on a wide number of stakeholders. A detailed understanding of these stakeholder groups, their interests and how they will be impacted by any potential activities for REDD+ will be important if future mechanisms are to be efficient, effective and equitable. The below information seeks to provide an overview of key stakeholder groups and their importance within the REDD+ process:

- **Government institutions and agencies** – The Government agencies are responsible for policy, regulatory and planning tasks related to establishment and maintenance of the enabling conditions

for Roadmap implementation. This includes enforcement of legislation and regulations, conflict resolution, service delivery, and ensuring that necessary capacity and technical assistance are available for development. A key consideration is that the majority of forests are state property, although mechanisms exist for local co-management of forestlands through Community Forestry, Community Protected Area, Protected Area Zonation and Community Fisheries arrangements. A mechanism for REDD+ could provide substantial support to existing and future plans for forest governance in Cambodia. The existing NFP identifies it as a potential funding resource for long term NFP implementation and the levels of funding associated with REDD+ may be the only opportunity to effectively scale up activities such as community forestry to the levels identified in the NFP. Provision of this level of funding is critical if Cambodia's forests are to be secured for the long-term. Coordination through and across Government will be critical to the success of REDD+. The capacity of several institutions will also have to be increased if strategies for REDD+ are to be effectively implemented. The establishment of the Cambodia REDD+ Taskforce builds on the positive experience of the interim REDD+ Taskforce used in the REDD+ Readiness Plan Proposal's (the Roadmap's) development. The Taskforce will look to support across government working and will facilitate interactions between different ministries as well as existing coordination bodies such as the NCCC.

- **Non-Governmental Organisations** – The NGO sector in Cambodia is extensive, often has high capacity, and has established mechanisms for coordination on forestry, community forestry, REDD+ and climate change. Both National and International NGO's have the capacity to provide technical support to Government agencies in the implementation of REDD+ Readiness activities, such as awareness-raising, and REDD+ strategy development. There are several organisations with experience of REDD+ processes internationally and the implementation of pilot REDD+ projects within Cambodia, as well as organisations with considerable experience in community forestry, indigenous rights and land. The knowledge and skills of these organisations will be important to the development of National REDD+ strategies.

A culture of upward accountability to development partners combined with the historical and present political context has limited the experience of the NGO sector in linking grassroots civil society with national policy development. Engagement within the NGO sector must thus recognise both the capacity of these organisations and their limitations in terms of representation at local level. Many groups may also have significant vested interests in different national approaches to REDD+.

- **Civil society and Indigenous Groups** – Cambodia has a substantial rural population including 20 different indigenous peoples groups<sup>8</sup>. These communities rely heavily on subsistence agriculture as well as the gathering of non-timber forest products (NTFPs). Although the legal framework on land and forestland tenure and ownership rights is relatively clear, implementation of this framework in rural or forest areas has been limited and local people are vulnerable to relocation for economic development or incursion resulting from migration to forest frontier regions. Given that Cambodia's population is increasing at one of the highest rates in Asia, coupled with rapid economic growth over the past decade, these conflicts are likely to become more prevalent, particularly in remote forest areas where many indigenous groups are found. Development and implementation of a National REDD+ Strategy thus presents a potential opportunity because it should encourage scaling-up of efforts to demarcate and register land boundaries and establish forestland co-management arrangements (such as Community Forestry), in order to determine local beneficiaries responsible

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<sup>8</sup> IPNN (2010) The Rights of Indigenous Peoples in Cambodia. 76<sup>th</sup> Submission to the UN Committee for the Elimination of Racial Discrimination.



for achieving REDD+. However, development and implementation of a National Strategy for REDD+ also presents potential risks if it leads to alienation of forestland resources.

The historical, cultural, and political context of Cambodia has resulted in a weak level of civil society organisation at the national level with limited engagement in policy debate and formulation. Organisations that have grown from a grassroots issue base have often struggled to maintain links with their constituents as they have grown. A number of different organisations and networks exist that have the capacity to manage processes of consultation and participation, however support to these organisations must also be managed carefully to allow them to maintain and develop structures of downward accountability.

- **Private Sector** – Cambodia has taken initial steps in engaging the private sector within forest conservation and REDD+. A poor history of private sector engagement within Cambodia's forests however along with an existing trends of natural resource exploitation and degradation means that there remains a long way to go. Successful engagement with the private sector will be critical in both reducing existing rates of deforestation and degradation and supporting future initiatives for REDD+ development.
- **Knowledge Institutions** – Cambodia has several established policy research institutions, such as the Cambodia Development Resource Institute (CDRI) and the Center for Advanced Study (CAS). Major Universities include the Royal University of Phnom Penh, which already has well-regarded master's courses on environmental conservation and provides teaching on Payments for Ecosystem Services, the Royal University of Agriculture (Chamkar Dong) and Prek Leap National School of Agriculture, all in Phnom Penh. Universities could play a key role in implementation of REDD+ through courses on REDD+ and necessary skills such as forest inventories.
- **Development Partners** – Development partners have provided vital support to the development of Cambodia's forest, environment, land and climate change sectors. Several partners have already committed to provide further support to policy dialogue and Roadmap implementation. Development partner experience will play an important role in linking national and international process. It is important that communication between DP's and Government is also clearly maintained to ensure that efforts towards REDD+ are coordinated with other initiatives.
- **International networks** – All of Cambodia's neighbours are currently investigating the potential for national mechanisms for REDD+. Coordination amongst these countries amongst others will provide important lessons.

Section 7 of the Cambodia REDD+ Background Document gives examples of the different types of stakeholders.

### General Considerations

General understanding of REDD+ and REDD+ Readiness activities is low, as is capacity to implement REDD+ and REDD+ Readiness activities. Overall levels of awareness and capacity will need to be substantially increased before stakeholders can be adequately engaged in the REDD+ Readiness process. Awareness-raising should avoid increasing general expectations that REDD+ revenues will be available soon, or even will be substantial in the longer-term.

### Consultation and Participation Plan

The consultation and participation plan has been developed through a process of consultation and has looked to draw lessons from the experiences of past consultation processes in Cambodia. The plan identifies a number of principles of consultation that should be adhered to through the national process,

as well as identifying initial steps within the stakeholder engagement and consultation process. Further development of this plan will occur through the Consultation and Safeguards Technical Team in accordance with national experience and international best practice.

### Objectives

The consultation and participation process has two key objectives:

1. Stakeholders are empowered to engage in the National REDD+ Readiness Process through the development of strategies and methods of implementation and the review of proposed policies
2. Stakeholders have access to information on the REDD+ and the National REDD+ Readiness process

### Principles

Stakeholders identified the following principles as being important to effective consultation. A number of means to achieve these principles were also recommended:

**Table 4. Principles for Stakeholder Consultation and Participation during the Roadmap**

Principle	Approach
The process should be <b>transparent</b>	<ul style="list-style-type: none"> <li>• Development of clear workplans and a decision making matrix that illustrates when and by whom decisions should be made available</li> <li>• Publication of minutes of meetings</li> <li>• Clear demarcation of the roles of different groups</li> <li>• Clear monitoring and evaluation frame work</li> </ul>
The process should be <b>inclusive</b> engaging all relevant stakeholders with a sufficient support to provided to more vulnerable groups	<ul style="list-style-type: none"> <li>• Representatives from each stakeholder group should be involved in the development of strategies</li> <li>• All stakeholders should have the opportunity to comment on draft policies that will impact their livelihoods</li> <li>• Information should be presented in a way that is both comprehensive and comprehensible to all</li> <li>• Information sharing events focused on gaining both information on existing perceptions and local approaches to forest governance as well as sharing information on REDD+</li> </ul>
The process should maintain fair <b>representation</b> of different groups	<ul style="list-style-type: none"> <li>• Groups should be allowed to select their own representatives</li> <li>• Training and support should be provided to representatives</li> </ul>
The process should allow for groups to be <b>held to account</b>	<ul style="list-style-type: none"> <li>• Clear idea of the <b>Role</b> of different constituents should be presented</li> <li>• <b>Respect</b> different positions</li> <li>• Develop <b>Complaint Mechanism</b> for consultation process</li> </ul>
The process should be <b>iterative</b>	<ul style="list-style-type: none"> <li>• Develop <b>Response Mechanism</b></li> <li>• Ensure <b>Continued Feedback</b></li> </ul>
The process should ensure the availability of <b>information</b>	<ul style="list-style-type: none"> <li>• Establishment of a REDD+ website</li> <li>• Materials should be developed that are appropriate to different stakeholders, including: glossary of terms in Khmer, Image based awareness raising materials, video information</li> </ul>
The process <b>builds on existing processes and structures</b>	<ul style="list-style-type: none"> <li>• The process should build on the capacity established by existing processes, organisations and/or networks</li> <li>• Consultation should be integrated into implementation of existing programmes such as the NFP and Community Forestry</li> </ul>

	<ul style="list-style-type: none"> <li>• Consultation and information sharing should be done by a range of stakeholders within their own constituencies</li> </ul>
The process should be <b>timely</b>	<ul style="list-style-type: none"> <li>• It should be sensitive to time needs of various stakeholders</li> <li>• Information should be provided sufficiently in advance for all stakeholders to access information</li> <li>• Stakeholders should be provided with sufficient information and training in advance of consultation</li> </ul>
The process should be <b>adequately resourced</b>	<ul style="list-style-type: none"> <li>• Development of clearly costed workplans for activities</li> <li>• Provide funding for grass-roots education and consultation with communities</li> <li>• Provide funding for education and consultation with local governments</li> </ul>

These approaches have been adapted to develop a number of next steps and a Results Matrix for the consultation process (see end of section). This information will also form the basis for a more detailed workplan for consultation and participation and a monitoring framework that will be developed by a Technical Team on consultation and participation which will be the first Technical Team to be established.

#### *Stakeholder Coordination*

It is important that the key stakeholder groups noted above are consulted through the Roadmap implementation. A number of interest forums already exist to facilitate communication with these groups. As such the initial stakeholder mapping has focused on identifying key networks and forums for stakeholder engagement. A summary of these is provided below. Consultations during Roadmap implementation will seek to engage with these fora and utilise existing representatives within the sector to facilitate communication. As such the process will not develop duplicate bodies but will build the capacity of existing structures.

**Table 5. Stakeholder coordination mechanisms under the Roadmap**

Stakeholder Group	Representative Forum
<b>Government</b>	Cambodia REDD+ Taskforce National Climate Change Committee Council for Land Policy; Cadastral Commission; National Committee for Land Management; National Committee for Addressing Disputes in Relation to Creation of Permanent Forest Reserve Areas; Forest Land Encroachment Committee; National Authority for Land Disputes/Conflict Resolution; National Committee for Subnational Democratic Development (NCDD); Expropriation Committee
<b>Government / Donors / Private Sector / NGOs</b>	Technical Working Groups (e.g. TWGF&E, TWGF, etc.) REDD+ Advisory Group
<b>Government-Community Forestry Groups</b>	National Community Forestry Programme Coordination Committee
<b>Civil Society and NGOs</b>	National Climate Change Network Informal NGO REDD+ Working Group Forest Livelihoods and Plantation Network Land Action Network Indigenous People's Network Regional and Provincial Networks

<b>Government-Private Sector</b>	Technical Working Groups Possibly: Government-Private Sector Forum Cambodia Timber Industry Association
<b>International Networks</b>	ASEAN Regional Knowledge Network on Climate and Forests Asia Indigenous Peoples Pact

### The Roadmap: Next Steps

#### *Phase 1: Awareness Raising and Development of Engagement - Next 12 months*

- Establish the Cambodia REDD+ Website – this should contain information on REDD+, Climate Change and the National REDD+ Readiness process. Developed by the Taskforce Secretariat – within 3 months.
- Clarification of means of communication between Advisory Group and wider stakeholder groups. The Terms of Reference for Advisory Group members should cover the need for representatives to communicate with existing forums. Funds will need to be allocated to support this process and to build the capacity of forest-dependent communities to engage in the REDD+ Readiness process. Taskforce and REDD+ Advisory group – within three months.
- Initial awareness-raising on REDD+ process through existing national and subnational networks. This should be conducted by existing REDD+ Taskforce members along with stakeholder representatives (potentially members of the Consultation and Safeguards Technical Team). Basic information sharing materials on Climate Change, REDD+ and National Readiness process already exist to a large extent and should be supplied to allow for groups to pass on information. Materials developed should include media appropriate for local consultation. A detailed plan for awareness raising and consultation should also be developed within this time and can be discussed during awareness raising events. Taskforce Secretariat and Consultation and Safeguards Technical Team – within three months.
- Identification of representatives for the REDD+ Advisory Group and Technical Teams to be established by the Taskforce. It is recommended that this occurs through existing network meetings to prevent duplication of processes. REDD+ Taskforce – within four months.
- Establishment of a National REDD+ Consultation and Safeguards Technical Team to develop detailed work plans for consultation and participation. REDD+ Taskforce – within 3 months.
- Development of core REDD+ communication materials suitable for use with different stakeholder groups. Materials should be based on visual information and should integrate existing efforts on REDD+ into existing national forest management strategies. REDD+ Secretariat – 3-6 months.
- Development of guidelines for consultation on REDD+ demonstration activities within REDD+ project sites. REDD+ Projects Technical Team with assistance from the Consultation and Safeguards Technical Team, in consultation with key stakeholders – within 12 months.
- Regular Update Meetings with key national networks. Taskforce Secretariat – Quarterly with selected networks
- Quarterly update news letter – briefing on national activities on REDD+ and Relevant Activities in Other countries and progress at international negotiations. Taskforce Secretariat
- Initiate awareness-raising in key target areas. Third party groups
- Integration of consultation and participation requirements in line with above principles in Terms of Reference for all studies under the REDD+ Roadmap. Taskforce Secretariat

#### *Phase 2: Awareness Raising, Consultation and Implementation – after 12 months*

- Information-sharing on REDD+ and participants existing experiences of forest Governance and national strategies for forest management. The process should be held with key stakeholder groups

at national and subnational levels and aim to establish the basis for initial communication and awareness-raising on REDD+, with participants being provided with communications materials to share with constituents. The awareness-raising will also aim to identify key issues that should feed into the REDD+ Readiness process. Materials developed should include media appropriate for local consultation. The process should link with existing initiatives on climate change awareness raising such as those under the Cambodia Climate Change Alliance, as well as existing training process such as those developed for community forestry. Consultation and Safeguards Technical Team – next 6 to 12 months.

- Assessment of and integration of REDD+ into Community Forestry Training. Taskforce Secretariat and the National Community Forestry Programme Coordination Committee
- Initial localised consultations on first steps of Roadmap. Taskforce Secretariat and relevant third parties
- Establishment of Multi-stakeholder Technical Teams to address range of issues. REDD+ Taskforce

*Phase 3: National Consultation on National REDD+ Strategy as it is developed – after 12 months*

- Awareness raising with national stakeholder groups. REDD+ Taskforce and relevant third party
- Consultation on Initial Draft Strategy Framework. REDD+ Taskforce and relevant third party
- Consultation on Revised Framework. REDD+ Taskforce and relevant third party

**Section 2: Stakeholder Consultation Plan**

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
<b>Component 2: Stakeholder Consultation Plan</b>					
2.1 Stakeholders are engaged in the REDD+ Readiness process		REDD+ Taskforce, Technical Team on Consultation and Safeguards, Consultation Group	<ul style="list-style-type: none"> <li>- Stakeholders from civil society (forest dependent communities and Indigenous communities), NGOs and Private sector are engaged in the management structure for Roadmap implementation through the REDD+ Advisory and Consultation Groups and the Technical Teams</li> <li>- Specific funds provided for the REDD+ Consultation Group to function</li> <li>- Regular consultations with relevant stakeholder groups, including the REDD+ Advisory and Consultation Groups, follow principles listed in Roadmap</li> <li>- Activities undertaken throughout programme implementation include consultation with relevant stakeholder groups and follow principles listed in Roadmap</li> <li>- Development of a comprehensive national consultation validation process for the National REDD+ Strategy and Implementation Framework</li> <li>- Development of an effective monitoring framework and feedback mechanism on consultation and participation</li> </ul>	<p>Monthly REDD+ Taskforce meetings for interministerial coordination</p> <p>Monthly meetings between REDD+ Consultation Group and the REDD+ Taskforce</p> <p>Quarterly meetings between Taskforce Secretariat and key stakeholder groups identified in the Roadmap (TWGs, Informal NGO REDD+ Working Group, Climate Change NGOs, Civil Society and Indigenous Peoples Networks, etc.)</p>	\$300,000 (UNDP: \$150,000)
2.2 Stakeholders provided with access to information on REDD+ and the National REDD+ process		Cambodia REDD+ Taskforce, Technical Team on Consultation and Safeguards	<ul style="list-style-type: none"> <li>- Establishment of a website for REDD+ where key documents are placed in a timely manner</li> <li>- Development of a work plan for awareness raising on REDD+ and the national process</li> <li>- Development of effective communication tools on REDD+ integrating it into national context and being appropriate for range of stakeholders</li> <li>- Implementation of multiphase information sharing and consultation process</li> <li>- Documentation and dissemination of lessons learned from pilot REDD+ projects</li> </ul>	<p>Website established within three months</p> <p>Appropriate materials developed for REDD+ communication at different levels</p> <p>Conduction national information sharing events</p> <p>Provision of support to different stakeholder groups to conduct information sharing events</p>	\$300,000 (UNDP: \$150,000)

### Section 3: Development and selection of REDD+ strategies

Definition: Plan for how Cambodia will develop and evaluate strategies to reduce deforestation and forest degradation

Background papers: existing reports on pilot REDD+ projects, FAO Assessment of land use, forest policy and governance, CCAP analyses, UNEP-WCMC co-benefits study.

Key parts:

- Understanding current land-use, forests and forest governance
- Research to understand costs and benefits of REDD+ (economic analysis), including the other ecosystem services that forest (including flooded forest) resources could provide, such as watershed management, livelihoods (e.g. resin-tapping, other NTFPs), biodiversity conservation, etc.
- A plan for how the Cambodia REDD-plus strategies will be developed
- Identifying priority areas for implementation at subnational level

#### Background to Cambodia REDD+ Strategy

##### *Drivers of Deforestation in Cambodia*

Cambodia is classified as a ‘high forest cover, high deforestation’ country<sup>9</sup>, with approximately 10.7 million hectares of forest in 2006, and an annual deforestation rate of 0.8% between 2002 and 2006<sup>10</sup> (approximately 379,485 hectares of forest were lost during this period). Deforestation is driven by a complex set of processes, including:

- improvements in accessibility to remote forested areas encouraged initially by a rapid increase in commercial logging activity in the 1990s, which ceased with the Government declared logging moratorium in 2002, and more recently by road-building projects;
- uncertain land tenure, which encourages land-grabbing based on squatters rights, even though illegal under the Land Law (2001);
- lack of Government capacity in remote areas to adequately manage forests, which are state public property under the Forestry (2002), Protected Area (2008) and Land Law (2001);
- a rapid increase in agricultural expansion and other large-scale development activities, which lead to widespread clearance of some areas; this is usually driven by declaring economic and social land concessions (ELCs and SLCs);
- increasing regional and global demand for raw materials; and
- rural poverty, which is still widespread in Cambodia. The majority of the rural poor are dependent on forest resources for a portion of their livelihoods.

Escalating development pressures, in particular for land for economic and social land concessions, has caused a rapid increase in the rate of deforestation since 2004-5, suggesting that Cambodia’s baseline

<sup>9</sup> Griscom, B., Shoch, D., Stanley, B., Cortez, R. and Virgilio, N. 2009. Sensitivity of amounts and distribution of tropical forest carbon credits depending on baseline rules. *Environmental Science and Policy* 12: 897-911.

<sup>10</sup> Forestry Administration, 2007. Forest Cover Changes in Cambodia, 2002-2006. Paper prepared for the Cambodia Development Cooperation Forum. Forestry Administration, Phnom Penh.

deforestation rate has probably now much greater than 0.8%. This in turn is leading to greater pressures on gazetted protected areas and protection forests, with parts of some areas being degazetted in recent years. Given the increasing opportunity costs of forest conservation, in comparison with alternatives such as economic and social land concessions, justifying forest programs requires demonstrating that forests can deliver substantial economic and social benefits to Cambodia.

**Table 6. Drivers of deforestation and forest degradation identified through the REDD+ Roadmap**

	Within the forest sector	Outside the forest sector
Direct	<ul style="list-style-type: none"> <li>• Unsustainable logging;</li> <li>• Fire (role disputed);</li> <li>• Unsustainable woodfuel collection (role unclear).</li> </ul>	<ul style="list-style-type: none"> <li>• Clearance for agriculture;</li> <li>• Expansion of settlements;</li> <li>• Infrastructure development;</li> </ul>
Indirect	<ul style="list-style-type: none"> <li>• Lack of demarcation of forest areas;</li> <li>• Inadequate forest law enforcement;</li> <li>• Low institutional capacity and weak policy implementation;</li> <li>• Demand for wood energy for domestic and industrial use;</li> <li>• Low efficiency of wood conversion and use for construction, energy production, etc.</li> <li>• Lack of incentives promoting sustainable management of forests;</li> <li>• Lack of finance to support sustainable forest management activities by line agencies, local authorities and local communities</li> <li>• Lack of sustainable or alternative supply of wood and timber, including for wood energy to meet demand;</li> <li>• Weak forest sector governance                             <ul style="list-style-type: none"> <li>– Low levels of stakeholder participation and involvement;</li> <li>– Lack of transparency and accountability;</li> <li>– Lack of assessment of social and environmental impacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Population increases;</li> <li>• Poverty;</li> <li>• Rising incomes and demands for resources;</li> <li>• Increasing accessibility of forest areas;</li> <li>• Low agricultural yields;</li> <li>• Migration into forest areas;</li> <li>• New settlements, including in border areas;</li> <li>• Large-scale agro-industrial developments (including economic and social land concessions and other concessions);</li> <li>• Land speculation;</li> <li>• Regional demand for resources;</li> <li>• Poor ESIA regulations and lack of implementation</li> <li>• Governance                             <ul style="list-style-type: none"> <li>– Weak forestland tenure – tenure is weakest in forests and other areas outside residential or farming zones;</li> <li>– Weak enforcement of the law;</li> <li>– Limited implementation of land registration (private and state)</li> <li>– Lack of a fair and transparent conflict resolution mechanism;</li> <li>– Insufficient implementation of land-use planning;</li> <li>– Overlapping/unclear jurisdictions;</li> </ul> </li> <li>• Social norms (claiming land through utilisation);</li> <li>• Economic benefits provided by sustainable management of forests at the national level often appear lower than alternative land-uses;</li> <li>• Opportunity costs of sustainable management of forests at the local level;</li> <li>• Low awareness of environmental roles of forests.</li> </ul>

The REDD+ Background Document and the REDD+ Roadmap Assessment of Land use, Forest Policy and Governance report provide further information and references. It should be noted that the role of fire as



a driver of deforestation and forest degradation is unclear, as fire has been traditionally used to manage deciduous dipterocarp forests in Cambodia for potentially 1000s of years. In addition, although construction and factories in Cambodia rely on woodfuel for energy to a great extent, the contribution of woodfuel burning to emissions depends on where the woodfuel is sourced from. Woodfuel from sources that are allowed to regenerate, or from clearance of forestland for agro-industrial concessions (which would have been emitted anyway) might not make any additional contribution to overall emissions. Additional research is required to accurately understand the drivers of deforestation and forest degradation in Cambodia.

#### *Current Forest Management Strategies in Cambodia*

Development of Cambodia's REDD+ strategy will build on previous experiences and already existing forest management strategies, rather than initiating new policies, legal structures or governance arrangements. Figure 1 (above) summarises forest and land management and ownership in the Kingdom of Cambodia. Cambodian Government agencies (FA/MAFF, GDANCP/MoE, FiA/MAFF) already have a long experience of implementing projects to reduce deforestation and protect existing forests in areas under their jurisdiction. Existing policy and legal frameworks and projects (past and present) aimed at helping to implement these frameworks include, but are not limited to, the following:

- Protected Areas management, based on the 2008 Protected Areas Law, the 1996 Law on Environmental Protection and Natural Resource Management, the 1993 Royal Decree on Creation and Determination of Nature Reserves and experience with various existing projects (e.g. Samkos, Lomphat, Bokor, Virachey, Kulen Promtep, etc.).
- Protection Forest management, based on the 2002 Forestry Law and Protected Forest subdecrees, and experience with various existing projects (e.g. Seima, Mondulkiri, Cardamoms), including the Seima REDD pilot.
- Community Forestry (CF), the development of which has been supported by the 2000 National Community Forestry Strategic Plan, 2002 National Forestry Policy, provisions in the 2002 Forestry Law allowing for Community Forestry in Production Forest areas, 2003 Sub-Decree on Community Forestry, 2006 Guidelines on Community Forestry, and experience with the many CFs in existence, including the Oddar Meanchey REDD pilot.
- Community Fisheries (CFi), supported by the 2004 Royal Decree on Community Fisheries, 2005 Community Fisheries Sub-Decree and the 2006 Fisheries Law.
- Community Protected Areas (CPAs), based on the draft CPA prakas; most Protected Areas now have one or more CPAs in existence.
- Management of Fishing Lots.
- Fisheries Protected and Conservation Areas.
- Indigenous Land titling (2009 Subdecree #83 on Registration of Land of Indigenous Communities)

Table 7 suggests how these existing management strategies can address the majority of drivers of deforestation from within the forestry sector.

The key plans of the RGC for implementing these strategies are:

- Cambodia's National Forest Programme (NFP, 2010), which is a 20-year the long term national forest management plan for the sector (2010-2030). The National Forest Programme provides a transparent, participatory process for planning, implementation and evaluation of all forestry activities, including direction for the overall course and approach of the wider forest sector by aligning activities with both national and international priorities and harmonising with other

sectors of the national economy. Cambodia's NFP will be implemented through five-year rolling plans for each sub-programme. In addition to providing the overall policy framework, it incorporates detailed strategic programmes for forest management activities in the Permanent Forest Estate (under the FA), including community forestry, protection forests, and sustainable forest management.

- The planned National Protected Areas Strategic Management Plan for the 3.1 million hectares of PAs.
- The Strategic Planning Framework for Fisheries (2010-2019) and the 3-year Fishery Development Action Plan for the fishery domain.

Note: Internationally, the National Forest Programme (NFP) represents a series of holistic socio-political processes that coordinate the policies, planning and field operations in the forest sector. Its development in Cambodia is still at an early stage, and it currently applies only to the mandate of the Forestry Administration of MAFF.

Many areas already have long-term site forest management programs in place which have had some local successes at reducing rates of deforestation and forest degradation, and conserving existing forest carbon stocks. Development of the REDD+ strategy should understand the factors behind the success of these programs, and focus on improving, strengthening and scaling-up these existing approaches.

#### *Drivers from outside the forestry sector*

The drivers of deforestation and forest degradation analysis identifies a significant number of drivers from outside the forestry sector that cause large-scale land-use change. These include in-migration to forest areas, agro-industrial developments such as land concessions, poor implementation of land laws and subsidiary regulations, economic incentives promoting forest clearance, poor ESIA regulations, and a lack of state land registration and forest estate demarcation.

Suggesting REDD+ strategies to address these drivers is challenging due to the factors involved. The success of existing site-based forest management programs, despite the substantial pressures from outside the sector, indicates that a bottom-up approach to REDD+ that focuses on site-based efforts may be the most effective REDD+ strategy. Nevertheless possible REDD+ strategies to address these external drivers should be investigated during the REDD+ Readiness phase. Table 8 lists the main drivers and some possible candidate REDD+ strategies that could be investigated further.

#### *Other Considerations*

Flexibility and ease of implementation should be maximized at the outset for the initial phases of REDD+ planning, piloting and implementation in order to allow for testing various approaches to REDD+ within the existing frameworks.

Development of Cambodia's REDD+ strategies should learn lessons from existing and future planned pilot REDD+ projects.

REDD+ projects include the involvement of private sector partners. Further work is required to understand how Cambodia's REDD+ strategies could be developed in a way that would incentivise private sector action.

Capacity building and support is required if these laws and policies are to be effectively implemented at scale.

A more detailed understanding of opportunity costs is required in order to assess the impact of potential REDD+ strategies. However, opportunity cost research should be undertaken in a way that assesses costs and benefits to different actors (e.g. local people, government agencies, local authorities, etc.). Gregersen et al. (2010)<sup>11</sup> provide a useful summary of some of the problems with opportunity cost research.

### Draft REDD+ Strategy

Cambodia's REDD+ Strategy should be implemented through:

1. Main Strategy: Support for effective management of Cambodia's forests, in accordance with existing laws and policies (supporting the NFP, PAs and flooded forest management). As part of the main strategy, line agencies may decide to investigate additional implementation strategies, such as:
  - a. Innovative Financing models, including development of Conservation Concessions as a viable alternative to other types of land concessions
  - b. Local forest protection contracts
  - c. Management of timber and wood energy
  - d. Understanding how REDD+ can support implementation of the CBD in Cambodia
  - e. Adopting the nested approach to REDD+ implementation
2. Supplementary strategies: Addressing drivers from outside the forestry sector. These candidate REDD+ Strategies will need to be investigated further through the REDD+ Readiness phase.

*1. Main Strategy: Support for effective management of Cambodia's forests, in accordance with existing laws and policies*

The National Forestry Programme (NFP), Nature Protected Areas management and sustainable management of flooded forest resources provide a strong basis to address the main drivers of deforestation and forest degradation from within the forestry sector and forestlands (see Table 7).

For the Permanent Forest Estate (under the FA), development of REDD+ should support implementation of the National Forest Programme –

- Forest Demarcation, Classification and Registration (Programme 1), including demarcation and registration of the Permanent Forest Reserve.
- Forest Resource Management and Conservation (Programme 2), including forest certification, production forest management, establishment of new protection forests, and reforestation/afforestation as alternatives to the currently dormant forest concessions found across Cambodia.
- Forest Law Enforcement and Governance (Programme 3), including potential linkages with the EU Forest Law Enforcement, Governance and Trade (FLEGT) programme.

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<sup>11</sup> Gregersen, H., El Lakany, H., Karsenty, A. and White, A. 2010. Does the Opportunity Cost Approach Indicate the Real Cost of REDD+? Rights and Realities of Paying for REDD+. Rights and Resources Initiative, CIRAD. [http://www.rightsandresources.org/publication\\_details.php?publicationID=1555](http://www.rightsandresources.org/publication_details.php?publicationID=1555)

- Community Forestry Programme (Programme 4), including plans to scale-up Community Forestry and to develop alternative CF models for protection forests, community commercial forestry and partnership forestry.
- Capacity Building and Research (Programme 5), including development of the managerial and technical capacity of FA staff and other stakeholders. Also includes activities on research and awareness-raising activities on sustainable forest management.
- Sustainable Forest Financing (Programme 6), including how to provide an economically sustainable and transparent framework required in meeting all the NFP objectives. This will be achieved through Government financing, income from forestry, donor financing and innovative financing such as REDD+ and PES.

The NFP provides detailed cost estimates for each of these activities. Further work could be done to understand the costs of forest area management, based on experiences from Protection Forest management and development of Community forestry. This could be done through a survey of NGO-funded projects. The FA could be additionally supported to develop a specific REDD+ financing strategy for FA managed areas. Relevant programmes of the NFP could be further elaborated to include the support from REDD+.

For GDANCP/MoE, the Protected Areas Law (2008) provides an overall framework for PA management, which could be supported by REDD+. However, no subsidiary regulations have yet been issued under this law, although they are mandated by the law. In addition the National Protected Areas Strategic Management Plan (mandated under the PA Law) has yet to be written, and there is no Protected Areas financing plan. GDANCP/MoE could be assisted to develop the National Protected Areas Strategic Management Plan, which would include details of how REDD+ will support strengthened PA management in accordance with the PA law. This could include development of subsidiary regulations mandated by the PA Law, such as the CPA Prakas (currently in draft form), Zoning regulations, and development of the PA Trust Fund. For communities in PAs, it is important to enact the CPA Prakas soon and to develop mechanisms for revenue-sharing from REDD+ to Protected Areas and Community Protected Areas. Effective development of PA Zonation regulations is particularly important for implementation of REDD+. Forests in some parts of the PA system have quite degraded and could be targeted for reforestation or enhancement of forest carbon stocks.

For Fisheries Administration managed flooded forest and mangrove areas, the 2006 Fisheries Law, 2005 Community Fisheries subdecree and 2010-2019 Strategic Planning Framework for Fisheries describe how areas should be managed, including through community fisheries, fisheries conservation areas and fishing lots. Further work with the Fisheries Administration is required to understand better how REDD+ might support these management strategies.

A critical issue is clarifying management rights of local people over forest areas, through existing modalities such as Community Forestry, Community Protected Areas, Community Fisheries and Indigenous Communal Land Titling. REDD+ would need to support scaling-up of these existing modalities.

As part of the main strategy line agencies (FA and GDANCP) may be supported to investigate additional implementation strategies such as:

(a) Innovative Financing models: Conservation Concessions could be a powerful new tool to finance sustainable forestry, used to manage and protect large tracts of forest, especially suitable for Cambodia's large areas of post-concession forests or protected areas that require additional funds for

long-term management costs. The Conservation Concession model would allow Cambodia to gain funds from preserving natural resources, thereby providing an innovative economically viable alternative to Land Concessions in Cambodia. Conservation Concessions could easily be financed through REDD+. Further work would be required to understand how conservation concessions might work in the Cambodia context, potentially in both the Permanent Forest Reserve and Protected Areas. Another possible innovative financing model that could have linkages with REDD+ is plans by MoE to develop Payments for Ecosystem Services (PES) policies for Protected Areas.

(b) Local Forest Protection Contracts: Very little experience exists in Cambodia for forest protection contracts with local communities, although several pilot programs exist in Vietnam (e.g. payments for watershed protection, reforestation programs, etc.). Cambodia pilots include ecotourism projects (e.g. Tmatboey in Kulen Promtep Wildlife Sanctuary, Preah Vihear province) and other payment programs (e.g. Crocodiles, Cardamoms, Wildlife-Friendly products). There is little understanding as well of how benefit-sharing mechanisms for REDD+ or PES could work in Cambodia, although at least one initial study has been done (Ken Serey Rotha, 2010<sup>12</sup>), and pilot forest protection contract projects could inform decision-making. Existing local forest co-management agreements, such as Community Forests, CPAs, and Community Fisheries could provide an ideal platform for REDD+ benefit-sharing arrangements. Further work is required to understand how these approaches might work in Cambodia, and the Cambodia REDD+ Readiness phase could encourage further pilot projects to inform policy development (see Implementation Framework).

(c) Management of timber and wood energy: A significant driver of forest degradation in Cambodia is logging for timber, and forest harvesting and clearance for wood energy demand (principally charcoal and for industry). Both of these are expected to increase significantly in the future, in particular because the garment and construction industries rely on wood for cheap energy. Current strategies to manage timber and fuelwood supply in the NFP include:

- Forest Law Enforcement and Governance (Programme 3)
- Forest Certification (in Programme 2: Forest Resource Management and Conservation)

PAs could also contribute to wood energy management through CPAs and community wood collection from the sustainable use zone. One further possible strategy to reduce domestic wood energy demand (for fuelwood) is improved cookstoves. Cambodia already has considerable experience at implementing pilot cookstove projects, and sells carbon credits both on the voluntary carbon market and through the CDM. However, much more information is required on the source of fuelwood used in the cookstoves in order to understand if the emissions reductions achieved are actually additional. Further work is required to understand timber and wood energy supply and demand further, in order to develop strategies to manage timber and wood supply.

(d) Promoting REDD+ co-benefits: Implementation of REDD+ is expected to deliver significant benefits for biodiversity conservation and local livelihoods (called REDD+ 'co-benefits')<sup>13</sup>. Scoping of REDD+ strategies will be undertaken in relation to the costs and benefits considering, *inter alia*, carbon density, co-benefits, jurisdiction, opportunity costs, resource management issues, etc. This should help to

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<sup>12</sup> Ken Serey Rotha, 2010. Considerations in designing a REDD Benefit Distribution System in Cambodia. IUCN Cambodia.

<sup>13</sup> Leng, C., Ravilious, C., Kapos, V., Bertzky, M., Osti, M., Clements, T., Dickson, B. (2010) Carbon, biodiversity and ecosystem services: Exploring co-benefits. Cambodia. UNEP-WCMC, Cambridge, UK

understand how REDD+ can support fulfilling Cambodia's commitments under the Convention on Biological Diversity (CBD).

(e) Adopting the nested approach to REDD+ implementation: REDD+ in Cambodia will be implemented using the nested approach, linking subnational action to a national framework. In line with the nested approach, REDD+ may be implemented progressively for forestlands across the country. It should be noted that the UNFCCC negotiations on REDD+ are still underway, and how subnational action is integrated into national REDD+ programmes has yet to be decided.

## *2. Supplementary strategies: Addressing drivers from outside the forestry sector.*

The drivers of deforestation analysis identifies a number of key factors from outside the forestry sector that causes land-use change in Cambodia. These include in-migration to forest areas, agro-industrial developments such as land concessions, poor implementation of land laws and subsidiary regulations, economic incentives promoting forest clearance, poor ESIA regulations, regional drivers, and a lack of state land registration and forest estate demarcation.

An initial assessment has identified some possible candidate REDD+ strategies that could be investigated further during the REDD+ Readiness phase (see Table 8). These include:

- Reviewing regulations for land concessions, including the planning processes and whether concessionaires could choose to avoid forest clearance under a REDD+ mechanism. The impact of land concessions on overall emissions could also be investigated.
- Developing REDD+ Concessions as an alternative to land concessions, which is covered under Strategy 1(a) above.
- Revisions to ESIA regulations. This is also recommended for the Strategic Environmental and Social Assessment for REDD+ under the Roadmap Section 4 (Implementation Framework)
- Integrating REDD+ into land-use planning processes at subnational scales.
- Establishing the REDD+ financing mechanism as quickly as possible in order to demonstrate that forests do have value as forests.
- Regional collaboration with bordering countries in order to reduce leakage.

These candidate REDD+ Strategies will need to be investigated further through the REDD+ Readiness phase.

## Roadmap towards Development of the Cambodia REDD+ Strategy: Key Activities

*1. Main Strategy: Support to effective management of Cambodia's forests, in accordance with existing laws and policies.*

### Key activities:

- Research to estimate the financial costs of REDD+ implementation under existing forest management strategies: for Protection Forests, Community Forests, Protected Areas, etc.
- Elaboration of the NFP to provide details on how REDD+ could support implementation of its various programmes.
- Ministry of Environment to be supported to develop the National Protected Areas Strategic Management Plan, as mandated by the 2008 Protected Areas Law, including support from REDD+ to PA management and improved law enforcement. The Ministry could also be supported to develop necessary subsidiary rules and regulations for Protected Areas under the

PA Law, including the CPA Prakas and zoning regulations, for effective management of Cambodia's PAs. Reforestation and enhancement of forest carbon stocks in PAs could also be considered, as could development of innovative financing tools.

- Fisheries Administration to develop plans for how REDD+ could support management of flooded forests and mangroves areas outside protected areas, under the 2010 Strategic Planning Framework for Fisheries.
- Scoping of REDD+ strategies in relation to costs and benefits considering, *inter alia*, carbon density, co-benefits, jurisdiction, opportunity costs, resource management issues, etc..

(a) Innovative Financing models:

- Analysis of appropriate legal instruments to implement conservation concessions, both through MAFF and MoE, based on the analysis in the Cambodia REDD+ Legal Review<sup>14</sup>.
- Analysis of potential costs and benefits of conservation concessions as an alternative to other land concession models.
- Linkages between REDD+ and other types of PES in Protected Areas by MoE (e.g. hydropower offsets).

(b) Local Forest Protection Contracts:

- Understanding local costs and benefits of REDD+ in order to determine payment levels.
- Pilot forest protection contracts projects

(c) Management of timber and wood energy:

- Research to understand current and future timber and wood energy supply and demand, including sources of wood energy
- Analysis of possible strategies to manage supply and demand (e.g. certification, community forests, improved cookstoves), and their emissions reduction potential
- Cost-benefit calculations for the different strategies

(d) Promoting REDD+ co-benefits:

- Scoping of REDD+ strategies in relation to costs and benefits considering, *inter alia*, carbon density, co-benefits, jurisdiction, opportunity costs, resource management issues, etc.

(e) Adopting the nested approach to REDD+ implementation:

- Understanding how to link subnational projects to the national REDD+ framework.

2. *Supplementary strategies: Addressing drivers from outside the forestry sector.*

Key activities:

- Review of possible candidate REDD+ strategies to address drivers from outside the forestry sector
- Developing REDD+ Concession models as an alternative to land concessions (see 1(d) above)
- Reviewing regulations for Land Concessions

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<sup>14</sup> Oberndorf, R. and Nhean, M. 2010. REDD+ in the Cambodian context. An overview of the policy, legal and governance Frameworks impacting implementation. Report for the Cambodia REDD+ readiness process. UNDP Cambodia, Phnom Penh.

- Reviewing ESIA requirements
- Regional collaboration with bordering countries

### REDD+ Demonstration activities

REDD+ Demonstration Activities can include:

- REDD+ projects developed for the Voluntary Carbon Market. Existing Cambodia examples include the Oddar Meanchey Community Forestry REDD project (FA/PACT/TGC/CFI) and the Seima Protection Forest REDD project (FA/WCS).
- Other REDD+ demonstration activities, such as awareness-raising, research, development of baselines for particular sites, and so on. These activities could be linked in to development of subnational REDD+ systems linked into the national REDD+ program.

For REDD+ demonstration activities it is important to clarify tenure over forestlands through the development of the project. This isn't a necessary pre-condition for starting a project, but clear agreements over tenure and forest carbon ownership should be developed through the project. Sites that already have started to establish local agreements over forestland tenure will therefore be more suitable for demonstrations of REDD+.

All REDD+ demonstration activities should build on existing forest or site conservation projects, rather than create new initiatives.

All pilot projects for the voluntary carbon market and REDD+ demonstration activities should be approved by the respective Government agency responsible.

The Forestry Administration prioritises existing pilot projects for the voluntary carbon market for completion before any other demonstration activities.

GDANCP priorities having 1-2 pilot projects in Protected Areas, and pilot projects should include thinking about how REDD+ can work with CPAs and the PA zoning system

Lessons from pilot projects and demonstration activities should be compiled, in order to improve subsequent implementation and reduce costs.

All pilot projects and demonstration activities should aim to build national capacity, especially in the Government line agencies responsible and local stakeholders.

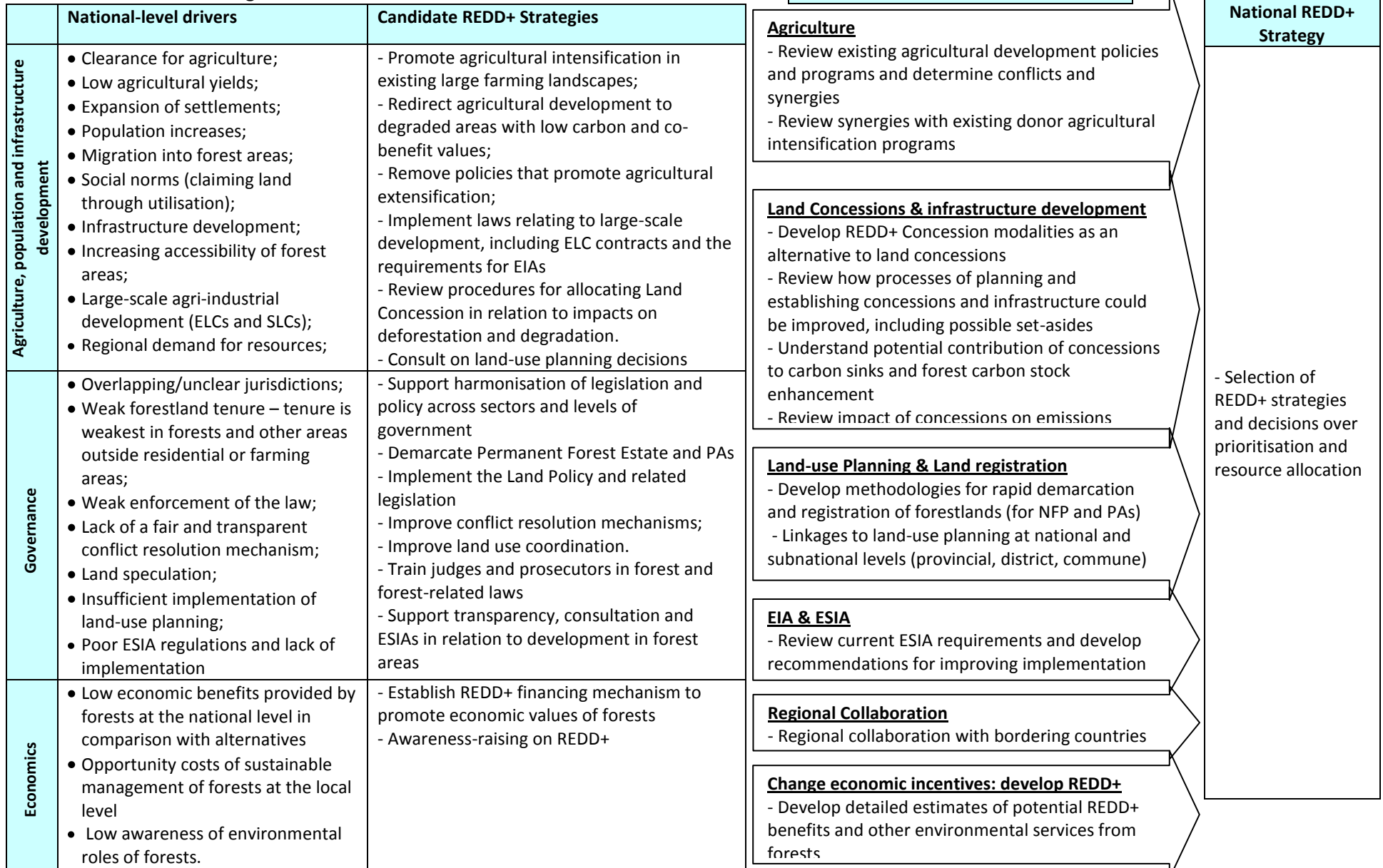
Pilot projects for the voluntary carbon market and demonstration activities should follow the national guidelines to be established by the REDD+ Taskforce through the Technical Team on REDD+ Projects.



**Table 7. Drivers and strategies: within forestlands**

		<b>Roadmap Activities</b>		
	<b>Drivers within forestlands</b>	<b>Candidate REDD+ Strategies</b>		<b>Development of National REDD+ Strategy</b>
<b>Direct</b>	<ul style="list-style-type: none"> <li>• Unsustainable logging</li> <li>• Unsustainable woodfuel collection (role unclear)</li> <li>• Fire (role unclear)</li> </ul>	<p>These drivers are largely addressed through Cambodia’s existing forest management strategies, all of which include tenure reform and local co-management. Implementation of these strategies is however hindered by the lack of available finance, which could be met by REDD+.</p>	<p><b>Further research on drivers</b></p> <ul style="list-style-type: none"> <li>- Assess sources of and contribution of woodfuel use to emissions from deforestation and degradation</li> <li>- Evaluate sources of and options to supply domestic timber demand and improve efficiency of wood and timber use</li> <li>- Quantitative assessment of drivers of forest degradation</li> <li>- Research and consultation on the list of drivers identified</li> </ul>	<ul style="list-style-type: none"> <li>- Revision of the REDD+ Roadmap Assessment of Land-use, Forest Policy and Governance report</li> </ul>
<b>Indirect</b>	<ul style="list-style-type: none"> <li>• Low institutional capacity and weak policy implementation;</li> <li>• Inadequate forest law enforcement;</li> <li>• Weak forest sector governance                             <ul style="list-style-type: none"> <li>– Low levels of stakeholder participation and involvement;</li> <li>– Lack of transparency and accountability;</li> <li>– Lack of assessment of social and environmental impacts</li> </ul> </li> <li>• Lack of forest demarcation;</li> <li>• Lack of sustainable or alternative supply of wood and timber, including for wood energy to meet demand;</li> <li>• Demand for wood energy for domestic and industrial use;</li> <li>• Low efficiency of wood conversion and use for construction, energy production, etc.</li> <li>• Lack of incentives promoting sustainable management of forests;</li> <li>• Lack of finance to support sustainable forest management activities by line agencies, local authorities and local communities</li> </ul>	<p><b>1. The National Forest Programme (2010).</b> The NFP identifies 9 objectives and 6 operational programmes for management of the Permanent Forest Estate and overall regulation of the forestry sector, including forest law enforcement and governance (FLEG), community forests, sustainable forest management, protection forests, improving capacity and demarcation. The NFP is linked to 5-year plans.</p> <p><b>2. Protected Areas</b> cover c.3 million hectares of forests and the main management strategy is the National Protected Area Strategic Management Plan (to be developed).</p> <p><b>3. Flooded forests and mangroves</b> are managed by the Fisheries Administration, according to the Fisheries Law and Strategic Planning Framework on Fisheries (SPFF)</p> <p><b>4. Other Possible Strategies</b></p> <ul style="list-style-type: none"> <li>- local forest protection contracts</li> <li>- conservation concessions</li> </ul>	<p><b>Research on Strategies</b></p> <ul style="list-style-type: none"> <li>- Scoping of REDD+ strategies in relation to costs and benefits considering, <i>inter alia</i>, carbon density, co-benefits, jurisdiction, opportunity costs, resource management issues, etc.</li> <li>- Understanding local costs and benefits of REDD+</li> <li>- Consultation on what additional REDD+ strategies might be</li> </ul> <p><b>Candidate REDD+ Strategies Development</b></p> <p><b>1. Development of REDD+ to support NFP (by FA):</b> Forest area management cost estimates for FA managed areas; Elaboration of relevant programmes of the NFP; Investigation of Conservation Concessions; Capacity-building</p> <p><b>2. Development of REDD+ to support PAs (by GDANCP):</b> Development of National Protected Area Strategic Management Plan and PA Business/Financing Plan (including REDD+); Development of PA zoning regulations and CPAs; Consideration of potential for reforestation within PAs; Investigation of other innovative financing models (including PES); Identifying synergies between REDD+ and the implementation of the CBD in Cambodia; Capacity-building</p> <p><b>3. Development of REDD+ to support fisheries areas (by FiA):</b> Consideration of integration of REDD+ and flooded forests and mangrove areas managed by Fisheries Administration under the Strategic Planning Framework on Fisheries</p> <p><b>4. Development of other strategies:</b> Assessments of local forest protection contracts; Conservation Concessions as alternative to land concessions</p>	<ul style="list-style-type: none"> <li>- Selection of REDD+ strategies and decisions over prioritisation and resource allocation</li> <li>- Detailed REDD+ strategies and cost implementation estimates</li> </ul>

**Table 8. Drivers and strategies: national**



Overall drivers of change are taken to be rising demand for land and resources by a growing and increasingly wealthy population in a country that is becoming more integrated into global markets

**Section 3: Cambodia REDD+ Strategy Development**

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
<b>Component 3: Cambodia REDD+ Strategy Development</b>					
3.1 Strategy Analysis	FAO	FA, GDANCP, Cambodia REDD+ Taskforce ...	<ul style="list-style-type: none"> <li>- Assess sources of and contribution of woodfuel use to emissions from deforestation and degradation</li> <li>- Evaluate sources of and options to supply domestic timber demand and improve efficiency of wood and timber use</li> <li>- Quantitative assessment of drivers of forest degradation</li> <li>- Revision to the REDD+ Roadmap Assessment of Land-use, Forest Policy and Governance report based on these</li> </ul>	Reports completed by June 2011; Revised Assessment report by June 2012;	\$150,000 (FAO: \$10,000)
3.2 Development of individual REDD+ strategies	UNDP	FA/MAFF	<ul style="list-style-type: none"> <li>- Forest area management cost estimates for FA managed areas</li> <li>- Elaboration of relevant programmes of the NFP</li> <li>- Investigation of how to integrate REDD+ into community forestry regulations</li> <li>- Integration of REDD+ into management plans for Protection Forests</li> <li>- Investigation of Conservation Concession models for the Permanent Forest Reserve</li> <li>- Capacity-building and training to the FA on REDD+</li> <li>- Selection of demonstration sites</li> </ul>	Financing plans completed by June 2011; Elaboration of the NFP by December 2011; Individual strategies by June 2012;	\$1,000,000 (UNDP: \$500,000) (UNEP: \$50,000)
		GDANCP/MoE	<ul style="list-style-type: none"> <li>- Development of National Protected Area Strategic Management Plan</li> <li>- Development of a Protected Areas Financing Plan, to include cost estimates of long-term management costs and potential sources of revenue including REDD+</li> <li>- Development of subsidiary regulations under the PA Law, such as PA zoning regulations, and the CPA Prakas</li> <li>- Strengthening Law enforcement for PAs</li> <li>- Consideration of potential for reforestation/rehabilitation within PAs</li> <li>- Investigating how sustainable financing strategies and models (e.g. PES, conservation concessions, etc.) could work for Protected Areas</li> <li>- Identifying synergies between REDD+ and the implementation of the CBD in Cambodia</li> </ul>	Protected Areas strategy and financing plan completed by June 2011; Report on REDD+ and Cambodia's commitments under the CBD completed by end of 2011	

National Programme Components	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
			<ul style="list-style-type: none"> <li>- Identifying priority demonstration sites</li> <li>- Capacity-building for GDANCP on REDD+</li> <li>- Understanding benefits of ecosystems services from PAs</li> </ul>		
		FiA	<ul style="list-style-type: none"> <li>- Development of a REDD+ implementation strategy that supports management of flooded forests and mangrove areas managed by Fisheries Administration under the Strategic Planning Framework on Fisheries</li> <li>- Capacity-building and training to FiA on REDD+</li> <li>- Scoping of individual REDD+ strategies for fishing lots, community fisheries areas and fisheries protected and conservation areas</li> </ul>	FiA REDD+ plan developed by June 2011; Individual REDD+ strategies by June 2012;	
		GDANCP, FA, REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Reviewing candidate REDD+ strategies to address national-level drivers of deforestation and forest degradation</li> <li>- Scoping of REDD+ strategies in relation to costs and benefits considering, inter alia, carbon density, co-benefits, jurisdiction, opportunity costs, resource management issues, etc.</li> <li>- Further analysis of the spatial distribution of REDD+ co-benefits with the assistance of UNEP-WCMC, including consideration of watershed values and the benefits of different REDD+ strategies</li> <li>- Understanding local costs and benefits of REDD+</li> <li>- Assessments of local forest protection contracts</li> <li>- Economic analysis of costs and benefits of REDD+ strategies</li> <li>- Integration into government planning processes</li> <li>- Regional collaboration with bordering countries</li> </ul>	Analysis of concessions by June 2011; Review of strategies by end of 2012; Analysis of economic costs and benefits by end of 2012	
3.3 National REDD+ strategy	UNDP	REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Development of national REDD+ strategy by the Taskforce</li> </ul>	Draft REDD Strategy: 2012	\$200,000 (UNDP: \$30,000)

## Section 4: Implementation Framework

### What is the Implementation Framework for REDD+?

Definition: Institutional, economic, legal and management arrangements that may be necessary to implement Cambodia's REDD-plus strategy options (taken from Section 3 of the Roadmap)

Background paper: legal and institutional review conducted by consultants

Key parts:

- Plan for supplemental legal regulations, development of REDD policies and governance arrangements
- Plan for Social and Environmental impact assessments, verification of results, and setting up transparent, decentralized benefit-sharing arrangements
- Plan for setting up robust systems for monitoring revenue disbursement, implementation, etc.

### Draft Implementation Framework for Cambodia

Cambodia's REDD+ Strategy will be implemented through:

- A. National Framework for REDD+
- B. Subnational implementation by line agencies, according to their jurisdiction, based on the national REDD+ strategy

Cambodia's REDD+ Implementation Framework needs to recognise the different roles and responsibilities of the various government authorities that have jurisdictional authority over forest resources in the country. Implementation of REDD+ is therefore expected to follow Government agency jurisdictions, with different Government agencies developing REDD+ implementation strategies for the different forest areas, based on the existing laws and policies of the RGC. Implementation will have to be nested within a National Framework, because REDD+ requires implementation at the National scale, with National-level reporting to the UNFCCC.

#### *A. National Framework for REDD+*

Over the next two years (2010-2012), a process will need to determine which functions and legislative development responsibilities will be managed by national level authorities, and which roles and responsibilities can be delegated to the various jurisdictional authorities mentioned above. Examples of national-level functions and the agencies responsible include:

- National Government Coordination: REDD+ Taskforce
- National Government-Donor Coordination: TWGs (e.g. TWGF&E, TWGF<sub>i</sub>, TWG<sub>Ag</sub>, TWGLands, including proposed new TWGs on Environment and Climate Change), using existing structures under the Government-Donor Coordination Committee (GDCC)
- Development of policies and subsidiary regulations under existing laws, that are harmonised with the existing legal framework in the country: Council of Ministers and Ministries
- National baseline (reference level or reference emission level): led by FA/MAFF, with input from GDANCP/MoE and FiA/MAFF

- National forest carbon accounting standards (e.g. methods to be used, definitions of forests, etc.): REDD+ Taskforce and MRV/REL Technical Team (including FA, GDANCP, MLMUPC and other line agencies as appropriate)
- National registry and independent monitoring of results: to be decided
- International negotiations: GDANCP/MoE, FA/MAFF and Ministry of Foreign Affairs
- Reporting to UNFCCC and National Greenhouse Gas Inventories: MoE, based on review by the NCCC
- Conflict resolution mechanisms (e.g. National Committee for Land Disputes/Conflict Resolution, National Authority on Forest Land Conflict Resolution)
- Land-use planning: National Land Management Committee, led by MLMUPC
- Land Administration (registration of land parcels): Cadastral Administration, led by MLMUPC
- Subnational Administration, and reviewing powers to be transferred to subnational levels: MoI
- Determining REDD+ project guidelines: REDD+ Taskforce
- State revenues management: MEF

### *B. Subnational Implementation*

The implementation of REDD+ by each jurisdictional agency would be based on the National REDD+ strategy (see Section 3), and the three main Government plans: the National Forest Programme (NFP, 2010) for the forestry sector, particularly the Permanent Forest Reserve, the planned National Protected Areas Strategic Management Plan for the Protected Area network, and the Strategic Planning Framework for Fisheries (2010).

Examples of functions that could be regulated by the various line agencies might include:

- Monitoring of forest carbon (using the nationally-approved accounting rules) within forest areas of each agency's jurisdictional responsibility
- Setting reference levels / reference emissions levels for forest areas within each agency's jurisdictional responsibility
- Setting rules for benefit-sharing for forest areas within each agency's jurisdictional responsibility
- Approving REDD+ projects in forest areas within each agency's jurisdictional responsibility

Local communities should be involved in local management decisions, implementation and monitoring, e.g. through existing Community Forestry agreements and similar modalities.

Implementation is expected to involve REDD+ projects within a nested framework. Examples might include implementation in:

- protected areas
- groups of protected areas
- groups of community forests
- groups of Permanent Forest Reserve units: e.g. a protection forest, areas of production forest, and several community forests

Implementation would involve working at subnational scales, such as entire provinces or forested regions (e.g. the Eastern Plains). Subnational implementation might require Government agencies to cooperate in setting reference levels and monitoring systems, e.g. in cases where Protected Areas are adjacent to Protection Forests. For example, Mondulkiri province includes parts of four Protected Areas (Snoul WS, Phnom Prich WS, Phnom Nam Lyr WS and Lomphat WS), two Protection Forests (Seima PF and Mondulkiri PF), Production Forest areas, and indigenous lands.

**Table 9. Draft Cambodia REDD+ Implementation Framework** (highlighted indicates parts to be decided)

<b>National Level Coordination Bodies</b>	- Coordination of National REDD+ Readiness: Cambodia REDD+ Taskforce (Terms of Reference in Section 1)			
<b>Technical Support and Coordination</b>	- REDD+ Taskforce Secretariat (Terms of Reference in Section 1) Includes lead Government agency counterparts, international REDD+ advisor, international MRV/REL advisor, national coordinator as secretary to the Taskforce			
<b>National Level Roles and Responsibilities</b>	<p><i>Functions coordinated by REDD+ Taskforce (no single agency has exclusive jurisdiction)</i></p> <ul style="list-style-type: none"> <li>- Development of REDD+ policies and subsidiary regulations under existing laws that are harmonised with the existing legal framework in Cambodia</li> <li>- Development of National REDD+ registry (structure to be decided)</li> <li>- Development of Guidelines for REDD+ projects in Cambodia, including procedures for Government approval (Technical Team under the REDD+ Taskforce, composition and responsibilities to be decided)</li> <li>- Determining benefit-sharing and REDD+ revenue management (Technical Team under the REDD+ Taskforce, composition and responsibilities to be decided)</li> <li>- Setting Cambodia's RELs and rules for MRV (MRV/REL Technical Team under the REDD+ Taskforce, composition and responsibilities to be decided), including national forest carbon accounting methods (e.g. methods to be used, definitions of forests, etc.)</li> <li>- Development of consultation plan and strategic environmental and social assessment framework (Technical Team under the REDD+ Taskforce, composition and responsibilities to be decided)</li> </ul> <p><i>RGC (as state properties and state revenue manager)</i></p> <ul style="list-style-type: none"> <li>- Decisions over REDD+ revenue management and carbon credit sales</li> </ul> <p><i>Forestry Administration/MAFF (as government institution with general jurisdiction over forest resources)</i></p> <ul style="list-style-type: none"> <li>- National forest cover assessments (with support for MoE for PAs and FiA/MAFF for flooded forests)</li> </ul> <p><i>Climate Change Department of Ministry of Environment (as government agency responsible for the UNFCCC)</i></p> <ul style="list-style-type: none"> <li>- Preparing reports to UNFCCC and national greenhouse gas inventories</li> </ul> <p><i>Ministry of Land, Management, Urban Planning and Construction</i></p> <ul style="list-style-type: none"> <li>- Registration of all lands that might come under REDD+ arrangements (State Public, State Private, Private Lands)</li> <li>- Land-use planning and national mapping standards</li> </ul> <p><i>Ministry of Economy and Finance</i></p> <ul style="list-style-type: none"> <li>- public revenues/state financial management</li> </ul>			
<b>Harmonization of REDD+ with other policies, laws and regulations of the RGC</b>	<p><i>Climate Change Policy</i></p> <ul style="list-style-type: none"> <li>- National Climate Change Committee</li> </ul> <p><i>Conflict resolution mechanisms</i></p> <ul style="list-style-type: none"> <li>- e.g. through Commercial Arbitration Council, Council for Land Policy, National Committee for Land Disputes/Conflict Resolution, National Authority on Forest Land Conflict Resolution</li> </ul> <p><i>Land Policy</i></p> <ul style="list-style-type: none"> <li>- Council for Land Policy, National Land Management Committee, led by MLMUPC</li> </ul> <p><i>Decentralisation &amp; Deconcentration Strategic Framework</i></p> <ul style="list-style-type: none"> <li>- National Committee for Democratic Development at Subnational Levels, led by MoI</li> </ul>			
<b>Subnational</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Forestry Administration</td> <td style="width: 33%; text-align: center;">GDANCP</td> <td style="width: 33%; text-align: center;">Fisheries Administration</td> </tr> </table>	Forestry Administration	GDANCP	Fisheries Administration
Forestry Administration	GDANCP	Fisheries Administration		

<b>Implementation of REDD+ Strategies</b>	<b>(MAFF)</b>	<b>(MoE)</b>	<b>(MAFF)</b>
	Regulatory authority over Permanent Forest Estate, including jurisdictional management authority over Permanent Forest Reserve	Jurisdictional management authority over Protected Areas	Jurisdictional management authority over flooded forest & mangroves
<i>Subnational responsibilities in area under jurisdiction</i>	<ul style="list-style-type: none"> <li>- Monitoring forest carbon and REDD+ implementation</li> <li>- Setting reference levels</li> <li>- Approving REDD+ projects</li> <li>- Facilitating forest carbon credit sales</li> <li>- Determining benefit-sharing arrangements?</li> <li>- Stakeholder consultation</li> </ul>	<ul style="list-style-type: none"> <li>- Monitoring forest carbon and REDD+ implementation</li> <li>- Setting reference levels</li> <li>- Approving REDD+ projects</li> <li>- Facilitating forest carbon credit sales</li> <li>- Determining benefit-sharing arrangements?</li> <li>- Stakeholder consultation</li> </ul>	<ul style="list-style-type: none"> <li>- Monitoring forest carbon and REDD+ implementation</li> <li>- Setting reference levels</li> <li>- Approving REDD+ projects</li> <li>- Facilitating forest carbon credit sales</li> <li>- Determining benefit-sharing arrangements?</li> <li>- Stakeholder consultation</li> </ul>
<i>Main Implementation Strategies</i>	REDD+ strategy implementation through the National Forestry Programme (2010) and REDD+ financing plan (to be written)	REDD+ strategy implementation through National Protected Areas Strategic Management Plan (to be written) and financing plan (to be written)	REDD+ strategy implementation through Strategic Planning Framework for Fisheries (2010) and REDD+ financing plan (to be written)
<i>Key activities supported under the REDD+ Roadmap</i>	<ul style="list-style-type: none"> <li>- Elaboration of section 6 of the NFP to include revised REDD+ revenue estimates and implementation costs</li> <li>- Integration of REDD+ into Community Forestry, Protection Forests, and other Forest Management activities</li> <li>- Conservation concessions?</li> <li>- REDD+ fund management mechanisms</li> <li>- Capacity-building</li> </ul>	<ul style="list-style-type: none"> <li>- Development of National Protected Areas Strategic Management Plan &amp; financing estimates</li> <li>- Development of necessary subsidiary rules and regulations under the 2008 PA Law</li> <li>- Integration of REDD+ into Community Protected Areas</li> <li>- Conservation concessions?</li> <li>- Linkages with PES</li> <li>- Protected Area fund mechanisms</li> <li>- Capacity-building</li> </ul>	<ul style="list-style-type: none"> <li>- Consideration of integration of REDD+ and flooded forests and mangrove areas under the Strategic Planning Framework on Fisheries</li> <li>- Investigation of REDD+ linkages with Community Fisheries</li> <li>- Capacity-building</li> </ul>
<i>Demonstration activities</i>	<ul style="list-style-type: none"> <li>- Finalise existing two pilot projects (Oddar Meanchey &amp; Seima)</li> <li>- Investigate options for regional demonstration at provincial/landscape scale (with GDANCP/MoE)</li> </ul>	<ul style="list-style-type: none"> <li>- Completion of 1-2 pilot projects (locations to be decided)</li> <li>- Investigate options for regional demonstration at provincial/landscape scale (with FA/MAFF)</li> </ul>	to be decided
Projects will be nested within the overall national REDD+ framework			



## Additional Implementation Framework Elements

Additional elements of the Implementation Framework will include:

1. Fund and revenue management for REDD+ Implementation
2. Private sector engagement
3. Benefit-sharing at sub-national level
4. Strategic Environmental and Social Assessment (SESA) of the REDD+ program
5. Mechanisms for documenting existing knowledge and sharing lessons learned between Government agencies and other stakeholders
6. Demonstration activities

### *1. Fund and revenue management for REDD+ Implementation*

Finance for REDD+ Readiness implementation is available from:

- Donor grants through existing mechanisms
- Fund-based mechanisms
- Carbon market mechanisms, including private sector investment

Under the Roadmap Cambodia could establish a REDD+ Trust Funds to provide funding for REDD+ Readiness and for later performance-based payments. The REDD+ Trust Funds could either use an existing modality (e.g. Protected Area Trust Fund mandated under the 2008 Protected Area Law) or establish a new fund or series of funds.

Cambodia could also develop rules for sales of carbon credits to the Voluntary Carbon Market and future complaint markets. Revenue generated from carbon credit sales could be used to support national regulatory functions.

### *2. Private sector engagement*

Cambodia has been successful at attracting some private sector investment for development of REDD+ projects (e.g. TGC in Oddar Meanchey). The Implementation Framework could consider how to further incentivise and encourage private sector investment. Private sector partners could be invited to participate in decisions on how REDD+ carbon market project guidelines and regulations are developed, to ensure that these are developed appropriately.

### *3. Benefit-sharing*

Cambodia already has some existing pilot examples of benefit-sharing agreements and fund-disbursement mechanisms relating to management of forests and wildlife, even if they are not specific to REDD+. These examples need to be documented and studied in order to understand the implications for future REDD+ benefit-sharing arrangements, e.g.:

- The Oddar Meanchey Community Forestry REDD+ pilot project, created under 2008 Decision no. 699 of the Council of Ministers
- The Commune/Sangkat fund Natural Resource Management (NRM) allocations, under the National Committee for Decentralisation and Deconcentration
- Community-based Ecotourism
- Payments to villagers to protect forest in the Cardamom mountains
- Payments to villagers for wildlife protection

- Community Forestry, Community Fisheries, Community Protected Areas

A Technical Team under the REDD+ Taskforce could be formed to investigate benefit-sharing examples and document the lessons learned, which would need to include MEF.

Building on these examples, considerable work is therefore required to understand better how benefit-sharing might work in Cambodia. Benefit-sharing may need to work at multiple scales, including:

- National-level payments (e.g. compensation for cancelling social and economic land concessions)
- Payments to Jurisdictional Agencies, e.g. for capacity-building or results
- Payments to individual landscape units, e.g. Protected Areas or Protected Forests, to cover management costs and for results at achieving REDD+
- Payments to provinces, districts and/or communes as appropriate, e.g. for land-use planning or forming development plans
- Payments to communes, villages and even households for results at achieving REDD+

Different implementation modalities for benefit-sharing may be required depending on the scale of implementation.

In the absence of sufficient information to inform decision-making the best approach might be to allow continued piloting, either through payments for ecosystem services programs (e.g. ecotourism, wildlife payments, forest protection payments, PES programs) and through pilot REDD+ projects (e.g. Oddar Meanchey and Seima). Only once these pilots have been implemented for several years will it be possible to make robust conclusions about the form of benefit-sharing arrangements.

Any proposed benefit-sharing arrangements will need to be consulted upon and agreed widely. However, it is also important not to raise expectations if the likelihood of benefits being provided in the immediate term (e.g. within a year) is low.

#### *4. Development of a Strategic Environmental and Social Assessment (SESA) Framework for REDD+*

An effective governance system for REDD+ will be essential to its success at both the national and international levels. Countries that can demonstrate that REDD+ can achieve co-benefits, in terms of social and biodiversity benefits, should be more likely to attract early investment both from the international donor community and the private sector. Demonstrating an effective governance framework for REDD+ will be important to attract this investment, in particular to reassure investors that the results achieved will be sustained over the longer-term. Developing an effective governance system for REDD+ will require:

- Identifying appropriate policies to tackle the complex political and economic incentives which have resulted in a lack of forest law enforcement, high levels of deforestation and forest degradation and unsustainable management practices;
- Identifying pragmatic and nationally-appropriate criteria for performance-based payments;
- Demonstrating that revenue does go to the intended beneficiaries;
- Ensuring meaningful accountability to domestic stakeholders; and
- Monitoring impacts to ensure that negative effects on local people and biodiversity are avoided and in order to demonstrate positive effects of REDD+ implementation.

Cambodia has an existing framework for Environmental and Social Impact assessment for activities within natural forest areas under the Law on Environmental Protection and Natural Resources Management (1996), Sub-Decree on Environmental Impact Assessment Process (1999), the Forestry Law

(2002) and the Law on Management and Exploitation of Mineral resources (2001). The currently existing Prakas on Guidelines for Preparing the Environmental Impact Assessment Report (2000) is however only one page in length and adds little guidance with regards to the EIA process. Similarly the approach to developing a Social Impact Assessment receives little attention within the legal framework and consequently no guidance exists to inform implementation. More widely there are significant constraints to the full implementation of regulations both in terms of technical capacity and the wider enabling environment resulting in weak implementation of existing regulations.

The main objectives of a SESA framework for REDD+ will be to identify, avoid and mitigate risk and adverse impacts, and to enhance positive impacts (e.g., sustainability, benefit sharing) from REDD+ readiness activities. Through the development and implementation of a SESA framework the National REDD+ Strategy will be able to identify what is required for REDD+ activities to comply with both national and international safeguards, and to identify areas for strengthening that are required within: (i) legal, regulatory, and policy frameworks; (ii) institutions; and (iii) mechanisms for citizen engagement. Undertaking a strategic assessment of a policy development process to identify potential positive and negative impacts of implementation (and to whom) is a relatively new concept in Cambodia and will need to be undertaken slowly with appropriate steps to ensure national ownership and build capacity. A critical first step will be for the REDD+ Taskforce to develop a set of nationally appropriate safeguards, based on appropriate consultation, which will be used to then evaluate the potential impacts of policy reforms through the SESA implementation framework. The framework should include guidance notes on how to apply the safeguards identified and management arrangements for their implementation and monitoring. The development of the SESA framework would be led by the Consultation and Safeguards Technical Team under the REDD+ Taskforce.

The SESA implementation framework will need to be linked to the REDD+ monitoring system, to be developed under Section 6 of the REDD+ Readiness Plan Proposal, which should include monitoring of the safeguards identified.

### *5. Documenting lessons learned*

REDD+ implementation will need to build on existing pilots, e.g.

- Community Forests: e.g. Oddar Meanchey REDD project (Forestry Administration)
- Protection Forests: e.g. Seima (Forestry Administration)
- Protected Areas: e.g. Samkos WS, or Kulen Promtep WS (Ministry of Environment)

It will be important to capture and utilize lessons learned from these pilots in order to build capacity within the various government actors, and to inform the overall national framework development process.

### *6. Demonstration activities*

Demonstration activities will form an important part of REDD+ implementation and for generating lessons learned. Demonstration projects will prioritise the completion of existing pilots and follow the principles established in Section 3 (Development of REDD+ Strategies) above.

The REDD+ Roadmap: Development of the Cambodia REDD+ Implementation Framework:

## 1. Legal and Policy Development

Any legal development work should be based on identifying and modifying areas of law where gaps, conflicts or overlapping jurisdictions that hinder effective implementation exist. This would include enacting new sub-decrees, or *prakas*, or regulations under existing laws. Flexibility should be maximized at the outset for the initial phases of REDD+ planning, piloting and implementation in order to allow for testing various approaches to REDD+ within the existing frameworks. Once enough lessons and experiences are gained from REDD+ related activities and pilots, then a comprehensive national policy and legal framework for REDD+ could be created. There should not be a rush to put in place various rules and regulations that are poorly designed and not properly integrated into the Cambodian context.

Further legal work is required to identify how subsidiary regulations under the 2008 Protected Areas Law, 2002 Forestry Law and 2006 Fisheries Law might need to be amended or new regulations developed in order to implement REDD+.

Only if it is found to be necessary, should the National Assembly enact legislation on REDD+ implementation in the country, but only after enough time has passed to understand what does and does not work in the Cambodian context for REDD+ implementation.

#### Key Activities:

- Understanding how to integrate REDD into Community Forestry, Community Fisheries & Community Protected Areas
- Legal analysis & development, e.g. including development of regulations under the 2008 Protected Area law
- Analyzing how to link projects to subnational and national implementation
- Establishing national-level guidelines for REDD+ demonstration projects
- Analyzing links with other Government policy processes and laws, including the NCDD and land-use planning
- Investigating conservation concessions as an implementation modality for REDD+

## 2. Development of a SESA (Strategic Environmental and Social Assessment) Framework for REDD+

#### Key Activities led by Technical Team on Consultation and Safeguards:

- In-depth analysis of current regulations relating to EIA, SIA, and SESA and constraints to the implementation
- Analysis of REDD+ safeguard options, based on international guidance and nationally appropriate activities
- Development of framework of indicators, monitoring requirements, management, and recourse mechanism in consultation with key stakeholders and civil society
- Initiate integration of basic safeguards into existing REDD+ demonstration activities, including pilot indicators and monitoring, in order to determine if the safeguards identified are appropriate and can be monitored effectively.
- Development of a SESA implementation framework that is both nationally appropriate and complies to international standards, including:
  - capacity building requirements
  - triggers of when different assessments are required
  - a effective recourse mechanism
- Consultation on the proposed SESA framework
- REDD+ Taskforce meeting to review SESA framework report

- Implementation of SESA framework within Roadmap development, including capacity building and legal reform if required
- SESA of National REDD+ Strategy

### 3. Benefit-sharing studies

- Establishment of Benefit-Sharing Technical Team
- Documentation of existing examples
- Analysis of potential future benefit-sharing arrangements for PAs, PFs, Concession Forests, CFs, CFis, Fishing Lots, CPAs
- Consultation on options considered

### 4. Establishing the Trust Funds for REDD+

#### Key Activities:

- Analysis of existing fund mechanisms under Cambodian Law
- Establishing the Fund) or development of mechanisms to use existing Funds

### 5. Demonstration Activities

#### Key Activities:

- Supporting 2-4 REDD+ projects approved by Government agencies (Oddar Meanchey, Seima, +...)
- Pilot forest protection contracts
- Pilot Conservation Concessions options, if initial analysis shows the approach is feasible
- Building capacity for provincial-level REDD+ in two provinces and supporting subsequent REDD+ demonstration
- Documentation of results

### 6. Development of National REDD+ Registry and Independent Monitoring

#### Key Activities:

- Analysis of registry options consistent with the nested approach to REDD+ implementation with independent projects by Government agencies, non-state actors and local communities
- Consideration of how independent REDD+ monitoring to verify results should be undertaken
- Consultation on the options considered

The registry should adopt a land-based approach, so that emissions reductions can be tracked to particular forest areas in the country.

### 7. Development of the Implementation Framework:

#### Key Activities:

- Regular review meetings
- Develop Draft Implementation Framework

**Section 4: Development of the Implementation Framework**

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
<b>Component 4: REDD+ Implementation Framework</b>					
4.1 Policy and legal development	UNDP	REDD+ Taskforce, FA/MAFF, FiA/MAFF, GDANCP/MoE, MLMUPC, ...	<ul style="list-style-type: none"> <li>- Integration of REDD+ into Community Forestry, Community Fisheries &amp; CPAs</li> <li>- Legal analysis &amp; development, e.g. including development of regulations under PA law</li> <li>- Establishing national-level standards for REDD+ projects</li> <li>- Analyzing how to link projects to subnational and national implementation</li> <li>- Analyzing links with other Government policy processes and laws, including the NCDD and land-use planning</li> <li>- Investigating REDD+ Conservation Concessions</li> </ul>	Analysis of CF, CFI and CPA regulations: April 2011; Proposed revisions: December 2011 Proposal for regulations under PA law: April 2011; Proposed regulations: December 2011 Report on linking subnational to national: December 2010 Report on REDD+ Conservation Concessions: December 2010	\$500,000 (UNDP: \$25,000)
4.2 SESA (Strategic Environmental and Social Assessment) Framework	UNDP	REDD+ Taskforce, Consultation and Safeguards Technical Team	<ul style="list-style-type: none"> <li>- Initial analysis of appropriate REDD+ safeguards</li> <li>- Development of draft SESA Framework including Safeguards, implementation and monitoring plan</li> <li>- Consultation on options considered</li> <li>- REDD+ Taskforce meeting to review Safeguards</li> <li>- Monitoring of Safeguard implementation</li> </ul>	Analysis of REDD+ safeguard options: December 2010, Draft Framework: February 2011, Initial SESA of National REDD+ Strategy, and Incorporation of SESA Elements into planned studies: June 2011 Full SESA of National REDD+ Strategy: December 2011	\$150,000 (UNDP: \$50,000)
4.3 Benefit-sharing studies		REDD+ Taskforce, FA/MAFF, FiA/MAFF, GDANCP/MoE	<ul style="list-style-type: none"> <li>- Establishment of Benefit-Sharing Technical Team</li> <li>- Documentation of existing examples</li> <li>- Analysis of potential future benefit-sharing arrangements for PAs, PFs, Concession Forests, CFs, Cfis, Fishing Lots, CPAs</li> <li>- Consultation on options considered</li> </ul>	Establishment of Technical Team: October 2010, Lessons learned briefs: April 2011, Benefit-sharing report: June 2011, Consultation process completed: December 2011	\$300,000 (UNDP: \$150,000)
4.4 Establishing the REDD+ Fund Mechanisms	UNDP	REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Analysis of existing fund mechanisms under Cambodian Law</li> <li>- Establishing the Fund(s), which could include use of a Protected Areas Trust Fund</li> </ul>	Report on fund options: December 2010, Fund established: June 2011	\$300,000 (UNDP: \$100,000)
4.5 Initial demonstration activities	UNDP	FA, GDANCP, NGOs, ...	<ul style="list-style-type: none"> <li>- Supporting 3-4 REDD+ projects approved by Government agencies</li> <li>- Documentation of results</li> </ul>	Two established REDD+ projects selling credits on the voluntary market: July 2011; Four complete by December 2011	\$1,000,000 (UNDP: \$550,000)

Cambodia REDD+ Roadmap, revised draft 4 October 2010, version 3.1.

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
4.6 Other demonstration project activities		FA, GDANCP, NGOs, ...	<ul style="list-style-type: none"> <li>- Pilot forest protection contracts</li> <li>- Pilot conservation concessions, if initial analysis shows the approach is feasible</li> </ul>	Pilot forest protection contracts at one site: July 2011	\$1,000,000
4.7 Extending demonstration activities	UNDP, ADB	FA, GDANCP, NGOs, ...	<ul style="list-style-type: none"> <li>- Selection of 1-2 regional demonstration sites</li> <li>- Pilot demonstration</li> <li>- Documentation of results</li> </ul>	Selection of regional sites: October 2010, Initiation of first demonstration: January 2011	\$3,000,000 (UNDP: \$600,000)
4.8 Development of National REDD+ Registry and Independent Monitoring	UNDP	REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Analysis of registry options consistent with the nested approach to REDD+</li> <li>- Consideration of how independent REDD+ monitoring to verify results should be undertaken</li> <li>- Consultation on the options considered</li> </ul>	Initial options report: June 2011, consultation on options: end of 2011	\$150,000 (UNDP: \$50,000)
4.9 Development of overall National Implementation Framework		REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Regular review meetings</li> <li>- Develop Draft Implementation Framework</li> </ul>	Monthly Taskforce meetings, Draft framework developed: June 2011	\$200,000

# General Principles for Measurement, Reporting and Verification of REDD+ activities

The development of Cambodia REDD+ Measurement, Reporting and Verification (MRV) system should...

- Follow the current guidance and guidelines as adopted or encouraged by the UNFCCC and the REDD+ negotiations
- Be implemented by an inter-agency team, respecting the roles and responsibilities of each institution.
- Be simple and cost-realistic to be managed by the national responsible institution(s)
- Be harmonised with the National Forest Inventory under the National Forest Programme
- Follow the UNFCCC decisions on the scope of REDD, noting that this currently only covers forestlands and not agriculture. Key issues include approaches for the inclusion of mangrove, freshwater wetlands and forest plantations.
- Develop standardized definitions of forest class types for Cambodia, noting that this may necessitate reanalysis of earlier national datasets.
- Develop methods to quantify and assess forest degradation
- Build national capacity and ownership.
- Based on adaptive management
- Follow a land-based approach, so that emissions and removals can be tracked to a particular land unit such as a community forest or a protected area and that the inventory database can be used for multiple purposes (most of others require “land-based” information). This is necessary in order to track the selling of forest carbon credits.
- Follow standardised boundaries for land units to prevent overlap. This is the responsibility of the Department of Geography of Ministry of Land Management, Urban Planning and Construction, which is a REDD+ Taskforce member.
- Be developed for multiple purposes:
  - REDD+
  - Timber inventories (in Community Forests and Forestry Concessions)



- Watershed management,
  - Protected Area management and zonation
  - Monitoring biodiversity co-benefits
  - Monitoring social impacts
- 
- Follow Tier 2-level accounting principles for emissions factors at a minimum (under IPCC Framework)
  - Follow Activity 3-level accounting principles for activity data (under IPCC Framework)
  - Be based on national-level accounting but allow integration of subnational activities within this framework.

## Section 5: Development of the Reference Scenario

### What is the Reference Scenario for REDD+?

Definition: Reference scenario: baseline against which Cambodia's performance will be measured

Background paper: Winrock International report on MRV and RELs in Cambodia, FAO MRV Framework proposal

#### Key parts:

- Technical plan for how reference scenario(s) will be developed
- Who will be responsible, and how much will it cost
- Analysis of the national circumstances
- Proposed reference emission level based on the analysis of the national circumstances and the historical data
- How to set subnational reference scenarios

### Objectives

The overall objective of this section is for the Royal Government of Cambodia to develop a scenario for the reference level (REL) that projects emissions and removals of CO<sub>2</sub> into the future in the absence of REDD+ incentives. Reference levels are an important concept in the operationalization of REDD+ at the country level because they establish the yardstick against which the achievements of national REDD+ policies and interventions are measured. Setting objective and correct reference levels will ensure that emission reductions or removals are real and verifiable. Decision 4/CP.15 "*recognizes that developing country Parties in establishing forest reference emission levels and forest reference levels should do so transparently taking into account historic data, and adjust for national circumstances*" (Article 7).

Reference levels (RL) and/or Reference Emission Levels (RELs) are likely to be based on historical trends and national circumstances, and constructed using historical data and assessment models. Measurement of results requires operational national forest monitoring systems for the collection of data such as forest land area, carbon stocks and their changes, and the elaboration of activity data and emission factors. This means that the REL will need to be developed in a way so that emissions and removals that are monitored in the future can be compared directly to the emissions and removals in the reference scenario—in other words there will be consistency between the approaches used for the REL and the MRV (Measurement, Reporting and Verification) system (see Section 6).

At this stage, it is unknown how the modalities for establishing the RELs will be set as policy decisions are ongoing under the UNFCCC. However, it is clear from Decision 4/CP.15 that RELs will be based on historical data, adjusted for national circumstances. The country will provide a description of the national circumstances which may include information on features of their geography, climate and economy which may affect their ability to deal with mitigating and adapting to climate change, as well as information regarding their specific needs and concerns arising from the adverse effects of climate

change and/or the impact of the implementation of response measures, as contained in Article 4, paragraph 8 and, as appropriate, in Article 4, paragraphs, 9 and 10, of the Convention<sup>15</sup>.

Establishing the REL involves three sub-goals:

- Quantification of *historic emissions/removals* from the five REDD+ activities<sup>16</sup> for the proposed period between 1998 to 2010 at a national scale, using the IPCC guidelines and guidance, and spatially represented to reflect differences in sub national activities in use and cover of the land
- Understanding Cambodia's *national circumstances*; and
- Development of *future trajectories* of emissions/removals over different time periods (e.g. 5 year and 10 year periods) and under different economic and development scenarios. This will take into consideration the national circumstances identified.

The ongoing discussions will be tracked by the Cambodia REDD+ Taskforce during the implementation stage of the Cambodia REDD+ Roadmap so as to ensure work being done on this topic will meet the policy requirements. However, any process agreed to for setting a reference scenario will be based on the historic emissions and national circumstances as starting points.

#### REL and RL Framework

The RELs and RLs at a national and sub-national level are key elements to:

- i. Define and quantify the mitigation objectives that Cambodia would like to reach through the implementation of REDD+;
- ii. Measure the performance of REDD+ policies and actions.

Once the national REL and RL will be defined and be approved by the UNFCCC, Cambodia will then start by defining a national strategy for REDD+ implementation according to possible and potential emission reduction and removals enhancement targets.

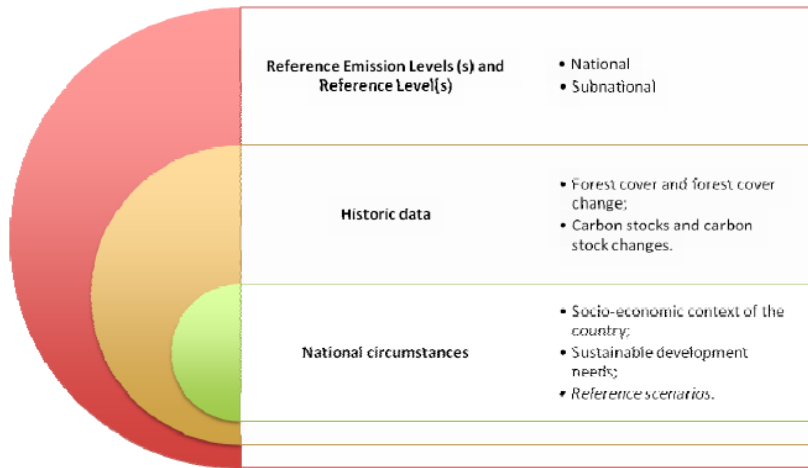
The national strategy for REDD+ implementation will define at which scale the REDD+ national policies and measures will be implemented, based on the nested approach (subnational implementation within a national framework). In this respect RGC will have to provide some methodological guidelines for the definition and the assessment of the subnational RELs and RLs and also guidelines on which kind of objective (targets) could be reached at subnational level. Once Cambodia has in place the full set of national and sub-national RELs and RLs, then it will be possible to have a system that could assess the performances of the different REDD+ actions at a national and sub-national scale. A system to measure REDD+ action performances will be the key element for a possible payment system for REDD+ implementation.

Figure 7 below shows how information on national circumstances and historic data provide the data that a country needs to establish the REL(s) and RL(s).

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<sup>15</sup> UN (1998), Kyoto Protocol to the United Nations Framework Convention on Climate Change.

<sup>16</sup> (i) reducing emissions resulting from deforestation; (ii) reducing emissions resulting from forest degradation; (iii) the role of conservation; (iv) the role of sustainable management of forests, and (v) the role of enhancement of forest carbon stocks.



**Figure 7: Key principles for RELs and RLs**

The main criteria that the REL and RL will seek to comply with are the following:

- **Environmental integrity:** The REDD+ mechanism will work in favor of climate protection and have to ensure that its corresponding activities will result in real climate change mitigation actions. Given the various forms of uncertainty described herein, prudence suggests that REL and RL be set conservatively (potential emission reduction or enhancement of removal should not be overestimated) as a safeguard or global GHGs mitigation efforts.
- **Accuracy:** Accuracy is a relative measure of the exactness of an emission or removal estimate. Estimates should be accurate in the sense that they are systematically neither over nor under true emissions or removals, as far as can be judged, and that uncertainties are reduced as far as practicable. Cambodia will use methodologies contained in the IPCC most recent Guidance and Guidelines to ensure accuracy in the REL and RL estimates.
- **Comprehensiveness:** The REL and RL should cover all relevant REDD+ activities: reducing emission from deforestation, reducing emission from degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks. The comprehensiveness principle will be also applied for the assessment of the forest carbon related data and in particular this means that all the five IPCC carbon pool will be considered in the estimation of the carbon stock changes.
- **Transparency:** The data that Cambodia will use to establish REL and RL will be available for open and independent reviews. Transparency will mean also that the assumptions and methodologies used to assess the REL and RL will be clearly explained to facilitate replication and assessment by users of the reported information and by other relevant stakeholder. The transparency of REL and RL is fundamental to the success of the process for the communication and consideration of REDD+ process in Cambodia.

- **Comparability:** Cambodia's estimates of emissions and removals reported in its REL and RL should be comparable among all the other reported estimates by non Annex I Parties. For this purpose, Cambodia will use the methodologies and formats agreed by the COP for estimating and reporting REL and RL.
- **Consistency:** The REL and RL will have to be internally consistent in all its elements regarding estimates done in different years. Moreover REL and RL will also have to be consistent with the methodologies that Cambodia is going to use for the estimation of carbon stock and carbon stock changes in subsequent REDD+ application periods.
- **Feasibility:** The proposed approaches for establishing REL and RL will have to ensure that REL and RL could be defined with a reasonable level of effort and expense or else they will simply not be done well or done at all. Feasibility factors include data availability, analytical capabilities, cost of data collection and analysis, and institutional support for these efforts.

#### Background data on forest land assessment and carbon stocks

Cambodia has substantial amounts of data on forest land uses and land use changes, and in forest carbon stocks that could be adapted for REDD+ reporting under the UNFCCC. The current and historical data on forest cover assessments and data on forest carbon stocks are particularly important for development of the REL/RL.

#### *Cambodia Forest Cover Assessments*

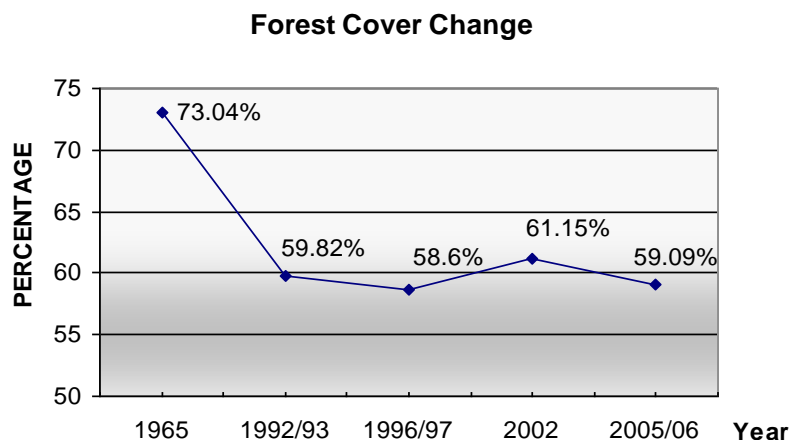
Cambodia has one of the highest forest coverage in South East Asia, with approximately 10.7 million hectares or roughly 60% of the national territory<sup>17</sup>. The extent of Cambodian forests are significantly declining<sup>18</sup> (**Error! Reference source not found.**) due to land use change, forest degradation through logging, forest fires, land-grabbing and encroachment of agriculture. The land use change is considered relatively high, with 379,485 hectares of forest cleared between 2002 and 2005/6**Error! Bookmark not defined.**, equivalent to a deforestation rate of 0.8% per year. As a consequence Cambodia can be considered to be a 'high forest cover, high deforestation' country for the purposes of REDD<sup>19</sup>.

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<sup>17</sup> Forestry Administration, 2007. Forest Cover Changes in Cambodia, 2002-2006. Paper prepared for the Cambodia Development Cooperation Forum. Forestry Administration, Phnom Penh.

<sup>18</sup> Cambodia's National Forestry Programme. 2009. Strategic Framework Document. 288 pp.

<sup>19</sup> As described in Griscom, B., Shoch, D., Stanley, B., Cortez, R. and Virgilio, N. 2009. Sensitivity of amounts and distribution of tropical forest carbon credits depending on baseline rules. Environmental Science and Policy 12: 897-911.



**Figure 8. Change in forest cover from 1965-2006 (Forestry Administration 2007)**

Figure 8 shows the available data on forest cover from national assessments since 1965. The figure suggests that forest cover has fluctuated between 58 and 61% since 1992/3. However, the differences in the estimates for various years is mainly because of different analysis methods that were used<sup>20</sup>:

- The 1988/1989 dataset, produced by the Mekong Secretariat, is based on visual interpretation of LANDSAT satellite image hardcopies and identified 20 land use classes (where 9 classes depict various forest cover) at a scale of 1:250 000, and a minimum mapping unit of 1 km<sup>2</sup> (4 x 4 mm at map scale).
- The 1992/3 and 1996/7 datasets were produced by the Forest Cover Monitoring Project, a Mekong River Commission initiative executed by the GTZ. The two land cover datasets are based on the visual interpretation of 1992/1993 and 1996/1997 LANDSAT satellite image hardcopies, at a scale of 1:250 000 with a minimum mapping unit of 1 km<sup>2</sup>. The Land use cover analysis for 1996/1997 results in a classification in 30 land cover classes (with 15 “forest” classes).
- The 2002 and 2005/6 analyses were produced by the Forestry Administration’s GIS/RS Unit with the support of the Danida. The results of this analysis have been recently published in English and Khmer<sup>21</sup>. These country-wide analyses have been based on manual on-screen visual interpretation of Landsat ETM+ imagery. The digitalization process has been conducted with false colour combinations of bands 2, 3, 4. These two latest land cover datasets are the most accurate: a) the minimum mapping unit of 0.2 km<sup>2</sup> (20 ha), and b) the scale of 1:50 000, allowing a much thinner depiction of the different classes. However, the land cover nomenclature used for the year 2002 and 2005/06 differs from the one related to 1988/89 and 1996/97 databases. For 2006, the nomenclature adopted in 2002, 4 forest classes on a total of 8 land cover classes, has been slightly modified, as recommended by the GRAS A/S accuracy assessment report. Due to their low accuracy, the smaller classes have been merged with others increasing the accuracy from 71% to 74%. In the 2006 nomenclature, finally 5 land cover classes have been retained, the class ‘bamboo’ has been included in the ‘other forest’ class, while the classes ‘wood & shrubland dry’ and ‘wood & shrubland evergreen’ have been merged within the ‘non-forest’ class.

<sup>20</sup> Brun, S. 2009. Elaboration of Cartographic tools for reforestation, CDM and REDD project activities in Cambodia. ONF International, Paris.

<sup>21</sup> Forestry Administration. 2008. Cambodian Forest Cover; Forest cover map change 2002-2006.

As a consequence of these differences, whilst the 1992/3 and 1996/7 analyses are comparable, and the 2002 and 2005/6 analyses are also comparable, the 2002 and 2005/6 results cannot be compared to the earlier results from the 1990s.

### *Cambodia Forest Carbon Data*

Cambodia has a large amount of existing forest carbon data (see below), from various historical forest inventories and more recently collected by REDD+ pilot projects. The datasets should provide fairly comprehensive information for most of the major dryland forest types, perhaps sufficient for Tier-2 levels under the IPCC guidance, but very little forest carbon stock data exists for flooded forest types and mangroves.

**Table 10. Existing forest carbon plot data from Cambodia**

Name of data	Description	# plots	Species/ forest types included	Min DBH (cm)	Year	Source
Permanent Sample Plots	1st measurement	120	(**)	>7.5	1998*	Field data
	3rd measurement	104	(**)	>7.5	2004*	Field data
	4th measurement	48	(**)	>7.5	2010*	Field data
Regrowth Forest	3rd measurement	15	(**)	>7.5	2010*	Field data
Kim-Phat et al. 2000 and Top et al. 2004 <sup>22</sup>	Kompong Thom	60	Evergreen, Mixed, and Deciduous forest	>10	1997	Forestry Administration and Miyazaki University, Japan
Strategic Forest Management Plan (SFMP)	15 Forest Concessions	2000	Unlogged	>Sapling	2002	Field data
		1760	Evergreen logged			
		1460	Evergreen Unlogged			
		300	Mixed Logged Mixed			
		1360	Unlogged Deciduous			
		60	Logged Deciduous			

<sup>22</sup> Kim-Phat N, Ouk S, Uozumi Y, Ueki T. 2000. Stand dynamics of dipterocarp trees in Cambodia's evergreen forest and management implications - a case study in Sandan district, Kamong Thom. *J Jpn Forest Plann* 6:13-23. Top, N., Nobuya Mizoue, and Shigetaka Kai. 2004. Estimating forest biomass increment based on permanent sample plots in relation to woodfuel consumption: a case study in Kampong Thom Province, Cambodia. *Journal of Forestry Research*, 9:117-123

Name of data	Description	# plots	Species/ forest types included	Min DBH (cm)	Year	Source
Tani 2007 <sup>23</sup>	Kompong Thom, Kratie and Mondulkiri	34	Semi- evergreen, deciduous	>10	2003- 5	Kyoto University
Kiyono et al. 2010 <sup>24</sup>	Several provinces	12	Evergreen, Deciduous, Secondary forests	>5	2005	Forestry and Forest Products Research Institute, Japan
Seima Carbon Stock Survey	Systematic Random Sample of project area, Mondulkiri provinc e	225	All dryland types	>5	2008	WCS /FA
Preah Vihear Pilot Stock Survey	Systematic Random Sample of trial blocks, Preah Vihear province	72	All dryland types	>5	2010	WCS /FA/GDANC P
Seima High Value Forest survey	Randomly located plots in fairly small survey area, Mondulkiri province	9	Semi- evergreen /evergreen	>20	2004	WCS/CDRI/FA <sup>25</sup>
Cherndar High Value Forest Survey	Randomly located plots in fairly small survey area, Preah Vihear province	15	Evergreen	>20	2004	WCS/CDRI/FA
Oddar Meanchey Carbon Stock Survey	Systematic Random Sample of project area, Oddar Meanchey province					CFI/TGC/PACT/FA
Southern Cardamoms Carbon Stock Survey	Systematic Random sample of project area, Southern Cardamoms	124	All dryland types	>5	2010	ONFI/Wildlife Alliance/FA

(\*) Year of measurement and remeasurement. (\*\*) Number of species per forest types be calculated from PSPs and field practice is given per forest type.

<sup>23</sup> Tani, A. 2007. Vegetation analysis of Cambodian forests based on species composition data. Masters thesis. Laboratory of Tropical Forest Resources and Environment, Graduate School of Agriculture, Kyoto University, Japan.

<sup>24</sup> Kiyono, Y., Furuya, N, Sum, T., Umemiya, C., Itoh, E., Araki, M. and Matsumoto, M. 2010. Carbon stock estimation by forest measurement contributing to sustainable forest management in Cambodia. Japan Agricultural Research Quarterly. 44 (1), 81-92. <http://www.jircas.affrc.go.jp>.

<sup>25</sup> CDRI and WCS. 2004. Focusing on Cambodia's High Value Forests: Livelihoods and Management. CDRI, Phnom Penh.



### Assessment of Cambodia National Circumstances

The evaluation of the national context of Cambodia will be based on (i) the analysis of existing socio-economic data; (ii) the analysis of the needs for future development of the Cambodia and (iii) potential forest cover changes (reference scenarios). In combination with historic data, these three components constitute the tool to take national decisions for the establishment of the REL and RL at national and sub-national scale. The assessment of the different national circumstances is a key element for the application of the UNFCCC principle of 'common but differentiated responsibilities' and it is the only factor (criteria) that has been used so far in the context of the UNFCCC to adjust human induced GHGs related data.

Collecting information on national circumstances provides the opportunity for detailing the Cambodia's national development priorities, objectives and circumstances that serve as the basis for addressing issues relating to climate change. Information provided on national circumstances is critical for understanding a country's vulnerability, its capacity and its options for adapting to the adverse effects of climate change, as well as its options for addressing its GHG emissions within the broader context of sustainable development. The REDD+ Roadmap process has identified the importance of establishing REL/RL at the national and subnational scale, and subnational RELs/RLs can be used as a tool for Government decision-making. The assessment of the national circumstances is already a reporting requirement for all the UNFCCC Parties and countries need to provide a specific chapter on them in their National Communication. However, there are no clear guidelines for the assessment and compilation of the national circumstances and each country is free to assess these following autonomous methodological approaches. Whilst awaiting further guidance from the UNFCCC, Cambodia can contribute become prepared for the international negotiations by undertaking initial analyses to understand the implications of different decisions. The assessment of national circumstances should contain the following information:

- Geographical characteristics: including climate, forests, land use and other environmental characteristics
- Population: growth rates, distribution, density and other vital statistics
- National policies: including such factors as Cambodia's Rectangular Strategy for Growth, Employment, Equity and Efficiency – Phase II, Cambodia's National Strategic Development Plan Update 2009-2013, the Cambodia Millennium Development Goals , and the Cambodia REDD+ Strategies.
- Economy: including GDP growth, energy, transport, industry, mining, tourism, agriculture expansion, fisheries, waste, health and services sector
- Education: including scientific and technical research institutions
- Other current country indicators such as: sectoral development plans, specific investment programs, and/or adjustment coefficients otherwise derived from such factors and data
- Any information considered relevant by the Party, e.g. information relating to Article 4.8, 4.9 and 4.10 of the UNFCCC. The national circumstances information could be of interest to other national stakeholders (Ministries, donors, etc.) investigating the benefits of specific activities and policies.

In order to establish Cambodia's REL and RL, the assessment on the national circumstances will be focused on three main aspects:

- (i) Current country socio-economic conditions: The assessment of current socio-economic condition will be based on a study review of all the available socio-economic data, including those related to the forests of the Cambodia based on the provisional list above and the

Assessment of Land-use, Forest Policy and Governance conducted through the Roadmap process (see REDD+ Background Document).

- (ii) Sustainable development needs: The assessment of Cambodia sustainable development needs will be based on a study that will indicate all the potential medium term development objectives for Cambodia.
- (iii) Development of reference scenarios: the establishment of reference scenarios will lead to predictions on the amount and location of future land use and land use changes, and its associated emissions and removals. It will use the results of the socio-economic and sustainable development studies and seek to qualify and quantify the impact of possible future emissions and removals (including those identified in the study on the causes of deforestation).

#### The Roadmap: Assessment of Reference emission level (REL) and Reference level (RL)

Development of the REL/RL will be led by the MRV/REL Technical Team reporting to the Taskforce and use the national definitions established for MRV (see Section 6). The assessment of the estimates for the historic carbon stock changes will be realized following the methodological indications of the most recent Inter-governmental Panel on Climate Change Good Practice Guidance (IPCC GPGs 2003) and Guidelines (IPCC AFOLU 2006). The estimates will be based on combinations of remote sensing data and field inventory data.

##### *5.1 Historical rates of Land-use and Land-use Change*

Cambodia proposes to use Approach 3 under the IPCC for measuring activity data, requiring the collection of spatially explicit information on land use changes and the conversions among land uses. Existing forest cover assessments for Cambodia are consistent with Approach 3. Currently, wall-to-wall forest cover assessments are available for 2002, 2006 and 2010 (ongoing) using similar methods, which may be sufficient for REDD+. The accuracy of these existing assessments will need to be quantified, using either ground-truthing or through acquiring high-resolution imagery from the same time period. Areas may need to be reanalyzed in order to meet quality standards. Given the small size of the country a wall-to-wall methodological approach is probably most appropriate.

The forest cover assessments will also need to be re-analysed based on the stratification that is decided for the MRV system (see Section 6). At a minimum this may involve differentiating flooded forest and mangrove areas. A critical issue concerns how to detect historical forest degradation or enhancement of forest carbon stocks and to stratify products appropriately. This may require further research into methods described in the GOF-C-GOLD REDD Sourcebook<sup>26</sup> and approaches proposed in the Winrock report<sup>27</sup>, and will be contingent on methodological guidance from the IPCC.

The REDD+ Taskforce will need to establish an appropriate historical reference period. Given that recent exploitation of Cambodia's forests started with the declaration of the forestry concessions around 1997, which led to the construction of new roads into forest areas, it might be appropriate to use 1997/1998

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<sup>26</sup> GOF-C-GOLD, 2009, A sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals caused by deforestation, gain and losses of carbon stocks in forests remaining forests, and forestation, GOF-C-GOLD Report version COP15-1.

<sup>27</sup> Walker, SM, Casarim, F, Harris, N, and Brown, S. 2010. Cambodia REDD+ Roadmap: Development of a Reference Scenario and Design of a Monitoring System. Winrock International, Washington D.C., USA.

as the base year. Use of the 1997/8 period would provide Cambodia with a 12-year baseline with data points every four years. The implications of this would need to be considered further before any decision is taken, and it should be remembered that the UNFCCC negotiation process has yet to provide guidance on the length of an appropriate historical reference period.

### *5.2 Historical Emissions and Removal Factors*

In order to be able to submit its carbon stock change estimates with a Tier 2 or Tier 3 uncertainty level, Cambodia will have to use the data that could also potentially be used to represent the forest carbon stock present in the different areas starting from the base year that is decided (e.g. 1997/8). The GOFCC-GOLD Sourcebook contains recommendations on how to identify forested areas today whose carbon stocks may represent the carbon stock of forests in the base year. For example, historical remote-sensing imagery can be used to identify areas that have been deforested or degraded, and data collected from current forested areas can be used as proxies for the historical carbon stocks in the deforested or degraded areas in the base year.

### *5.3 Estimate historical GHG emissions*

Data from steps 5.1 (activity data) and 5.2 (emissions factors) will need to be combined to assess historical greenhouse gas emissions. The uncertainty of these estimates will then need to be assessed.

### *5.4 Develop future reference scenario based on national circumstances*

The assessment of the different national circumstances is a key element for the application of the UNFCCC principle of “common but differentiated responsibilities” and it is the only factor (criteria) that has been used so far in the context of the UNFCCC to adjust human induced GHG gas related data.

The definition of the Cambodian national circumstances will be established in order to be used to adjust the historic data. The assessment of the Cambodian national circumstances will be based on the analysis of the socio-economic data (for examples see above) and on the analysis of future projections of Cambodia development and on potential changes in forest land cover. This will require using modelling approaches to predict future land-use change. The impacts of development policies, global trends in demand and prices for Cambodia’s land based commodities, and other economic factors will be included in these models. A workshop will be held in this regard, to consult with national and international modelling experts and Cambodian Ministries related to planning and finance. The outcome of this workshop would be a methodology by which the historic emissions can be projected over different time periods and under different economic and development scenarios, taking into consideration such factors as GDP, population growth, past and present agricultural expansion, forest industry growth, sectoral development plans, subnational development plans, specific investment programs, and/or adjustment coefficients otherwise derived from such factors and data.

Work on this activity will require coordination and inputs from other government departments. In addition to REDD+ Taskforce and MRV/REL Technical Team members, national experts and university staff/researchers will be engaged and consulted with for their assistance in developing the data bases and models to derive adjustment coefficients to modify the historical emission levels for developing future trajectories.

### *5.5 Subnational demonstration*

The Cambodia REDD+ strategy suggests that REDD+ will be implemented in subnational units (such as provinces). This requires development of the nested approach to RELs, so that subnational RELs contribute to the national REL. Establishment of the nested approach will require additional studies to understand how this might be done, and subnational demonstration in areas with REDD+ projects.

Section 5: Development of the Reference Scenario

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
<b>Component 5: Development of the Reference Scenario</b>					
5.1 Quantify activity data (land-use change assessments)	FAO	FA/MAFF, MoE, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Trainings in forest cover assessment techniques</li> <li>- 2010 Forest cover assessment</li> <li>- Reclassification/stratification of 2002, 2006 and 2010 assessments</li> <li>- 1998 Forest cover assessment</li> <li>- Quality Control / Quality Assessment of products</li> </ul>	2010 assessment complete by mid-2011; Re-analysis of 2002, 2006, 2010 assessments complete by end of 2012; 1998 assessment complete by end of 2012	\$600,000 (FAO: \$150,000)
5.2 Develop historical emission and removal factors for REDD+ related activities	FAO	FA/MAFF, MoE, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Estimate historical emissions and removals factors</li> </ul>	Emissions factors estimated based on existing data and data collected by the MRV system by end of 2012	\$100,000
5.3 Develop historical baseline	FAO	FA/MAFF, MoE, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Training on GHG reporting</li> <li>- Combine activity and forest carbon stock data</li> <li>- Assess uncertainty</li> </ul>	Data combined by end of 2012	\$100,000 (FAO: \$50,000)
5.4 Develop future reference scenario	FAO	FA/MAFF, MoE, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Collate data on drivers of deforestation</li> <li>- Undertake modeling analyses of future trends</li> <li>- Develop proposed reference scenario(s)</li> <li>- Revise based on external evaluations</li> </ul>	Cambodia's national circumstances assessed by mid-2012, modeling of future trends undertaken by end of 2012; future reference scenarios established in 2013	\$200,000 (FAO: \$50,000)
5.5 Subnational demonstration	FAO	FA/MAFF, MoE, NGOs, ...	<ul style="list-style-type: none"> <li>- Develop nested approach for subnational RELs</li> <li>- Pilot demonstration</li> <li>- Documentation of results</li> </ul>	REL/RLs established for two provinces by the end of 2012	\$200,000

## Section 6: Development of the Monitoring System

### What is the Monitoring System for REDD+?

Definition: Measurement, reporting and verification (MRV): system to measure Cambodia's performance at achieving REDD+

Background paper: Winrock International report on MRV and RELs in Cambodia, FAO MRV Framework proposal

#### Key parts:

- Technical plan, with a budget, for how Cambodia will develop a forest carbon monitoring system
- Technical plan, with a budget, for how monitoring of other aspects, such as revenue disbursement and biodiversity, will take place
- How to integrate subnational projects into a national system

### Objectives

The overall objective of this section is to develop a monitoring system for REDD+ in Cambodia that achieves two sub-goals:

- A. Development of a Monitoring, Reporting and Verification (MRV) system that allows for transparent and conservative accounting of emissions and removals of CO<sub>2</sub> through time that can be compared against the projected reference scenario.
- B. Development of a monitoring and reporting system for social, environment, governance and other impacts of implementation of REDD+ activities. This should build on the Strategic Environmental and Social Assessment (SESA) prepared in Section 4.

### Key elements of MRV for REDD+ implementation

In order to participate to the REDD+ under the United Nations Framework Convention on Climate Change (UNFCCC), the RGC must establish a system of measurement, reporting and verification (MRV) for Greenhouse Gas (GHGs) emissions, including GHGs from the five activities under REDD+<sup>28</sup>. The 15th Conference of the Parties to the UNFCCC adopted a decision on 'Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries' which requires to establish a "robust and transparent national forest monitoring system".

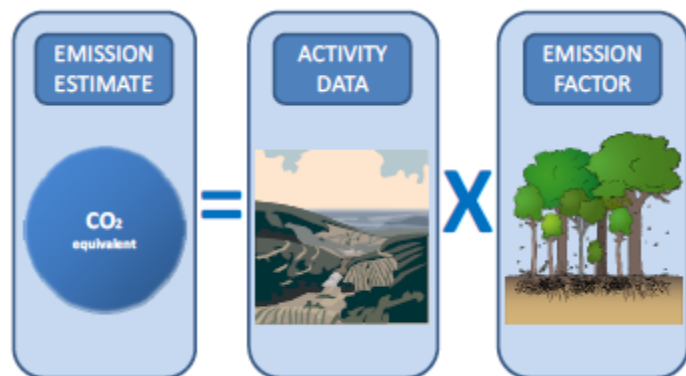
The COP decision states that Parties have "to use the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties, as

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<sup>28</sup> (i) reducing emissions resulting from deforestation; (ii) reducing emissions resulting from forest degradation; (iii) the role of conservation; (iv) the role of sustainable management of forests, and (v) the role of enhancement of forest carbon stocks.

appropriate, as a basis for estimating anthropogenic forest-related GHG emissions by sources and removals by sinks, forest carbon stocks and forest area changes”.

In the IPCC Good Practice Guidance the most common simple methodological approach is to combine information on the extent to which a human activity takes place (called activity data<sup>29</sup>) with coefficients which quantify the emissions or removals per unit activity which are called emission factors (EF)<sup>30</sup>. The basic equation is (see Figure 9): Emissions = Activity Data \* Emissions Factor.



**Figure 9. Estimation method**

A monitoring system under the UNFCCC will have to provide data on (1) forest area and forest area changes and (2) carbon stock (emission factors) and carbon stock changes.

#### Designing a measuring, reporting and verification system

Cambodia’s MRV system will need to enable the evaluation of anthropogenic emissions by sources and anthropogenic removals by sinks resulting from activities relating to forestry. Based on decision 4/CP.15 of the UNFCCC Conference of the Parties it will need to be developed in accordance with the 2006 Guidelines of the IPCC for national inventories of GHGs. A comprehensive MRV system for Cambodia should be composed of four major components for measuring GHG emissions (see Figure 10):

- (i) A monitoring system of forest cover using remote sensing (part of the ‘M’)
- (ii) A system for measuring carbon on the ground in the different forest types (part of the ‘M’)
- (iii) Reporting through the GHG inventory of the RGC (the ‘R’)
- (iv) Verification of the data through a transparent process by the UNFCCC (the ‘V’)

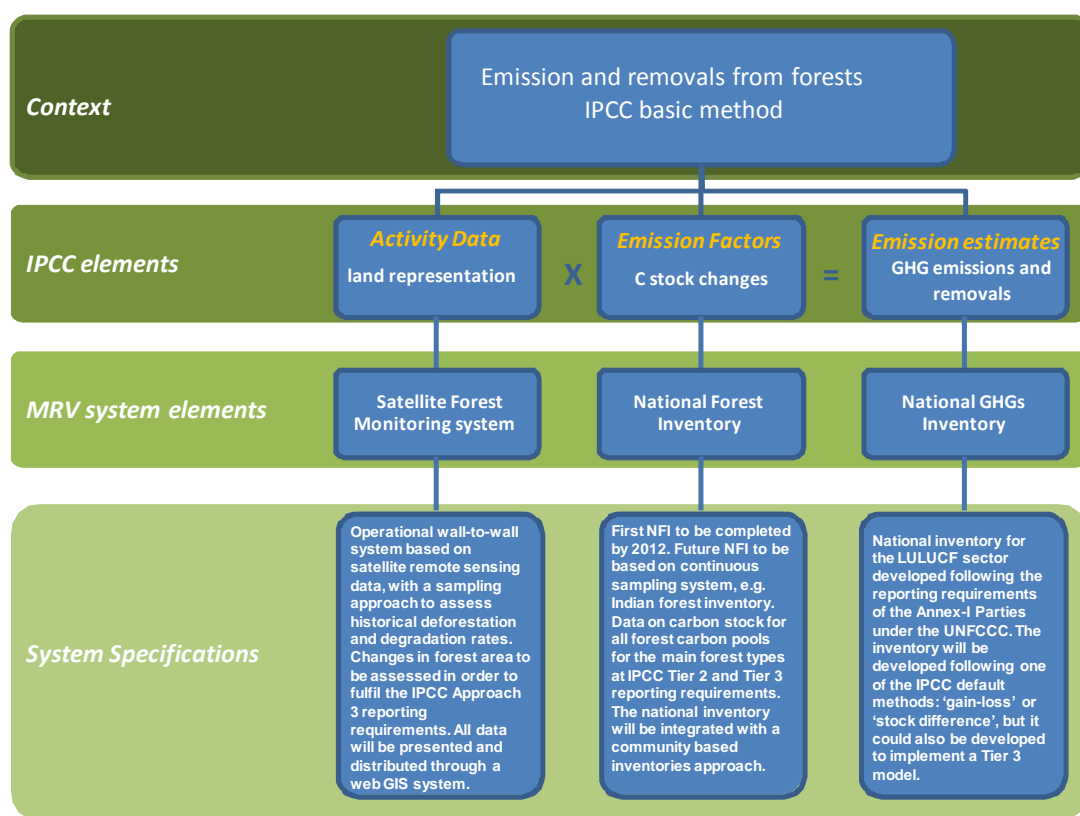
#### **Design of the Monitoring system**

As shown in Figure 10, emission estimates for the MRV system will be based on two types of measurements: (1) activity data using a Satellite Land Monitoring System and (2) data on emission factors through a national forest inventory (NFI).

<sup>29</sup> Activity data is defined as ‘Data on the magnitude of human activity resulting in emissions or removals taking place during a given period of time’.

<sup>30</sup> Emission factors is defined as ‘A coefficient that relates the activity data to the amount of chemical compound which is the source of later emissions’.

(1) Satellite Land Monitoring System. The IPCC Good Practice Guidance for LULUCF presents the following three approaches for obtaining activity data: (i) only identifying the total area for each land category (approach 1); (ii) tracking of land-use changes between categories (approach 2); and (iii) tracking land-use changes using sampling or wall-to wall mapping techniques (approach 3). Approach 3 is the only approach that tracks forest and other land conversions on an explicit spatial basis, including gross deforestation and gross change in other land cover classes (FCCC/TP/2009/1, Paragraph 12), hence Cambodia proposes to use this approach. Approach 3 implies the use of geographical explicit data, which realistically requires the use of satellites. Thus the estimation of the activity data (land use category area extension and area changes in land use category) will be realized through a monitoring system based on remote sensing techniques that should be able to provide regular activity data estimates. This is consistent with Cambodia’s current forest cover assessments (see Section 5). The NFI field activities and measurements will contribute to the forest area assessment mainly as a training data set for remote sensing image analysis and as ground verification.



**Figure 10. The three basic “carbon-related” MRV elements: (i) a Satellite Land Monitoring System; (ii) a National Forest Inventory; (iii) National GHG Inventory, and their relationship to the IPCC methodologies.**

(2) Emissions factors through the Cambodia National Forest Inventory, which is mandated under the National Forest Programme. For emissions factors, following the methodological approach suggested by the IPCC, Cambodia must at least aim to establish a GHG inventory with known uncertainties on the estimations of carbon stock variations (Tier 2 or Tier 3). To meet this condition, a country must have the following:

- (i) estimations of emissions factors specifically for this country;



- (ii) multi-temporal inventory data; and
- (iii) uncertainties associated with the estimates of the reported data.

Emissions or removals resulting from land conversions are manifested in changes in ecosystem carbon stocks in the five IPCC eligible pools: aboveground biomass, belowground biomass, litter, deadwood and soil organic carbon. In a first instance, the Cambodia's MRV system aims for Tier 2 accuracy. Nevertheless, the current approach enables the implementation of an MRV system that will allow Cambodia to assess and report on carbon stock variations at a Tier 3 in the future. The way in which the MRV system will be built for Cambodia will aim to minimize MRV system costs, but at the same time obtain a system that provides reliable and solid data at the national level.

### *Uncertainty*

Uncertainty estimates are an essential element of a complete MRV system and for an inventory of GHG emissions and removals. They should be derived for both the national level reporting and trend estimates, as well as for the component parts such as emission factors, activity data and other estimation parameters for each key source category. Uncertainties should be reduced as far as is practicable during the measurement process, and it is particularly important to ensure that the model and the data collected are fair representations of the real forest status. The uncertainty analysis should be seen, first and foremost, as a means to help prioritize national efforts to reduce the uncertainty of inventories in the future, and guide decisions on methodological choice. For this reason, the methods used to attribute uncertainty values must be practical, scientifically defensible, robust enough to be applicable to a range of categories of emissions by source and removals by sinks, methods and Cambodia's national circumstances.

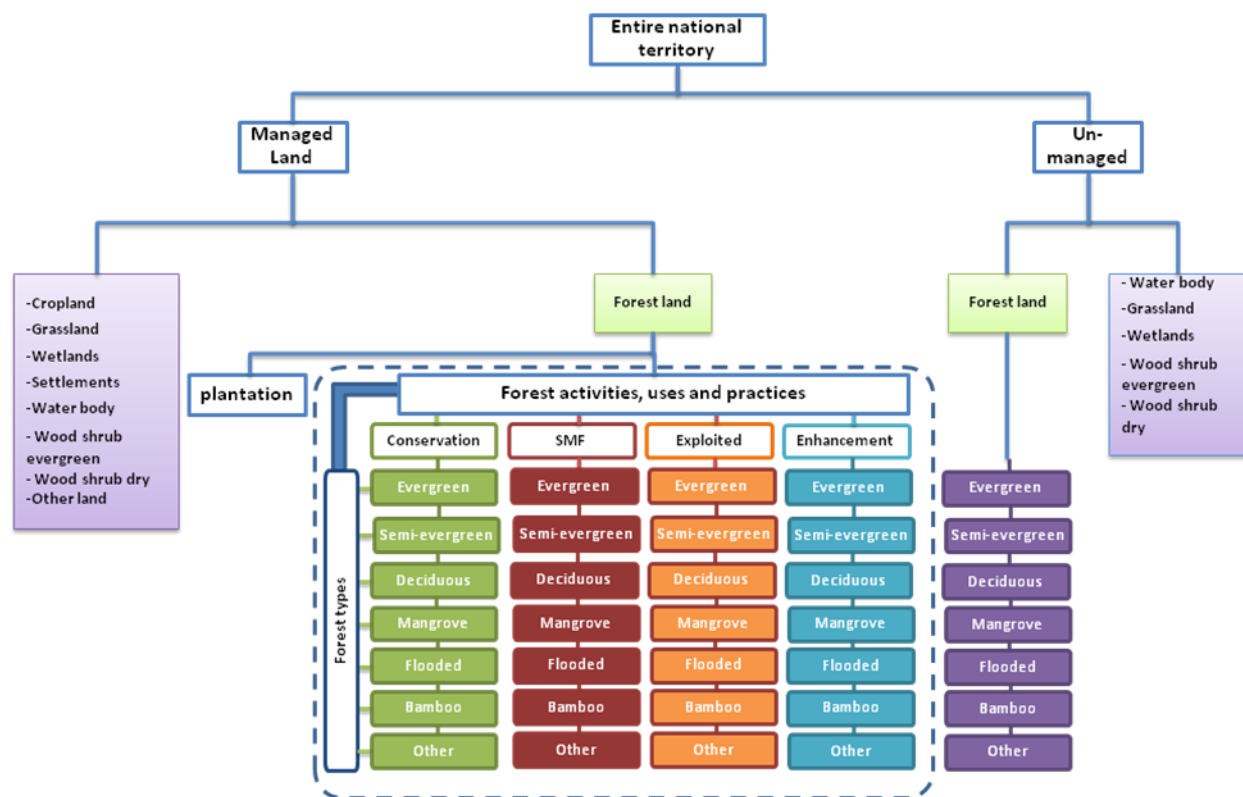
### *REDD+ and national territory stratification*

In order to facilitate the reporting under the Convention and following the 2003 IPCC LULUCF guidance Countries should stratify their national territory into managed and un-managed land, as a way to focus on human-induced emissions. Countries will only be requested to report on any emission/removal that affects their human-influenced land (= managed land). Further on, the IPCC guidance also requests to stratify the land into more homogeneous units based on their carbon contents. In the case of forest land uses, this might imply stratifying by forest classes (e.g. evergreen lowland rain forests), but also stratifying by different human forest management activities that might result in forest strata with more homogeneous forest carbon stocks (e.g. evergreen lowland rain forests undergoing sustainable management of forests, or undergoing degradation, or undergoing conservation, etc).

The stratification facilitates the monitoring of the selected REDD+ activities in the country (e.g. by enabling the country to track land uses that remain in the same land use and forest land uses that change into another land uses), and the reporting of their forest-related emissions.

The forest classes adopted will need to be consistent with those approved in the National Forest Programme (2010) approved by the RGC.

Figure 11 suggests a possible stratification of the land following these considerations for Cambodia. This will need:



**Figure 11. Potential land use classification/stratification system for Cambodia’s national territory, based on land categories defined in the National Forest Inventory of the Kingdom of Cambodia, Final Forest Resources Statistics Report, 1996.** Forest land will be defined in a coherent way with the requirements for National Greenhouse Gas Inventory Reporting under the UNFCCC.

*REDD+ monitoring within the Cambodia National Forest Inventory*

Development of a National Forest Inventory is mandated under the National Forest Programme (NFP), Implementation Programme 2 (‘Forest Resource Management and Conservation Programme’). The NFP states that:

“A NFI will be developed and updated regularly to monitor the overall effect of ongoing forestry reforms on quantity and quality of forest resources. The programme will minimize the costs by developing a systematic, reliable and cost-effective national forest inventory methodology. In this process FA will:

- Develop a guideline on making national inventory (including inventorying of herbs, sprouts, seedlings, saplings, timber and biomass)
- Identify capacities with expertise in multi-forest resource inventories
- Develop cost-effective methods to assess quantity and quality of forests (including inventorying of herbs, sprouts, seedlings, saplings, timber and biomass stocks, NTFPs, carbon, environmental services, endangered species etc).

The national forest inventory will at the same time be the FA’s main tool to monitor Cambodia’s millennium development goal on maintaining a 60 percent forest cover as well as it will have a section on carbon accounting.”

Development of a NFI is also a key aspect of monitoring for REDD, under Implementation Programme 6 of the NFP (‘Sustainable Forest Financing’) and the NFP Monitoring and Reporting System

(Implementation Programme 7) which has yet to be developed. Under the REDD+, the NFI is a key element for the reporting forest GHG inventories. However, the NFI will also provide information on timber volume, biodiversity, biomass, bio-energy etc.

The data provided by a National Forest Inventory in Cambodia will be used for several purposes, such as:

1. To determine logging quotas and Government policy regarding logging, based on available timber resources and trends. Commercial logging has been banned in Cambodia since 2002 with the exception of annual logging coupes that have been established in recent years to meet domestic consumption needs. The National Forest Programme (NFP) of the Royal Government sets out an ambitious target of 50% of wood production to be certified.
2. To determine appropriate Government policy over the role of wood energy and biofuels and their medium-term domestic impacts. Research done over the past few years suggests that much of Cambodia's demand for wood energy for brick-making and construction has been met by the scrubbing of old rubber plantations. As this supply becomes exhausted, natural forests are likely to become the primary source of wood energy, as has already happened in some places (e.g. Phnom Aural).
3. To determine appropriate Government policy over conservation and watershed forests for ecosystem services. In the next few years a large number of hydropower projects are expected to go ahead. In this context, the importance of watershed forests in the Elephant mountains, the Cardamoms and other places is likely to increase. Effective watershed management is key to proper management of dams and their reservoirs, and can prolong the operation of the dam.
4. To monitor the impact of climate change on land-use policy, which is likely to become more important as the rate of climate change increases. Changing weather patterns, such as rainfall, may have an impact on forest structure and composition.

In addition, the Cambodia NFI will assess carbon stocks and carbon stock changes (i.e. emission factors) for the REDD+ mechanism under the United Nations Framework Convention on Climate Change (UNFCCC) as part of the MRV system. The NFI field activities and measurements may also contribute to the forest cover assessment part of the MRV system mainly as a training data set for remote sensing image analysis and as ground verification.

#### *Institutional, governance and participation arrangements*

Preparation of the MRV system will see institutional and capacity building arrangements in the relevant national institutions. The objectives are to manage the following at the national level on a permanent basis: (i) the national forest inventory, (ii) satellite land monitoring system and (iii) the GHG inventory reporting.

#### **DIAGRAM ON MRV INSTITUTIONAL ARRANGEMENTS HERE**

Major training needs identified for Cambodian Government agency staff include:

1. Staff expertise and training with regard to UNFCCC and the IPCC guidelines;
2. Training of qualified staff with regard to GIS and remote sensing as well as managing the information produced;
3. Training qualified staff for field measurements of forest carbon stocks and to manage the information produced;
4. Establishing appropriate offices with necessary equipment both in Phnom Penh and in the field;
5. Training of qualified staff to prepare national GHG reporting reports that will be requested by the UNFCCC.

Establishing these capacities is necessary to enable the country to be logistically capable of undertaking MRV.

### *Current UNFCCC Reporting by Cambodia*

The first National Communication to the UNFCCC occurred in 2002 (for year 1994) and the National Adaptation Programme of Action to Climate Change (NAPA) was approved by the Government in 2006. The second national communication to the UNFCCC (for year 2000) is currently being prepared using a combination of new existing country specific data for Cambodian forests. Implementation of the work proposed in this document will be able to feed into producing an improved national communication in the future. The Department of Climate Change of the Ministry of Environment is responsible for reporting to the UNFCCC.

### REDD+ Roadmap: Development of the Monitoring System

The REDD+ MRV system will need to take into account Cambodia's candidate REDD+ Strategies (developed under Section 3) if it is to be able to evaluate how effective they have been at reducing GHG emissions and/or increasing removals. However, the implementation of an individual REDD+ strategy may have indirect rather than direct impacts on emission reductions. For example, an improvement in forest governance may have profound impacts on how forests are managed in Cambodia, yet developing a specific indicator to ascribe the impact of this action to reducing emissions or enhancing removals of CO<sub>2</sub> would be difficult. The linkages between MRV and the REDD+ Strategies will need to be evaluated early in the development of the MRV system.

The MRV section is composed of two phases — a MRV development phase and a MRV implementation phase. The outcome of the implementation of this section will be a functional MRV system for evaluating the performance of REDD+ interventions in Cambodia.

#### *6.1 Establish institutions for MRV/REL with adequate capacity*

In order to coordinate the development of the monitoring system the Cambodia REDD+ Taskforce will establish an MRV/REL Technical Team. This team will be responsible for coordinating the technical activities related to the design of the national forest monitoring system, although final decision-making will remain with the Taskforce. The team will be composed of key representatives from the main Government agencies responsible (FA, GDANCP, FiA, MLMUPC), other relevant institutions, external experts, and local communities. The management structure for the MRV/REL Technical Team will need to be developed and roles and responsibilities of various institutions defined to ensure that groups are working together towards a common goal. A training and capacity-building needs assessment will need to be undertaken for the MRV/REL Technical Team, technical staff in the FA/MAFF, GDANCP/MoE, FiA/MAFF and Department of Geography/MLMUPC who will be undertaking the analyses, field staff from local management units (e.g. Protected Areas and Protection Forests) and local communities. Based on the needs assessment targeted trainings should then be provided. A suitable office will need to be established to house the MRV/REL Technical Team. A full-time international MRV/REL advisor will be recruited to support the team in its work, and this advisor will be based in the Taskforce Secretariat.

Representatives of local communities and local management authorities (protected areas, forestry units, etc.) will need to play a key role in the MRV/REL Technical Team, because these stakeholders will be important for collecting information on both area changes and carbon stock changes that are not

detectable using remote sensing imagery at the local scale. The MRV/REL Technical Team, especially FA/MAFF, MoE and FiA/MAFF representatives, will need to compile the data collected at the local level and across the communities. The identification of technologies commonly and widely used across the communities to improve compilation and storing of this data must be assessed.

### *6.2 Collation and harmonization of existing data*

Cambodia already has considerable data on forest carbon stocks that could be used as part of the basis for the future design of the national forest inventory. This data will need to be collated and harmonized the existing data to identify key gaps and where further analysis or data collection is required. Since data are held by several Government agencies these activities will be coordinated by the MRV/REL Technical Team under the direction of the Taskforce.

### *6.3 Develop the Cambodia Monitoring system plan for forest carbon*

Under the direction of the Taskforce and with advisors and other technical experts, the MRV/REL Technical Team will develop a plan for the REDD+ monitoring system focusing on forest carbon. The monitoring system plan will be based on the principles established in this Section of the Roadmap. The design of the monitoring plan will need to consider the REDD+ strategies that are being implemented, and the appropriate scale to the REDD+ strategies. This will probably involve local communities and line agency subnational management units (e.g. protected areas) in the monitoring plan, as appropriate. The monitoring plan design should be based on appropriate standard operating procedures for measuring activity data (6.4) and emissions and removals factors (6.5), and include measures for checking data quality and accuracy. The design will need to take into account the nested approach and integrating subnational monitoring into the national system.

Development of the REDD+ monitoring system will require the MRV/REL Technical Team to cooperate with the REDD+ Taskforce and key Ministries (especially MAFF and MoE) to set national definitions that will be used for REDD+. These definitions will include:

- **National Forest Definition.** The definition of forest that Cambodia has submitted to the UNFCCC is based on the following thresholds: minimum crown cover of 10%, minimum height of 5 m and minimum area of 0.5 ha. Using a 10% minimum crown cover is however difficult to detect using available remote-sensing imagery. It is therefore recommended to revise the minimum crown cover to 20%, keeping the other thresholds the same. This possible change would need to be extensively discussed and consulted before any changes were made, and possible implications of the change would need to be evaluated before it was made. Forest definitions also have to be harmonized with the National Forest Programme.
- **Forest classes.** The different land-use assessments have used varying definitions of Cambodia's forest types. A single classification system for REDD+ purposes will need to be developed, and classifications should then use this standard system. The classification system will need to follow that in the National Forest Programme. To facilitate reporting to the UNFCCC, the classification system will need to be consistent with the IPCC land-use categories. The system adopted may also need to be consistent with other international reporting (e.g. Forest Resources Assessment). Historical datasets may need to be reclassified based on these revisions.
- **Reference time period.** The reference time period for REDD+ should be defined (see Section 5).
- **Carbon pools.** Under the IPCC guidelines, all carbon pools need to be reported but it is possible to use a lower tier level if a particular pool is not defined as a key category (i.e. is responsible for less than 5% of greenhouse gas emissions or removals). Consequently, it may be necessary to investigate

which carbon pools should be measured to Tier 2 or 3 level (i.e. requiring field measurements). Current pilot REDD+ projects are mainly measuring aboveground and belowground tree biomass and dead wood. The potential benefits of also measuring soil carbon in particular will need to be investigated, as this is expensive.

The stratification system used for the MRV system will be based on the forest classes decided and the five REDD+ activities (deforestation, forest degradation, conservation, sustainable management of forests and enhancement of forest carbon stocks). A critical issue concerns how to detect forest degradation or enhancement of forest carbon stocks and how to stratify products appropriately. This may require further research into methods described in the GOFC-GOLD REDD Sourcebook, and will depend on future methodological guidance from the UNFCCC.

#### *6.4 Support a national forest cover monitoring system to quantify activity data for REDD+ related activities*

Building on existing experience with forest cover assessments, Cambodia will establish a national forest cover monitoring to quantify activity data for REDD+ MRV. Assessments will be primarily undertaken by the Forestry Administration, but in consultation with other line agencies through the MRV/REL Technical Team. All products will need to be checked to ensure they are of sufficient accuracy, using either ground-truthing or through acquiring high-resolution imagery from the same time period. Data from the NFI (see 6.5) might be suitable for this purpose. All products will be classified according to the stratification system decided in 6.3.

#### *6.5 Establish a national forest inventory system to quantify emissions and removal factors for REDD+ related activities.*

The NFP prioritizes development of a National Forest Inventory (NFI), to include assessment of timber stocks. For REDD+, Cambodia therefore proposes to use a multi-purpose NFI that collects national statistics appropriate for timber inventories (e.g. by community forests or concessionaires), the necessary data to assess REDD+ emissions factors, and other needs such as data on watersheds. Support for implementation of the NFI system designed may be available through support to the NFP. Field measurements will be undertaken by the FA (for the Permanent Forest Estate), GDANCP (for Protected Areas) and FiA (for flooded forests and mangroves), and local communities or management units as appropriate.

National-level protocols for forest carbon inventories will need to be developed by the MRV/REL Technical Team following available reference and training resources (e.g., IPCC 2003 GPG LULUCF, World Bank's BioCarbon Sourcebook for LULUCF, GOFC-GOLD Sourcebook, etc.). These national-level protocols could be based on the Standard Operating Procedures already established for the different REDD+ pilot projects, especially in Oddar Meanchey, Seima Protection Forest and in the Southern Cardamoms. The protocols would need to be adapted include the multi-purpose objectives of the NFI, including sampling of timber stocks, for example. Different protocols may need to be developed for different forest areas: for example, in order to integrate with the requirements of community forestry management agreements.

A national sampling plan for forest carbon inventories will need to be developed by the MRV/REL Technical Team. It is proposed that a three-stage process is used to design the NFI sampling:

(i) Forest area pre-assessment and stratification, following the stratification system decided under 6.3.

(ii) Pre-sampling and examination of existing forest carbon stock data (from 6.2), in order to determine the variance of the data collected and to obtain initial estimates of emission factors. This information is then used to determine the final sampling plan, based on the gaps where further data collection is required to meet accuracy and precision levels decided by the MRV/REL Technical Team.

(iii) Final sampling and assessment, based on the sampling plan. Data collection should focus only on lands that underwent change or are expected to undergo change in the future in order to minimise unnecessary data collection. These areas are:

- For forests, only the areas that underwent deforestation/degradation/disturbance are relevant;
- For soils, only the soils carbon stocks needed for areas converted to/from annual cultivation.

Results from the field measurements will be used to estimate emission factors for various land cover changes (deforestation, degradation, forestation, enhancement of carbon stocks) using the IPCC GPG framework, along with the estimated uncertainty around each emission factor.

This three stage approach consists of a learning-by-doing process but simultaneously resources and efforts can be better targeted if priorities evolve or resources are scarce. Different sampling designs can take advantage of pre-existing knowledge of the forest structure (and other information) to improve precision or reduce the cost of an inventory. During pre-sampling, preliminary statistics of different forest strata will be assessed. These preliminary statistics will be used to define the final sampling strategy but also to produce conservative estimates of emissions factors. The overall approach of the NFI's final sampling stage will be to use a combination of temporary and permanent plots. As for the pre-sampling stage, there will be an optimal allocation of plots combined with a cost-effective and statistically sound solution to sample in 'managed' unexploited forests and in 'unmanaged' (intact) forests.

As with the activity data, estimating emissions factors for forest degradation may require additional consideration. Tree removals and dead wood for charcoal production, over grazing of understory reducing regeneration, and fire all contribute to forest degradation. However, little data are available in Cambodia on how these degradation activities affect the carbon stocks in which pools. A first step during the REDD+ implementation phase will be to review the literature to determine if there are any studies on related topics in similar environments (including neighboring countries). In addition, field studies will be necessary to determine the effect these activities have on carbon stocks and to assist in determining which additional pools will need to be included. These studies would need to build on existing research, in particular by GERES and Japanese researchers.

A standard, uniform database should be designed. This should be developed with the specific purposes of the NFI and in parallel with the development of the field sheets in order to facilitate data inputting and error checking. The database could include carbon stock lookup tables (i.e. development of national specific values). Modelling tools will be developed and articulated with the REDD+ database in order to develop the data on emission factors (based on dendrometric measurement, allometric equations, biomass estimation, carbon stock conversion and carbon stock comparison in space and time). Generalised allometric equations will need to be verified for Cambodia based on field sampling.

#### *6.6 Report national estimate of GHG emissions during monitoring period and subject this estimate to international verification*

Current Greenhouse Gas Inventory reporting is undertaken by the Department of Climate Change within GDANCP. Under this component, the lead Government agencies (FA, GDANCP and FiA) will be trained in reporting for REDD+, and systems will be established to allow such reporting to take place, including

systems for Quality Assessment/Quality Control and measurement of uncertainty. It is important to assess the quality of measurements taken in the field, data compilation and data analysis in order to have error estimates and improve future measurements. The IPCC's Guidelines for National Greenhouse Gas Emissions (2006) already provide clarifications regarding quality control (QC) and quality assurance (QA).

The outcome of the monitoring system will be synthesized and compared against the reference scenario to provide timely reporting of emissions/removals for REDD+ activities. The MRV implementation plan will be developed to allow for complete transparency so as to be open for verification and peer review. The database developed under 6.5 could be adapted to calculate changes in GHG emissions and removals to ease reporting.

#### *6.7 Design and implementation of a Monitoring System for Other Benefits and Impacts*

REDD+ requires monitoring of co-benefits in addition to measurement of forest carbon. Under Component 2, the Taskforce will have developed a strategic environmental and social assessment framework including safeguards relating to local communities and biodiversity. This activity will develop a monitoring plan to measure impacts and benefits of REDD+ implementation based on the safeguards identified. Design of a monitoring system for other benefits and impacts of the REDD+ will need to involve consideration of:

- Environmental benefits and impacts of REDD+ implementation, e.g. on biodiversity, water quality, watershed protection, etc.
- Socio-economic impact of the REDD+ Strategy on local forest-dependent and rural communities on employment, poverty reduction, health, education, gender, and food security.
- Monitoring of governance indicators during REDD+ Implementation.

Monitoring plans for each of these will need to be developed, baseline data collected and monitored as the REDD+ program is implemented.



Section 6: Development of the Monitoring System

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
<b>Component 6: Development of the Monitoring System</b>					
6.1 Establish institutions for MRV/REL with adequate capacity	FAO Japan	REDD+ Taskforce, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Regular meetings of MRV/REL Technical Team</li> <li>- Provision of Technical support and advice</li> <li>- Determine appropriate institutions and their roles in the MRV system</li> <li>- Consult on the role of local communities and subnational management units in the MRV system</li> <li>- Training and capacity needs assessments</li> <li>- Trainings on MRV and IPCC guidelines, National Forest Inventories, Remote sensing and satellite monitoring systems</li> <li>- Provide adequate equipment</li> <li>- Provide the technical manuals and backgrounds to achieve accurate carbon stock assessment and report activity data</li> </ul>	MRV/REL Technical Team established in the first three months with agreed ToR; training and capacity needs assessments by end of 2011; trainings provided through 2011 and 2012;	\$700,000 (FAO: \$400,000)
6.2 Collation and harmonization of existing data	FAO	MRV/REL Technical Team, FA, GDANCP, FiA, MLMUPC	<ul style="list-style-type: none"> <li>- Collect existing data on forest cover and forest carbon stocks</li> <li>- Review the extent to which this data is suitable for REDD+</li> <li>- Harmonization of data according to national and international standards</li> </ul>	All existing data should be collated by mid-2011;	\$50,000 (FAO: \$25,000)
6.3 Develop the Cambodia Monitoring system plan for forest carbon	FAO	MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Review national forest definitions in the NFP and for the CDM and provide recommendations for revisions as appropriate.</li> <li>- Determine national forest definitions, forest classes, carbon pools and reference period to be used</li> <li>- Determine the stratification system to be used</li> <li>- Review monitoring system needs and programs in other countries</li> <li>- Design monitoring system including integration sub-national projects</li> <li>- Define the role of local stakeholders</li> </ul>	Definitions established by end of 2011; Monitoring system designed by mid-2012	\$200,000 (FAO: \$135,000)

<i>National Programme Components</i>	Participating donor organisation	Implementing Partner	Indicative activities for each Component	Milestones	Budget (2 years)
6.4 Establish a national forest cover monitoring system to quantify activity data	FAO	FA, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Trainings in forest cover assessment techniques</li> <li>- Develop and finalise the protocols for monitoring activity data</li> <li>- Assessment of how to measure areas of forest degradation</li> <li>- Implementation of the MRV plan for activity data by national and, as appropriate, subnational units</li> <li>- Quality Control / Quality Assessment of products</li> </ul>	Protocols developed by mid-2012; Programme implemented by 2013 onwards	\$200,000 (and annual operating costs thereafter)
6.5 Establish a national forest inventory system to quantify emissions and removal factors	FAO	FA/MAFF, MoE, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Training on national forest inventory methods</li> <li>- Assessment of how to estimate emissions factors due to forest degradation</li> <li>- Review and revise as appropriate allometric equations to estimate biomass and carbon stocks from tree measurements</li> <li>- Design multi-purpose National Forest Inventory</li> <li>- Undertake pilot field data collection from plots (pre-sampling)</li> <li>- Develop and finalise field sampling design</li> <li>- Develop national and subnational databases of all information on forest carbon stocks</li> <li>- Implementation of the MRV plan for carbon stocks by subnational management units</li> <li>- Quality Control / Quality Assessment of products</li> </ul>	National Forest Inventory designed by mid-2012; Data collection protocols established by end of 2012; Pre-sampling undertaken by end of 2012; Databases designed by end of 2012; Programme implemented by 2013 onwards	\$1,000,000 (and annual operating costs thereafter) (FAO: \$230,000)
6.6 Report national estimate of GHG emissions during monitoring period	FAO	MoE, NCCC, REDD+ Taskforce	<ul style="list-style-type: none"> <li>- Training on GHG reporting</li> <li>- Combine activity and forest carbon stock data</li> <li>- Assess uncertainty</li> <li>- Develop and submit reports</li> <li>- Subject reports to international verification</li> </ul>	From 2013	\$100,000 (and annual operating costs thereafter)
6.7 Design and implementation of a Monitoring System for Other Benefits and Impacts	UNDP	REDD+ Taskforce, MRV/REL Technical Team	<ul style="list-style-type: none"> <li>- Develop environmental, socio-economic and governance indicators to measure impacts and benefits of REDD+ implementation</li> <li>- Design the monitoring system</li> <li>- Implement the monitoring system</li> </ul>	Indicators designed by mid-2012; Monitoring system designed by end of 2012; Implemented from 2013	\$200,000 (and annual operating costs thereafter) (UNDP: \$50,000)

