



Proceedings of the training workshop “Bangladesh’s Forest Reference Level: Review of the Report and Calculation of Emissions/Removals”



Bangladesh Forest Department
27 November 2017

UN-REDD
PROGRAMME



Food and Agriculture
Organization of the
United Nations



UN
environment

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.

The UN-REDD Bangladesh National Program is implemented by the Bangladesh Forest Department under the leadership of Ministry of Environment and Forests. United Nations Development Program (UNDP) and Food and Agriculture Organization (FAO) are the two implementing partners.

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EXECUTIVE SUMMARY

Reducing emissions from deforestation and forest degradation, conservation and enhancement of forest carbon stocks, and sustainable management of forests, REDD+ in short, came into being in accordance with the section III-C of Decision 1/CP.16. In view of this, Bangladesh is currently implementing the UN-REDD National Programme through the Ministry of Environment and Forests (MoEF) in collaboration with the Bangladesh Forest Department (BFD). One of the objectives of the national programme is to submit the forest reference emission level/forest reference level (FREL/FRL) to the United Nations Framework Convention on Climate Change (UNFCCC).

As a part of the FREL/FRL report drafting process, a workshop was organized on 27 November, 2017, titled as “Bangladesh’s Forest Reference Level: Review of the Report and Calculation of Emissions/Removal”. 16 experts (13 male and 3 female), including nine from BFD and two from MoEF and five FAO experts, participated the workshop.

The objectives of the workshop were:

- Follow-up with the contributors of FRL document,
- Address comments and questions regarding the latest update of the FRL report,
- Check the calculation of emissions and removals of the FREL/FRL, and
- Plan future activities before the submission of the proposed national FREL/FRL to the UNFCCC.

During the first session of the workshop, the BFD and MoEF officials reviewed the second draft of FREL/FRL report that was prepared after the workshop held on 31 October – 1 November 2017 in Habiganj. They all opined that the report was nearly ready for circulation for expert review. They also agreed to provide comments and suggestions, if they have any, to FAO by 30 November 2017. In the second and third sessions, the participants checked the background calculation for FREL/FRL construction by dividing themselves in five groups. No mistakes or inconsistencies were found.

The major the next steps agreed upon by the participants were to prepare the draft final FREL/FRL report by the first week of December 2017 and then circulate it for the expert review. They also agreed to arrange the national consultation on proposed FREL/FRL in the third week of December 2017.

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1. INTRODUCTION

The decisions¹ of the United Nations Framework Convention on Climate Change (UNFCCC) encourage developing countries to contribute to climate change mitigation by voluntarily undertaking activities to reduce greenhouse gas (GHG) emissions as well as conserve and enhance carbon stocks in the forest sector. Such contribution is known as REDD+² that covers:

- (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.

A national Forest Reference Emission Levels or Forest Reference levels (FREL/FRLs) in terms of tonnes of CO₂ equivalent per year is determined for a nationally agreed reference period covering the five REDD+ activities. In short, FREL/FRLs are benchmarks to assess a country performance for implementing REDD+ activities³, and against this benchmark, performance of country in terms of difference between reference levels and actual emissions will be compared for results based payment (RBP) during result period.

Therefore, FREL/FRL depicts the level of emissions in the absence of implementation of REDD+ activities. Besides, according to UNFCCC decisions, eligibility for RBP require an assessed FREL/FRLs⁴. Thus, FREL/FRLs are required for countries that wish to access to RBP based on measured, reported, verified (MRV) emission reductions⁵. The construction and submission of FREL/FRLs to the UNFCCC is a process that requires transparent, complete, consistent, comparable, and accurate information.

2. BANGLADESH CONTEXT

Given the technical and procedural complexity involved in its implementation, the Parties of UNFCCC agreed that REDD+ should be done in three phases⁶: readiness, implementation and result period. The choice of a starting phase depends on the specific national circumstances, capacities and capabilities of each developing country Party and the level of support received⁷. Bangladesh is currently in the readiness phase, and hence the country is working to develop national REDD+ strategies or actions plans, policies and measures (PAMs), and built capacity to contribute to climate change mitigation through forest-based actions. The country is under the process of constructing

¹ All REDD+ related decisions can be accessed through this link: <http://unfccc.int/6917>

² UNFCCC, Decision 1/CP.16, par. 70

³ UNFCCC, Decision 12/CP.17, par. 7

⁴ UNFCCC, Decision 9/CP.19, par. 3 and Decision 13/CP.19, par. 2

⁵ UNFCCC, Decisions 11/CP.19/par. 3

⁶ Decision 1/CP.16, paragraph 73

⁷ Decision 1/CP.16, paragraph 74

FREL/FRL for REDD+ with the aim to assess the effectiveness of REDD+ activities and potentially receive RBP.

The FREL/FRL should be consistent and coherent with national REDD+ strategy. To construct FREL/FRLs, Bangladesh must reflect and make methodological choices on key elements like scale, scope, forest definition, selection of historical data and analysis, stratification, selection of construction methodology, and reference period. As a part of the capacity development and data generation, FAO through the UN-REDD Bangladesh National Programme organized several events as demonstrated by the Figure 1.

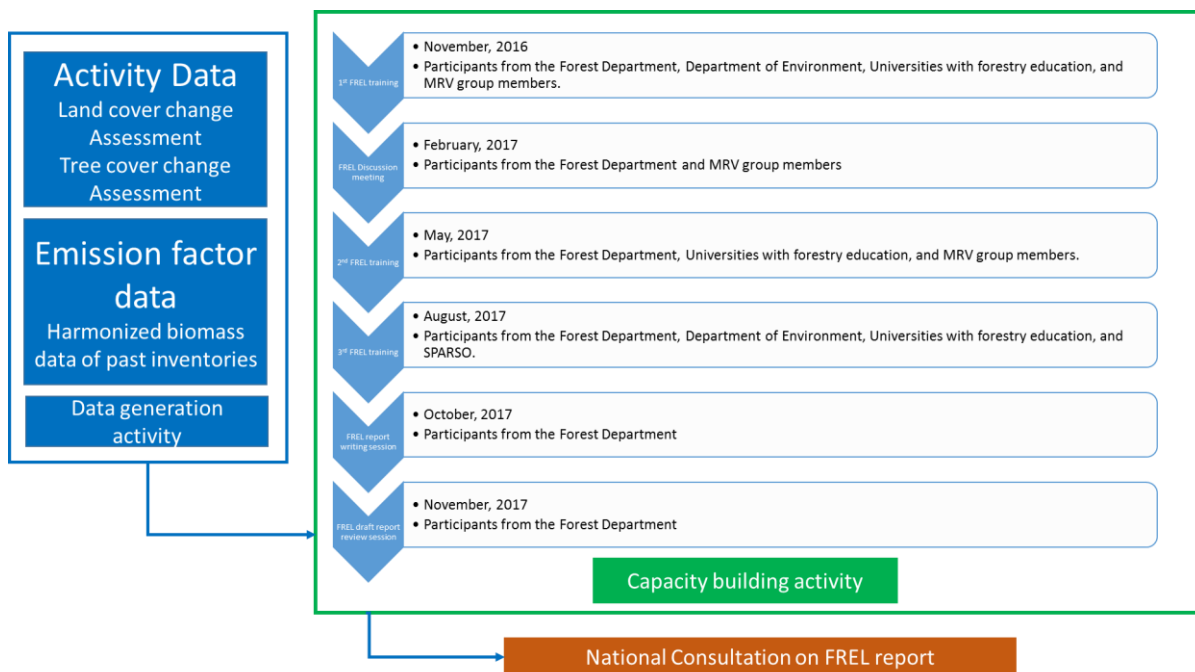


Figure 1: FREL/FRL development process in Bangladesh

The UN-REDD Bangladesh National Programme is supporting the BFD to develop FREL/FRL for submission to the UNFCCC in January 2018. The FREL/FRL workshop organized on 27 November in Dhaka was a follow up of the one organized on 31 October – 1 November, 2017 in Habiganj, and was focused on preparing the final draft of FREL/FRL report.

3. OBJECTIVES

The objectives of the workshop were:

- Follow-up with the contributors of FRL document,
- Address comments and questions regarding the latest update of the FRL report,
- Check the calculation of emissions and removals of the FREL/FRL, and

- Plan future activities before the submission of the proposed national FREL/FRL to the UNFCCC.

4. SUMMARY OF THE WORKSHOP

4.1 General structure

It was a one-day workshop with three sessions (see Annex 1 for agenda). The workshop started with the welcome speech by Mr. Rakibul Hasan Mukul, Project Director, UN-REDD National Programme Bangladesh and Conservator of Forests (CF), BFD. He also explained the objectives of the workshop to the participants (see Annex 2) in his speech. In the first session, the BFD and MoEF officials reviewed the second draft of FREL/FRL report prepared after the workshop held on 31 October – 1 November 2017 in Habiganj. In the second and third sessions, the participants checked the background calculation for FREL/FRL construction. The results of the participants' evaluation of the workshop is presented in Annex 3.

4.2 Session 1: Review of the second draft of the FREL/FRL report

During the first session of the workshop, the BFD and MoEF officials reviewed the second draft of FREL/FRL report. This draft was prepared after the workshop held on 31 October – 1 November 2017 in Habiganj. In particular they checked whether the comments and suggestions they provided during the Habiganj workshop were properly addressed. They all agreed that the comments and suggestions were adequately addressed throughout the FREL/FREL report except in one table. Moreover, they opined that the report was nearly ready for circulation for expert review. The participants agreed to provide further comments and suggestions on the report, if they have any, to FAO by 30 November 2017.

4.3 Sessions 2 and 3: Checking FREL/FRL calculations

The participants coming from BFD and MoEF were divided into five groups. Each group was assigned for checking the calculation for one zone of Bangladesh⁸. With the facilitation of the FAO experts, each group did the calculation step by step for their respective zones leading to the national FREL/FRL using Microsoft Excel. The calculation started with the harmonizing the land cover class (LCC) between 2000 and 2015. The CO₂ emissions or removals for each zone were calculated at the polygon level, and then combined and organized according to the harmonized LCC to form the land-use change matrix for 2000 – 2015 (see Table 1 for an example).

From the land-use change matrix, the REDD+ activities included in FREL/FRL of Bangladesh (i.e. deforestation, forest degradation, and forest carbon enhancement) were identified and then the emissions/removal under each activity were calculated for each zone. Finally, the emissions/removal for all five zones were combined to calculate the national FREL and FRL for Bangladesh. The FREL and FRL calculated during the workshop matched completely with the one presented in the second draft of the FREL/FRL report.

⁸ For the purpose of Bangladesh Forest Inventory for which FAO is providing technical support to BFD, the country is divided into five geographical zones: hill, sal, village, coastal and the Sundarbans.

TABLE 1: LAND-USE CHANGE MATRIX 2000-2015 FOR THE COASTAL ZONE

area (ha)		2015											
		1	2	3	7	8	9	10	11	12	13	15	Total
2000	1	137					3				1	7	148
	2		2,287					24		194	0.3		2,505
	3	0.5		33,916	3	66	11,954	2,125	1,886	7,485	3,945		61,381
	7				18		185	12		158	113		487
	8			3,963	8	620	7,543	3,669	722	5,727	685		22,936
	9	148	6	612	181	1,059	191,068	3,949	7,044	27,381	10,178	3	241,629
	10	27		5,102	10	418	5,739	10,343	3,036	24,442	215		49,333
	11	233		161	3		470	596	21,236	1,678	326	1	24,704
	12	6	0.5	9,848	1	2,858	10,633	40,101	1,173	390,076	294		454,990
	13	27		22	11	3	1,127	314	610	4,884	102,215	101	109,314
	15	1,008		0.2			179		0.4		1	3,930	5,119
Total	1,585	2,293	53,624	234	5,023	228,903	61,134	35,708	462,026	117,973	4,041	972,544	
Forest land cover classes are: 1: Forest Tree Dominated Area (Terrestrial); 2: Mangrove Forest; 3: Mangrove Plantation													
Non-forest land cover classes are: 7: Cultivated Trees; 8: Herb Dominated Area; 9: Herbaceous Crops; 10: Mud Flats or Intertidal Area; 11: Non-vegetative; 12: Rivers and Khals; 13: Rural Settlement; 15: Shrub Dominated Area													
The cells highlighted with blue indicate areas that exceed 100,000 ha.													

5. NEXT STEPS

The participants agreed to the following steps to move forward for the submission of Bangladesh's National FREL/FRL report to the UNFCCC:

1. BFD and MoEF participants will provide comments and suggestions, if any, on the FREL/FRL report by 30 November.
2. FAO expert will integrate the comments and suggestions to prepare third draft by 3 December 2017 and share it with the BFD and MoEF officials.
3. The FREL/FRL report will be send for external review in the first week of December.
4. National consultation on FREL/FRL report will be organized in Dhaka in the third week of December.
5. The final FREL/FRL report will be prepared based on the comments and suggestions received during the national consultation and submitted to BFD which will eventually submit it to MoEF by 20 December 2017.
6. The MoEF will submit the FREL/FRL report to the UNFCC with the deadline of 8 January 2018.

APPENDIX 1. AGENDA

Monday 27 November 2017	
9.00 – 11.30	Review of the second draft of FREL/FRL report
11.30 – 11.45	<i>Tea Break</i>
11.45 – 14.30	Calculation of emissions and removals in each zone
14.30 -15.30	<i>Lunch</i>
15.30 – 17.00	Calculation of emissions and removals in each zone <i>continues</i>

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APPENDIX 2. PARTICIPANT LIST

ID	Name	Gender	Designation & Organization	Email
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16	Rashed Jalal	M	National Consultant, FAO	Rashed.Jalal@fao.org

APPENDIX 3. EVALUATION

	Male	1	100%
	Female	1	100%
How often do you participate in training related to forest monitoring?			
1	First time	0	0%
2	1-3 every year	1	100%
3	More than 3 per year	0	0%
4	Regularly (approximately one per month)	0	0%
I would describe my self as?			
1	A professor/academic	0	0%
2	A student	0	0%
3	Forest Department staff	1	100%
4	Government staff (outside Forest Department)	0	0%
5	NGO staff	0	0%
6	Private consultant	0	0%
99	Other	0	0%
My professional background relates most closely to:			
1	Forester	1	100%
2	GIS/RS	1	100%
3	Statistics	0	0%
4	Social survey/assessment	0	0%
5	Economics	0	0%
6	Natural Resource Management	1	100%
7	Ecology	1	100%
99	other	0	0%
My years of relevant experience is:			
1	1-2 years	0	0%
2	3-5 years	0	0%
3	5-7 years	0	0%
4	8-10 years	0	0%
5	More than 10 years	1	100%
The training was relevant to my daily work			
1	Strongly agree	0	0%
2	Agree	1	100%
3	Neutral	0	0%
4	Disagree	0	0%
5	Strongly disagree	0	0%
I had enough previous knowledge to understand the content of the event			
1	Strongly agree	0	0%
2	Agree	0	0%
3	Neutral	1	100%
4	Disagree	0	0%
5	Strongly disagree	0	0%
The training met my expectations in terms of the content and learning outcomes			

1	Strongly agree	0	0%
2	Agree	0	0%
3	Neutral	1	100%
4	Disagree	0	0%
5	Strongly disagree	0	0%
The learning resources provided were adequate and useful			
1	Strongly agree	0	0%
2	Agree	1	100%
3	Neutral	0	0%
4	Disagree	0	0%
5	Strongly disagree	0	0%
The resource person presented information in a way that i could understand and was easy to follow			
1	Strongly agree	0	0%
2	Agree	1	100%
3	Neutral	0	0%
4	Disagree	0	0%
5	Strongly disagree	0	0%
I feel confident to be able to carry out the tasks described in the training without supervision.			
1	Strongly agree	0	0%
2	Agree	0	0%
3	Neutral	1	100%
4	Disagree	0	0%
5	Strongly disagree	0	0%
I was pleased with the venue/meeting room/snacks etc			
1	Strongly agree	0	0%
2	Agree	1	100%
3	Neutral	0	0%
4	Disagree	0	0%
5	Strongly disagree	0	0%
Are there other people/agencies/organisations that you think should have been included in the training?			
Any other comments?			