Sustainable Forest Management and Climate Change in Cambodia

INTRODUCTION TO FOREST RESOURCES IN CAMBODIA
1- Forest Resources

2. Forest Resources

<table>
<thead>
<tr>
<th>Forest Types</th>
<th>Forest Area 2006</th>
<th>Forest Area 2010</th>
<th>% Changed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Evergreen forest</td>
<td>3,668,902</td>
<td>3,499,185</td>
<td>-0.93</td>
</tr>
<tr>
<td>2 Semi evergreen forest</td>
<td>1,362,638</td>
<td>1,274,789</td>
<td>-0.48</td>
</tr>
<tr>
<td>3 Deciduous forest</td>
<td>4,692,098</td>
<td>4,481,214</td>
<td>-1.16</td>
</tr>
<tr>
<td>4 Other forest</td>
<td>1,007,143</td>
<td>1,108,600</td>
<td>0.56</td>
</tr>
<tr>
<td>Total Forest Land</td>
<td>10,730,781</td>
<td>10,363,788</td>
<td>-2.02</td>
</tr>
</tbody>
</table>
FOREST POLICY AND REGULATIONS

2- POLICY AND REGULATION

I. Millennium Development Goal: maintaining the forest cover of 60% by 2015,

II. Rectangle Strategy of RGC: ensure environmental sustainability through sustainable management of natural resources

III. National Strategic Development Plan

IV. Forestry Law and relevant regulations

V. National Forest Program: 2 million ha of forest to be under CF management
COMMUNITY FORESTRY

Community Forestry Development

- Initiated in 1990’s
- Sub-Decree in 2003
- Legal framework (CF guideline) in 2006
- User Rights: 15 years with possible renewable
- Currently there are more than 450 CFs
- Customary uses of Timber and Non Timber Forest Products
Map Shows Locations of CF

CAMBODIA NATIONAL FOREST PROGRAM
Background

• Government’s response to the international forest policies/agreements (Non-legally binding Instrument for all Types of Forests known as NLBI of UNFF)
• National Forest Policy Statement
• Rectangular strategy of the Government

Prioritized Programs for 2010-2029

1. National Forest Demarcation, Classification and Registration
2. Forest Resource Management and Conservation
3. Forest Law Enforcement and Governance
4. Community Forestry Development
5. Capacity Building and Research Development
6. Sustainable Forest Financing
How to manage forest?

- Forests are renewable resources if managed properly;
- Managing forest, the manager needs to know why and how forests are degraded;
- To sustain water resources, catchment areas, and forest cover must be protected;
- The same concept with forest management: to sustain forests, the manager not only deals with forests but also with peoples whose livings depend on forests;
- Peoples are the main driving forces of deforestation.

Cambodia REDD+
Implementation at Pilot Scale
Up to date there are 3 Projects
1-The Seima REDD+ Project

General Information

- The whole area is under the mandate of FA/MAFF since 1994.
- Sub-decree 143 (2009) confirms this mandate and makes carbon emission reductions an explicit objective.
- Project crediting period - 60 years, 1 Jan. 2010-31 Dec. 2069.
- FA has agreement with all 20 communities that the state owns the carbon, that FA can sell the credits, and FA will set up a benefit-sharing arrangement.
Project area – Core Zone 180,513 ha

Participating Villages

20 villages, >2600 families
67% Phnong, 32% Khmer
Highly forest dependent
Agriculture also very important
2-The Udar Meanchey REDD+ Project

- Start February 2008; first in Cambodia
- Partners
  - Royal Government of Cambodia, Forestry Administration
  - Technical specialists (Terra Global Capital)
  - NGOs (Pact Cambodia)
  - Provincial partners (Community Forestry Network)
- Project Goals
  - Climate change mitigation;
  - Sequester 8.3 million tonnes of CO$_2$ (over 30 years)
  - Improve local livelihoods
  - Protect and enhance forests and biodiversity

The Udar Meanchey REDD+ Project

13 CF sites, 64,318 ha, 58 Villages, 10,000 households, 30% of population below poverty
2.1% Deforestation (2002-2006)
3-Korea-Cambodia REDD+ Project

General Information

- Period: 4 years (2015-2018)
- Budget: USD$ 900,000
- The project area covers 88,444 ha consisting of:
  - Hydrological forest conservation: 24,151 ha
  - Reforestation area: 1323 ha
  - Community Forestry: 14899 ha
  - Permanent Forest Estate: 48,071 ha

Goals

1. To contribute to the long-term greenhouse gas emission reduction from the forestry sector and;
2. To enhance livelihood of targeted forest-dependent community in the project area through the implementation of REDD+ program;
Objectives

1. *To Obtain forest carbon credits* to be certified under CCBA and VCS standard;
2. To Increase livelihood of forest dwellers within project site;
3. To enhance capacity of key different stakeholders for effective REDD+ implementation;
4. To Support the Royal Government of Cambodia (RGC) on REDD+ policy formulation.

Expected Outcomes of KCRP

- Not only produced VCU to be shared/benefits for both countries but also enhance strongly collaboration in the future.
- Exchange experience and knowledge through learning by doing of implementation of KCRP
- Producing lesson learns and policy recommendation to inform Cambodia government in designing the national REDD+ policy.
Challenges of applying REDD+

• The Concept still hard to understand by local communities;
• Less participation from relevant stakeholders;
• No incentive in term of financing scheme (Voluntary vs Compliance Markets);
• Changing in land used without consulting with local communities;
• Land encroachment for speculation;
• Land clearance for agricultural practices;
• Population increase more land are needed for agriculture purpose;
• Fuel wood requirement increase;
• Infrastructure development is also the cause of threatening;
• The world is working very hard in curbing all these drivers

WHY SUSTAINABLE FOREST MANAGEMENT?

WHY LINK WITH CLIMATE CHANGE?
Introduction

- Billions of people living around the globe based on natural resources for their livelihood;
- Human being and Nature are depend on each other;
- Bad human behaviors lead to destruction of our unreplaceable sweet home planet;
- The green house gas increase every day by human activities;
- Developed countries with heavy industry pollute most in to atmosphere;
- Forest Resources are the only reservoir that could store CO2 from the atmosphere;
- Developing countries are requested to compensate the environment by preserving their forest resources;
- These factors give high pressure to all developing countries, among others Cambodia is the one that suffered;

How to manage forest effectively?

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- The same concept with forest management: to sustain forests, manager not only deal with forests but also with peoples whose their livings depend on forests;
- Peoples are the main driving forces of deforestation.
How to manage forest effectively?

• Seeing those challenges, foresters have to take into consideration on how to settle the problem;
• Therefore, Cambodia has initiated some Carbon Credit projects under pilot scale;
• Simultaneously, the national scale is under preparation;
• However, under the current voluntary market system, it is hard to find good market for our carbon projects;
• As such, developing countries have to fight for compliance markets at the COP;
• Income from Carbon sale will be used to maintain the resources and protection;
• At the same time, we have to struggle by all means to find ways to protect our valued forests;

Livelihood Project: A case study in Cambodia

• In addition to implementation of REDD+ Projects. Cambodia has also applied a new concept to support livelihood of local communities;
• Applying the above mentioned concept, Cambodia has initiated livelihood project at TBENG LECH commune, starting with poor household;
• Sustainable Forest Management need to take care livelihood of local communities;
A Case of Mr. Long Bean (Sandek)

The project has provided:
- Two cows
- A biogas kiln
- Seedlings of fruit trees
- Seeds of vegetables
- Some woods for house construction
- Technical support on farm

Mr. Sandek Family & his Benefits
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• Manure from bio-digester could be used as organic fertilizer

Impacts from the Project

• Reduce pressure on forest land encroachment;
• Reduce high dependency on timber & NTPF;
• More income generation from conventional agriculture;
• Cut off firewood collection and consumption practices;
• Give more time for children to school;
• Incentive for organic products;
• Contributing to climate change mitigation and adaptation;
Impacts from the Project

• Free cows control: No more free movement of cows in the field;
• Green house gas control: Cut off methane gas from cow manure, lighting supply;
• Health control: Access to bio gas for cooking while reducing cancer due to inhale of smoke;
• Incomes generation: Vegetable, fruits, baby cows;
• Children access to school.

Conclusions

• The National Forest Policy, National MDG, Rectangular Strategy, and the new Strategic Plan of the Ministry of Agriculture Forestry and Fisheries Cambodia give priority for the development of SFM by focusing on Reduce Emission from Deforestation and Forest Degradation, taking into account of Bio-gas project, conservation of natural resources and support Community Livelihood;
• The REDD+ Mechanism will not be successful if the Compliance Markets has not been considered;
• As such, we need to support the Compliance Markets scheme;
• Alternative livelihood project should be implemented to adapt CC situation.
Your Questions or Clarifications are Welcome.

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The End