

# Assessing socio-economic benefits from tree and forest resources in Bangladesh

Towards a better consideration of sustainable forestry activities to improve local livelihoods

There is a critical need to better understand the relationship between supply and demand of tree and forest services to implement sustainable natural resources management and improve local livelihoods.

## Context

The demand for information about trees and forests has grown due to increasing population pressure and reduced available environmental services' related to climate change and other environmental crises. Tree and forest services are essential for the societies to meet the basic needs such as timber, food, energy and to address climate change. In Bangladesh, about 19 million people directly rely on tree and forest resources for their livelihood. More importantly about 84% of rural households use fuelwood for cooking. In addition, trees and forests provide ecosystem services such as water purification, climate regulation, and nutrient cycling that people depend on for their well-being.

Currently, the availability and demand of these services is poorly known, and thus forest ecosystem services are not properly reflected in national statistics. Regular assessment on socio-economic benefits from tree and forest resources is important to better understand the linkages between household welfare, livelihoods and the trends in sustainably managing the provision of ecosystem services from forest and tree resources in the country. Bangladesh Forest Department collects socio-economic data to estimate the forest ecosystem services, in collaboration with the Bangladesh Bureau of Statistics and with technical support from FAO. These data are essential to inform natural resource decision making and planning process.



A socio-economic household survey is conducted in the Sal forest using a mobile tablet.

# **Objectives**

- To provide national statistics about tree and forest ecosystem services.
- To support national plans and strategies such as Forestry Master Plan, 7th Five-Year Plans, and Country Investment Plans and international requirements such as SDGs and Forest Resource Assessment (FRA) to promote sustainable use of tree and forest resources.
- To identify the drivers of deforestation and forest degradation and tree and forest changes for REDD+.
- To promote the consideration of local information to guide interventions for sustainable forest management and livelihoods.

#### **Process**

- National stakeholder engagement: Meetings, workshops and national consultations with more than 100 representatives from more than 20 national and international entities have been conducted to identify objectives, criteria, indicators, and variables, and to design the socio-economic survey questionnaire.
- **Establish a socio-economic expert group:** A group composed of ten members from five national organizations has been established to support monitoring the socio-economic activities under the Bangladesh Forest Inventory (BFI).
- Prepare training materials and knowledge transfer: Training of trainers has been conducted with the participation of 48 representatives of Bangladesh Forest Department, Bangladesh Bureau of Statistics, Dhaka University, Chittagong University, Khulna University, Arannayk Foundation and Center for Natural Resource Studies.
- Implement socio-economic survey and quality checks: Technologies such as tablets, apps, and QA/QC procedures, were applied to survey 6,400 households from 320 administrative unions, and conduct 100 focus group discussions across 100 administrative unions at national scale.
- Data cleaning, analysis and report preparation: Collected data were cleaned, checked for errors and analyzed with statistical software and to prepare final socio-economic reports.

## **Results**

- The first national scale survey of forest ecosystem services informs decision makers about tree and forest income, medicine, employment, governance, social forestry, biodiversity, energy, ownership, sustainable management and impact of disturbances on tree and forest resources.
- More than 70 field inventory staff involved in surveying 6400 households, equipped and trained using national-specific manuals and trainings materials.
- All data have been archived, documented, analyzed and the results are accessible under the Bangladesh Forest Information System (BFIS). The data are linked to forest measurements from the Bangladesh Forest Inventory through a land cover map.
- The drivers for tree and forest resources change were evaluated to better understand their impact on various socio-economic needs, including food security and nutrition, livelihoods and resilience of ecosystems to climate change.





A focus group discussion is conducted in Hill forest to identify the availability of tree and forest products.

# **Selected references**

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