

Bangladesh MRV Action Plan

**4th UN-REDD Regional Lessons Learned Workshop
National Forest Monitoring Systems for REDD+
Bangkok, Thailand
15-17 October 2013**



MRV context of the Country

National Forest Inventory (NFI): the previous NFI has not covered some forest type (the sampling strategy did not cover some forest types)

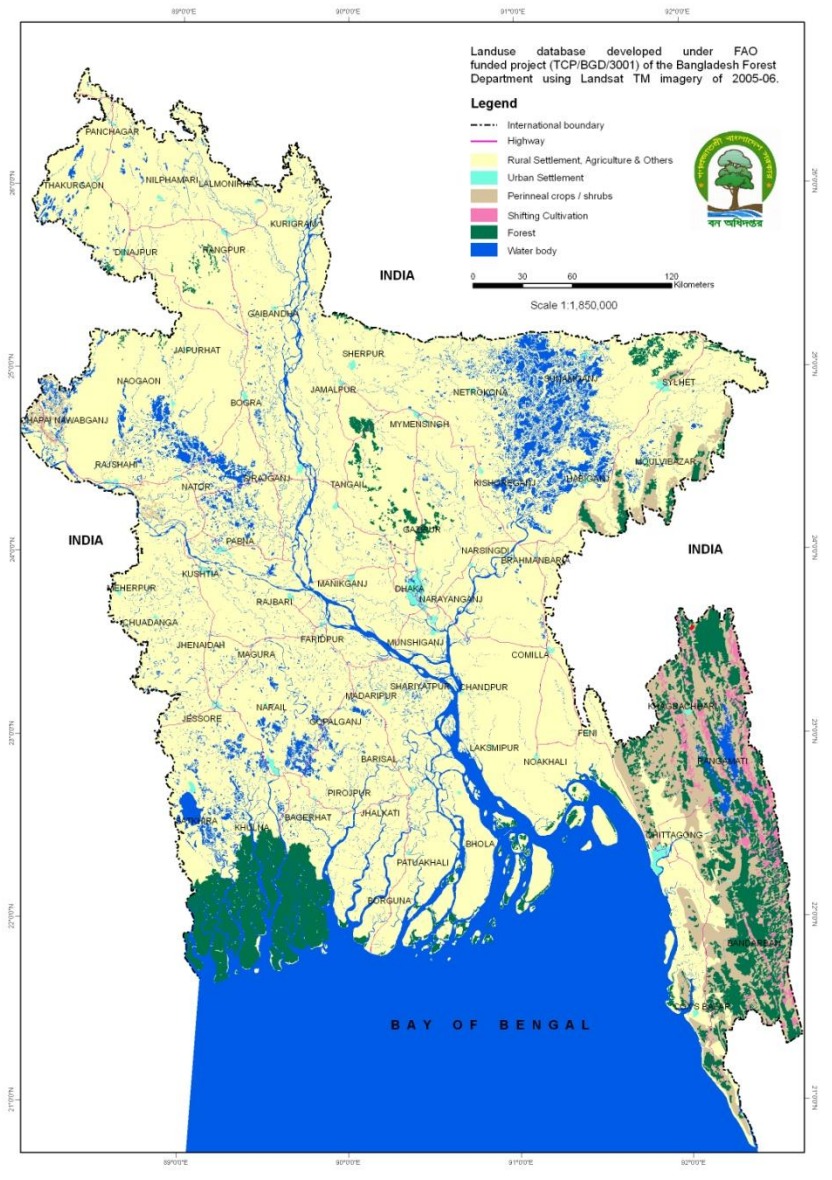
Forest Monitoring System (FMS): one national forest cover assessment was performed (coarse resolution), and several sub-national land cover assessment (not compatible between each other)

Green House Gas Inventory (GHG-I): mainly performed by contracting external resources



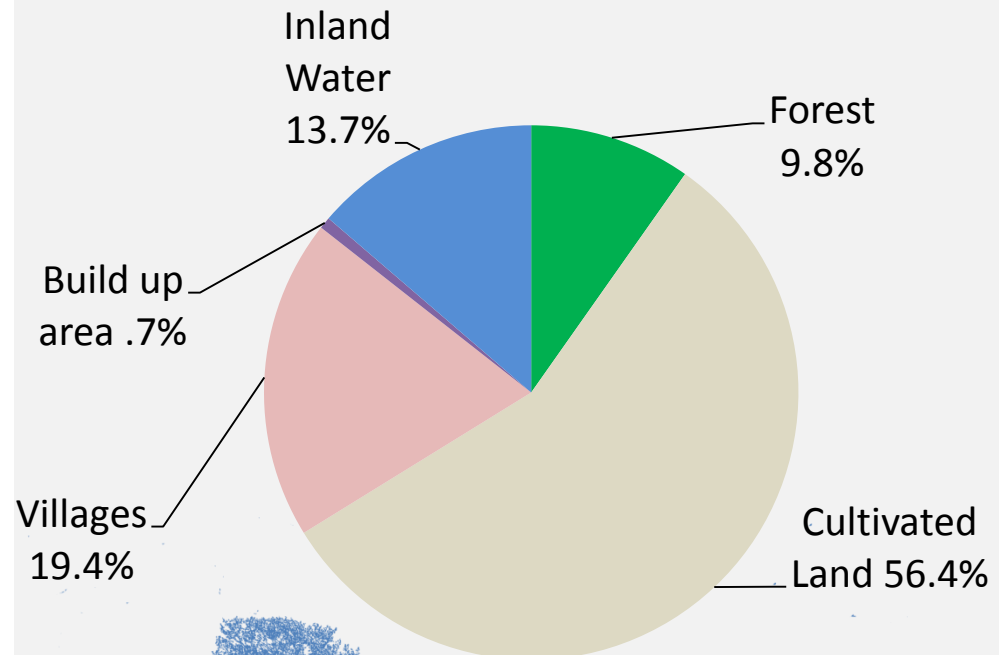
Experiences in inventorying National Forests

Major Landuses of Bangladesh



NFA (2005-2007)

Sample intensity: 0.000054
Number of sample: 296



Experiences in inventorying at National Forests

Inventory of the Hill Forests

Inventory of the Plain land Sal Forests

Inventory of the Sundarban Reserved Forests

Inventory of the Coastal Afforestation

Experiences in Carbon inventory at National Forests

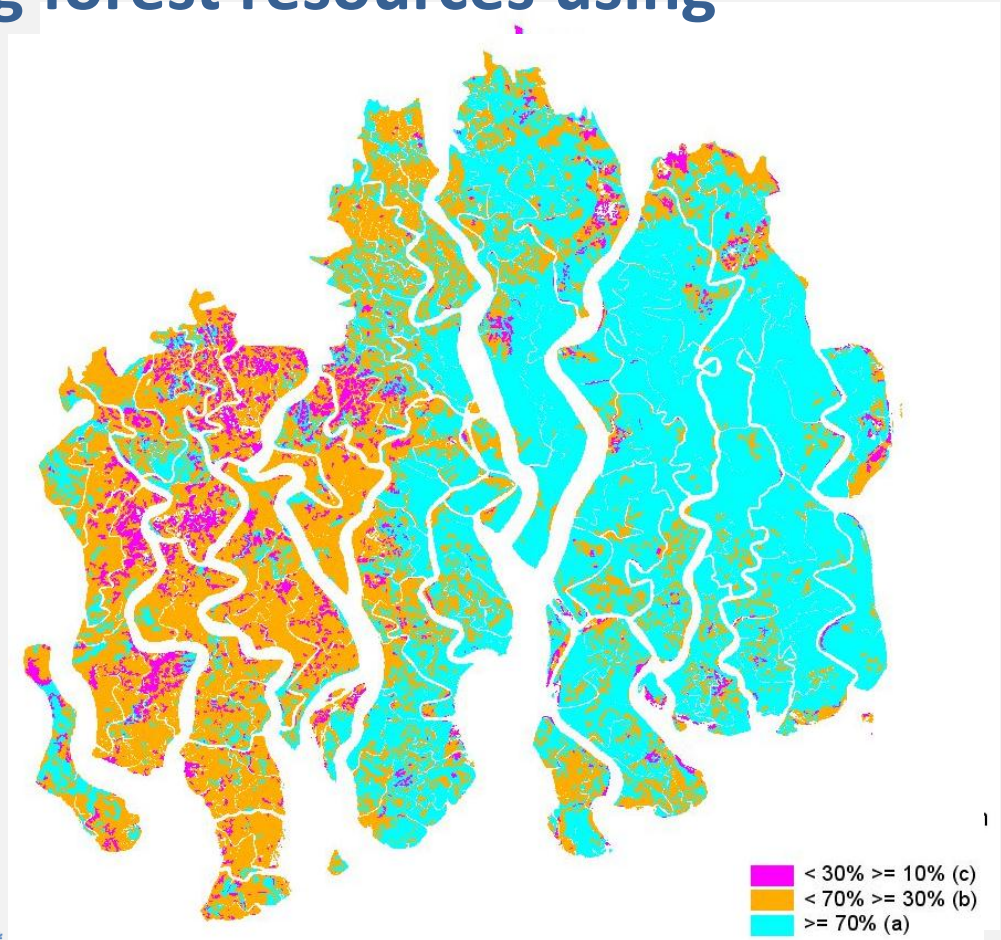
Sundarban Reserved Forests

6 Protected areas of the Hill Forests



Experiences in assessing forest resources using Remote Sensing

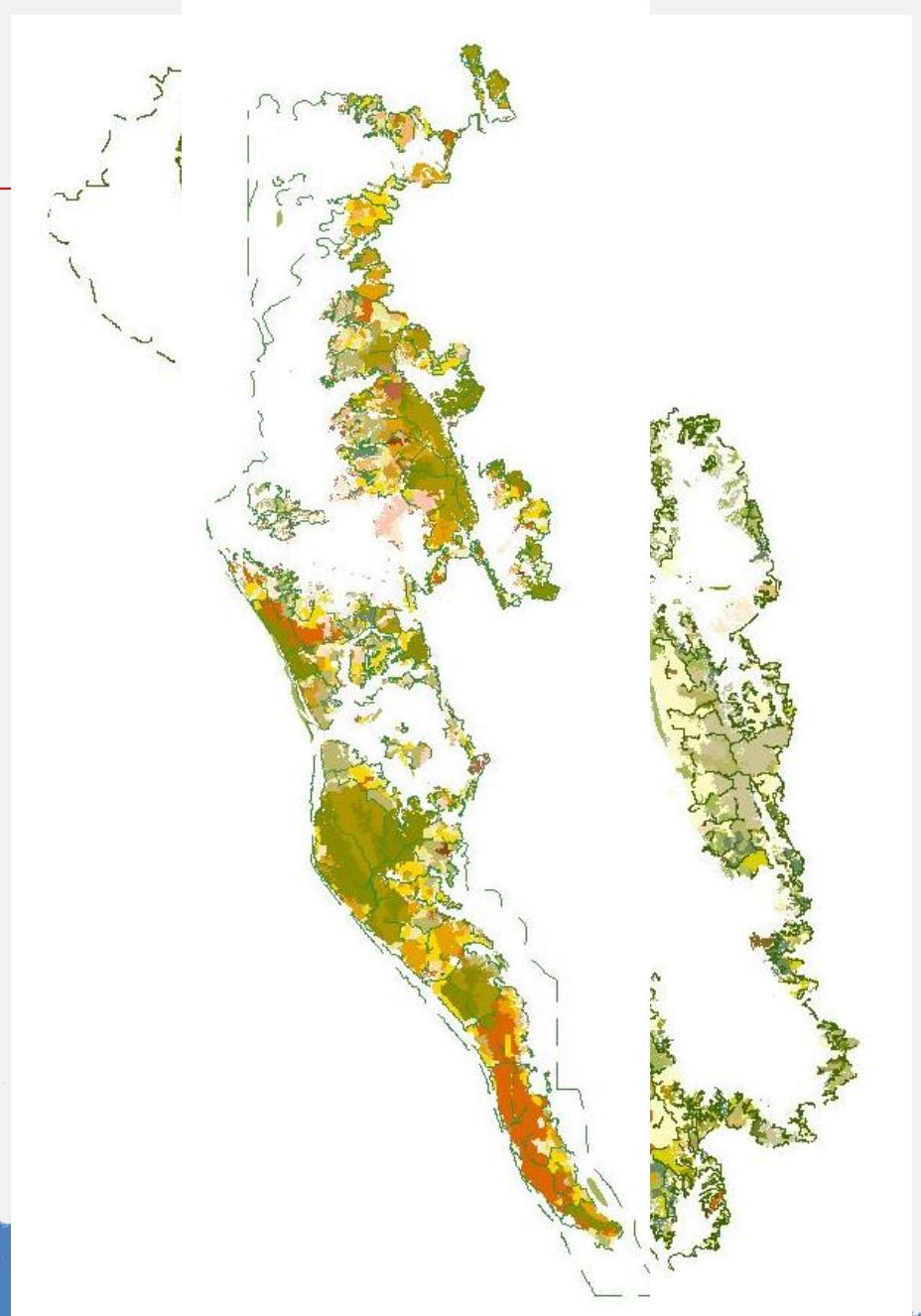
SRF assessment and mapping was done using aerial photo of 1958, 1981, 1995



Height classes
Forest types
Density classes

Experiences in assessing forest resources using Remote Sensing

Hill forest assessment and
mapping was done using
aerial photo of 1985,1995



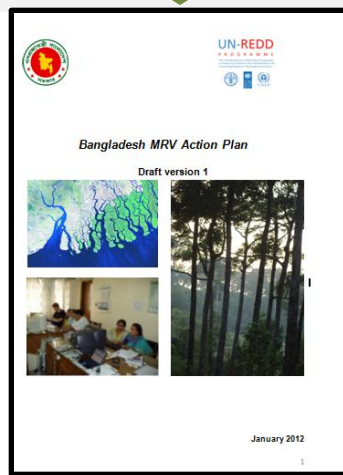
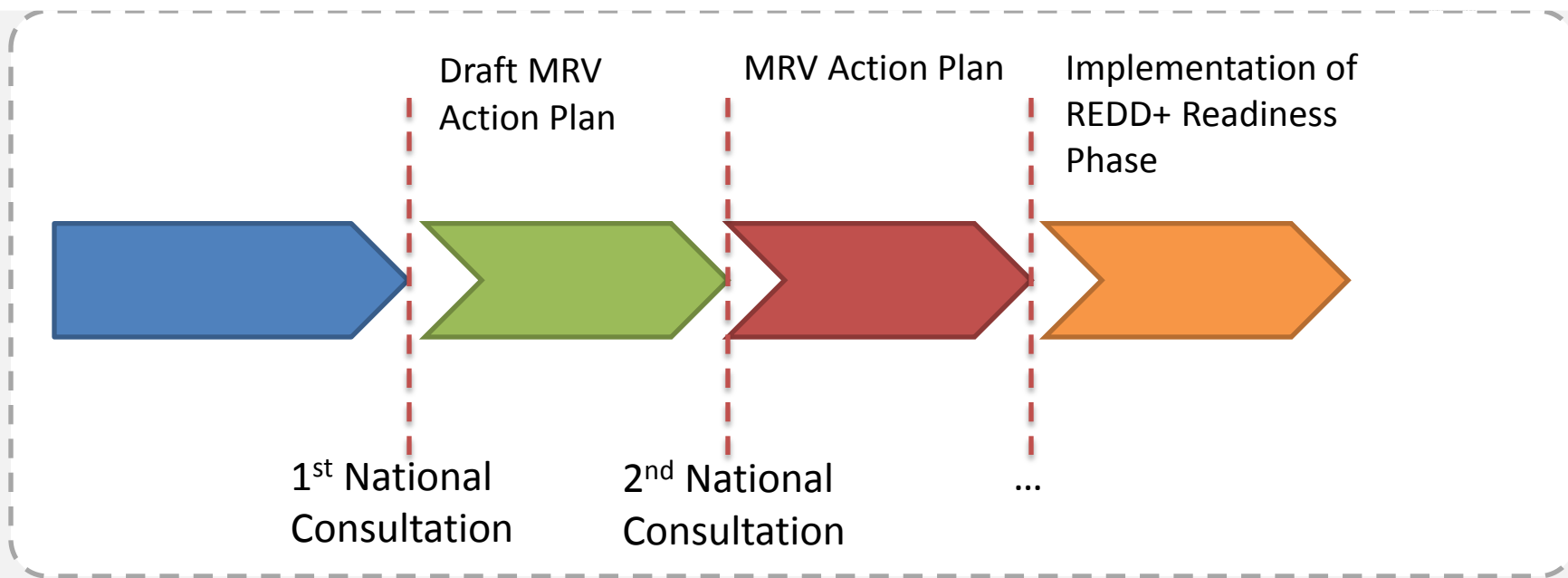
MRV Action plan

Components for Intervention

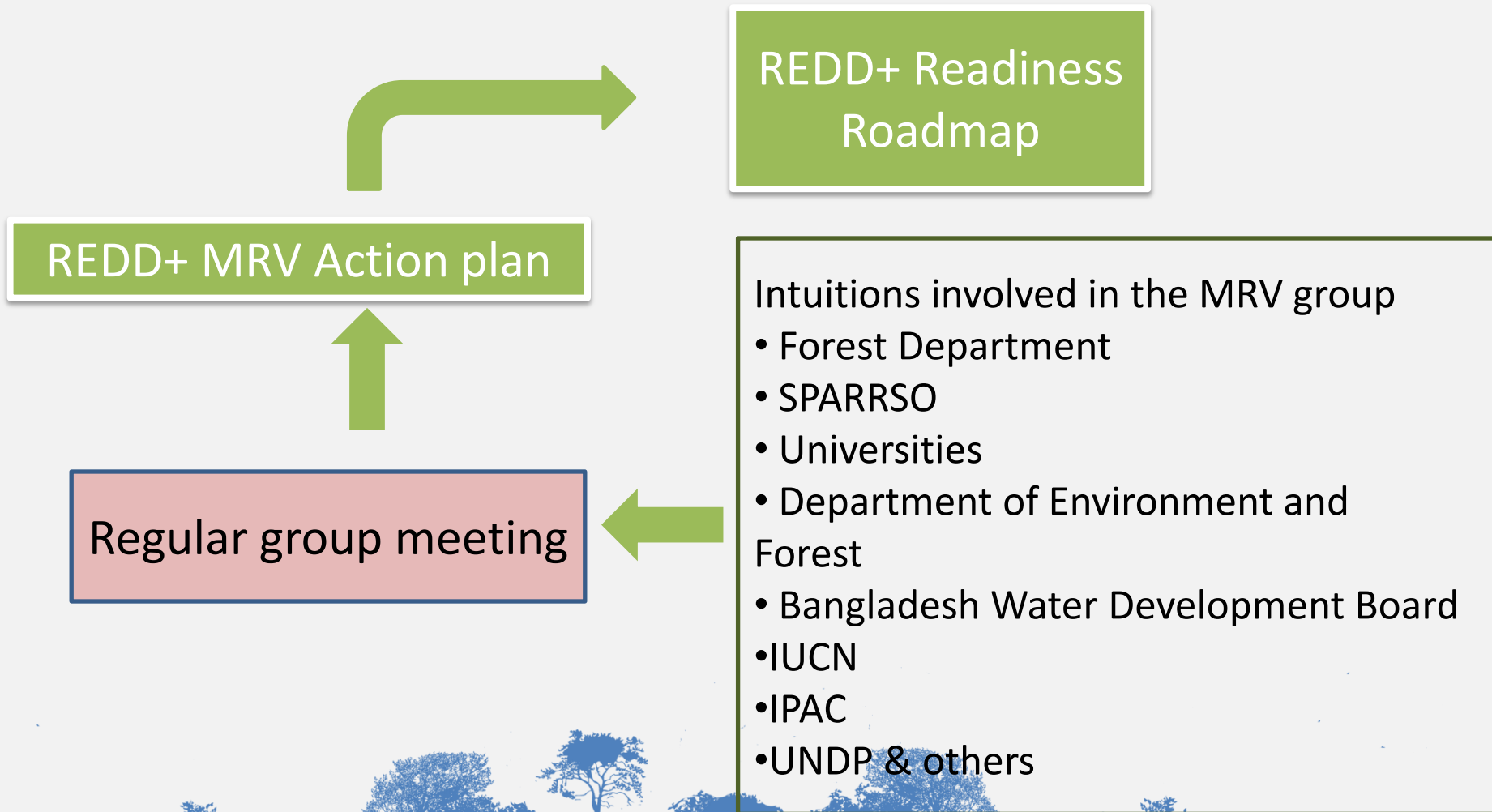
- Building capacities to implement the GHG inventory for the forest sector
- Develop a Forest Monitoring System
- Develop a National Forest Inventory design
- Implement an MRV system



Process for the development of the MRV Action Plan



Contribution to the REDD+ Readiness Roadmap preparation process



MRV Action Plan

Objectives of the MRV Action Plan:

- To identify the existing capacity gaps in regards to develop Emission Factor, Activity Data and GHG inventory for LULUCF sector
- To identify the MRV activities to address the existing gaps for the REDD+ Readiness phase.

Gap analysis on MRV

- **Institutional arrangements**
- **Human capacities**
- **Technical capacities**
- **Financial sources**
- **Logistics, equipments and software**



Capacity gaps	Institutional arrangements	Human capacities	Technical capacities	Financial sources	Logistics, equipments and software
National Forest Inventory	No NFI Unit at national level, 3 MPD is responsible to conduct inventory	Inadequate , Limited trained manpower	Inconsistent methodologies among the inventories, no emission factors, Limited number of allometric equation, Lack of proper archiving, No mechanism for QA/QC.	Limited financial support from revenue	Inadequate support
Forest Monitoring System	No specific monitoring system	Limited technical manpower	no proper definition of the classification systems, no consistent change assessment, not properly archived, No mechanism for QA/QC.	No revenue budget allocation	Lack of upgraded software and functional server.
GHG Inventory	No institutional arrangement	Lack of human resource, Inadequate Technical capacities	No accuracy checked, INC, SNC data archived , No mechanism for QA/QC.	No permanent source of funding	Lack of necessary software and technical equipments

MRV Action Plan

- ❑ Bangladesh profile and conditions
- ❑ REDD+ and MRV and the UNFCCC
- ❑ Bangladesh's MRV experiences and context
- ❑ Gap analysis on MRV
- ❑ Proposed MRV implementation for REDD+



Bangladesh REDD+ MRV Action Plan

Draft version 1



March 2012

1. Building capacities to implement the GHG inventory for the forest sector

Activity 1: Organize regular MRV meetings

Activity 2: Support Institutional Arrangements for GHG National Inventory System for the LULUCF sector supported

Activity 3: Technical capacity building for the GHG inventory for the LULUCF sector

Activity 4: Rationalize forest definition and establish a harmonized classification system for land representation

Activity 5: Identify the logistics, equipments and software needs for GHG inventory for the LULUCF sector and complete their procurement

Activity 6: Procure and establish a central database and archiving system

Activity 7: Methods and Data Documentation

Activity 8: Support the development of the GHG inventory

2. Develop a Satellite Forest Monitoring System

Activity 1: Satellite image characterization for forest monitoring

Activity 2: Support the establishment of the Forest Management Information System

Activity 3: Capacity building on geospatial data processing and database management

Activity 4: Forest boundary delineation in the field and GIS boundary generation for demonstration activities

Activity 5: Develop a forest monitoring system



3. Design a National Forest Inventory

Activity 1: Harmonize all existing inventory data and develop a robust database

Activity 2: Review of existing inventory designs and provide recommendations for NFI design

Activity 3: Strengthen the capability of forest inventory of the stakeholders to collect and analyze the needed information on forests

Activity 4: Design the multi-purpose National Forest Inventory



4. Support scientific research on key forestry issues

Activity 1: Development of a database of existing tree and stand allometric equations

Activity 2: Explore the development of participatory tools for forest monitoring and MRV



Lesson learned

- **Participation from outside capital was not adequate**
- **Permanent representative from technical organisation needed**
- **Inadequate knowledge base of the members**
- **Adequate financial allocation necessary**

Mariam Akhter
mariam.akhter@fao.org

Thank You

Website: <http://www.un-redd.org>

