



# *A review of Capacity Building Needs Assessment in view of REDD+ and GHG inventory reporting of MoEF and its agencies in Bangladesh*



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UN-REDD  
PROGRAMME



The UN-REDD Programme, implemented by FAO, UNDP and UNEP, has two components: (i) assisting in developing countries to prepare and implement national REDD strategies and mechanisms; (ii) supporting the development of normative solutions and standardized approaches based on sound science for a REDD instrument linked with the UNFCCC. The programme helps empower countries to manage their REDD processes and will facilitate access to financial and technical assistance tailored to the specific needs of the countries.

The application of UNDP, UNEP and FAO rights-based and participatory approaches will also help ensure the rights of indigenous and forest-dwelling people are protected and the active involvement of local communities and relevant stakeholders and institutions in the design and implementation of REDD plans.

The programme is implemented through the UN Joint Programmes modalities, enabling rapid initiation of programme implementation and channelling of funds for REDD efforts, building on the in-country presence of UN agencies as a crucial support structure for countries. The UN-REDD Programme encourage coordinated and collaborative UN support to countries, thus maximizing efficiencies and effectiveness of the organizations' collective input, consistent with the "One UN" approach advocated by UN members.

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## **1. Executive summary**

The purpose of this capacity assessment was to identify the capacity needs of MoEF and its agencies to manage REDD+ scheme as well as greenhouse (GHG) emission reporting to the UNFCCC, propose capacity development measures to address the identified needs. The key findings are as follows:

Alongside awareness raising at a national level, key gaps lying with local level officials capacity building as well as involvement of the local political commitment for REDD+ scheme development, social and environmental safeguards. Insufficient attention paid by the concerned agencies to REDD+ awareness raising for actors' based at local level, and especially the communities that live in and around the forests to involve them at the REDD+ scheme development as well as to collect the data related with forest resources extraction by them to be used GHG emission estimation.

Proper institutional frameworks and setup are important elements of institutional capacity related with REDD+ scheme and GHG emission reporting. Absence of proper institutional frameworks such as separation of regulatory and management function, planning function, data collection and archiving function, adequate provisions for compilation and reviewing, and finally functional organizational coordination are the major capacity gap persisting within the MoEF and its agencies. This report provides brief results of the desk review of the existing literature and capacity assessment report.

## 2. Introduction

The Ministry of Environment and Forests (MoEF), is the key organization formally responsible for overall forest and environment sector in the administrative structure of the Government of Bangladesh. The key responsibilities lying with planning, promoting, co-ordinating and monitoring the execution of forestry and environmental programmes, climate change and REDD+ development programmes. National Environment Council (NEC) headed by the Prime Minister, and Executive Committee of National Environment Council headed by the Minister for Ministry of Environment and Forest provide high level guidance on national environmental issues to the sectoral Ministries/Agencies[1].

The Forest Department (FD) and the Department of Environment (DOE) are two major departments under the Ministry of Environment and Forests. There are three other agencies, namely Bangladesh Forest Research Institute (BFRI), Bangladesh National Herbarium (BNH) and Bangladesh Forest Industries Development Corporation (BFIDC) under this Ministry. Moreover, a project based Climate Change Unit (CCU) is working under this Ministry[1].

The Forest Department (FD) is entrusted with the primary responsibility of managing, protection and conservation of all the government owned forests of Bangladesh. The Department of Environment (DOE), is responsible for environmental planning, management, monitoring and enforcement. Bangladesh Forest Research Institute (BFRI) is the only national institute to carry out research activities on various aspects of forestry and forest products in the country. The Bangladesh National Herbarium (BNH) is the only national research organization for the survey, exploration, collection, identification and research on conservational aspects of plants of the country. The Climate Change Unit (CCU) is involved with facilitating the process of the selection of projects based on Bangladesh Climate Change Strategy and Action Plan (BCCSAP) themes, monitoring and evaluation of approved projects, management of Climate Change Trust Fund (CCTF), facilitating and coordinating with Climate Change Cells (CCCs) instituted in several ministries and line agencies [1].

The key component of REDD+ readiness processes is the building capacity for implementing REDD+ as well as GHG emission reporting. The UN-REDD related preparatory works have been underway for in Bangladesh since 2011. Moreover, GHG emission reporting to UNFCCC started from 2002. All of these efforts were backed by substantive funding from international organizations, and involvement with government agencies. Bangladesh classified as Group B countries within Asia in

terms REDD+ capacity along with Cambodia, Myanmar, the Philippines and Sri Lanka. In Asia only Viet Nam is in Group A. Group A countries are more advanced, and Group B countries, have made relatively less progress in terms of REDD+ readiness [2]. Again based on the submitted initial and second national communication Bangladesh classified as limited capacity country for greenhouse gas emissions inventory preparation among the Asian developing countries[3]. So, it is high time to assess the MoEF and its agencies related to REDD+ capacity building, and whether they are meeting country needs in getting ready for REDD+.

This report provides results of the assessment and recommendations to inform the REDD+ capacity building process in

### **3. Capacity need contexts**

A number of international agreements covering environment, forest and biodiversity issues and in general natural resources management is signed by Bangladesh, and for which Bangladesh has to report regularly [4]. The most notable one is United Nations Framework Convention on Climate Change (UNFCCC) under which the reporting requirements are National communication (NC) (decision 9/CP.16) of GHG emission and sinks, Biannual Update Report (BUR) (decision 2/CP.17), Intended Nationally Determined Contributions (INDCs) (decisions 1/CP.19 and 1/CP.20), Nationally Appropriate Mitigation Actions (NAMAs) (decision 1/CP.13), Forest Reference Emission Level (FREL)/Forest Reference Level (FRL) (decision 1/CP.16; decision 12/CP.17; decision 13/CP.19)[5, 6]. Apart for the UNFCCC, the Convention on Biological Diversity (CBD), the Convention to Combat Desertification (CCD), the Ramsar Convention, and FAO's Forest Resource Assessment (FRA) are some of the reporting requirement that Bangladesh regularly submit. This reporting requirement is presented in table 1. Currently most of the case, such report is prepared based on project or ad-hoc basis, which resulted into non-compliance of transparency, accuracy, completeness, consistency and comparability (TACCC). The non-compliance mainly resulting from lack of consistent data documentation, referencing and archiving and institutional arrangement for collecting the right data in the right format, and consistency in report series as well as reports prepared by different entities.

Such reporting requirement should not be viewed as only international obligation, rather they should be viewed as a broader context of reporting, and information dissemination to all relevant entities and stakeholders, including the general population, and in general for the sustainable natural resources

management of Bangladesh. In view of this requirement, it became necessary to address the existing capacity gap of MoEF and its agencies.

Table 1: Capacity need context in terms of UNFCCC reporting.

Report	Submission time	Contexts	Concerned govt. agency
National Communication (NC)	Once every 4 years, as per Decision 1/CP.16, paragraph 60(b).	Overview of national circumstances; emissions of various greenhouse gases in 5 sectors of the national economy such as Industry, energy, transportation, agriculture, and wastes including Land Use, Land Use Change and Forestry (LULUCF). Bangladesh submitted its first National Communication in 2002, and its second National Communication in 2012.	MoEF is assigned by the GoB to act as Focal Point to the UNFCCC. MoEF therefore produces the report through Department of Environment (DoE). Information has to be delivered by many other government agencies.
Biennial Update Report (BUR)	Once every 2 years, as per decision 2/CP.17, paragraph 41(f). In a 4 year cycle, one BUR coincides with submission of a NC, in which case the BUR is “a summary of parts” of the NC, the other being “a stand-alone update report”.	National circumstances and institutional arrangements. National inventory of emissions and removal of GHGs. Mitigation actions. Constraints and financial, technical and capacity needs. Level of support received to produce the BUR. Information on domestic MRV. Any other relevant information. By December 2016, Bangladesh had not yet submitted any BUR.	Same as NC
Technical Annex	The Technical Annex is part of the BUR, as per decision 2/CP.17, Annex III.	The Technical Annex can contain information on multiple topics. For forestry, it contains information on REDD+ (decision 14/CP.19) and then specifically: <ul style="list-style-type: none"> <li><input type="checkbox"/> Summary information on RLS/RELS: <ul style="list-style-type: none"> <li>o Amount of the RLS/RELS in tCO<sub>2e</sub></li> <li>o REDD+ activity related to the RLS/RELS</li> <li>o Forest area covered</li> <li>o Date of the RLS/RELS</li> <li>o Period for which the RLS/RELS are valid</li> </ul> </li> <li><input type="checkbox"/> Results or REDD+ activities in tCO<sub>2e</sub>/yr</li> <li><input type="checkbox"/> Demonstration that the methodologies used to produce the REDD+ results are consistent with those used to establish the RLS/RELS</li> <li><input type="checkbox"/> Description of the NFMS and the institutional roles and responsibilities for MRV</li> <li><input type="checkbox"/> Necessary information to reconstruct the results</li> <li><input type="checkbox"/> Description of how REDD+ requirements have been</li> </ul>	Responsible agency is MoEF as mandated by Bangladesh government, but the focal agency is Bangladesh forest department for the REDD+ activities.



		<p>taken into account.</p> <p>This report covers all REDD+ activities, with full details on individual programmes, interventions and activities. This report is the pillar to report on mitigation actions on forest land. As of December, 2016, Bangladesh has not submitted any technical annex.</p>	
Nationally Appropriate Mitigation Actions (NAMA)	<p>Submission of proposals for mitigation actions seeking international financial and technical support are optional and on a voluntary basis (decision 2/CP.17, paragraph 46) through the NAMA Registry maintained by the UNFCCC Secretariat.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Description of the mitigation action and the national implementing entity</li> <li><input type="checkbox"/> Time frame for implementation</li> <li><input type="checkbox"/> Cost of the preparation</li> <li><input type="checkbox"/> Cost of the implementation</li> <li><input type="checkbox"/> Amount and type of support (financial, technology and capacity-building) to prepare and/or implement</li> <li><input type="checkbox"/> Estimated emission reductions</li> <li><input type="checkbox"/> Other indicators of implementation</li> <li><input type="checkbox"/> Other relevant information, including the co-benefits for local sustainable development</li> </ul> <p>Projects receiving support should report on the following topics:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Support is for preparation and/or implementation</li> <li><input type="checkbox"/> Source of the support</li> <li><input type="checkbox"/> Amount and type of support, and whether it is financial, technical and/or capacity-building support</li> <li><input type="checkbox"/> Status of delivery</li> <li><input type="checkbox"/> Supported actions and the process for support</li> </ul>	MoEF
Intended Nationally Determined Contribution (INDC)	<p>Once every 5 years, as per decision 1/CP.19.</p>	<p>The INDC contains a conditional and non-conditional commitment of the GoB to undertake mitigation and adaptation actions. Bangladesh submitted its first INDC in September 2015.</p>	MoEF

#### **4. Objectives**

The objective of this capacity assessment review report related to MoEF and its agencies in view of REDD+ and GHG emission reporting are as follows:

- (a) Identify the challenges.
- (b) Identify the gaps in capacity.
- (c) On the basis of these gaps provide recommendations.

#### **5. Methodology**

The report is primarily based on a desk review of related reports and articles published in the contexts of REDD+ or UNFCCC reporting contexts. Key documents reviewed are as follows:

- (a) Government policy, strategy and master plan documents [1, 7-14].
- (b) Documents of some ongoing REDD+ projects in Bangladesh.
- (c) Scientific papers and articles related with REDD+ and UNFCCC reporting [6, 15].
- (d) Documents on REDD+ and UNFCCC reporting produced in other countries or by other international organizations related to capacity building in developing countries[2, 3].

#### **6. Result**

Based on the changing circumstance after COP21 as well as COP22, to address the REDD+ scheme as well as other UNFCCC reporting like national communication and INDC requires significant new set up for MoEF and its agencies as mentioned in the table 2. Figure 1 represents the current challenges and required changes needed in view of some key area. National level resource persons and facilitators involving the personnel from MoEF agencies should be trained on how various aspects of REDD+ framework are linked, what innovations and experiences are emerging in different countries of the world, and how these international as well different country's frameworks can be adapted in the context of Bangladesh. There is a need for setting up coordinating body who can bridge technical, institutional, and policy and facilitate REDD+ scheme implementation and GHG emission reporting within the MoEF in a holistic way.

Grassroots stakeholders, mainly the local forest dependent people, as well as local officials of the MoEF and its agencies still lack conceptual understanding of REDD+ scheme and probable benefits as well as benefits sharing with local communities. There is strong lack of local level political involvement and wills for the probable REDD+ scheme. Even the grassroots service providers, such

as local NGOs, field based forestry staff, are not fully aware of the basics of REDD+, its political, institutional and methodological aspects. Though experts working on extension and institutional aspects related with REDD+ and GHG emission reporting are growing at the national level, there are very limited human resources for GHG emission, monitoring and verification covering different sectors like industry, transportation, agriculture, etc. All this suggests that a capacity development intervention cannot ignore at the national level processes, even when it has focus at local and sub-national levels.

Political	Policy and law	Institutions	Technical	Data
<ul style="list-style-type: none"> <li>• Challenge: Lack of clearly defined political will for environmental conservation at local level.</li> <li>• Required change: Strong enthusiasm and political will at the local level and local level political leaders active involvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Challenge: Diverse, contradictory and weak policy and law related to natural resources management.</li> <li>• Required change: Need to prepare country positions and long term strategies. Formulation of national strategy for capacity building interms of natural resources management.</li> </ul>	<ul style="list-style-type: none"> <li>• Challenge: Lack of institutional arrangement for service delivery particularly related to REDD+ and GHG reporting. Absence of dedicated unit like REDD+ or GHG inventory unit.</li> <li>• Required change: Institutional arrangement involving focal points at concerned govt organization for smooth service delivery particularly related to REDD+ and GHG reporting. Establishment of REDD+ or GHG unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Challenge: Lack of technical capacity on monitoring, reporting and verification related to REDD+ and GHG reporting.</li> <li>• Required change: Precise and cost effective methods need to be developed and adopted for MRV of REDD+ and GHG reporting.</li> </ul>	<ul style="list-style-type: none"> <li>• Challenge: Lack of comprehensive, updated and credible data and absence of proper data documentation, referencing and archiving processes. Absence of data sharing policy as well as copyright of data.</li> <li>• Required change: A comprehensive and user friendly data base need to be established with properly defined copyright and data sharing policy. A monitoring system established for regular data update.</li> </ul>

Figure 1: Current challenges and required changes needed in terms of natural resources management and in particular related with REDD+ and GHG inventory reporting.

Table 2: Capacity building issue in view of REDD+ and GHG inventory reporting of MoEF and its agencies.

Capacity Building issue	Existing capacity	Capacity gap	Possible strategies
Awareness raising and knowledge dissemination	<ul style="list-style-type: none"> <li>• Experience providing policy making capacity building to senior politicians and working groups at the national level.</li> <li>• Good organizational networking from central to the local level.</li> <li>• Experiencing in engaging the mainstream media like print, TV and radio media for awareness raising.</li> </ul>	<ul style="list-style-type: none"> <li>• Weak facilitation skills, particularly at the local level.</li> <li>• Limited ‘Training of Trainer’ at the national level and dissemination of knowledge from national level to the local level for REDD+ and GHG inventory related issues.</li> <li>• Inadequate experience in effectively communicating technical REDD+ and inventory reporting issues to the media.</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancing the local level facilitation.</li> <li>• Dissemination of knowledge from national level to the local level.</li> <li>• Dissemination of knowledge related to REDD+ and GHG engaging the mainstream media.</li> </ul>
Policies and law	Understanding/involvement of relevant institute of MoEF for REDD+ and GHG emission reporting.	<ul style="list-style-type: none"> <li>• Absence of clear indication of selection of REDD+ activities and scope in the existing and draft policy is the critical constraints in mobilizing knowledge and evidence.</li> <li>• Absence of clear guidelines regarding GHG inventory reporting roles and responsibilities.</li> <li>• Limited or weak engagement of interconnected govt. organization for REDD+ and GHG emission reporting with MoEF.</li> <li>• Policy makers are not fully aware of regulatory dimensions of REDD+ or GHG emission reporting.</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify the goals and specific target of REDD+/GHG inventory reporting within the larger forest or environment sector strategy/policy of the country.</li> <li>• Defining the scope and coverage of the REDD+ activities at different scales.</li> <li>• Legally clarifying the roles of actors like FD, DoE, BFRI in carbon value chain, FREL/FRL and GHG reporting, including framework for enabling the delivery of required services.</li> </ul>

			<ul style="list-style-type: none"> <li>• Providing training on climate change as well REDD+ related negotiation.</li> </ul>
Institutional	Existing organizational structure to deal with some specific component of REDD+ or GHG emission reporting.	<ul style="list-style-type: none"> <li>• Lack of institutional set up or unit to collect necessary data, organize the data into a database format, and prepare the national FREL/FRL or GHG inventory report.</li> <li>• Lack of institutionalized guidelines and procedures for monitoring, reporting verification, and measurements.</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze and identify stakeholders organization which should be given priority, and assigned role in the FREL/FRL or GHG inventory report.</li> <li>• Draft and improve a national FREL/FRL and GHG inventory institution setup plan.</li> <li>• Identifying and legally assigning the monitoring and verifying agencies.</li> <li>• Mechanisms and processes for monitoring of monitoring agencies.</li> </ul>
Methodological and technical	Existing GIS unit and carbon stock calculation for some specific forests of Bangladesh.	<ul style="list-style-type: none"> <li>• Inadequate capacity in data analysis of carbon stocks and GIS/mapping.</li> <li>• Inadequate capacity in developing, disseminating, applying and modifying technical issues related to REDD+ and GHG emission reporting.</li> <li>• Limited capacity to understand, monitor and make necessary decisions about choosing buyers,</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic data / information archiving system in relevant wings as well as archiving of data in the BCC server.</li> <li>• Familiarization with Carbon monitoring and measurements methods.</li> <li>• Familiarization with technical procedures for monitoring and verification.</li> </ul>

		verifiers for carbon market.	<ul style="list-style-type: none"> <li>• Familiarization with FREL/FRL and GHG emission reporting procedures and formats.</li> </ul>
Calculating the potential costs and benefits	Experience in handling financial information of donor or govt. funded project sites.	<ul style="list-style-type: none"> <li>• Inadequate experience conducting natural resource/ environmental economic analysis.</li> <li>• Inadequate capacity to analyse carbon markets and pricing</li> </ul>	<ul style="list-style-type: none"> <li>• Training of relevant officials on Project Planning and Development, budget preparation and cost benefits analysis related with REDD+ or mitigation activities.</li> </ul>
Fund Management	Financial management of donor funded projects and government generated climate fund.	Inadequate capacity to handle donor provided carbon fund for REDD+ or mitigation activities mentioned in the NDC.	<ul style="list-style-type: none"> <li>• Development of computerized database for financial management.</li> <li>• Training of relevant officials on financial management related with REDD+ or GHG emission mitigation activities.</li> </ul>

## 7. Conclusion

The purpose of this study is to assess the capacity building needs for REDD+ scheme and GHG emission reporting in Bangladesh, and based on the findings, suggest capacity development intervention strategies, with a particular focus on grassroots stakeholders who have active interests in, or are likely to be directly impacted by REDD+.

REDD+ is evolving very fast at global level as a potential mitigation option to combat with climate change, and Bangladesh needs to think more seriously over how different regimes and conditions of forest can benefit through this emerging REDD+ opportunity, and minimise any negative consequences that may accompany the implementation of REDD+. Moreover Bangladesh should also

think seriously about a proper institutional set up for continuous data collection, documentation and archiving related with GHG emission and other reporting to the UNFCCC.

Because of swift evolving and contentious nature of REDD+ and UNFCCC reporting process, it will be wise to work through multi-stakeholder groups in the design, delivery and monitoring of training and capacity building activities. Finally, it is highly significant to continuously update training needs, adapt curricula and enrich the content with learning and insights related with REDD+ and UNFCCC reporting requirement involving the national, sub-national and local level officials of MoEF and its agencies in Bangladesh.

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