CAMBODIA UN-REDD NATIONAL PROGRAMME

Concept Note:

Technical work sessions and National Consultation on land cover classification and forest monitoring systems in the context of REDD+

18- 22 March 2013

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Background

Definitions and classifications used for monitoring natural resources are crucial to meet targeted objectives (management of timber resources, biofuel, land tenure, Non-Timber Forest Products, carbon sequestration etc.). Indeed, a definition that is not suitable will not allow monitoring forest types with an interest for decision makers. Assessment of natural resources must be done in time to assess whether policies and measures have positive or negative effects and meet their target(s). Also, the use of consistent classification system and definition in time are necessary.

Currently different classifications and definitions are used for mapping natural resources in Cambodia. Because of different objectives, time/scales and resources, the classification systems and the methodologies adopted for mapping and monitoring forest cover extent and condition vary considerably. At the regional level, the Mekong River Commission and FAO have developed maps that include 27 land cover classes[1]. At the national level three national forest assessment 2002, 2006 and 2010 were carried out by the Forestry Administration with the support of DANIDA and ITTO. This classification includes 5 final classes (8 classes before merging)[2]. In 2010 the FAO Land Cover Classification System has been used to generate a loand cover map of Cambodia. Other classifications systems have been used at sub-national level in order to monitor changes in natural resource functions of different objectives. These objectives can be related to the assessment of the availability of biofuel, timber, biodiversity, the relationship between the water cycle and woodlands, fertility management and crop production etc.

In the context of monitoring forest cover for REDD +, it is important to develop a system that takes into account the existing classification systems while allowing production of data that are in line with international recommendations, particularly UNFCCC decisions and IPCC guidelines. To this end, the monitoring system should allow the acquisition of data on the extent of human activities in the forestry sector (activity data) for each of REDD + activities (activities ...). Past data are expected to support the identification of baseline scenario (reference level and reference emission levels) and inform policy makers. The current data acquisition should allow monitoring REDD+ activities in line with national objectives and decisions.

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[1] FAO/UNDP/MRC, Land Cover Atlas LUMO (1973/1976, 1985/1987, 1992/1993)
[2] Forestry Administration, Cambodia Forest Cover (2002, 2005/2006, 2009/2010)

Forest definition influences evaluation of forestry resources, when assessing forest land area, when identifying natural resources to be considered. Forest classification influences system for decision making and natural resources including forest, management of forest tenure and reporting to international conventions.

At present, Cambodia has many products to analyze forest cover at local, national and regional levels. Their integration into one system for forest monitoring for REDD+ is limited by several constraints such as inconsistency in definitions, classifications, spatial and temporal resolutions, accessibility, etc. On one hand, existing products are not harmonized and the data cannot be compared between forest types between locations, between different time periods. On the other hand, different data have been developed for different purposes, regardless of a national framework for monitoring forest cover in space and time.

The UN-REDD programme, CAMREDD and other projects from different NGOs such as WWF, WCS, PACT, FFI, GERES, etc. contributes to improve the assessment of the forestry resources at national and local levels. Several international agencies such as JICA, USAID, UNEP, FAO, UNDP support the Royal Government of Cambodia to report to international conventions and particularly to the UNFCCC. As part of the UN-REDD programme, efforts are undertaken to support the development of the national forest monitoring system. In order to develop a national forest monitoring that integrates sub-national activities and profits of the existing experiences as far as possible, it is necessary that agreement is found between the relevant institutions on the definition and classification system to be used.

Therefore, the objectives of the work session and national consultation are the following: (1) identification of different definitions, classification systems and available data, (2) identification of constraints related to the harmonization of available data in the context of the establishment of a national system for monitoring forest cover and REDD+ activities, (3) recommendations for a classification system that would allow the consideration of existing data in line with UNFCCC decisions and IPCC guidelines, (4) draw lessons from experiences from other countries with regard to their satellite forest monitoring system, (5) provide recommendations in the context of Cambodia, (6) establish the link between field data and analysis of satellite images, (7) identify the different sampling strategies for establishment of a national forest inventory, (8) present the current status of the national forest inventory design, (9) propose a system for REDD + including a national forest inventory and monitoring system of forest cover using Remote Sensing techniques.

The national consultation will particularly present the results of the following activities under the UN-REDD programme, in collaboration with CAMREDD and other stakeholders of the Technical Working Group on Forestry Reform.

- Activity: 4.3.a: Development of satellite imagery dataset and index maps for the forest monitoring system of Cambodia;

- Activity 4.2.a. Review of existing satellite forest monitoring systems and recommendations for Cambodia;

- Activity 4.2.b. Review national forest definitions and forest classification systems in Cambodia and provide recommendations;

- Activity 4.4.a Design multi-purpose National Forest Inventory and assess costs of implementation, in conjunction with the FAO project TCP/CMB/3304 and DANIDA support to the Forest Administration on designing a national forest inventory for Cambodia.

The work session and national consultation are divided into 2-day separate work session with a small technical team and 3-day consultation which is targeted to a wider audience.

CAMBODIA UN-REDD NATIONAL PROGRAMME

Training Workshop on "land cover classification and forest monitoring systems in the context of REDD+"

MRV Team, Cambodia UN-REDD National Programme

Tentative Agenda Technical work sessions

Phnom Penh, Cambodia
18- 19 March 2013

Venue: Forestry Administration

Day 1: 18 March, 2013

Time	Topic	Speaker	Facilitator
8:00-8:15	Registration		
Session 1: FAO Land Cover Classification System			
8:15-8:30	Introduction of the content of the training	Mr. Mathieu van Rijn	
8:30-10:30	Introduction to land cover classification systems	Dr. Antonio Di Gregorio	Mr. Mathieu van Rijn
10:30-10:45	break		
10:45-11:15	Land Cover Classification System 3	Dr. Antonio Di Gregorio	
11:15-11:45	Forest and land classification system in MAFF and MOE		
11:45-12:30	Using LCCS in Cambodia	*Open discussion*	Mr. Mathieu van Rijn

12:30-13:30	Lunch Break (at Sokha Norodom)		

Session 2: LCCS3 Exercise

13:30-14:30	LCCS/GLCN Re-classification toolbox	Dr. Antonio Di Gregorio	
14:30-15:00	Break		
15:00-15:30	LCCS/GLCN Re-classification toolbox	Dr. Antonio Di Gregorio	Dr. Stephane Brun
15:30 - 16:30	Exercise on Advanced Database Gateway	Dr. Antonio Di Gregorio	Dr. Stephane Brun
16:30 - 17:30	Group discussion		

Day 2: 19 March, 2013

Session 3: Production of data in line with UNFCCC decisions and IPCC guidelines

8:00-8:15	Registration	
8:15-8:30	Summary of the first day	Mr. Mathieu van Rijn
8:30-9:00	Presentation of maps and related information for the exercise	Mr. Mathieu van Rijn
9:00-12:30	Exercise: translation of some examples of national legends	Dr. Antonio Di Gregorio
12.30-13:30	Lunch Break	

Session 4: Group exercises

13:30-14:00	Presentation on translated legends	by groups
14:00-14:30	Group discussion	all
14:30	Departure to Sihanoukville	

CAMBODIA UN-REDD NATIONAL PROGRAMME
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Training Workshop on "land cover classification and forest monitoring systems in the context of REDD+""

MRV Team, Cambodia UN-REDD National Programme

Tentative Agenda Consultation Workshop

Sihanoukville, Cambodia
20- 22 March 2013

Venue: Independence Hotel, Sihanoukville

Day 1: 20 March, 2013

Time	Topic	Speaker	Facilitator
8:30-9:00	Registration		
Session 1: Opening Session			
9:00-9:10	-Announcement of Program		
	-Invitation of Board of Chairmen		
	-National Anthem		
9:10-9:25	Welcome remarks	DDG FAO Repr.	Ms. Ly Sophorn
9:25-9:35	Group Photo		
Session 2: Forest definitions and classification systems			
9:35-9:45	Presentation of the content of the training	Mr. Mathieu Van Rijn	Mr. Leng Chivin & Mr. Mathieu Van Rijn
9:45-10:25	Land representation system under the IPCC	Dr. Matieu Henry	

10:25-10:40	Break		
10:40-11:00	Forest classification used by forest administration (including the method used for classification)	Mr. Leng Chivin	
11:00-11:20	Forest classification used by GDANCP (including the method used for classification)	Ek Menrith & Sokha Sophorn	
11:20-11:40	Forest classification used by fisheries administration (including the method used for classification)	FiA	
11:20-12:00	Forest classification used by the WCS	Mr. Phien Sayon	Dr. Matieu Henry & Mr. Kamal Uy

Session 3: Forest classification in Cambodia			
12:00-13:30	Lunch		
13:30-14:30	Forest definitions and classifications in Cambodia	Dr. Stephane Brun	
14:30-15:30	Recommendations for a forest classification system	Dr. Stephane Brun	Mr. Mathieu van Rijn
15:30-15:45	Break		
15:45 - 16:15	Presentation of the results of the translation of legends using LCCS	Dr. Antonio di Gregorio	
16:15: 17:30	Open discussion		Dr. Stephane Brun & Dr. Antonio Di Gregorio
	- Which are the limits of using different classification systems?		
	- What would be the ideal classification system for monitoring land use, use change and forest change in Cambodia?		

Day 2: 21 March, 2013

Session 4:	**Satellite forest monitoring in the context of REDD+**		
8:30-9:00	Registration		
9:00-9:15	Summary of the first day	Mr. Mathieu V.R.	
9:15-10:15	Status of Cambodian reporting to the UNFCCC and preparedness for reporting on REDD+	Mr. Uy Kamal	Dr. Matieu Henry
10:15-10:30	Break		
10:30-11:15	Forest monitoring systems using satellite imageries, issues and constraints in the context of REDD+ in	Mr Ian Thomas	Dr. Antonio di Gregorio

	south east Asia		
11:15-12:00	Recommendations for a functional satellite forest monitoring in Cambodia	Mr Ian Thomas	
12:30-13:30	Lunch		
13:30-14:00	Status of progress of the development of satellite imagery dataset and index maps for the forest monitoring system of Cambodia	Mr. Suong Sovan	Mr. Mathieu van Rijn
14:00-15:00	Indicators and variables to be considered when developing a satellite forest monitoring system in Cambodia	TBC	
15:00-15:15	Break		
15:30-15:45	Forest monitoring systems using satellite imageries, issues and constraints in the context of REDD+	Ms. Inge Jonckheere	
15:45-17:30	Open discussion - *Which are the variables to consider when developing a satellite forest monitoring system?* - *What would be the adequate design for a functional satellite forest monitoring system?* - *Which are the gaps and needs to make such a system functional?*		Dr. Henry Matieu & Mr. Leng Chivin

Day 3: 22 March, 2013

Session 5:	National forest inventory		
8:30-9:00	Registration		
9:00-9:15	Summary of the second day	Mr. Mathieu V.R.	
9:15-9:45	Current status of the design of the national forest inventory in Cambodia	Dr. David Chojnacky	Dr. Henry Matieu
9:45-10:00	Break		
10:00-10:30	The use of remote sensing to support the national forest inventory	Ian Thomas / Dr. David Chojnacky	Mr. Kamal Uy & Mr. Mathieu van Rijn
10:30-11:00	Database management system and archiving system to support the forest monitoring system	Dr. Henry Matieu	
11:00-12:30	**Group discussion and identification of next steps**		
	- *Which are the available data?*		

	- *The use of existing data to support the national forest inventory*		
	- *Which are the different plot and sampling designs in Cambodia?*		
	- *How to manage data to support the national forest monitoring system?*		
12:30-13:30	Lunch		
13:30 - 14:30	Certificate and Closing remarks	DDG FAO Repr.	
14:30	Departure to Phnom Penh		

End