

Ensuring Sustainable Landscape Management in Chittagong Hill Tracts, Bangladesh

Summary

- The forest land of the Chittagong Hill Tracts (CHT) is experiencing severe anthropogenic pressure resulting in forest cover loss, fragmentation, forest land conversion, and land degradation¹⁻⁴.
- Thousands of hectares of productive land in the CHT are lying vacant and underutilized, while in other cases, are overexploited^{3,5}.
- Logging bans, land use and land rights disputes, overlapping jurisdictions, lack of inter-institutional coordination, lack of sustainable and inclusive land use plans, expansion of unsustainable agricultural practices, insufficient budget allocation in forestry sector projects, ongoing geo-political issues, all collectively serve as obstacles to sustainable landscape management (SLM) in the CHT^{2,3,6,7}.
- Adopting SLM practices through Community based Forest Management (CFM) is essential for promoting environmental conservation and ensuring long-term resource sustainability. Comprehensive policy dialogue – led by Bangladesh Forest Department (BFD) in association with other relevant stakeholders is

required to initiate SLM in the CHT.

Background

The CHT comprising of 3 districts: Rangamati, Khagrachari and Bandarban covers about 10% of Bangladesh's land area⁴. It is mostly a hilly area with a subtropical monsoon climate, enriched with tropical and sub-tropical forests and a large variety of flora and fauna. Due to bio-physiographic conditions, terrain, historical and cultural factors, forestry is the main land use in the CHT, accounting for 36% of the forest cover of the country. Ethnic

communities that reside in the CHT traditionally practice shifting cultivation, locally called *jhum*.

The hill forests have been identified as the highest contributor to the forest-related emissions in Bangladesh (85% of the total), while they still make the highest contribution in carbon removals (52% of the total). According to the 2020 Forest Resources Assessment (FRA) for Bangladesh, from 1990 to 2020, a total of 36,930 ha of forest area has been lost. Therefore, the hill forests have been the prime focus of the present Bangladesh National REDD+ Strategy (BNRS) 2016-2030¹. The current rate of deforestation not only leads to high levels of carbon emissions, but also increases soil erosion, reduces productivity of cultivable land, and causes frequent landslides¹⁻³.

The age old traditional practice of *jhum* is failing to maintain the integrity of natural ecosystems and a sustainable production cycle (Chakma and Nahar, 2013). Loss of biodiversity and habitat, overexploitation of resources, increased soil erosion and landslides, and declining crop production are cumulatively impacting the cultural and socio-economic conditions of forest-dependent communities.

The Bangladesh Forest Department (BFD) is the sole authority to conserve and expanding tree cover in all areas of the country. However, long-standing socio-political conflicts between multiple stakeholders involved in land management have restricted the management of forests and prevented the introduction of social or community-based forestry in the CHT. Some isolated initiatives, taken without proper community consultation such as agar plantation and *Jhumia* rehabilitation program did not make any significant contribution to forest conservation.

The government-imposed logging bans in all reserve and natural forests in 1989 (gazette notification, 2022 - extended to 31 December 2030) which has restricted basic forest management operations on these lands. In the past, commercial logging in the forest management units (i.e., coupes, felling series, blocks) helped BFD in closely monitoring forest resources and generating revenue. Discontinuation of commercial logging and subsequent silvicultural operation also created a vacuum in sustainable forest management. This has restricted economic activity and job creation for local communities in logging related services (harvesting, processing, transportation) and reforestation. Logging bans without effective control measures could not halt illegal felling, thus failed to secure forest resource conservation and production related objectives of the government⁵. The logging ban has removed the incentive of local operators in the value chain to protect the forest from which they would gain their livelihood. At the same time, the management of the Unclassed State Forests (USF), administered by the district administration, has also fallen short^{3,5}.

Illegal and unsustainable harvesting of timber and fuel wood, and expansion of settlements, *jhum* cultivation, horticulture and road networks are the main drivers of deforestation and degradation of forests in CHT.

In the current situation, large numbers of staff would be needed to effectively protect the forest. There is no sanction for such an increase in staff numbers and even then, success would not be guaranteed, given the sensitive socio-political situation.

Expansion of SLM in CHT requires rethinking the moratorium on logging; promoting community participation in forest and watershed restoration using locally appropriate nature-based solutions (NbS) including assisted natural regeneration, enrichment planting and reforestation; improving

shifting cultivation through soil conservation practices; and ensuring necessary financial investment for such activities⁵.

What are the barriers for pursuing SLM in CHT?

Unsettled land rights/use leading to mistrust and conflicts

Conversion and fragmentation of forest land and overexploitation

Gradual expansion of settlements and *jhum* cultivation

Low incentive for forest conservation amongst local communities

Inter-institutional gaps and lack of coordination among stakeholders

Overlapping and contradictory land use policies and practices

Logging bans restricted timber production and revenue generation

BFD rules and governance have limited scope for community engagement in forestry activities

Lack of awareness for inclusive sustainable landscape management

Benefit sharing

Community based Forest Management (CFM) should be adopted to ensure sustainable landscape management. Intrinsic to this approach is the concept of generous levels of benefit sharing with local communities to incentivize them to retain tree cover. This will require adopting a separate rule for CFM covering mutually agreed management roles and benefit sharing arrangements. Adopting such a rule may not be difficult as both BFD officials and ethnic community leaders agreed to a benefit sharing scheme and institutional arrangement that Arannayk Foundation proposed in the Landscape Management Plan for the Reinkhyong Reserved Forest (RRF).

What can be done?

Ensuring SLM in the CHT should be a shared and coordinated task. Joint efforts need to be undertaken by MoEFCC (BFD), MoCHTA, Land Ministry, Defense Ministry, CHTDB, CHTRC, local

leaders, and other public and private institutions. Land issues must be settled through stakeholder consultations based on mutual trust and common understanding under a legal framework. Additionally, the following recommendations have been developed in compliance with national and international commitments and targets.

1. Relevant stakeholders need to develop common and mutual understanding of the principles, techniques, and technologies involved in SLM. Capacity needs to be built for relevant extension services and in NGOs, environmental, community and agricultural organizations. BFD and other officers who will see a shift in role and responsibilities will need specific capacity building.
2. Representatives of MoEFCC, Ministry of Land, MoCHTA, BFD, Hill District Councils and local authorities including the representatives of ethnic communities should be formed as a working group to develop guidelines for establishing Community based Forest Management (CFM) for CHT based on a combination of traditional and scientific knowledge, and best practices.
3. The CFM guideline should provide a template that each community should follow for local level planning and implementation of SLM activities. The template may include rules for the following aspects:
 - i. Forest access: Who has access and under what conditions?
 - ii. Monitoring and surveillance: How will the ecosystem health and productivity of the forest be monitored? How will CFM rule-breaking be detected, or other regulations enforced? Who will perform these tasks? BFD or third-party monitoring (e.g., via remote sensing) could be used, but only if fully accepted by, and useful to, communities.
 - iii. Decision-making: Determine how decisions related to the forest area will be made. This can involve creating a representative committee or council that

includes members from different stakeholder groups. Decision-making processes should be transparent, inclusive, and allow for the participation of all relevant stakeholders.

- iv. Sustainable practices: Establish guidelines and practices that promote sustainable forestry, such as protecting regenerating trees, long-term management plans, retaining old-growth and deadwood, fire control, ecotourism standards, hunting controls, maximizing structural and species diversity, and preserving the overall ecosystem health.
- v. Conflict resolution: Develop procedures for resolving conflicts and disputes that may arise among stakeholders. This can involve mediation, arbitration, or other conflict resolution mechanisms to address disagreements over forest harvesting practices, resource allocations, or rule violations.
- vi. Enforcement and compliance: Define enforcement mechanisms and penalties for non-compliance with the established rules. This may include fines, temporary harvesting bans, or loss of access for those who violate the agreed-upon regulations. Management plans may be required to have periodic approval from BFD officials.
- vii. Adaptive management: Recognize the importance of adaptive management, which involves regularly assessing the effectiveness of management strategies and adjusting them as needed. This can include periodic evaluations, scientific studies, and incorporating new information and knowledge into decision-making, training or information sharing processes.
- viii. Benefit sharing: Determine how the benefits derived from the forest will be distributed among stakeholders. This can include revenue sharing, provision of employment opportunities, or

investments in community development projects.

4. BFD, with the help of NGOs and resource organizations, would facilitate and support the preparation and implementation of the SLM plan by the CFM communities addressing medium to long-term goals.
5. A federation of CFM communities may be formed to promote their common interests including collaboration, lobbying and negotiations with the state and non-state entities. They would act to maximize the financial returns to local communities for the sustainable management of forests and continuing provision of market and non-market ecosystem services such as carbon, water protection, etc. associated with maintaining forest cover.
6. Existing Social Forestry Rules (2004, 2010) should be contextualized for CHT, or a new CFM Rule should be promulgated based on the abovementioned guidelines developed by the CHT stakeholders to reflect the necessary paradigm shift.
7. An impact assessment and plan for the gradual lifting of the moratorium on felling trees will be needed to ensure sustainable landscape management practices and sustainable production of forest products.

For More Information Contact:

Arannayk Foundation
Address: 572/K, 6th floor, Wasi Tower, ECB Chattar,
Matikata, Dhaka – 1206
Email: info@arannayk.org
Website: <http://arannayk.org/>

References:

1. GoB. *Bangladesh National REDD+ Strategy (BNRS): 2016-30* (2021).
2. GoB. *Bangladesh Forestry Master Plan (2017-2036) Draft*.
3. Ahammad, R. *et al.* Social-ecological and institutional factors affecting forest and landscape restoration in the Chittagong Hill Tracts of Bangladesh. *Land use policy* 125 (2023).
4. GoB. *Tree and Forest Resources of Bangladesh: Report on the Bangladesh Forest Inventory*. (2020).
5. GoB. *Bangladesh Country Investment Plan for Environment Forestry and Climate Change 2016-2021* (2016).
6. GoB. *Bangladesh Forest Department: Annual Report 2021-22* (2022).
7. Sarker, A. S. K., Deb, J. C. & Halim, M. A. A diagnosis of existing logging bans in Bangladesh. 13, 461–475 (2011).
8. Potapov, P. *et al.* Comprehensive monitoring of Bangladesh tree cover inside and outside of forests, 2000–2014. *Environmental Research Letters* 12, 104015 (2017).
9. FAO, 2020. Global forest resource assessment 2020. Rome, Food and Agriculture Organization of the United Nations.
10. Arannayk Foundation, 2023. Landscape Management Plan for Reinkhyong Reserved Forest. Landscape Modeling and Planning in Selected Landscapes in the Chittagong Hill Tracts. Draft Consultancy Report prepared for the World Bank Group, Dhaka, Bangladesh.