



# Strengthening greenhouse gas inventory in the agriculture and forestry sector of Bangladesh

Supporting a sustainable inventory preparation process to mitigate and adapt to climate change

*A greenhouse gas (GHG) inventory is essential for identifying activities contributing to emissions reduction and monitoring progress made towards climate change mitigation and adaptation goals.*

## Context

The preparation of GHG inventory is limited by several issues and problems affecting its quality and monitoring climate change mitigation efforts. These issues include: (1) lack of accurate data, (2) limited number of experts, (3) insufficient technical capacity, (4) lack of proper documentation and archiving and (5) insufficient institutional arrangements for data sharing and coordination among national entities. As a result, the preparation of a national GHG inventory, in particular for the agriculture, forestry and other land-use (AFOLU) sector, is a major challenge for the inventory compilers.

Since 2011, the Food and Agriculture Organization of the United Nations (FAO), with the financial support of the UN-REDD Bangladesh National Programme, has been implementing capacity building activities on AFOLU GHG inventory. These activities are based on the 2006 Guidelines from the Intergovernmental Panel on Climate Change for National Greenhouse Gas Inventories. This work supports the Bangladesh Forest Department (BFD) and other governmental, academic and research institutions in accurately estimating GHG emissions and removals from the AFOLU sector.



Meeting with the MRV working group at the Bangladesh Forest Department in Dhaka.

## Objectives

- To strengthen technical and institutional capacities and national institutional arrangements for preparing GHG inventory.
- To support data collection, documentation, archiving, management, analysis and reporting for GHG inventory for AFOLU sector.
- To develop GHG emissions baseline scenarios for planning and support monitoring emission reduction in the AFOLU sector and contribute to low carbon economy.
- To assist informed decisions on climate change mitigation and adaptation in the forestry sector through improving the quality and accuracy of national data.



## Process

- **Engage national GHG stakeholders:** Since 2012, a Measurement, Reporting and Verification (MRV) technical working group has been established to provide guidance and support the preparation of AFOLU GHG inventory.
- **Collect and build on the existing information:** The MRV group facilitates the process for collecting and documenting the national data and information relevant to the preparation of the GHG inventory for AFOLU sector and to make them available through the Bangladesh Forest Information System.
- **Improve the technical and institutional capacity:** Technical trainings, consultations and meetings on the preparation of AFOLU GHG inventory and calculation of ex-ante emissions reductions from forestry and agriculture development projects have been conducted using different software such as the IPCC software, UNFCCC reporting forms, EX-ACT and using as much as possible country-specific data.
- **Strengthen institutional arrangements and data sharing:** A technical team responsible for the preparation of GHG inventory for the AFOLU sector and forest reference level for REDD+ has been established. One draft data sharing policy for BFD was prepared to facilitate data and information sharing.



National workshop on data sharing and institutional arrangements for national GHG inventory.



National workshop on strengthening academic capacities on GHG inventory for the AFOLU sector.

## Results

- Since 2012, more than 100 representatives of 26 national agencies participated in technical trainings and workshops on GHG accounting, data sharing and institutional arrangements for the AFOLU sector.
- The emission factor database containing around one thousand country-specific emission factors was developed and is available under the BFIS.
- More than 30 documents including training proceedings and materials were prepared under the UN-REDD Bangladesh National Programme and published on the e-Library of the BFIS.
- One data sharing policy for BFD was developed and submitted to MoEFCC. The institutionalization of the GHG inventory for AFOLU sector is supported and is under progress.

## Selected references

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