



Assessing and reporting climate change mitigation actions for forestry in Bangladesh

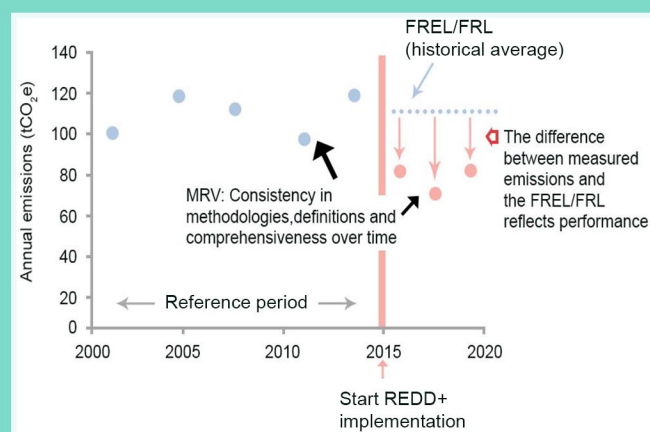
Supporting the Bangladesh Forest Department in constructing a forest reference level for REDD+

The important role of forests in greenhouse gas (GHG) emissions management is widely recognized in Bangladesh. However, the implementation of climate change mitigation activities in the forestry sector is limited by many factors including the lack of good quality data and technical capacities to monitor GHG emission reductions.

Context

The United Nations Framework Convention on Climate Change (UNFCCC) encourages developing country Parties to contribute to mitigation actions in the forestry sector by undertaking the following REDD+ activities: (a) reducing emissions from deforestation; (b) reducing emissions from forest degradation; (c) conservation of forest carbon stocks; (d) sustainable management of forests; and (e) enhancement of forest carbon stocks. Forest reference emission Levels (FRELs) and/or forest reference levels (FRLs) as tonnes of CO₂ equivalent per year for a nationally agreed reference period is a benchmark for assessing performance in implementing REDD+ activities. A country's performance is the difference between the reference level benchmark and actual emissions during a period and is used for determining a results-based payment.

The Bangladesh REDD+ Readiness Roadmap endorsed in 2012 by the Ministry of Environment, Forest and Climate Change (MoEFCC). It sets out how Bangladesh will implement its REDD+ Readiness activities including the development of a national FREL/FRL. The goal of the UN-REDD Bangladesh National Programme is to support the Government of Bangladesh in initiating the implementation of its REDD+ Readiness Roadmap.



An example of FREL/FRL for assessing historical changes of GHG for future predictions and climate change mitigation actions in the forestry sector (FAO, 2015).

Objectives

- To provide robust data and documentation for better forest monitoring and support decision-making processes in the forestry sector.
- To assess the effectiveness of forest-related activities undertaken to achieve national targets for reducing emissions and enhancing forest carbon stocks.
- To contribute towards international climate change mitigation actions through REDD+ activities under the UNFCCC.

Process

- **Strengthen governmental, academic and research institutions capacities**
 - Since 2012, the Measurement, Reporting and Verification (MRV) working group, which involves 11 national entities, has been set up and met regularly to advice on REDD+ related issues.
 - Technical trainings and national consultations have been organized on several topics such as remote sensing and GIS, GHG inventory and statistical data analysis, accuracy assessment and reporting.
 - Technical officers with stronger technical capacities have participated in international workshops on REDD+.
- **Provide high quality historical data for the development of forest reference level (FRL/FREL)**
 - National land cover maps were developed for 2000, 2005, 2010 and 2015 based on Landsat and SPOT images.
 - Tree cover data were prepared in collaboration with University of Maryland and integrated with land cover information.
 - Historical above-ground biomass stocks obtained from previous forest carbon inventories were collected, compiled, harmonized and analyzed to provide emission factors.
 - Historical emissions and removals from deforestation, forest degradation and enhancement of forest carbon stocks were calculated for the reference period 2000-2015 at the national scale.
- **Provide access to well-documented information via the Bangladesh Forest Information System (BFIS)**
 - Data sharing agreements and policy were developed to facilitate data access to different national and international stakeholders and support decision-making process.
 - More than 10,000 field inventory data were collected, analyzed and harmonized, and the result of the analysis made available under the BFIS.
 - The BFIS is interoperable with other national platforms to ensure consistency between national platforms.
 - All information are documented and the methodology for data analysis is made available under the BFIS.

Results

- Since 2016, more than 200 representatives of 30 national entities have been participated in capacity building activities focused on the development of forest reference level.
- National consultations on data sharing and construction of forest reference level were organized with the participation of 130 individuals from 43 organizations. Results are documented in the proceedings and articles published.
- More than 30 documents including training proceedings and materials have been prepared and made available on the BFIS e-Library.
- The report on national forest reference level has been submitted to MoEFCC and UNFCCC.
- BFIS is the first national information system for forestry sector in Bangladesh and several modules are interoperable with other national platforms to ensure the complementarity and integration of the several national activities related to reducing GHG emissions in the forestry sector.
- A technical team responsible for the development and updating the forest reference level has been established at the Bangladesh Forest Department in Dhaka.

Selected references

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3. Islam, K.M.N., Poultouchidou, A., Mariam, A., Henry, M. 2016. Proceedings of the National Training Workshop on data sharing, institutional arrangements and tools for GHG gases for the Agriculture, Forestry and Other Land use sector (AFOLU), 6-8 December, 2016, Dhaka. Bangladesh Forest Department, Food and Agriculture Organization of the United Nations.

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