

# Myanmar REDD+ Readiness Roadmap

---

## *Working Group 2: National Forest Monitoring System (NFMS) and Forest Reference Emission Levels/Reference Levels (RELS/RLs)*

### Terms of reference

Co-Chairs: Dr. Thaung Naing Oo (MoECF), Mr. Zaw Win Mying (Forest Research Institute)  
Secretary: Forest Department, assisted by UN-REDD Coordinator  
Advisors: Joel Scriven (FAO), Ben Vickers (FAO)

*Objective: 1) to assess baseline national technical capacities and institutional arrangements related to the forest monitoring and measurement, reporting and verification (M&MRV) functions of the national forest monitoring system (NFMS) for REDD+ activities; and 2) to identify potential strategies for the development of Myanmar's forest RELs/RLs.*

## **1 Background**

As a result of a visit to Myanmar by Mr. Erik Solheim, former Norwegian Minister for the Environment and International Development, in late October/early November 2011, there is interest in Norway in providing support for the REDD+ Readiness process in Myanmar. Subsequently, support from Norway's International Climate and Forests Initiative for the preparation of a REDD+ Readiness Roadmap and funding proposal was sanctioned at environmental ministry level to be delivered through UN-REDD Programme in collaboration with RECOFTC.

An initial scoping mission (July 9<sup>th</sup>-13<sup>th</sup>, 2012) yielded recommendations on the process to be followed in preparing a Roadmap and funding proposal. One recommendation was that a Working Group be formed, consisting of selected individuals representing different stakeholder groups, to 1) assess national technical capacities and institutional arrangements for Myanmar's national forest monitoring system (NFMS) for REDD+ activities; and 2) consider and identify strategies to develop Myanmar's forest reference emissions levels/reference levels (RELS/RLs) for REDD+ (the performance benchmarks for REDD+ activities).

## **2 Issues to be Addressed by the Working Group**

Decisions under the United Nations Framework Convention on Climate Change (UNFCCC) set out that developing countries aiming to undertake REDD+ activities<sup>1</sup>

---

<sup>1</sup> Reducing emissions from deforestation, Reducing emissions from forest degradation, Conservation of forest carbon stocks, Enhancement of forest carbon stocks, Sustainable management of forests.

should develop a number of technical elements. This working group will address two of these elements and assess what their implementation means in the context of Myanmar. The first is a **national forest monitoring system (NFMS)**. Once developed, the NFMS will serve two functions:

1. **Monitoring of REDD+ activities:** this function will assess whether REDD+ activities are resulting in positive outcomes. A key tool for this function is satellite remote sensing and analysis.
2. **Measurement, Reporting and Verification (MRV) of greenhouse gas (GHG) emissions:** this function will assess whether REDD+ activities are resulting in reductions in forestry emissions and enhancements of forest carbon stocks. Key tools for this function are satellite remote sensing, a national forest inventory and a national GHG inventory.

The second element is forest reference emission levels and forest reference levels (RELS/RLs). RELS/RLs are the benchmarks that the performance of REDD+ activities in reducing GHG emissions will be measured against. RELS/RLs will be central to determining the levels of positive incentives countries will receive for implementing REDD+ activities. Key tools for developing RELS/RLs are satellite remote sensing and assessments of national circumstances. UNFCCC guidance on RELS/RLs is not complete, and countries will need to determine how best to approach RELS/RLs, based on their national circumstances.

Key technical elements to be addressed by the working group are as follows.

### 2.1 GHG Inventory

The working group will assess and map out the current system for compiling Myanmar's national GHG inventory, including institutional arrangements for sharing data and information (if any) and writing and submission of the National Communication to the UNFCCC Secretariat. It should place emphasis on how the inventory is compiled for the land use, land use change and forestry (LULUCF) sector, where the data is sourced, and what analyses and quality checks are carried out. The group should work towards the production of a gap analysis of inventory capacities and produce a list of capacity building and development activities.

### 2.2 Satellite Remote Sensing & GIS

The working group will evaluate and compile a comprehensive assessment of satellite remote sensing capacities in the country, focusing on land use and land use change monitoring, and the ability to monitor changes over time. Existing capacities should be evaluated in light of international guidance from the UNFCCC and IPCC for the monitoring of REDD+ activities (forest cover change analysis) and generation of activity data for the LULUCF sector. The group should work towards the production of a gap analysis of data and information, of inventory capacities and produce a list of capacity building and development activities.

### 2.3 National Forest Inventory

The working group should map out existing institutional arrangements, personnel capacities, sampling strategies and data collection methodologies (including approached to field inventory plots) for the national forest inventory. They should also evaluate the data parameters collected to date, in light of IPCC guidance for the collection of emission factors for the LULUCF sector, and the methods used for data collection, archiving (i.e. national forest inventory database) and analysis/use (e.g. how is the data used; how does the forest inventory inform decision making and/or forest policies). The group should work towards the production of a gap analysis of data and information, of inventory capacities and produce a list of capacity building and development activities.

### 2.4 International Guidance: UNFCCC & IPCC

The working group should collect and revise in detail, and discuss and evaluate through regular seminars, the international guidance on NFMS and RELs/RLs provided in UNFCCC Decision texts and IPCC Guidance and Guidelines.

## 3 Outputs

Outputs of the Working Group will consist of relevant background/guidance materials (studies, reports, legislation, etc.), preliminary gap analyses of satellite remote sensing, forest inventory and GHG inventory capacities (identifying key gaps between national capacities and international guidance/best practice). Conclusions should consist, as appropriate, of text that can be inserted into the REDD+ Readiness Roadmap.

## 4 Methods of Working

The Working Group will meet at least once a month to develop the information required for the Roadmap, as described above. All meetings will be in Naypyitaw. The travel costs of working group members located outside Naypyitaw to attend the meetings will be covered. In addition, and as necessary, working group members may wish to organize discussion groups or seminars, to bring in a wider range of technical experts, to discuss specific topics, such as satellite remote sensing or the national forest inventory.

The duration of the Working Group's work will nominally be 4 months, but the actual duration will be determined by completion of its outputs. Background information and gap analyses will be compiled by the Forest Department, assisted by the UN-REDD/RECOFTC Coordinator, although any member of the working group or advisors may contribute materials. All background materials will be shared with all working group members, electronically where possible. For each meeting, the Co-chairs, assisted by the Forest Department and UN-REDD/RECOFTC Coordinator will prepare a brief ToR, defining the purpose of the meeting, the expected result of the meeting, and appending any materials required

in preparation for the meeting. This information will be shared with all Working Group members at least a week before the meeting.

At each meeting, a secretary will be nominated who will be responsible for recording minutes and conclusions of the meeting. This document will be shared with all members of the working group within one week of the meeting. Comments and corrections may be proposed by any working group member within one additional week, after which the minutes and conclusions will be considered final. This document will be sent to the UN-REDD/RECOFTC Coordinator.

While every effort will be made to select a meeting date that will allow all Working Group members to participate, it is inevitable that this will not always be possible. In such cases, Working Group members who are not able to attend a meeting will be provided with all the pre-meeting information, as well as the minutes and conclusions and will be invited to make additional contributions to the conclusions within one additional week.