



# Proceedings of the workshop on national forest monitoring system (Geo portal)



**Bangladesh Forest Department**  
**28 June – 02 July 2015**

**UN-REDD**  
PROGRAMME



The UN-REDD Programme, implemented by FAO, UNDP and UNEP, has two components: (i) assisting in developing countries to prepare and implement national REDD strategies and mechanisms; (ii) supporting the development of normative solutions and standardized approaches based on sound science for a REDD instrument linked with the UNFCCC. The programme helps empower countries to manage their REDD processes and will facilitate access to financial and technical assistance tailored to the specific needs of the countries.

The application of UNDP, UNEP and FAO rights-based and participatory approaches will also help ensure the rights of indigenous and forest-dwelling people are protected and the active involvement of local communities and relevant stakeholders and institutions in the design and implementation of REDD plans.

The programme is implemented through the UN Joint Programmes modalities, enabling rapid initiation of programme implementation and channelling of funds for REDD efforts, building on the in-country presence of UN agencies as a crucial support structure for countries. The UN-REDD Programme encourage coordinated and collaborative UN support to countries, thus maximizing efficiencies and effectiveness of the organizations' collective input, consistent with the "One UN" approach advocated by UN members

The UN-REDD Bangladesh National Program is implemented by the Bangladesh Forest Department under the leadership of Ministry of Environment and Forests. United Nations Development Program (UNDP) and Food and Agriculture Organization (FAO) are the two implementing partners.

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This report is designed to reflect the activities and progress related to UNJP/BGD/057/UNJ UN-REDD Bangladesh National Programme. It does not reflect the official position of the supporting international agencies including FAO and UNDP and should not be used for official purposes. Should readers find any errors in the document or would like to provide comments for improving the quality they are encouraged to contact one of above contacts

## EXECUTIVE SUMMARY

In order to support capacity building efforts, FAO Bangladesh organized a workshop on “Forest Monitoring System” held at Bangladesh Forest Department, Dhaka under the Targeted Support Activity of UN-REDD programme during 28 June–02 July 2015 with the collaboration of Bangladesh Forest Department. In total 16 participants (10 male and 7 female) were present. Md. Mozaharul Islam, Conservator of Forests, UN-REDD Focal Point in Bangladesh also attended.

Officials of RIMS Unit and NFMS group were discussed and trained in the following areas:

- Introduction to the features of the portal, the portal administration and the geoserver administration panel.
- Ingestion of shape file.
- Creating a style.
- Publishing a map.
- Hands on session.

Furthermore capacity building is necessary to activate and maintain the geo portal and a follow up mission will be considered for late 2015.

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## 1. INTRODUCTION

In the context of REDD+, Bangladesh has to develop transparent national forest monitoring systems (NFMS). NFMS can be defined as a process that includes the collection, analysis and dissemination of forest-related data and the derivation of information and knowledge at regular intervals to allow the monitoring of changes over time. In order to support capacity building efforts, FAO Bangladesh organized a workshop on “Forest Monitoring System” held at Bangladesh Forest Department, Dhaka under the Targeted Support Activity of UN-REDD programme during 28 June–02 July 2015 with the collaboration of Bangladesh Forest Department. Officials from the NFMS group of and the Resource Information Generation System (RIMS) Unit of Forest Department joined the workshop. The workshop focused on the capacity building and development of a Geo-portal using geo spatial data available for the country as well as the forest areas.

## 2. SUMMARY OF PRESENTATIONS AND EXERCISES

The workshop was undertaken following the agenda presented in Appendix 1. In total 16 participants were present. Md. Mozaharul Islam, Conservator of Forests, UN-REDD Focal Point in Bangladesh also attended. The workshop included several presentations and practical exercises. Below is a brief description of the content of the presentations.

## 3. OVERVIEW OF NFMS

Initial methodological guidance in relation to MRV for REDD+ was provided at COP 15, Copenhagen (2009). Decision 4/ CP.15, paragraph 1(d) “Requests” Parties to:

*“...establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems as part of national forest monitoring systems that:*

- i. Use a combination of remote sensing and ground-based forest carbon inventory approaches for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes,*
- ii. Provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties, taking into account national capabilities and capacities;*
- iii. Are transparent and their results are available and suitable for review as agreed by the Conference of the Parties.*

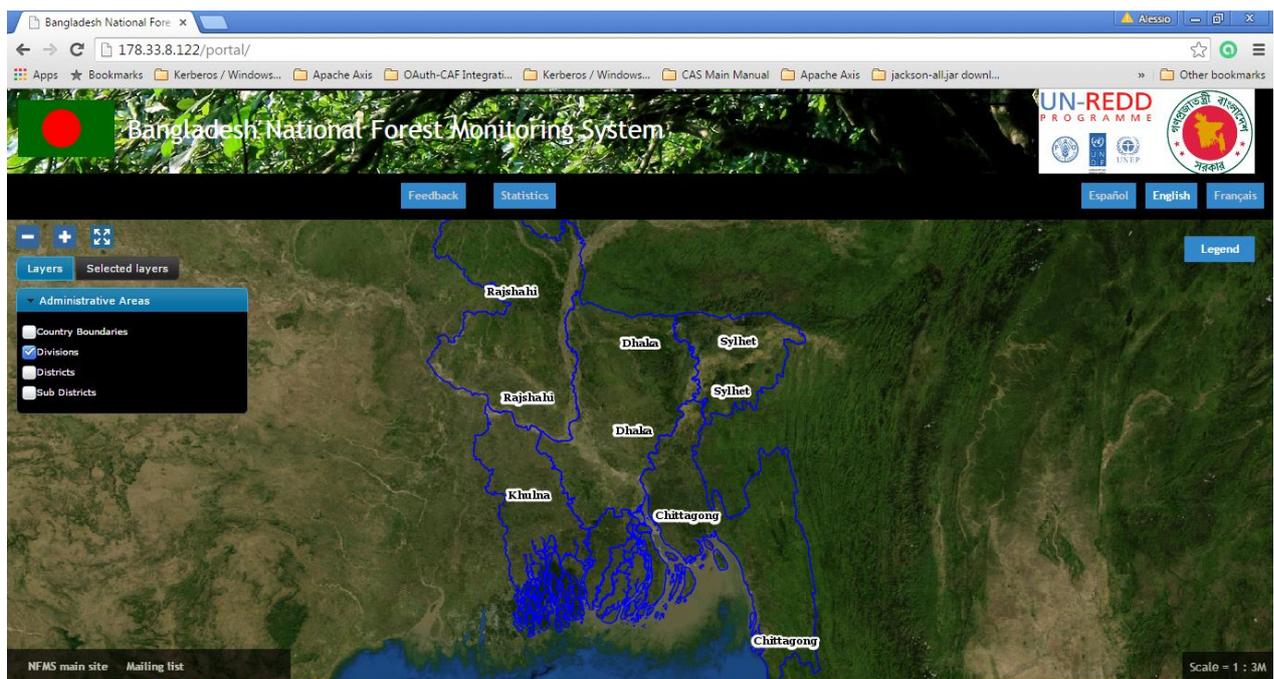
The presentation highlighted that to establish these decisions, the country Parties must develop a

national forest monitoring system. To achieve this, countries must follow the most recent methodological recommendations issued by the IPCC, as adopted or encouraged by the COP, as a basis for estimating the sources of anthropogenic GHG emissions, their removal by sinks, and for measuring carbon stocks and changes in forest area. The presentation also discussed about the principals, structures, functions of NFMS, the SLMS Geoportal, explained the current status, and discussed the work plan and the data requirements.

- NFMS should be:
  - Appropriate for national level implementation
  - Robust and transparent
  - In line with UNFCCC decisions on REDD+, including 1/CP.16 and any forthcoming
  - Relevant for the phased approach to REDD+
  - Complementary to existing forest inventory methods
  - Cost-effective
  - Sustainable without REDD+ finance
- NFMS has two functions in REDD+ context:
  - Monitoring (M) of Policies and Measures (PAMs)
  - Measurement (the M of MRV) of emissions and removals
- Develop the NFMS in a stepwise approach through Phases of REDD+

#### 4. BANGLADESH NFMS SLMS GEO PORTAL

The Satellite Land Monitoring System (SLMS) Geo Portal has been developed for Bangladesh.



Officials of RIMS Unit and NFMS group were discussed and trained in the following areas:

- Introduction to the features of the portal, the portal administration and the geoserver administration panel.
- Ingestion of shape file.
- Creating a style.
- Publishing a map.
- Hands on session.

## **5. RECOMMENDATIONS FOR NEXT STEPS**

Countries need at least two land cover data sets to display in the geo portal and compare change statistics over time. Currently Forest Department has one land cover data set available. Signing of a Memorandum of Understanding (MoU) is under process to obtain land cover data from the Soil Research Development Institute (SRDI). Harmonization of these data sets is required prior to their use in the web platform. In addition, existing protected area data can be displayed in geo portal.

Furthermore capacity building is necessary to activate and maintain the geo portal and a follow up mission will be considered for late 2015.

## 6. APPENDIX 1

**Draft Agenda**  
**Mission Bangladesh Forest Monitoring System**  
Alessio Alfonsetti  
Dhaka, Bangladesh  
June 28 – July 2 2015

<b>Sunday June 28, 2015</b>		
<b>Time</b>	<b>Event</b>	<b>Notes</b>
11hrs15	Landing in Dhaka International Airport at 11:15.	
13hrs30	Security Briefing	
14hrs00	Meeting with National UNREDD Team (Yourself, Mariam, Shahed) to 1) introduce ourselves, 2) review the agenda of the mission, 3) present the web geo portal developed in FAO HQ, 4) identify the objectives of the National geo portal according to Bangladesh requirements/needs, 5) identify of the potential data to be disseminated (LULUC data, administrative, socio-economic surveys, safeguards information).	

<b>Monday June 29, 2015</b>		
<b>Time</b>	<b>Topics</b>	<b>Notes</b>
<i>Morning</i>	- Meeting with CCF - Meeting with FD REDD focal point (Mr. Mozaharul Islam)	
<i>Afternoon</i>	Meeting with FD officers or MRV group to 1) discuss data availability, 2) objectives of the geo portal, 3) overview of the steps for the development of the geo portal in order to define a common work plan.	

<b>Tuesday June 30, 2015</b>		
<b>Time</b>	<b>Topics</b>	<b>Notes</b>

<i>Morning</i>	<p>Meeting with RIMS unit to discuss:</p> <ul style="list-style-type: none"> <li>✓ Objectives of the geo portal.</li> <li>✓ Overview country mapping status and define roadmap to have the data ready for the UNREDD NFMS geo portal.</li> <li>✓ Definition of data format and type.</li> <li>✓ Discuss requirements about the UNREDD NFMS geo portal – i.e. features that may fit with Bangladesh needs.</li> <li>✓ Data Availability.</li> <li>✓ Overview of the steps for the development of the geo portal in order to define a common work plan.</li> </ul> <p>Define requirements, policies and procedures to host the final product, hand over the product maintenance and development further to the end of the project</p>	
<i>Afternoon</i>	<p>Meeting with FAO National Officers to discuss:</p> <ul style="list-style-type: none"> <li>✓ UNREDD NFMS geo portal hosting and maintenance.</li> <li>✓ UNREDD NFMS geo portal National governance and management.</li> <li>✓ UNREDD NFMS geo portal work plan.</li> </ul>	

**Wednesday July 1, 2015**

Date/Time	Topics	Notes
<i>Morning</i>	<p>Half day workshop on the geo portal work flows to:</p> <ul style="list-style-type: none"> <li>✓ Ingest data (upload a raster and a vector data, create a layer, create a style, publish a layer on the internet).</li> <li>✓ Provide feedback.</li> <li>✓ Talk about geoserver, geobatch.</li> </ul>	
<i>Afternoon</i>	Debriefing	

**Thursday July 2, 2015**

Time	Event	Notes
<b>10hr15</b>	Departure from Dhaka International Airport	

## 7. APPENDIX 2

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