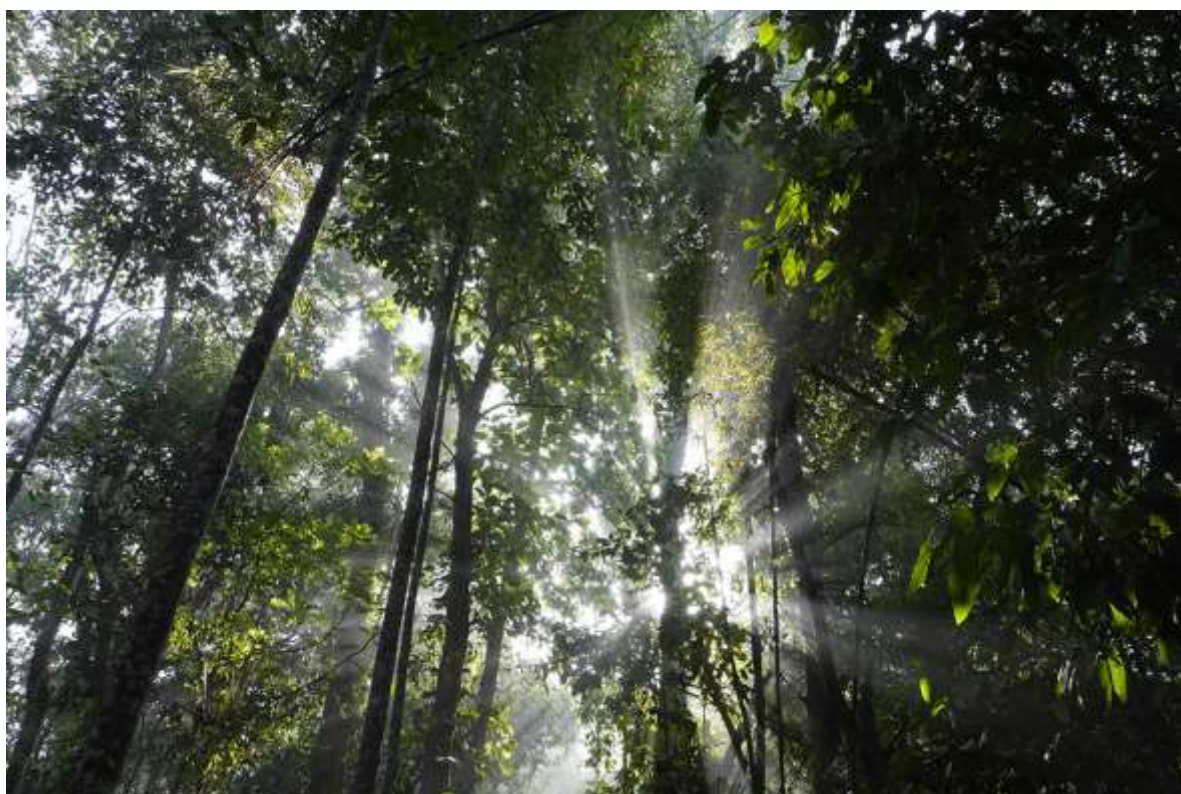


Ministry of Environment, Forest and Climate Change

Bangladesh Forest Department



Sustainable Forests and Livelihood (SUFAL) Project



Environmental and Social Management Framework (ESMF)

July 2018

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ABBREVIATION AND TERMS

A/R	: Afforestation and Reforestation
AIGAs	: Alternative Income Generating Activities
AP	: Affected Person
BFD	: Bangladesh Forest Department
BMD	: Bangladesh Meteorology Department
CBN	: Cost of Basic Needs
COM	: Community Operational Manual
DoE	: Department of Environment
FCMC	: Forest Co-Management Committees
ECP	: Environmental Codes of Practice
ESMF	: Environmental and Social Management Framework
FDC	: Forest Dependent Community
FGDs	: Focus Group Discussions
FSMP	: Forestry Sector Master Plan
FENTC	: Forest Extension and Nursery Training Center
GAP	: Gender Action Plan
GoB	: Government of Bangladesh
HDC	: Hill District Council
HHs	: Households
HIES	: Household Income and Expenditure Survey
MOL	: Ministry of Land
MPA	: Multiphase Programmatic Approach
NGO	: Non-government Organization
OP	: Operation Policy
PA	: Protected Area
PAPs	: Project Affected Persons
PR	: Poverty Ranking
PIB	: Participatory Identification of Beneficiaries
PMU	: Project Management Unit
RR	: Resilience Ranking
SEC	: Small Ethnic Community
SECDF	: Small Ethnic Communities Development Framework
SIMP	: Social Impact Management Plan
SUFAL	: Sustainable Forests and Livelihoods
TOF	: Tree Outside Forests
WB	: World Bank
VR	: Vulnerability Ranking

EXECUTIVE SUMMARY

The Bangladesh Forest Department (BFD) proposes to implement the Sustainable Forests and Livelihoods (SUFAL) project with the financial support of the World Bank (WB). The SUFAL project envisages restoration of degraded forest ecosystems; conserves biodiversity through sustainable forest management practices for enhancing carbon sequestration, ecosystem services, livelihoods opportunities, and climate change resilience; and improves Protected Area (PA) networks in selected forest landscapes of Bangladesh.

Proposed Project Development Objective: The proposed development objective is to improve collaborative forest management and increase access to alternative income generation activities for forest-dependent communities in targeted sites. This will be achieved by these expected results:

- (i) Improving public sector management of forest resources and increasing participation of communities in forest conservation and restoration.
- (ii) Reducing direct dependence and unmanaged extraction of forest resources by offering alternative livelihood sources to dependent communities and improving the enabling environment for trees outside forests.

Together, these will result in the eventual improvement of forest cover and ecosystem functions, coastline protection and increase job opportunities for some of the poorest and most vulnerable forest dependent communities, including women and tribal groups.

Implementation Period: The SUFAL project duration is five years, from September 2018 to August 2023.

Project Area: The project administrative area will cover 169 Upazilas (sub-districts) under 28 districts (out of 64 districts) in different three ecosystems (plains, hills and coastal) of Bangladesh.

Population covers: The project will involve a total estimated population of 50.79 million or 1.12 million households, one third of total population in Bangladesh (WFP/ WB/ BBS, 2014).

Program Cost: Total Project cost is estimated at US\$195 million of which US\$ 175 million will be IDA Credit and GoB contribution will be US\$ 20 million.

Environmental and Social Management Framework: (EMF):

The potential interventions of the project are collaborative forest management promotion, afforestation and reforestation (A&R), small-scale infrastructure, certain alternative livelihoods and market-driven value chain development activities in the plains, hill and coastal areas.

The project will not require any land acquisition; however, there is a possibility that these interventions might induce adverse and unintended environmental and social impacts. All environmental and social issues and impacts could not be specifically identified at this stage to recommend mitigation measures. BFD will screen sites specific activities for project interventions and identify the target beneficiaries in preparing and implementing any environmental and social action plans. However, there is a need for procedural guidance for environmental and social impact management. Therefore, BFD has taken a framework approach and prepared this Environmental and Social Management Framework (ESMF) document as a constituent part of the guidance in the implementation stage.

Rationale for developing the framework is based on the consideration that all the project sub-component specific environmental and social issues and impacts that have been foreseen by the project may not be precisely the reality. Therefore, detailed site investigations will be carried out as part of identifying specific project interventions and related designs at the selected locations to ascertain the precise nature of the environmental and social impacts. Therefore, this ESMF will provide the necessary background for environmental and social considerations, impact mitigation measures, checklists of potential issues of the project activities to be considered and built into the design and interventions of the project so that environmentally as well as socially sustainable implementation can take place.

Conducting a proper environmental and social assessment as well as preparing both environmental and social management plan is essential to address the potentially negative impacts of the project. While this ESMF document has been prepared to identify the potentially negative impacts of the SUFAL project.

The specific objectives of this ESMF:

- To integrate the environmental and social concerns into the identification, design and implementation of all project interventions in order to ensure that those are environmentally sustainable and socially feasible;
- To ensure all relevant environmental and social issues are mainstreamed into the design and implementation of the project and also in the subsequent progress of the SUFAL activities;
- To consider in an integrated manner the potential environmental and social risks, benefits and impacts of the program and identify measures to avoid, minimize and manage risks and impacts while enhancing benefits;
- To ensure compliance with national and World Bank requirements. The ESMF presents potential impacts of the SUFAL, mitigation, enhancement, contingency and compensation measures, environmental and social management and monitoring plan, and institutional framework including inter-agency cooperation for implementing ESMP. The ESMF will facilitate compliance with the GoB's policies, acts and rules as well as with the World Bank's environmental safeguard policies, and;
- To guide conducting the detailed IEE/ EISAs/SIA of the SUFAL as appropriate to the project components/sub-components.

Methodology for ESMF Preparation:

The present ESMF has been prepared following the standard methodology consisting of the steps listed below:

- Review of the program details and meeting/ discussions
- Review of the policy and regulatory requirements
- Reconnaissance field visits by BFD team and initial scoping and screening to determine the key environmental and social parameters and aspects that are likely to be impacted by the program activities
- Collecting and analysis of baseline environmental and social data, with the help of secondary literature review, and field data collection that initiated by BFD

- Consultations with the stakeholders including beneficiary/ affected communities and developing the consultation process
- An initial assessment of the potential and likely impacts of the program activities
- Prepare an outline of environmental and social management plan
- Compilation of the present ESMF.

Target Beneficiary:

The SUFAL project target groups of beneficiaries are the poor and extremely poor households of forests dependent community. As forest resources are immensely significant to their livelihoods, which are quite varied and influential on their socio-economic and physical environment. So, therefore, a special attention will be given to the women, the disabled, the elderly, small ethnic community and other vulnerable groups. Also, the project will ensure that all members of the forest dependent community will have access to the project services and benefits. To ensure environmental and social justice, the project will prioritize the beneficiaries based on poverty, ethnic groups, vulnerability to shocks and disasters and their resilience to shocks and disasters.

Outlines of the Project:

Component 1. Strengthening Institutions, Information Systems and Training (IDA US\$ 17.41 million)

This component will finance activities to strengthen BFD's organizational capacity by to effectively implement collaborative forest management, in addition to the new approaches in restoration of forests, enhancement of trees outside forests and alternative income generation for communities. It will increase BFD's knowledge and capabilities in understanding and addressing climate impacts on forests, increasing resilience of plantations, eco-tourism management and addressing gender dimensions in forestry. It will include a functional review and recommend actions related to BFD roles and organizational needs, IT and GIS needs and policies that impact community and private sector participation in forestry. BFD's geo-spatial information management capacity for planning and monitoring of forest activities will be upgraded. BFD staff, especially female staff, will receive training on a range of issues including climate change, carbon measurement, eco-tourism, gender, collaborative management, etc. Applied research will focus on sourcing of high planting material to promote better technologies in private sector nurseries. An *Innovation Window* will fund proposals related to climate change and forests and biodiversity conservation or other topics that support the objective of SUFAL, from individuals, companies, educational institutions, NGOs, etc. The National Forest Inventory (NFI) and national tree canopy cover in Bangladesh will be updated. Under a communication and outreach plan formulated in the first year, the PMU will pursue an outreach program to motivate participating partners, especially women, about collaborative management, PA management, wildlife protection, etc.

Component 2. Strengthening Collaborative Forests and Protected Areas Management (IDA US\$ 96.04 million)

This component will finance restoration and afforestation through collaborative forest management (CFM) which will give forest dependent communities a stake in the management of forests. CFM committees will be established and an institutional framework and rules for CFM developed in consultation with communities. Special emphasis will be given to encourage women's participation as office-bearers in the CFMCs (at least 33% in each CFMC) which will be elaborated in the Community Operations Manual (COM). Afforestation will be preceded by Site-Specific Planning (SSP) with CFM

committees to generate a geo-spatial database to improve monitoring and increase transparency. The project will treat approximately 78,000 to enhance forest quality, increase sustainable supply of fuelwood and non-timber products and increase mitigation and coastal resilience. Restoration and planting will take place along the coast, hill forests and central and northern plain. Preliminary criteria for site selection included (i) extent of degradation and suitability for restoration; (ii) feasibility of community participation; (iii) clear tenurial status. Project area field offices and training centers will be renovated and climate -proofed and serve as cyclone shelters in coastal districts to support field operations. The project will support the development and implementation of PA management plans for 10 PAs with co-management committees (CMCs). Other activities will include (i) scaling up of endangered species conservation programs for 13 endangered species; (ii) scaling up SMART patrolling (excluding support to active enforcement activities) and (iii) restoration and protection of natural habitats in select wildlife corridors (3.8 thousand hectares) for wild elephants and other species for the alleviation of human-wildlife conflict.

Component 3. Increasing Access to Alternative Income Generating Activities (AIGAs), Forest Extension Services & Trees outside Forest (TOF) (IDA US\$ 48.38 million)

Increased access to AIGAs will increase incomes and resilience of communities. A Community Operations Manual (COM) will elaborate the rules and criteria for the implementation of AIGAs. NGOs will be contracted by BFD to mobilize, organize and provide A Community Operations Manual (COM) will elaborate the rules and criteria for the implementation of AIGAs. NGOs will be contracted by BFD to mobilize, organize and provide training to communities to plan and implement the AIGAs and manage the AIGA fund. An important aspect will be organizing and targeting women and adolescent girls with tailored training and income generation activities. These activities will be organized in a way that is conducive to women's participation and compatible with their multiple responsibilities. Priority for AIGAs will be given to members of CFMCs who are (a) the poorest in the village; (b) all women-headed households; (c) landless and those who lack year-round employment; or, (d) belong to ethnic minority communities. Funding will be channeled from the PMU directly to community accounts. The AIGA fund will be maintained as a revolving fund at the community level and will be available to community members as micro-credit. The choice of AIGAs will be demand driven, and will be aligned with the objectives of SUFAL, i.e., to reduce forest loss and improve forest management. AIGAs will be screened, among others, for climate resilience and safeguards. A list of activities that *may not be financed* by the project will be in the COM but both, on and off-forest activities may be financed. The NGOs will help with the forward linkages to markets and banking and credit facilities, with special emphasis on providing women with these linkages. AIGAs and will be implemented in up to 600 villages, covering about 40,000 households.

The TOF value chain (nurseries, homesteads, sawmills) will be supported by: (i) establishing a timber market information system; (ii) technology transfer and training to nursery owners and farmers through Social Forestry Nursery and Training Centers (SFNTCs); (iii) training; and, (iv) a review and updating of policies to ease costs and difficulty for tree growers, saw millers and exporters. Activities will include plantations; outreach programs with Upazila Parishads to encourage planting of trees on public and private land; seedling distribution to homestead farmers. Special focus will be given to ensure that extension and training is held in locations and at times that encourage participation of women farmers and entrepreneurs.

Component 4. Project Management, Monitoring and Reporting (IDA US\$ 12.16 and 1.00 million for DPP preparation support)

This project will finance the BFD's project management unit at the headquarters and in the 28 districts where field implementation will take place. Support will be provided for contracting key specialists such as in the areas of social and gender, financial management, procurement, knowledge management and community development. In addition, monitoring and evaluation including, baseline survey, mid-term and end of project evaluations, independent third-party monitoring, external and social audits and geo-spatial monitoring and analysis of administrative records will be financed. The forest inventory and the new module on trees outside of forests, will be financed under component 1.

Project Implementation Arrangement :

The Ministry of Environment, Forest and Climate Change (MOEFCC) is the nodal ministry of this project. All the components of this project will be implemented by the Bangladesh Forest Department (BFD) through a Project Management Unit (PMU) established for the project. For the livelihood component, BFD will engage NGOs for group formation, motivation, consultation, and training. The Project Director will be responsible for the overall implementation of the project, including, managing implementation at all field locations and the reporting to the Bank. The PMU will be equipped with relevant qualified specialists, three Deputy Project Directors to supervise the field activities and a Project Manager. The respective Divisional Forest Offices headed by the DFOs will be responsible for project implementation activities in the field. The afforestation and reforestation program will be executed in the field by the beat officers, range officer will be responsible for monitoring and reporting to the DFO. For AIGA activities under Component 3 seven NGOs will be hired to mobilize and organize and provide the necessary training to communities to prepare the AIGA plans, and support them during implementation. Each NGO will work in a cluster of districts/Upazilas.

Policy and Regulatory Review:

The major legislations reviewed in forestry sector of Bangladesh include Forest Act 1927, Forestry Sector Master Plan for 2017-2031 (drafted in 2016), Forest Policy 2016 (draft), Wildlife (Conservation and Security) Act, Bangladesh 1972, Forest Investment Plan 2017, a recent GoB gazette to ban felling in natural forests through 2022, Social Forestry Rules 2004 (amended through 2011), Protected Area Management Rules, 2017 etc. The acts, policies, rules and standards relevant to the forest sector in Bangladesh are:

- Constitution of Bangladesh, (Fifteenth Amendment) Act, 2011 (Act XIV of 2011)
- Forest Act, 1927 (Act No. XVI of 1927)
- Forest Transit (Control) Rules 2011
- Private Forest Ordinance 1959
- Saw Mills (License) Rules 2012
- Environmental Conservation Act 1995
- Environment Court Act 2010
- Brick Manufacturing and Brick Kilns Establishment (Control) Act 2013
- Social Forestry Rules 2004 (Amended up to 2011)
- Wildlife (Preservation and Protection) Act 2012
- Management of Protected Areas Rules 2017
- Bangladesh Bio-diversity Act 2017
- Chittagong Hill Tracts Regulation of 1900 (Regulation 1 of 1900)

- Chittagong Hill Tracts Transit Rules 1973
- Tourism Act 2010

Forestry and Other Relevant Sectorial Policies Governing the Forestry Sector

- Forest policy 1994
- Forest Policy 2016 (Draft)
- Land Use Policy 2001
- Coastal Zone Policy 2005
- Fisheries Policy 1998
- National Water Policy 1999
- National Tourism Policy 2010
- National Agriculture Extension Policy 2012
- Agriculture Policy 1999
- Forestry Master Plan 1995-2015
- Forest Master Plan 2016 (Draft)
- Jalmahal Management Policy 2009
- Gender Policy Draft 2016
- NDC (INDC) 2015
- National Energy Policy 2004

International Treaties Signed by the GoB:

Bangladesh has signed most international treaties, conventions and protocols on environment, pollution control, biodiversity conservation and climate change, including the Ramsar Convention, the Bonn Convention on migratory birds, the Rio de Janeiro Convention on biodiversity conservation, and the Kyoto protocol on climate change.

Implication of GoB Policies, Acts and Rules on SUFAL and their Classification:

The legislations relevant for environmental assessment for SUFAL are the Environmental Conservation Act 1995 (ECA'95) and the Environmental Conservation Rules 1997 (ECR'97).

As per ECR'97, most components/sub-components and associated activities of SUFAL are likely to fall under *Green Category* as they have no significant impact on the environment, but some of the project activities likely to have negative environmental impacts on air, soil, water and natural setting such as water bodies, vegetation, wildlife and fishes, demands IEE and if required, EIA.

The proposed interventions of SUFAL will comply with all the policy directives of the National Environmental Policy, 1992 emphasizing reducing probable environmental impacts. SUFAL broadly contributes toward achieving the aims and objectives of the climate change adaptation strategies that will contribute towards achieving the objective of pillars of Bangladesh Climate Change Strategy & Action Plan, 2009, such as (i), (ii), (iii), (iv), and (vi).

SUFAL's interventions will be implemented in accordance with the Bangladesh Wildlife (Protection and Preservation) Act 2012; Bangladesh Wildlife (Preservation) Order & Act (1974); Forestry Acts & its amendments; Private Forest Act (PFA), 1959; Embankment and Drainage Act, 1952; Bangladesh Water Act, 2013; Bangladesh Labor Act, 2006; Bangladesh National Building Code, 2006.

The constitution of the country affirms the environmental safeguards as "The state shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, biodiversity, wetlands, forests and wildlife for the present and future citizens (Article 18A)".

The vision 2021, in the perspective plan of Bangladesh (2010-2021), sets national development priority as ‘growth with equity and social justice remains the overarching goal of our development strategy and will be achieved on a sustainable basis without damaging the environment’ (GoB 2012b).

World Bank’s Environmental and Social Safeguard Policies:

World Bank has developed a number of safeguard policies to ensure that all possible impacts are considered and mitigation measures are spelled out prior to the implementation of any proposed project. If the decision is taken that a safeguard policy should be applied, the mitigation measures and plans must be developed and in place before the implementation of the proposed project.

However, some of the activities would require further assessment for better understanding of the associated impacts. Therefore, further assessments are recommended to be carried out for those activities, in accordance with Environmental Assessment (OP/BP 4.01)

- Natural Habitats (OP 4.04)
- Forests (OP/BP 4.36)
- Pest Management (OP/BP 4.09)
- WB Policy on Access to Information

The operational policies (OP) and Bank Procedures (BP) of the World Bank includes guidelines on involuntary resettlement (OP/BP 4.12) and the indigenous peoples (OP/BP 4.10) for management of social safeguards issues associated with investments with financing from the World Bank.. These operational policies have been reviewed with regard to relevant national laws and constitutional provisions to identify additional measures to comply with Bank policies. OP 4.12 has a set of lesser known provisions relating to impacts deriving from “restriction of access” to natural resources in legally designated protected areas. These provisions are relevant in the case of SUFAL given that, overall, the project is not expected to necessitate any land acquisitions and resettlement. However, there is the possibility that during the project’s implementation, access to land and forest-based natural resources by some forest dependent communities and households could be restricted, with adverse effects on their livelihoods. Similarly, the project also involves construction of some infrastructures for BFD (such as office buildings and complexes) which, although will be constructed on BFD’s own land, could result with restricting access to the nearby communities. Therefore, a Process Framework (PF) has also been prepared following the World Bank policy OP 4.12 on Involuntary Resettlement for the purpose of establishing a due process to avoid, minimize and mitigate the negative impacts from the project’s interventions. It will also guide the project to ensure effective participation of the affected communities and relevant stakeholders in the project.

A Small Ethnic Communities Development Framework (SECDF) has also been developed to provide guidance for the preparation and implementation of site specific as Small Ethnic Communities Development Plans (SECDP) as and when required. The framework will be fully cognizant of local and cultural nuances associated with designing and proposing alternative livelihood measures, grievance redress processes and all other project interventions including community consultation and communication.

Impact Assessment:

The overall impact assessment of the proposed project to be implemented reveals that most of the adverse impacts could be minimized or eliminated by adopting standard mitigation measures;

there is also scope to enhance some of the beneficial impacts to be generated from the proposed project.

When the sites for specific activities are identified and if, according to the substantive social effects are anticipated a brief SIA (based on PRA techniques) will be undertaken to identify project beneficiaries, particularly focusing on poor, ethnicity, affected people and other relevant stakeholders. The SIAs will utilize a well-planned and all-inclusive communication and consultation strategy. It will include a baseline survey covering the prevailing status of income, employment, education, age, skills and other socio-economic aspects along with cultural and community aspects in the areas. The assessment will feed into the individual RPs created for each location and will be incorporated, along with consultation feedback from those identified in the PAP census and all other relevant stakeholders, in the development of mitigation measures, especially livelihood strategies. The project should develop a guideline for SIA specific to the intervention sites.

A. Significant Environmental Impact :

The potential impacts of the program on the key environmental parameters that have been identified as part of the ESMF are detailed in the chapter 5. In the subsequent sections, these impacts are discussed and guidelines are included for the EMF of the SUFAL. However, the potential impact areas are:

- Conversion of natural forests to plantation
- Loss of wildlife habitats
- Land cover and land use changes
- Loss of ecological connectivity
- Loss of aquatic habitat
- Loss of coastal/marine habitats
- Drainage congestion and water logging
- Site clearance and burning for plantation and infrastructure
- Promotion of Monoculture with exotic species
- Soil/Water pollution
- Impacts on aquatic habitat (coastal/char land)
- Extensive agriculture/ aquaculture/ livestock for livelihoods
- Occupational health and safety
- Impact on livelihood and daily income
- Impact on Flora and Fauna

The potential impacts of the program on the key environmental parameters that have been identified as part of the ESMF as well as the significance of each impact based upon the criteria has been defined in the same chapter.

B. Potential Key Social Impacts:

When the sites for specific activities are identified and if, according to the substantive social effects are anticipated a brief SIA (based on PRA techniques) will be undertaken to identify project beneficiaries, particularly focusing on poor, impacted people and other relevant stakeholders. The SIAs will utilize a well-planned and all-inclusive communication and consultation strategy and include a baseline survey covering the prevailing status of income, employment, education, age, skills and other

socio-economic aspects along with cultural and community aspects in the areas. The assessment will feed into the individual site-specific plans created for each location and will be incorporated, along with consultation feedback, in the development of mitigation measures, as needed.

Involuntary Resettlement Impacts:

A vast majority of forest dependent communities are known to use lands and forest resources under customary/traditional rights that are not recognized in the country's land administration system. An assessment of land ownership carried out for the project found just 3% of respondents have their legal ownership documents. The lands that they use without legal titles are considered public and make them ineligible for any assistance in cases where they are adversely affected. Neither land acquisition nor physical displacement of forest dependent communities is being considered as part of the project; instead, such communitiesThe community will be engaged in the project via multiple activities, including collaborative forest management, afforestation, access to AIGAs, PAs and wildlife management, and so on, in order to bring a greater area of land under forests and achieve more sustainable forest resource use patterns in that area. Just the same, a. A Resettlement Policy Framework (RPF) has been developed on a precautionary basis for the purpose of establishing processes to minimize and mitigate the negative impacts from any project-related involuntary resettlement that could take place. It will also guide the project to ensure effective participation of PAPs in such situations. .

Impacts on Small Ethnic Communities:

SECs present in the project area can be characterized as indigenous peoples in view of their unique characteristics including language, culture, occupation, and traditions. These communities are amongst the poorest living in the project areas. Very few families have been able to make a good progress in terms of social and economic status with higher education and diverse employment. Tribal peoples are present in all 28 SUFAL districts, hence will receive priority in the project benefits. The Bank operational policy on indigenous peoples has therefore been triggered and a Small Ethnic Community Development Framework (SECDF) has been prepared to guide community participation and benefit sharing of the SECs from the project activities. The involvement of the SECs in planning, implementation and monitoring of the programs meant for their own development will be the cornerstone of SECDF strategy of the project.

Categories of social risks and impacts associated with the project:

Following basic categories of impacts or issues may take place under this project:

Loss of access or limited access to the usual forest area and resources ;

Loss of source of livelihood;

Loss of fuel wood and wood

Loss of network and mobility

Loss of daily income

Environmental Impact Management:

The overall impact assessment of the project reveals that most of the likely adverse impacts could be minimized or eliminated by adopting standard mitigation measures; there is also scopes for enhancement of some beneficial impacts to be generated from the project. The major interventions

of the SUFAL project will be afforestation/reforestation (A/R), Small-scale infrastructure development and Alternative Income Generating Activities (AIGAs). The following key area will be considered for environmental impact management of SUFAL activities:

- Afforestation and reforestation programs
- Plantation site selection:
- Planting material selection:
- Impacts on Biodiversity and Protected Species:
- Clearing planting sites
- Fertilizer and Pesticides
- Polypropylene Bags used for Seed Germination:
- Small-scale infrastructure
- Loss of Natural Habitat and Biodiversity
- Erosion and Sedimentation
- Contamination of ground and surface water supplies
- Adverse impact on human health and safety
- Potential concerns include: *Dust and Noise and Spread of disease*
- Livelihoods interventions
- Plantation Plan:
- Environmental Management of Resettlement Sites
- Health, Safety and Environment Plan:
- Technical Assistance and Capacity Building

Social Impact Management Plan (SIMP):

The management of social risks and impacts associated with the project intervention relating afforestation and reforestation, alternation livelihoods development, infrastructure development works as well as income generating activities in the target communities. As neither land acquisition nor physical displacement of forest- dependent people is being considered under the SUFAL. Therefore, the Social Impact Management Plan (SIMP) entails a Process Framework following the World Bank policy OP 4.12 and paras 26-27 principles (instead of resettlement). The purpose of the Process Framework is to establish a process by which members of the potentially affected communities participate in the design of the project components, determination of necessary measures, and implementation and monitoring of relevant project activities. The project approach will be to engage targeted beneficiaries inclusive of their gender, disability, ethnic identity, poverty and any other exclusion excuses. The Social Impact Management Plan (SIMP) provides guidance to the BFD SUFAL and others on the social development requirements during implementation of the Project and applies to all Project activities. The SIMP provides for obligations of the executing agencies and project staff on social development and safeguards requirements of the World Bank in supplement with national legislative requirements and guides BFD in identification, planning, auditing, monitoring, reviewing, evaluation and reporting of social performance of project implementation.

The SIMP includes action plans for consultation and participation framework, gender framework, livelihood, and grievance management. The SIMP also refers to RPF and SECDF guiding management of involuntary resettlement and small ethnic communities at the implementation level.

Consultation and Participation Plan:

The objectives of consultation and participation are to inform, consult, engage, collaborate and empower the forest dependent communities and other local stakeholders at all levels of project cycle. Consultation and community participation will be undertaken to achieve the following specific objectives at identification, planning, design, implementation and evaluation stages:

- Identification ; to sensitize the community about the project objectives, its components and their role and identify inclusive ground needs;
- Planning ; to ensure transparency of the planning process, reflect community expectations in project design, acceptable work schedule and procedures; ensure identification of adverse impacts and measures to mitigate them;
- Implementation ; to ensure that benefit accrues to the targeted beneficiaries inclusive of all groups including the very poor and vulnerable groups and activities designed and implemented at a standard satisfactory to the communities.
- Review and evaluation ; to evaluate the beneficiary satisfaction and outcomes of the project activities for intended benefits to targeted group beneficiaries.

Gender Action Plan:

A gender action plan has been prepared for the project for review and updating by the SUFAL activities before implementation based on social screening, social impacts assessment and designing the activities for implementation.

Grievance Redress Mechanism:

BFD will establish a grievance redress mechanism (GRM) for the project to address complaints and grievances in implementing the ESMF. Based on discussion and consensus, the GRM will try to resolve the issues/conflicts amicably and quickly to ensure unhindered implementation of the project activities.

BFD, as part of GRM, will set up project and sub-project specific Grievance Redress Committees (GRCs) which will include representatives of the forests dependent community, at least the local level, besides other relevant stakeholders including representatives of BFD itself. The GRC will carry out all its transactions in a transparent manner with full disclosure of the relevant information to the stakeholders. Decisions agreed at any level of GRC hearings will be binding on BFD and its partners organizations involved in the implementation of the project. In addressing grievances a bottom up approach will be adopted, detailed in the chapter 6 on GRM section.

Monitoring Program:

As one of the key elements of the ESMP, a three-tier monitoring program is proposed comprising integrated monitoring, compliance monitoring, effects monitoring, and external monitoring (Third party monitoring). The main purpose of this monitoring program is to ensure that the various tasks detailed in the ESMP particularly the mitigation measures are implemented in an effective manner, and also to evaluate program impacts on the key environment and social parameters.

Capacity Building:

Capacity building for effective implementation of the environmental and social safeguard requirements is a key element of the ESMP. Capacity building for environmental and social safeguard management will need to be carried out at all tiers of the program.

Documentation:

The PMU with assistance from SUFAL and partner (staff) will produce the following environmental and social reporting documentation: Environmental and Social Monitoring Reports and Program Completion Environmental and Social Monitoring Report.

EMP/SIMP Implementation Cost:

Cost estimates will need to be prepared for all the mitigation and monitoring measures. The cost estimates for some of the mitigation measures to be identified in the EMP will be part of the associated contracts. Some of suggestive activities from EMP/SMP will be implemented by hiring competent organizations.

Stakeholder Consultations and Disclosure:

A number of consultations, surveys, focus group discussions (FGDs) have been carried out as part of preparation of this ESMF (detailed minutes provided in Annex – 8). However, further consultation are necessary during the implementation phase considering the project area and dimension of the stakeholders. Extensive field visits and consultations with the relevant stakeholders at the environmental and social assessment stage are required to overcome this shortcoming throughout the program sites to collect feedback/comments on the components, sub-components, activities, potential positive and negative impacts and measures taken to mitigate those impacts. It is also required to record the views of each of the respondents of the consultations, irrespective of gender, profession, religion, and age groups. The present ESMF along with the other safeguards documents, namely (1) Pest Management Plan (PMP), (2) Resettlement Process Framework (PF), (3) Small Ethnic Community Development Framework (SECDF) and (4) Resettlement Policy Framework (RPF), have been disclosed on the website of BFD both in English and Bangla version and hardcopies have been available in the field offices. Subsequently, the ToRs of additional assessments (*e.g.* IEE, EIA/SIA) will be disclosed in the public meetings during the initial stage of the assessments in all the sites of the proposed project. Findings of these assessments will also be presented in local language going back to the same stakeholders while the draft is ready to submit for DoE and other relevant agencies' clearance, if it is required. Consultation meetings are necessary to identify issues and problems to enable BFD to include corrective measures and to identify lessons and opportunities to enhance program implementation mechanism.

Framework for Future Stakeholder Consultations:

Consultations with the key stakeholders will need to be carried out throughout the project's duration. These will include consultations and liaison with communities and other stakeholders during the project implementation and also extensive consultations with the grass-root as well as institutional stakeholders. The detailed objective and methodology for the future consultations is presented in the chapter 7.

Access to Information:

A national workshop will be held at Dhaka to present the detailed project including the environmental and social safeguard aspects of SUFAL to the key stakeholders. In addition, stakeholders' meetings will be held at all selected upazilas to disclose the ToRs at the initial stage of the project. Representative of implementing authority, the study team, and the government officials from different departments,

representatives from NGOs, local communities of different occupation, journalist, and local elite/civil society will attend these workshops.

The information on program interventions and the findings of environmental and social assessment will also be disclosed both in Bangla and English through proper media (e.g. BFD's website, social media, internet, TV, radio, etc.).

Summary of field update of SUFAL will be translated into Bengali language and disseminated locally. The full report (in English) and the summary (in Bengali) will also be uploaded in the website of BFD and World Bank. Hard copy of the ESMF will also be available at BFD District and Upazila offices of SUFAL area.

CHAPTER 1: INTRODUCTION

1.1. Background

Bangladesh an area of 1,47,570 sq. km and bounded with India on the west, Myanmar and India on the east and the Bay of Bengal on the south. As per decision of International Arbitral Tribunal (2012-2014), Bangladesh currently has 118,813 sq. km of marine area (DoE 2015). About 80% of total land surface of Bangladesh is considered as floodplain (BBS 2011). Hilly terrain covers only some 12% of total land area in the northeast and southeast, with average elevations of 244m and 610m, respectively (UN-REDD 2012). Overall, 17.5 % of total land surface area of Bangladesh is now considered as state owned forest land (BFD-2017). However, the Perspective Plan of Bangladesh (2010-2021) entitled 'Making Vision 2021 a Reality' (GED 2012a), reported that the recorded state-owned forest land (not necessarily supporting tree cover), and potential forest/tree growing areas, has been identified as 7 million acres (2.82mha), which is 20% of the land area.

The Bangladesh Forest Department (BFD) is going to implement the Sustainable Forests and Livelihoods (SUFAL) project with the financial support of the World Bank (WB). The SUFAL project envisages restoration of degraded forest ecosystems and conserves biodiversity through sustainable forest management practices for enhancing carbon sequestration, ecosystem services, livelihoods opportunities, climate change resilience and improves Protected Area (PA) networks in selected forest landscapes of Bangladesh. The project will develop alternative livelihoods of targeted forest dependent people from the most poor, vulnerable, forest dependent communities, so that forest resources based livelihoods options are reduced and other income generation activities get strengthened in the forest communities of Hill, Plain land and Coastal Forest Types of Bangladesh. The potential interventions of the project are Afforestation and Reforestation (A&R), small-scale constructions and market driven livelihood activities in the plain, hill and coastal areas.

This Environment and Social Management Framework (ESMF) has been prepared for SUFAL project management of environment and social issues including risks and impacts following national legal and regulatory framework and the World Bank (WB) policy on social development and safeguards measures. The environmental and social risks and impacts that have been foreseen at the project appraisal are based on preliminary concept and may not be the precise reality to face during implementation. This ESMF has been prepared to guide identification and management of environmental and social issues which may come across during the implementation level. The ESMF delineates general social policies, guidelines, codes of practice and procedures to be adopted while implementing the proposed project (SUFAL). The framework provides the comprehensive account of potential environmental and social issues associated with the planning and implementation of the project activities in general.

1.2. Project Overview

The Bangladesh Forest Department (BFD) proposes to implement the Sustainable Forests and Livelihoods (SUFAL) project with the financial support of International Development Association (IDA) loan of the World Bank (WB). The SUFAL project emphasized that it will be implemented in three different forest types, i.e. coastal eco-system, hill forest and plain land and floodplain forest. The SUFAL project envisages restoration of degraded forest ecosystems and conserves biodiversity

through sustainable forest management practices for enhancing carbon sequestration, ecosystem services, livelihoods opportunities, climate change resilience and improves Protected Area (PA) networks in selected forest landscapes of Bangladesh. The project will develop alternative livelihoods of targeted people from the most poor, vulnerable, forest dependent communities through conservation-focused Alternative Income Generating Activities (AIGAs) and market based value chain development.

Implementation duration: The SUFAL project duration is five (5) years, from the point of effectiveness (likely in early 2019) to closing (late 2023 or early 2024).

Project cost: The project will be implemented for an estimated US\$175.00 million from the World Bank with a GoB contribution of US\$20 million.

Project administrative area: Project will cover 169 Upazilas (sub-districts) under 28 districts in different three ecosystems (plains, hills and coastal), detailed in the Annex 1.

Population covers : The project will covers around 50.79 million population which consisted in 1.12 million households, and covers one-third of total population in Bangladesh (estimated based of World Food Program/ World Bank/ Bangladesh Bureau of Statistics, 2014), detailed in Annex 1.

1.3. Forest and Environmental Settings

1.3.1 Forests

Different sources noted differently the forest areas in Bangladesh, e.g., the total forest area is 2.56 million ha (FMP 1993), 2.25 million ha (BBS 1999) and 1.47 million ha (WB 2018). However, in Bangladesh, of the total area agricultural land makes up 65% of the geographic surface, forest lands account for almost 17.5% (2.53 million ha) (BFD 2004), while urban areas cover 8% of the land. Water and other land uses account for the remaining 10%. The total forest land includes classified and unclassified state lands, homestead forests and tea and rubber gardens. Of the 2.53 million ha of forest land, the Forest Department manages 1.53 million ha including hill, Sal and Sundarbans forests (FAO 2006). The remaining 0.73 million ha of land designated as Unclassed State Forest (USF) are under the control of Deputy Commissioners. Village forests (homesteads) form the most productive tree and bamboo resources in the country and account for 0.27 million ha. Much of the forest lands do not have satisfactory tree cover (Chowdhury 1999) and only 0.84 million ha (about 5.8%) of the state forest land has good forest cover (Chowdhury 1999; GoB 2016a).

Hill Forest landscapes: The hill forests of Bangladesh are situated at the eastern border of the country. The relatively high-altitude hills are found in Chittagong Hill Tracts. Hill forests of Bangladesh are ecologically divided into two classes: (a) Tropical wet evergreen forests, and (b) Tropical semi-evergreen forests (Das 1990).

Tropical Wet Evergreen Forests: The tropical wet evergreen forests are an important class of forests in Bangladesh in terms of biodiversity, forest assets and environmental concerns. These are magnificent dense evergreen forests, rich in floral and faunal composition. The trees in the top canopy reach a height of 46-61 m. A few semi-evergreen or deciduous species may occur but they do not really change the evergreen character of the forests. The forests floral diversity is rich with epiphytes, orchids, woody and non-woody climbers, ferns, mosses, aroids, and palms, particularly in northern shady moist places. Herbs and grasses are abundant and the undergrowth is a tangle mass of shrubs, bamboo and cane. These forests occur usually in hills and moist shady areas in Chittagong Hill Tracts

(Khagrachari, Rangamati and Bandarban), Sylhet, Habigonj, Moulvibazer, Sunamganj, Cox's Bazar and Chittagong (Das 1990).

Tropical Semi-Evergreen Forests: This type of forests occurs in Cox's Bazar, Chittagong, CHTs and Sylhet, in more exposed dry locations. The top canopy species of the tropical semi-evergreen forests reach a height of 25-57 m. In this group, the evergreen species predominate but there are also many deciduous species. Many of the species of evergreen forests also occur in this type of forests.

Plain land Sal forest landscapes: The tropical moist deciduous forests are popularly known as *Sal* forests. These occur in Dhaka, Gazipur, Tangail, Mymensingh, Sherpur, Jamalpur, Netrokona, Dinajpur, Rangpur, Naugaon, and in degraded form in Comilla (Chowdhury 1994). In these forests, the predominant species is sal (*Shorea robusta*). The trees are 10-25 m high and mostly deciduous. Associate species are palas (*Butea monosperma*), Haldu (*Adina cordifolia*), Sidha Jarul (*Lagerstroemia paviflora*), Kumbi or Gadila (*Careya arborea*), Hargaza or Ajuli (*Dillenia pentagyna*), Bhela or Beola (*Semecarpus anacardium*), Koroï (*Albizia* spp.), Gandhi Gazari (*Miliusa velutina*), Menda (*Litsea polyantha*), Kusum (*Schleichera oleosa*), Chapalish (*Artocarpus chaplasha*), Udal (*Sterculia* Spp.), Depha jam (*Cleistocalyx operculatus*), Bahera (*Terminalia bellirica*), Kurchi (*Holarrhena antidysenterica*), Horitiki (*Terminalia chebula*), Kapila (*Garuga pinnanta*), Raina or Pitraj (*Aphanamixis polystachya*), Sheora (*Streblus asper*), Sonalu (*Cassia fistula*), Assar (*Microcos paniculata*), and Amloki (*Phyllanthus emblica*).

Freshwater swamp forest landscapes: Freshwater swamp forest landscapes are distributed over 23,590 ha of gazetted forest areas in the haors and low-lying land areas under the jurisdiction of Sylhet Forest Division. It develops in still water areas around the lake margins and on elevated ridges between the beels or levees of streams and consist of evergreen trees 10-12 m tall including hijal (*Barringtonia acutangula*), koroch (*Pongamia pinnata*), bhuri (*Trewia nudiflora*), jarul (*Lagerstroemia speciosa*), woody shrubs including baladunur (*Ficus heterophylla*) and chitki (*Phyllanthus disticha*), and *Asclepias* climbers. Murta (*Schumannianthus dichotomus*), bet (*Calamus* spp.), fish, shingles and boulders are further commercially important non-wood resources of the reed forest (Karim 1993). The reed forests in freshwater marshes are dominated by a reed type known locally as Pajuban, and consist of grasses 6-7 m tall, of mainly nal (*Phragmites karka*), khagra (*Saccharum spontaneum*) and ekra (*Eranthus ravannae*), as well as meadow grasses including binna (*Vetiveria zizanioides*) and woody shrubs including satamuli (*Asparagus racemosus*).

Fresh water swamp forest has a great ecological, commercial and socio-economic importance. They are highly productive ecosystems and important breeding grounds for fish (Karim 1993). They are rich in their diversity of fauna, and are internationally important wetland habitats for migratory waterfowls, particularly for ducks and shore birds. The wetlands are recognized as containing very rich components of biodiversity of local, regional and national significance (Nishat 1993).

Coastal forest landscapes: Coastal afforestation program is executed administratively by the Forest Department in four coastal afforestation divisions including several range and beat offices along the coast and offshore islands of Bangladesh. These divisions are Chittagong, Noakhali, Bhola and Patuakhali. The coastal afforestation was started in 1966 and got momentum in 1978 gaining the large funds from the World Bank. In the meantime, 148,526 hectares of coastal lands have been afforested by different species. The mean temperature in the coastal areas ranges between 19°C in Winter and 29°C in Summer. The rainfall occurrence ranges from 2300 mm to 4000 mm. About 10% of the tropical cyclones worldwide form in the Bay of Bengal and more than 40% of world's total deaths due to

cyclones takes place in the coastal areas of Bangladesh alone. The coastal areas of Bangladesh include soils with silt clay loam in texture. These are mostly clayey with high quantity of silts in the West and very fine sandy clays and silts in the eastern part of the coastal areas of Bangladesh (Siddiqi 2001). These soils have been formed mostly on recent (Quaternary) sediments deposition from a number of rivers. The physical and chemical properties of coastal soils are more or less uniform along the shorelines. The soils are slightly or moderately alkaline with the pH ranging from 7.52 to 8.3. The organic carbon content in the soil (devoid of plantation) surface ranges from 0.5% to 2.0% (Siddiqi 2001). The frequently planted tree species in the coastal areas are *Sonneratia apetala*, *Sonneratia caseolaris*, *Avicennia officinalis*, *Heritiera fomes*, *Xylocarpus mekongensis*, *Bruguiera sexangula*, *Excoecaria agallocha*, *Ceriops decandra*, and *Nypa fruticans* (Siddiqi 2001).

Mangrove forests, both natural and plantation, are very important forest resources in Bangladesh. These are also called littoral swamp forests and are mainly evergreen forests of varying density and height, always associated with wet soils. The mangrove forests are well developed in the Sundarbans on the Ganges- Brahmaputra Delta, but very poorly developed in the Chokaria Sundarbans (Siddiqi 2001). The Sundarbans mangrove area is now a World Heritage Site. Sundri (*Heritiera fomes*) is the dominant tree species from which it derives its name. The total area of the Sundarbans is 6,017 km², which is the single largest natural mangrove tract in the world. It is about 4.2% of the total land area of Bangladesh and about 44% of the forest land (FMP 1993). Other associate species are *Excoecaria agallocha*, *Avicennia officinalis*, *Rhizophora mucronata*, *Bruguiera sexangula* and *Ceriops decandra* and many others constitute the tidal or mangrove vegetation. The Sundarbans Reserve forest has been managed as a productive forest since 1879. The Sundarbans are a very vital natural resource providing a large number of products, such as timber, fuelwood, fish, thatching materials, honey, bee wax and shells. In addition, it supports a very rich and diverse flora and fauna (Siddiqi 2001). It is the largest remaining habitat for the Royal Bengal Tiger. Some 600,000 people are directly dependent on these resources for their livelihood. The mangrove forest acts as a natural barrier to cyclones and tidal bores, and protects the densely populated agricultural areas to its north. The Sundarbans also act as the world's largest mangrove carbon sink. These are also an important spawning ground for fishes and harboring a very rich biodiversity.

1.3.2 Environmental settings

The project will be implemented in the selected areas of 28 districts of Bangladesh, covering coastal plains and off-shore islands, south-east and north-east hills, central plains and north-west Barind and piedmont plains. Coastal districts will include Cox's Bazar, Chattogram, Noakhali, Lakshimpur, Barisal, Patuakhali, Barguna, and Bhola. In the hilly area of the south-east will include Cox's Bazar, and Chattogram district. The hills of north-east will cover, Habiganj, Moulavibazar, and Sylhet districts. The central plain will cover the plain land Sal forest landscape in Dhaka, Gazipur, Mymensingh, Tangail, Sherpur, Netrokona and Jamalpur districts. The north-west Barind and piedmont plains will include Rajshahi, Noagaon, Thakurgaon, Dinajpur, and Panchagarh districts, which possess small remnant of Sal forests. Rest of the districts under SUFAL don't have any natural forests and included as part of Social Forestry and Trees Outside Forest Program. The BFD administrative divisions are different from the administrative districts. The Figure 1.1 shows the districts covered under SUFAL project in the Bangladesh map.

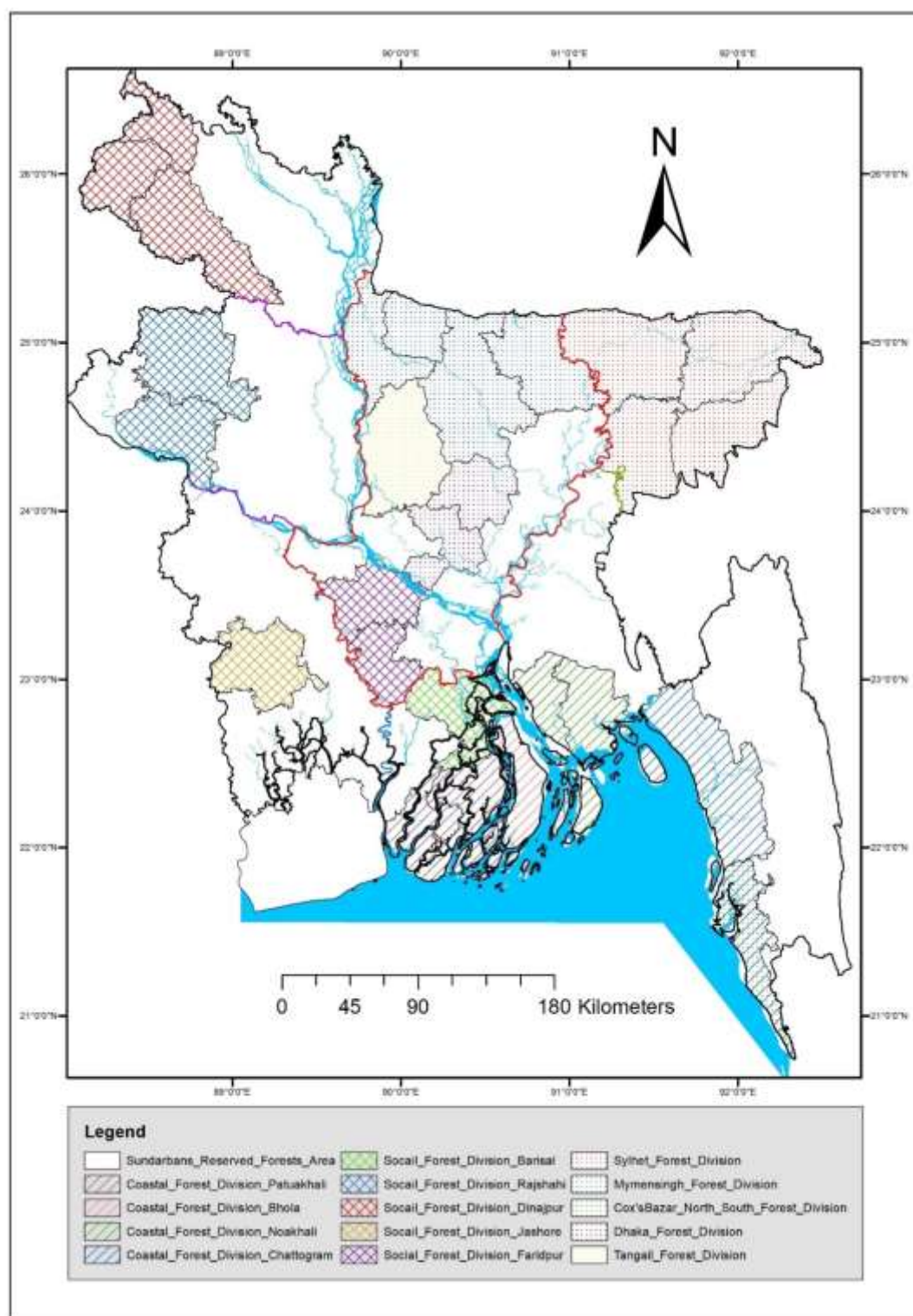


Figure 1.1: SUFAL Project area.

Bio-ecological Zones

Based on parameters such as physiography, soil, temperature and rainfall, floral and faunal diversity, and flooding characteristics, Bangladesh is divided into 25 bio-ecological classes (IUCN, 2002) (Figure 1.2).

Himalayan Piedmont Plain: The Himalayan Piedmont Plain occupies most of Dinajpur and parts of Jamalpur, Netrokona, Sherpur, Sunamganj and Sylhet district. The area is composed of numerous smooth but irregular-shaped ridges with broad and braided rivers. Being the ecotone between hill forests and low land swamps, ecologically this zone is very rich and diverse. Reeds and grasslands are the characteristic vegetation of this zone. Wildlife species of this zone is also diverse. Although the bird population, like that of mammals, has been affected by the disappearance of its natural habitats, there still exist a large number of birds in this zone.

Barind Tract: Barind Tract is located in the center and western part of Rajshahi division. The greater part of the tract is almost plain and is crisscrossed by only a few minor rivers. This tract is considered an ecologically fragile ecosystem with extremely low vegetation cover. Though this zone was rich with faunal diversity in the past, it has now noticeably reduced mostly due to various pressures like expansion of human habitat, agricultural extension, unwise use of agrochemicals and illegal hunting.

Madhupur Sal Tract: The Madhupur Sal tract extends across the district of Gazipur, Tangail and Mymensingh. The boundary between this ecosystem and its surroundings are generally sharp and well defined. Undulating Sal forest is the main ecological feature of this zone. This region is enriched with high floral diversity, but unfortunately, over 70% of the Sal forest area is either already degraded or encroached. The Madhupur Sal tract is prominent by the presence of Sal tree. Records show that the Bengal tiger and One-horned rhinoceros, both of which have become extinct from this zone now, had healthy population in the past. However, due to continuous habitat destruction most of the wildlife of this region are either extinct or in vulnerable condition.

Teesta floodplain: Teesta floodplain spreads over several different landscapes in greater Rangpur and the adjoining regions. The diversity results from the fact that the Teesta river had occupied and later abandoned several different channels during the last few thousand years including the valleys now are occupied by the Mahananda, Punarnava, Atrai, Choto Jamuna, Kortoya and Ghagat rivers. There were large patches of forests in this zone, but they have in most cases been ruthlessly cut down. However, this zone is still fairly wooded with many valuable indigenous timber species. Although most of the large mammals have been disappeared- from this area but most of the common bird species are still found in this location.

Ganges Flood plain: The Ganges floodplain is basically consisted of the active floodplain of the Ganges River and the adjoining meandering floodplains, and is mostly situated in the Greater Jessore, Kustia, Faridpur and Barisal districts. This floodplains are comprises of ridges, basins and old channels. The Gangetic alluvium is readily distinguished from the old Brahmaputra, Jamuna and Meghna sediments by its high lime contents. Ganges channel is constantly shifting within its active floodplain, eroding and depositing large areas of new char lands in each flooding season, but it is less braided than that of the Brahmaputra- Jamuna. Both plants and animals are adapted with the pattern of flooding. The floodplains are characterized by mixed vegetation. Huge number of stagnant water bodies and channels, rivers and tributaries support a habitat of rich biodiversity. Free-floating aquatic vegetation is commonly shown in most of the wetlands. Both cultivated and wild plants species are found in homesteads forest. Major groups of the oriental birds are represented in this zone by many species. A large number of migratory birds are observed in winter. Different species of tortoises and turtles are found in perennial water bodies.

The coastal plains: The coastal plains are underlain by heavy marine or tidal clays but these have been buried under by more sand or silty deposits near the foot of the hills and along the courses of rivers

and streams, which run across the plains. The eastern coastline, extending from the mouth of the Feni river to the southern tip of mainland along Chittagong, is regular and unbroken and protected along the sea by mud-flats and submerged sands. This zone is important for a wide variety of waterfowls.

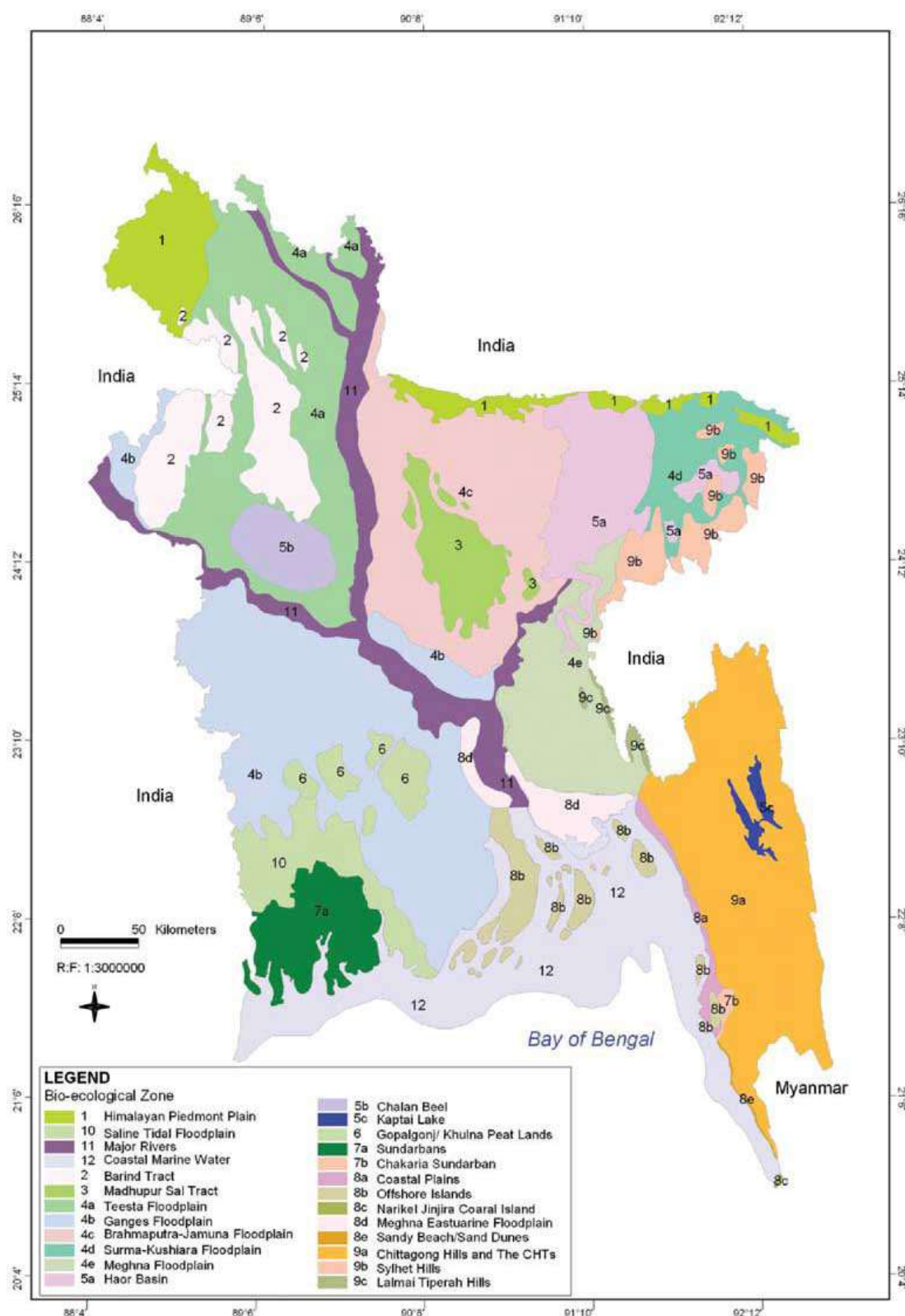


Figure 1.2: Bio-ecological Zones of Bangladesh

Offshore islands: This zone covers numerous offshore islands, including Hatiya, Bhola, Nhijhum dweep etc. Shapes of most of these islands are continuously changing as a result of erosion and accretion. Moreover, there are extensive intertidal mudflats composing parts of the islands. The vast amount of sediments brought down by Meghna made the estuary shallow for a considerable distance. Most of these islands have man made mangrove plantations. The islands of this zone are very important staging and wintering areas for a wide variety of waterfowls, particularly the migratory shorebirds.

Meghna estuarine floodplains: A huge newly accreted mudflat is the main physiographic feature of the Meghna estuarine floodplains, which is situated at the southern part of the Southeast region. Deposition and erosion are constantly taking place on the land margins. In many places during the dry season, part of the zone and surface becomes saline in varying degrees. Urighash is the pioneer plant species in the new land formation whereas the luxuriant growths of Palms are the dominant. All the accreted inter-tidal lands are important wintering grounds for migratory waterfowls.

Sandy beach/Sand dunes: The main feature of this zone is the continuous line of sandy beaches and sand dunes, backed in places by narrow coastal plains, and bounded almost throughout by hills. Vegetation cover is relatively less diverse and consists primarily of dopati lata and nil nishinda (*Vitex trifolia*). This zone is very important for marine turtle and snakes, in particular a large number of marine turtle use this beach area as their breeding habitat.

Chittagong Hills and the Hill Tracts: south-eastern hill range of the country is composed of tropical evergreen and semi evergreen forest, which are important watershed areas of the country. The majority of the species in the lower canopy are evergreen, and the upper canopy of the forest is deciduous type. Tropical evergreen forest is found in the valleys of this zone. Knowledge on the diversity of reptiles and amphibians of this zone is rather rudimentary, as few surveys of these animals have been made. This zone possess richest avifauna population of the country mostly marine and shore birds.

Sylhet hills: The Sylhet hilly tracts could be remnants of Pleistocene terraces with small hillocks are locally known as “Tilla”. Tropical evergreen forest is found in this zone particularly in the valleys. This zone is still relatively rich with faunal diversity. The region is popular among bird watchers due to its rich bird diversity.

The Lalmai-Tipperah hills: The Lalmai-Tipperah hills laying the eastern border of South-East region constitutes a distinct physiographic unit enjoys tropical semi-evergreen forests. The principal floral characteristic of this zone is present a large proportion of deciduous species. The diversity of bird and mammal species is still considerably high but these species are increasingly under threat of extinction due to unhindered loss of habitats. The zone faces flash flood in rainy season.

The saline tidal floodplain: The saline tidal floodplain has a transitional physiography, which is located at the south portion of Southwest and South central region. It has a low ridge and basin relief, crossed by innumerable tidal rivers and creeks. Soils are the non-saline throughout the over substantial amount of areas in the north and east but they become saline to various degrees in the dry season in the south-west and are saline for much of the year in the Sundarbans. The river carry fresh water throughout the year to the east and north-east, but saline water penetrates increasingly further inland towards the west. Of the floral diversity, this zone has innumerable indigenous weeds grow in beel areas. Several types of palms and bamboo clumps grow in almost all the villages. This zone affords a very lucrative place for game birds include goose, duck, cranes, spine, jungle fowls etc.

Soil

The major part of Bangladesh is on the delta formed by the three major rivers Brahmaputra, Ganges and Meghna. These rivers and many of the country's other minor rivers originate outside the national boundary of the country and make up the Ganges-Brahmaputra-Meghna river system. The system drains a basin of some 1.76 million sq. km and carry not only snowmelt water from the Himalayas but also runoff water from some of the highest rainfall areas of the world. These huge sediments are the major sources of formation of 80% soils of the country. The remaining 20% of soils have been formed in Tertiary and Quaternary sediments of hills (12%) and in uplifted Pleistocene terrace (8%). The soil formation process differs significantly between floodplain, hill and uplifted terrace.

Floodplain In many areas, the soil surveys recognized active, young, and old floodplain landscapes. Active floodplains occupy land within and adjacent to the main rivers where shifting channels deposit and erode new sediments during the annual floods. Newly deposited alluvium within this floodplain is stratified in different layers. Usually, silty and clay deposits are finely stratified, and sandy deposits, as well as mixed sandy and silty deposits are coarsely stratified. This is a state from where the soil forming factors are yet to activate the soil forming processes.

Hill Soil forming processes are active on the hills for a significant period. Due to erosion on steep slopes of high hills, the weathered material on the hills is constantly removed and thus keeps the soils young on the high hills. The soils on the low hills are older as erosion is less severe and allows soil material to accumulate. The sedimentary rocks underlying steep to very steep high hill ranges are usually hard and relatively rich in weatherable minerals and lower hills are unconsolidated and poor in weatherable minerals. Soils have been developed from these minerals through prolonged weathering under well to excessively drained conditions, leaching, acidification and removal of surface material by erosion. There is an increase of clay content from surface to subsoil indicating clay illuviation in most of the soils formed in the low hills.

Pleistocene Terrace Unlike other floodplain terraces, the Madhapur clay was uplifted and formed a terrace above sea level probably before the Late Pleistocene. Since then it has been subject to the action of soil forming processes. Soils have been developed in the two kinds of Madhapur clay - deeply weathered pervious clay and little altered impervious clay. They vary considerably in drainage, depth of column and degree of profile development, depending on the extent of weathering of the parent material and the topography.

Based on physiographic condition and the geological origin of the parent material the soil of Bangladesh was also divided into seven tracts. The main objective of the classification was to make an appraisal of nutrient status of the soils of Bangladesh. A brief description of the seven tracts follows:

Madhapur Tract or Red Soil Tract This tract represents the red lateritic soils of Madhapur area, a highland tract above flood level intersected by numerous large and small depressions. The soils of this tract have clayey texture and contain large quantity of iron and aluminum, which are highly aggregated. The pH value ranges from 5.5 to 6.0 in the topsoil. The cation exchange capacity is low and the soils have the high phosphate fixing capacity. The soils are deficient in organic matter, nitrogen, phosphorus and lime.

Barind Tract belongs to an old alluvial formation which is usually composed of massive argillaceous beds of pale reddish brown colour that often turns yellowish on weathering. Lime nodules and pisolitic ferruginous concretions occur throughout the soil. Locally the soils are rich in lime. Soil pH varies between 6.0 and 7.5. Soils are deficient in nitrogen and phosphorus.

Teesta Silt, the predominant soil texture is sandy loam. The pH of the topsoils ranges from 5.5 to 6.5. The soils are in general fertile and are rich in potassium and phosphorus.

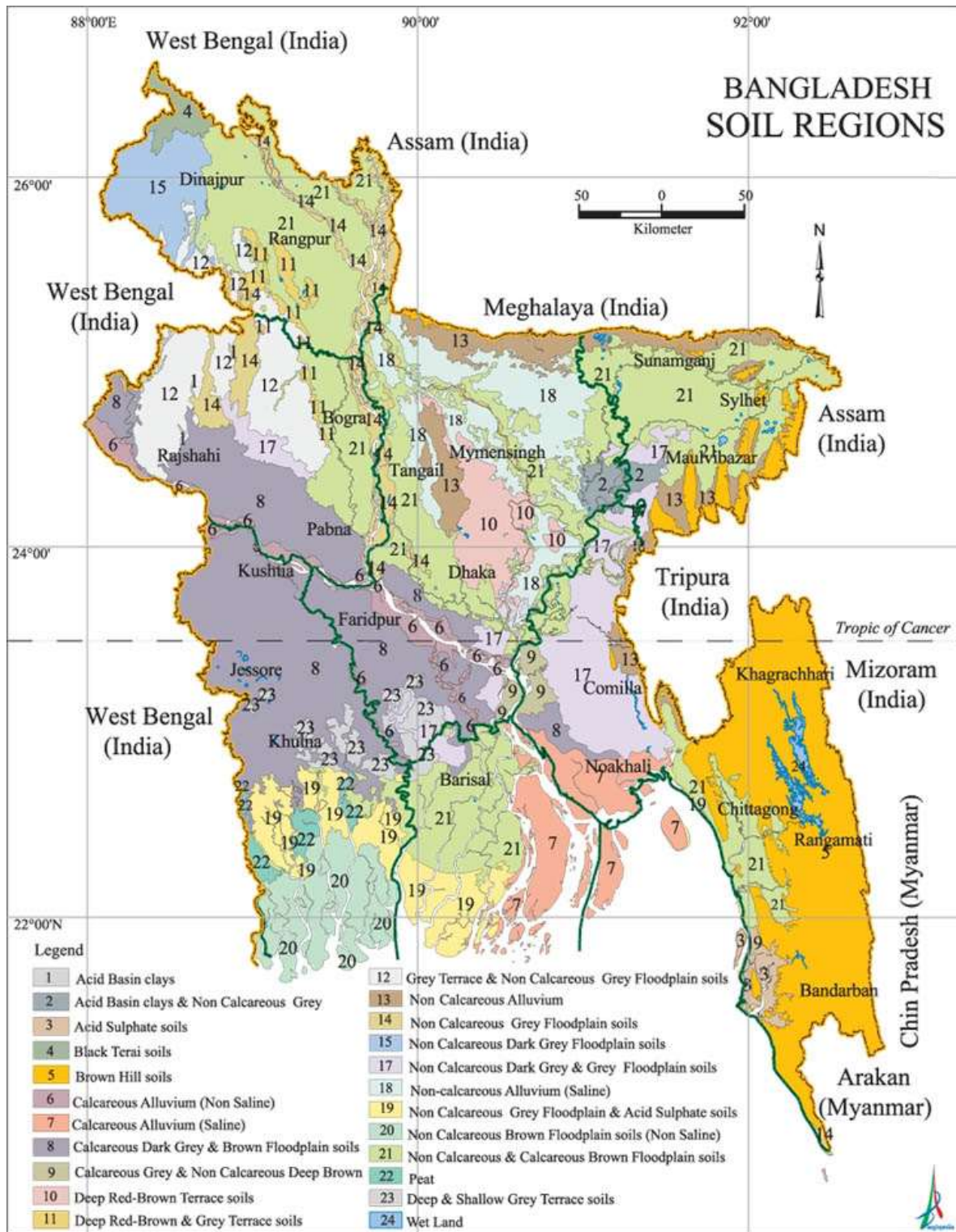


Figure 1.3: Soil Map of Bangladesh

Brahmaputra Alluvium with dominant soil texture is sandy loam. The soils are acidic in character and the pH ranges from 5.5 to 6.8. The soils are naturally fertile and are recharged every year by fresh deposition by the floodwaters.

Gangetic Alluvium represents the riverine lands of the Gangetic plains. Soil texture varies from clay loam to sandy loam. The pH of the soils ranges from 7.0 to 8.5. The soils are moderately fertile and are characterized by calcium carbonate content and are well supplied with phosphate and potassium.

Coastal Saline Tract represents the flat low-lying areas along the coastal belt and the estuarine islands. The soils are saline and the pH values are neutral to slightly alkaline. The soils are well supplied with potassium and phosphorus. The Sundarbans is located in this tract.

Hill Tracts soils consist of hard red clay with a mixture of fine sand of the same colour and nodules containing a large percentage of sesquioxides. The soils are moderately to strongly acidic. The soils are highly leached and have a low natural fertility. Hills are mainly under natural and plantation forests. Shifting cultivation is practiced in some places.

Climate Condition

To understand the climate condition of the project districts, the data from four weather stations are analyzed and discussed here. These four stations can be considered representative of the project districts. These stations are Chittagong, Dhaka, Sylhet and Rangpur.

Rainfall

The rainfall in Bangladesh varies, depending upon season and location and controlled primarily by the intensity of monsoon wind from the Bay of Bengal. The average annual rainfall in Bangladesh varies from 1500 mm in the west-central part to over 3000 mm in the northeast and southeast. At Sylhet the rainfall average is 4180 mm, near the foot of the abrupt Meghalaya Plateau at Sunamganj it is 5330 mm, and at Lalakhal 6400 mm, the highest in Bangladesh.

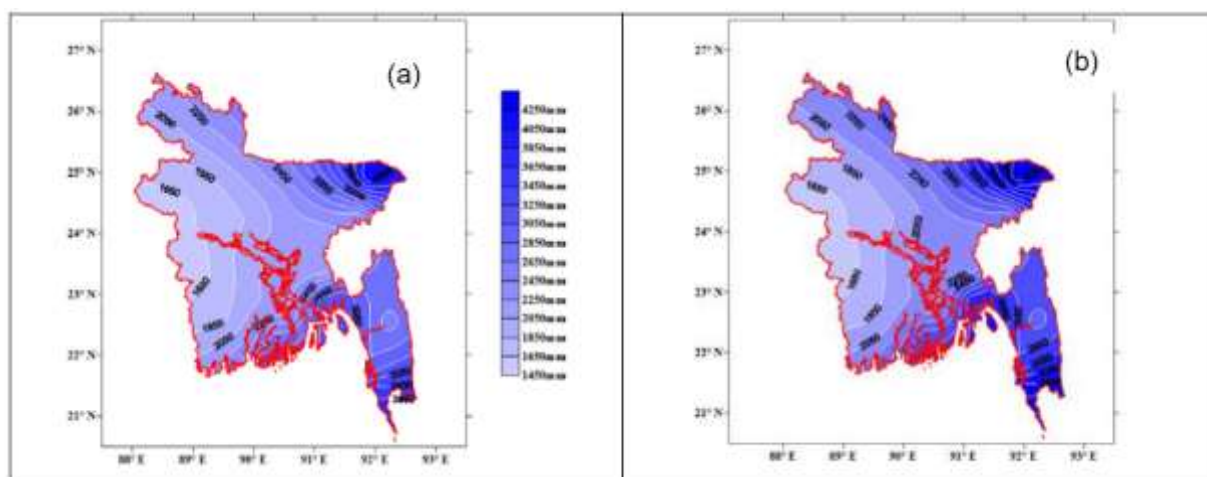


Figure 1.4: Spatial distribution of annual normal rainfall (a) during 1971-2000 and (b) during 1981-2010 in Bangladesh

Rainfall in the pre-monsoon hot season (March-May) accounts for 10-25% of the total annual rainfall. The rain in this period is caused by convective storms (thunderstorms) or nor'westers (locally called Kalbaishakhi). Average rainfall of this season varies from 200 mm in the west-central part of the country to 800 mm in the northeast. Enhanced rainfall in the northeast is caused by the additional effect of the orographic uplifting provided by the Meghalaya plateau. The rainy season (June through October) accounts for 70 to 85% of the annual rainfall, which varies from 70% in the eastern part of the country to about 80% in the southwest, and 85% in the northwest. Rainfall pattern of five representative weather stations are provided in Figure 1.5.

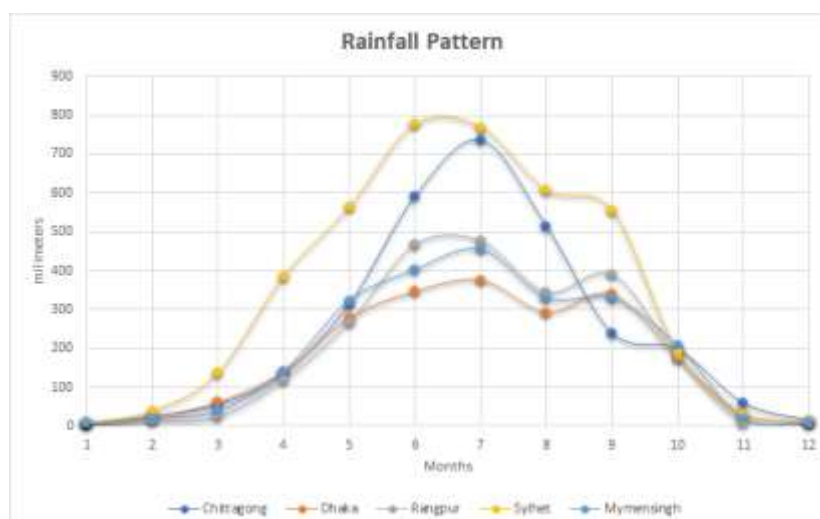


Figure 1.5: Rainfal Pattern of five representative weather stations

The average number of rainy days also follow a similar trend with June to August have the most rainy days in a single months (Figure 1.6).

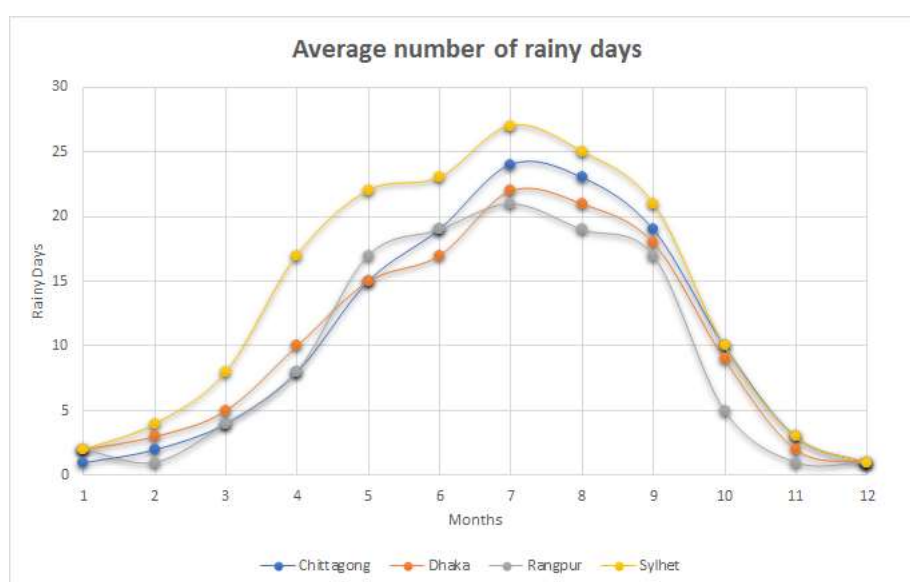


Figure 1.6: Average number of rainy days

Rainfall analysis (Table 1.2a,b,c,d) of Chittagong, Dhaka, Rangpur and Sylhet revealed that the number of rainy days in winter (Dec-Feb) are rarity and during January and December average rainy days are less than one. Frequency of rainy days increase with the onset on monsoon and days with very heavy rain (>100 mm) are only restricted between April to November. However, there are subtle differences between different stations and it appears that the very heavy rain (>89 mm) starts early in north-east (Sylhet) region than rest of the country.

From the spatial distribution map (Figure 1.4) and number of rainy days (Figure 1.6 and Table 1.1a,b,c,d), it is evident that the eastern side of the country is relatively wetter than its western neighbors and so the eastern part of the country supports more water demanding forest types (evergreen and semi-evergreen rain forests) compared to deciduous and moist deciduous types found in central and western part of the country.

Table 1.1a: Frequency of rainy days over Chittagong for different rainfall ranges during the period 1981-2010

Rainfall (mm)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Total Missing Days
Dry days	784	683	718	586	458	281	240	279	352	558	702	749	6390	89
Light rain 1-10	19	34	50	74	154	203	245	273	268	122	43	14	1499	
Moderate rain 11-22	1	10	12	39	51	80	95	91	87	44	16	5	531	
Moderate heavy 23-43	1	4	18	30	77	83	86	69	39	43	7	6	463	
Heavy rain 44-88	1	3	7	15	35	73	74	60	29	30	9	1	337	
Very heavy rain > 89			1	6	18	45	66	34	5	9	3		187	
Very heavy rain 100-199				3	14	29	43	23	5	4	2		123	
Very heavy rain 200-299						4	6	6		1			17	
Very heavy rain > 300							3	1					4	

*5 July 1983 ----407 mm, * 9 July 1985 ---374 mm, * 8 July 1988 ---- 305 mm, *4 August 1983 --511mm

Table 1.1b: Frequency of rainy days over Dhaka for different rainfall ranges during the period 1981-2010

Rainfall (mm)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Total Missing Days
Dry days	886	768	806	653	504	366	284	294	371	655	844	904	7335	3
Light rain 1-10	36	60	22	116	208	263	348	408	281	151	34	15	1942	
Moderate rain 11-22	5	12	18	64	85	119	138	113	108	44	10	4	720	
Moderate heavy 23-43	2	5	8	41	70	84	86	67	78	43	3	6	493	
Heavy rain 44-88		2	3	24	53	53	61	37	48	27	4	1	313	
Very heavy rain > 89			1	2	10	15	13	11	14	10	3		79	
Very heavy rain 100-199				2	4	10	8	9	11	9	1		54	
Very heavy rain 200-299													0	
Very heavy rain > 300							1		1				2	

*28 July 2009 --- 333 mm rainfall, *14 September 2004 --- 341 mm

Table 1.1b: Frequency of rainy days over Rangpur for different rainfall ranges during the period 1981-2010

Rainfall (mm)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Total Missing Days
Dry days	891	801	849	672	487	338	311	428	404	709	870	901	7661	97
Light rain 1-10	24	36	55	127	204	244	280	237	226	117	25	20	1595	
Moderate rain 11-22	8	7	16	37	106	116	117	92	94	37	2	5	637	
Moderate heavy 23-43	3	3	8	47	91	105	87	75	66	29	1	4	519	
Heavy rain 44-88			2	13	37	66	73	46	57	25	2		321	
Very heavy rain > 89				2	5	28	31	21	23	13			123	
Very heavy rain 100-199				1	5	15	25	14	16	8			84	
Very heavy rain 200-299						4	2	2	4	4			16	
Very heavy rain > 300													0	

Table 1.1b: Frequency of rainy days over Sylhet for different rainfall ranges during the period 1981-2010

Rainfall (mm)	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total	Total Missing Days
Dry days	896	739	685	419	319	141	79	149	272	635	849	900	6083	8
Light rain 1-10	28	73	131	169	209	259	306	307	257	150	28	17	1934	
Moderate rain 11-22	4	22	51	129	149	175	218	200	134	53	9	8	1152	
Moderate heavy 23-43	2	9	35	113	125	156	169	154	110	56	8	3	940	
Heavy rain 44-88		4	25	57	95	104	110	88	95	30	5	2	615	
Very heavy rain > 89			2	13	33	58	48	32	32	6	1		225	
Very heavy rain 100-199			2	8	23	44	35	22	26	5	1		166	
Very heavy rain 200-299				1	3	4	7	1	3				19	
Very heavy rain > 300						1		1					2	

** 13 June 2000 --- 362 mm & ** 1 August 1987 --- 302 mm

Source: Met Report: Climate of Bangladesh, 2016

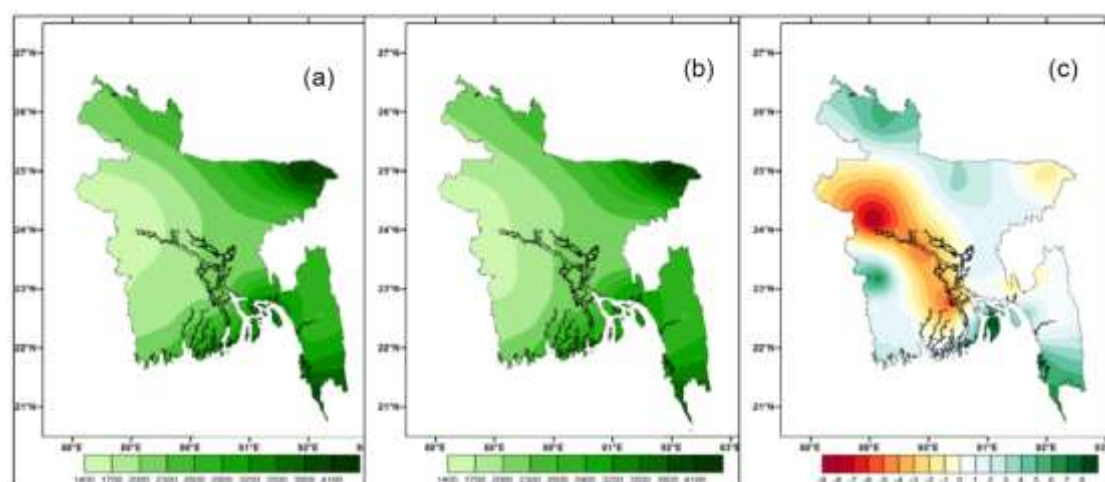


Figure 1.7: Spatial distribution of Annual Rainfall (a) during 1981-2010, (b) during 1971-2000 and (c) deviation (%) of Annual Rainfall during 1981-2010 based on 1971-2000

Over the year, the amount and spatial distribution of annual average rainfall have changed most part of the country. Although the distribution pattern of annual rainfall during 1971-2000 and 1981-2010 look similar (Figure 1.7a and b), but the comparison between these two periods shows that the amounts of annual rainfall increased during 1981-2010 over extreme southeastern part, Hatiya-Sandwip, Rangpur and Jessore regions. But the amounts of rainfall decreased over Rajshahi division and the regions of Faridpur, Dhaka, Sylhet, Kushtia and Barisal (Figure 1.7c). Substantial increments are found at Hatiya (+9%), Teknaf (+8%) and Jessore (+7%) but the considerable declines are found at Ishurdi (-9%), Barisal (-6%), Rajshahi and Faridpur (-5% each).

Temperature

Bangladesh has a humid tropical climate characterised by seasonal variations in temperatures, and high humidity. In general, maximum summer temperatures range between 38 and 41 °C. April is the hottest month in most parts of the country. January is the coolest month, when the average temperature for most of the country is 16–20 °C during the day and around 10 °C (50 °F) at night (Figure 1.8).

The analyses of both annual average maximum and minimum temperature indicate an increase temperature (Figure 1.9). Analysis of the temperature of the hottest month of the year also shows an increase. According to this trend, between 1966 and 2006 the temperature of the hottest month has increased by about 1.6°C on an average.

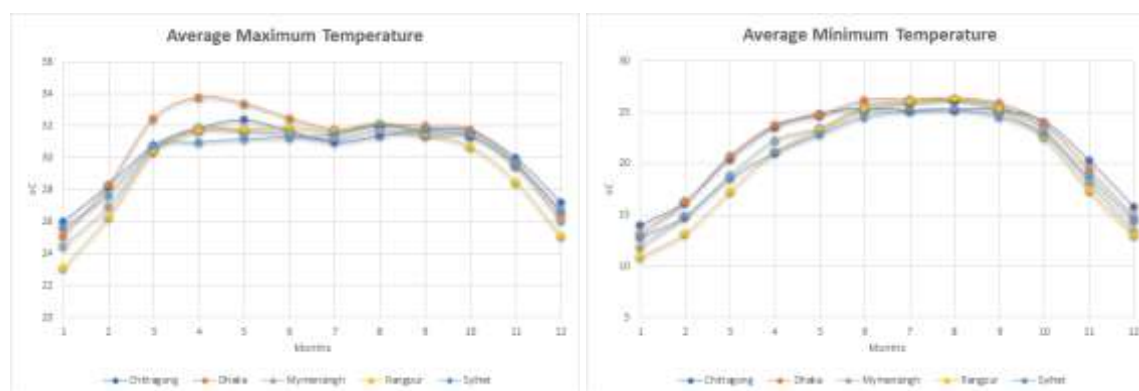


Figure 1.8: Monthly normal maximum and minimum temperature (°C)

The maximum temperature of 34 weather stations used in a BMD study shows increasing trend except at Dinajpur, Rangpur and Mymensingh where it shows negative trend during the available observation period at each of the station. The significant rates of increment per hundred years are 3.9°C at Mongla, 3.7°C at Patuakhali, 3.6°C at Tangail, 3.4°C at Khepupara, 3.2°C at Kutubdia & Cox's Bazar and 2.8°C at Hatiya & Seyedpur. Analysis also reveals that the rates of increment of the stations located over the southern part of country are higher than that of the stations located over north and northwestern parts of the country.

Similarly, minimum temperatures of almost all the stations shows increasing trends except at Barisal, Khulna, Sandwip, Sitakunda, Rangamati and Rajshahi where trends are decreasing. The significant trends of minimum temperature per hundred years are 3.8°C at Madaripur, 2.6°C at Dhaka, 2.5°C at Rangpur, 2.3°C at Seyedpur, 2.3°C at Majdi Court, 2.2°C at Cox's Bazar and 2.1°C at Srimangal & Kutubdia. Trend of average

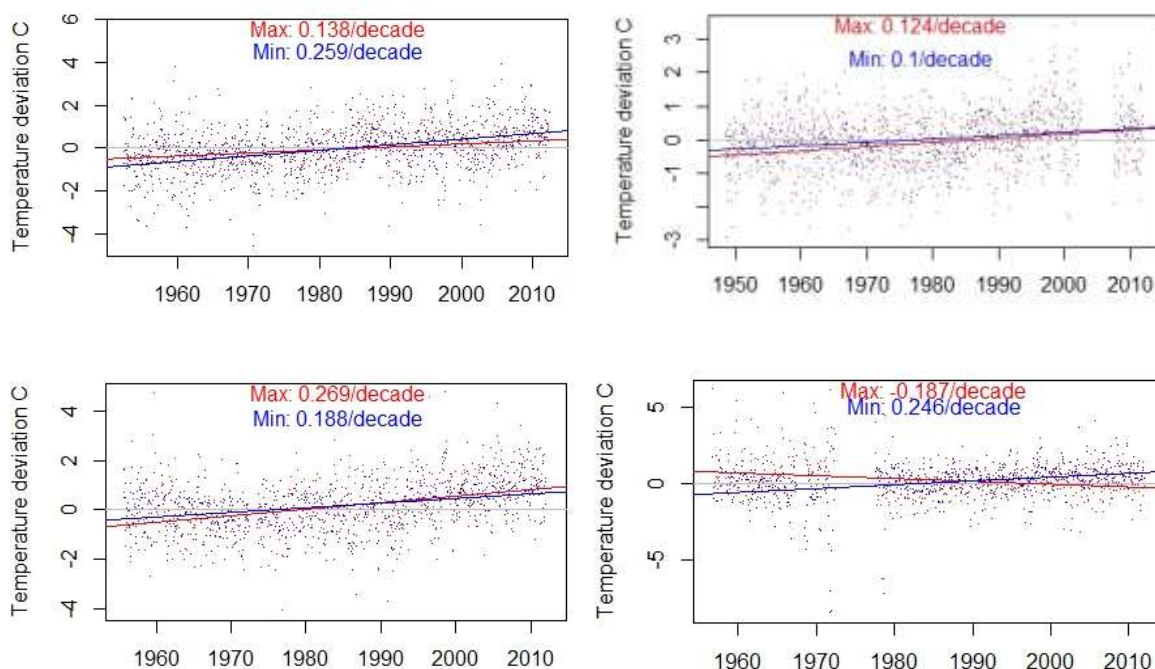


Figure 1.9: Trend of annual average maximum and minimum temperature in Chittagong, Sylhet, Rangpur and Dhaka (in clockwise)

1.4. Environmental and Social Management Framework

Rationale for ESMF

The project will implement collaborative forest management, afforestation and reforestation, AIGAs, infrastructure development works as well as certain alternative livelihoods interventions in the target communities. Though there will no private land acquisition, there is a possibility that these interventions might induce adverse and unintended environmental and social impacts. The number, type and locations of certain project interventions will be decided over the project period. The adverse social impacts of each sub-component could not be identified and specified by the time of project appraisal; hence, the development of this ESMF and its three related frameworks (Resettlement Policy Framework, Resettlement Process Framework and Small Ethnic Communities Development Framework).

The rationale for developing the project's various safeguards frameworks is based on the consideration that the sub-component-specific environmental and social issues and impacts that have been foreseen by the project may not all come to pass. Therefore, detailed site investigations will be carried out as part of identifying specific project activities and related designs at the selected locations to ascertain the precise nature of the environmental and social impacts. Therefore, the ESMF will provide the necessary background for environmental and social considerations and a series of checklists of potential issues of the project activities to be considered and built into the design of the project so that environmentally and socially sustainable implementation can take place.

In doing so, the ESMF takes into account the relevant legislation, policies, and strategies related to both publicly owned forests (e.g. reserved forests) and Trees Outside Forests (TOF). The suggested guidelines and procedures of the ESMF would adhere to the due diligence principles, especially it will ensure compliance with the World Bank's environmental and social safeguard policies and the relevant provisions under the related policies of Bangladesh, and its associated laws, regulations and procedures. It will also serve as the guideline for the staff in the PIU for SUFAL within BFD to oversee and monitor the social safeguards compliance of the project components coming under their implementation responsibility. Therefore, this ESMF would be used as the template and guideline to ensure diligent environmental and social compliance of the planning and implementation of the activities envisaged under the SUFAL project. However, all processes described in the ESMF can be adjusted based on implementation experience. The ESMF will be a living document and will be reviewed and updated periodically as needed.

Objectives of the ESMF

The operational policy OP 4.01 of the World Bank requires Environmental and Social Assessment (ESA) of project proposed to help ensure that the projects are environmentally and socially sound and sustainable. The proposed interventions of SUFAL can potentially have significant impacts on the natural environment and the people living in that area. Conducting a proper environmental and social assessment as well as preparing both environmental and social management plan is essential to address the potentially negative impacts of the project. While this ESMF document has been prepared to identify the potentially negative impacts of the SUFAL project.

The specific objectives are as follows:

- To integrate the environmental and social concerns into the identification, design and implementation of all project interventions in order to ensure that those are environmentally sustainable and socially feasible;
- To ensure all relevant environmental and social issues are mainstreamed into the design and implementation of the project and also in the subsequent progress of the SUFAL activities;
- To consider in an integrated manner the potential environmental and social risks, benefits and impacts of the program and identify measures to avoid, minimize and manage risks and impacts while enhancing benefits;
- To ensure compliance with national and World Bank requirements. The ESMF presents potential impacts of the SUFAL, mitigation, enhancement, contingency and compensation measures, environmental and social management and monitoring plan, and institutional framework including inter-agency cooperation for implementing ESMP. The ESMF will facilitate compliance with the GoB's policies, acts and rules as well as with the World Bank's environmental safeguard policies, and
- To guide conducting the detailed IEE/ EISAs/SIA of the SUFAL as appropriate to the project components/sub-components.

Environmental and Social Due Diligence Principles

The GoB represented through the BFD and the associate implementing partner agency are required to comply with the World Bank's environmental and social guidelines in identification, design and implementation of interventions under the proposed project. These guidelines provide for establishing environmental and social review process to ensure that the project undertaken with IDA finance is environmentally and socially sustainable, designed to operate in compliance with applicable regulatory requirements in the country, and as required by the policy guidelines of the World Bank, are not likely to cause a significant environmental, health, or safety hazards or to aggravate social impacts and risks to stakeholders.

The principles of safeguards due diligence and management by the BFD, the executing agency (EA) on behalf of GoB be the following:

- BFD and its associate implementing agency will review the process of identification, design and implementation activities under the project following national laws and regulatory framework and in compliance with the World Bank environmental and social safeguards operational policies.
- On review of national legislations regarding World Bank safeguards policy objectives and requirements, if it appears that there are major gaps, then the World Bank policy requirements will prevail and complied with.
- Project interventions will be identified, designed and implemented with engagement of the beneficiaries and communities inclusive of location, gender, social groups and ethnic identity and active consultation and participation process will be adopted and implemented.
- A locally appropriate grievance redress mechanism (GRM) will be designed and established for ensuring citizen participation, transparency and accountability.

Methodology for ESMP Preparation

The present ESMF has been prepared following the standard methodology consisting of the steps listed below:

- Review of the program details and meeting/ discussions
- Review of the policy and regulatory requirements

- Reconnaissance field visits by BFD team and initial scoping and screening to determine the key environmental and social parameters and aspects that are likely to be impacted by the program activities
- Collecting and analysis of baseline environmental and social data, with the help of secondary literature review, and field data collection that initiated by BFD
- Consultations with the stakeholders including beneficiary/ affected communities and developing the consultation process
- An initial assessment of the potential and likely impacts of the program activities
- Prepare an outline of environmental and social management plan
- Compilation of the present ESMF.

The methodology for the preparation of the ESMF is presented in Figure 1.1.

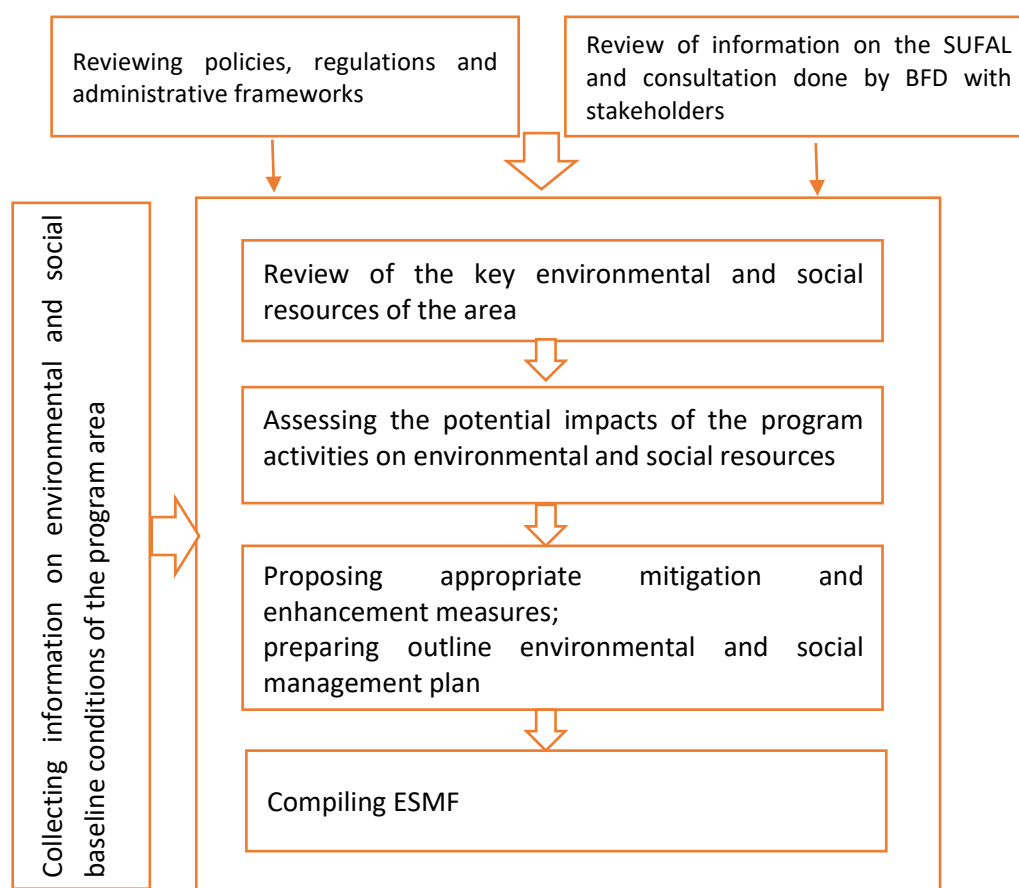


Figure 1.10: ESMF Preparation Approach.

ESMF Components and Structures

Chapter 3 presents a simplified description of the program, its various components and other salient information relevant for environmental and social assessment. Chapter 4 reviews the prevailing WB policies and national regulatory requirements relevant to environmental and social assessment. Description of the baseline environmental and social conditions is presented in Chapter 5. Environmental and Social management steps to be followed during the program and also screening, assessment and prediction of potentially negative environmental and social impacts have been discussed under Chapter 6. Chapter 7 presents the outline of the environmental and social (impact)

management plan (ESMP) and as well as the appropriate mitigation measures to address these negative impacts. Finally, Chapter 8 describes the consultations that have been carried out with the stakeholders.

CHAPTER 2: PROJECT COMPONENT AND DESCRIPTION

2.1. Introduction

At the verges of huge forest degradation and deforestation in Bangladesh, a potential response has been outreach through a project of Sustainable Forests and Livelihoods (SUFAL). With the financial support of the World Bank (WB), the project has been undertaken by the Bangladesh Forest Department (BFD) to help satisfy the development needs of the forestry sector of Bangladesh. The project employs a comprehensive approach to scale up action and address the challenges on : (i) increase the cover, improve quality and management of natural forests and biodiversity and coastal 'green belt' through collaboration with communities; (ii) improve living standards through alternative income generation options to forest dependent communities; and, (iii) improve the policy and regulatory environment to enhance tree planting on private lands.

The project will be implemented in selected sites in 169 Upazilas (sub-districts) of 28 districts, and costs USD\$ 175 million, a detailed component and cost are given in the Table 2.1

Table 2.1: Components and Cost of SUFAL Project

Component 1: Institutional Development, Information Systems and Training	17.41
Sub-Component 1.1: Strengthening Organizational Capacity	
Sub-Component 1.2 Applied Research	
Sub-Component 1.3 Training	
Sub-Component 1.4: Strengthening Monitoring, Information Management Systems and Forest Inventory	
Sub-Component 1.5: Communications & Outreach	
Component 2: Strengthening Collaborative Forest and Protected Area Management	96.04
Sub-Component 2.1: Institutionalizing Collaborative Forest Management (CFM)	
Sub-Component 2.2: Restoration of Degraded Forests, Plantations, Coastal Green Belt and Field Infrastructure	
Sub-Component 2.3: Improving Protected Areas and Wildlife Management	
Component 3: Increasing Access to Alternative Income Generating Activities (AIGAs), Forest Extension Services & Trees Outside Forests (TOF)	48.38
Sub-Component 3.1 Community Mobilization and Organization	
Sub-Component 3.2 Community Livelihood Grants for AIGAs	
Sub-Component 3.3 Extension Services for Trees Outside Forests	
Component 4: Project Management, Monitoring and Learning	12.16
Sub-Component 4.1 Project Management	
Sub-Component 4.2 Monitoring	
Support to the DPP preparation (SUFAL)	1.00
Grand Total	175.0

2.2. Project Components Details

Component 1: Strengthening Institutions, Information Systems and Training

Sub-Component 1.1 Strengthening Organizational Capacity: (i) A review of BFD's capacity and roles will focus on the long-term needs of BFD including, IT, GIS and other systems and business processes

and staffing and will initially concentrate on incremental change and bolstering existing capacity, with possible functional reorganization being addressed subsequently. (ii) Support for the adoption of the new draft Forest Policy, the draft Forest Master Plan and, a review of key regulations (timber transit and social forestry) and development of options for innovative long-term forest financing will provide. (iii) project area field offices and training centers will be renovated and climate -proofed and serve as cyclone shelters in coastal districts.

Sub-component 1.2 Applied Research: The Bangladesh Forest Research Institute (BFRI) will undertake this task through a Memorandum of Understanding (MoU) with BFD. Applied research will focus on sourcing of high quality and climate resilient planting material for plantations through (i) seed collection systems and seed orchards; and (ii) improved nursery techniques. An *Innovation Window* will fund proposals related to climate change and forests and biodiversity conservation and increasing efficiency of wood and non-wood processing, wildlife management or other topics that support the objective of SUFAL, from individuals, companies, educational institutions, NGOs, etc. A BFD committee will review and shortlist proposals according to agreed criteria.

Sub-component 1.3 Training: Training for BFD staff, and especially female staff, will be delivered on a number of topics to strengthen capacity in forest and wildlife management and will include training in emerging areas including, climate change, carbon measurement, eco-tourism, gender, collaboration with communities, etc. Other stakeholders e.g., tourism companies, NGOs, will also receive training in eco-tourism, collaborative management, forest and PA regulations, etc. A customized training program will be delivered by the NGOs under Components 2 and 3 for communities on collaborative management and AIGAs.

Sub Component 1.4 Strengthening monitoring, information management systems and forest inventory: A strategy for information management systems will be developed. The Resource Information Management System (RIMS) unit will be resourced to develop a *digital site-specific management planning system* using free and open source software. This approach will build on the Site-Specific Plans developed under Component 2 and will be piloted in 3 Management Planning Divisions and will help in the revision of the Forest Manual and format for management plans. The project will support updating of management plan requirements by piloting preparation of new management plans for both forests and PAs (protected areas). The current NFI will be updated and a team of trained staff will be dedicated to continue the process beyond the project period. Precise estimates of TOF, which play an important role in the economy and carbon sequestration, are not normally the focus of NFI but the NFI unit will consolidate the necessary skills and tools to conduct the sophisticated analysis for this work.

Sub-component 1.5. Communication & Outreach: Under a communication and outreach plan formulated in the first year, the PMU will pursue an outreach program to motivate both the participating partners, especially women, about collaborative management, PA management, wildlife protection, etc. The experiences and lessons from the project will be shared with relevant officials, partners and decision-makers for effective project management and implementation. A separate program of outreach will be planned for each of the key interventions under the project: (i) collaborative forest management; (ii) protected areas and wildlife management; and, (iii) Trees Outside Forests (TOF);

Component 2: Strengthening Collaborative Forests and Protected Areas Management

Sub-component 2.1 Institutionalizing collaborative forest management (CFM): The aim of collaborative management is to give forest dependent communities¹ a stake in the management and maintenance of forest cover and to foster local stewardship of forests. Key activities will be: (i) identifying policy and regulatory measures to strengthen collaboration with communities in different ecosystems; (ii) identifying the most forest dependent communities where CFM committees will be established; (iii) awareness raising, capacity development and training on the CFM approach for communities, especially women and BFD staff; (iv) strengthening CFM committees with own bank account, an operating fund and, (v) developing an institutional framework and rules for CFM during implementation. Special emphasis will be given to encourage women's participation as office-bearers in the CFMCs.

Community co-management in PAs will be under the Protected Area Management Rules 2017. In areas where social forestry programs are underway, the BFD will initiate CFM after the 3rd (third) rotation. A template to describe the roles and responsibilities of CFMCs will be developed during the first year of the project in consultation with communities. The CFMC will be the point of entry for the AIGAs under Component 3.

Sub-Component 2.2 Reforestation, Coastal Green Belt and Plantations: Protection, management and planting as appropriate in different forest ecosystems, covering about 76,000 hectares will be financed to enhance forest quality and increase the sustainable supply of fuelwood and non-timber products to communities. This will be achieved through:

- Assisted Natural Regeneration -protection and planting of up to 20% of site
- Enrichment plantations - with up to 60% planting
- Mixed plantation with indigenous and slow or fast-growing species, including NTFPs, medicinal
- Mangrove and other coastal afforestation

Availability of suitable forest land for these activities was assessed by BFD with support from the Center for Environment and Geographical Information Services (CEGIS), Bangladesh, using satellite images and field verification^{2,3}. Selection of areas for afforestation in the coastal districts is based on field verification using the study conducted by CEGIS for this purpose in 2016. Afforestation activities will be preceded by Site-Specific Planning(SSP) for each site based on *actual* site requirements. SSPs will generate a geo-spatial database which will help monitoring of treated sites, increase transparency and be an entry point for involvement of local communities in CFM.

Sub-Component 2.3 Improving Protected Areas (PAs) and Wildlife management: (i)development and implementation of PA management plans for 10 PAs⁴. Management plans will be implemented with

¹ A forest dependent community would include forest dependent people (self-selected) residing in villages located within three kilometers from the boundary of the Forest Beat area and would include the nearest village in the case of mangroves.

² CEGIS, 2017. GIS based Forestland Availability Assessment for Plantation/ Restoration. (Dhaka: CEGIS)

³ Government of Bangladesh (2017), National Land Representation System of Bangladesh, Forest Department, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh.

⁴ Baraiyadhala National Park, Shingra National Park, Nababgong National Park, Birgonj National Park, Pabla Khali Wildlife

co-management committees (CMCs). The members of Village Conservation Forum, the lowest tier of this organizational structure, would be eligible to be part of the livelihood support provided under Component 3. For motivation, networking and organizational development, the NGOs contracted under Component 3 will be responsible for organizing the CMCs and their training and capacity building for AIGAs. (ii) scaling up endangered species conservation programs for 13 endangered species⁵; (iii) enhancing capacity for wildlife law enforcement (excluding support to active enforcement activities): The project will support developing necessary technical and human capacity for scaling up SMART patrolling in 10 PAs outside Sundarbans. Training, facilities, equipment including software and hardware, GPS navigators, binoculars, tools for data collection and analysis will be procured. Necessary awareness raising and outreach and training will be provided to the Co-Management Committee (CMC) members. (iv) restoration and protection of natural habitats in select wildlife corridors (3.8 thousand hectares) for wild elephants for the alleviation of human-wildlife conflict in and outside of the country's protected areas and, (v) knowledge and information sharing with regional neighbors to curb trade in wildlife products and enhance wildlife law enforcement in the region and cooperation on transboundary habitat maintenance.

Component 3: Increasing Access to Alternative Income Generating Activities (AIGAs), Forest Extension Services & Trees Outside Forests (TOF)

Sub-Component 3.1 Community mobilization and organization for AIGAs: AIGAs and will be implemented in up to 600 villages in or close to forests, covering about 40,000 households. A Community Operations Manual (COM) will elaborate the rules and criteria for the implementation of AIGAs. NGOs will be contracted by BFD to mobilize, organize and provide training to communities to plan and implement the AIGAs and manage the AIGA fund. The CFMCs will open a bank account and start community savings and initiate village development activities and receive training for AIGAs. An important aspect will be organizing and targeting women and adolescent girls with tailored training and income generation activities. These activities will be organized in a way that is conducive to women's participation and compatible with their multiple responsibilities.

Sub-Component 3.2 Alternative Income Generation Activities (AIGAs): The COM will elaborate the protocols for implementation including: (i) awareness raising and community mobilization; (ii) criteria and process for selection of AIGAs recipients - priority will be given to members of CFMCs who are (a) the poorest in the village; (b) all women-headed households; (c) landless and those who lack year-round employment; or, (d) belong to ethnic minority communities; the NGO will ensure that all decisions are participatory, inclusive and, transparent and address the specific needs for women's economic empowerment. (iii) capacity building; (iv) assessing AIGA proposals; (v) rules for borrowing and re-payment to the AIGA fund; (vi) reporting and procurement; (vii) list of activities that may not be financed by the project; (viii) sustainability.

Sanctuary, Hazarikhil Wildlife Sanctuary, Shangu Wildlife Sanctuary, Nagarbari-Mohangonj Dolphin Sanctuary, Shilanda-Magdemra Wildlife Sanctuary, Nazirgonj Wildlife Sanctuary, Altadighi waterbased SBGA, Swatch of No-ground MPA, Charminguria Eco-park

⁵ Tiger, Elephant, Dolphins, Shark and Rays, Migratory Birds, Vultures, SB Sandpiper, Russel's Viper, C-E Macaque, SW Crocodile, River Terrapin, P-Langur, Gharial Conservation Program

Funding of AIGAs: Funding will be channeled from the PMU directly to community accounts. Each community will have two accounts: (i) a collaborative forest management committee (CFMC) account for a village development fund of \$5000 per village for carrying out activities that benefit the village as a whole; and, (ii) AIGA fund. The AIGA fund will be maintained as a revolving fund at the community level and will be available to community members as micro-credit. AIGAs that may be financed would be screened, among others, for enhancing climate resilience, reduction of forest degradation and support to the objectives of SUFAL. A list of activities that *may not be financed* by the project will be in the COM. Both on and off-forest income generating activities may be financed. The NGOs will help with the forward linkages to markets and banking and credit facilities where required with special emphasis on providing women with these linkages.

Sub-component 3.3 Extension services and Trees Outside Forests (TOF)⁶: The existing private sector network of nurseries and planting material distribution tends to use non-certified, low quality seed of unknown origin and germination rates, and generally raises poor quality seedlings using outdated methods. The TOF value chain comprises of. This sub-component will support the TOF value chain (nurseries, homesteads, sawmills) by: (i) establishing a national timber market intelligence system; (ii) technology transfer and training to nursery owners and farmers through Social Forestry Nursery and Training Centers (SFNTCs); (iii) training to improve efficiency of small scale sawmilling; and, (iv) a review and updating of policies to ease costs and difficulty for tree growers, saw millers and exporters. Activities will include plantations on bare and other unused land available on the sides of roads, coastal embankments, railway tracks, and river and canal banks; outreach programs with Upazila Parishads to encourage planting of trees on public and private land in five Upazilas; seedling distribution to homestead farmers. Special focus will be given to ensure that extension and training is held in locations and at times that encourage participation of women farmers and entrepreneurs.

Component 4: Project Management, Monitoring and Reporting

Sub-Component 4.1 Project Management: This sub-component will finance the BFD's project management unit at the central level in the headquarters and in the 28 districts where field implementation will take place. Support will be provided for contracting key specialists such as in the areas of social and gender, financial management, procurement, knowledge management and community development. In addition, monitoring and evaluation including, baseline survey, mid-term and end of project evaluations, independent third-party monitoring, external and social audits will be financed under the sub-component.

Sub-component 4.2 Monitoring, Reporting and Evaluation: This component will finance all activities related to M&E and reporting of the project including surveys, social audits, third-party monitoring, geo-spatial monitoring and analysis of administrative records. The forest inventory and the new module on trees outside of forests, will be financed under component 1.

⁶ Trees Outside Forests (TOF) refers to trees that have been grown on land that is not classified as Reserved Forest or Protected Forest or any land with legal status of a forest. These trees are frequently grown on government or privately-owned land or some are grown as part of the Social Forestry program.

2.3. Project Implementation Arrangement

The Ministry of Environment, Forest and Climate Change (MOEFCC) is the nodal ministry of this project. All the components of this project will be implemented by the Bangladesh Forest Department (BFD). For the livelihood component, BFD will engage NGOs for group formation, motivation, consultation, training, etc. A Project Management Unit (PMU) will be established in BFD Headquarters. A diagram of overall Project Implementation Arrangement is provided in Figure 2.1.

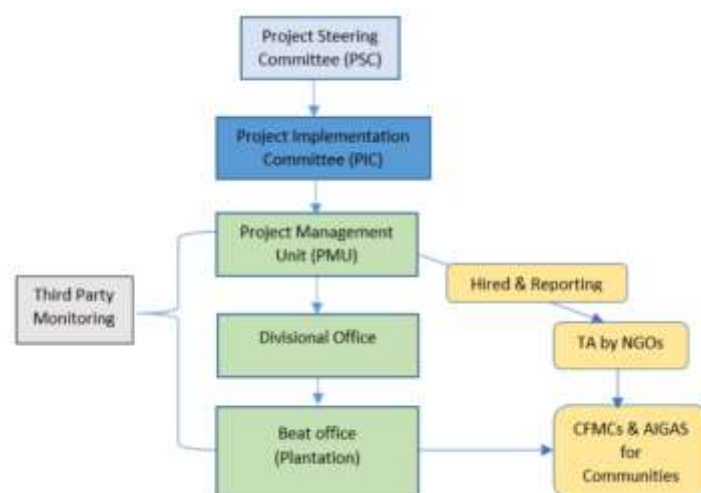


Figure 2.1: Project Implementation Arrangement

To provide oversight the following Committees will be set up:

- A Project Steering Committee (PSC) for Project Oversight and Policy Direction
- A Project Implementation Committee (PIC) for endorsement of Project Performance

A Project Steering Committee (PSC) will be established by the MOEFCC with the representative from relevant Ministries, Government Departments /Agencies. The PSC may co-opt any other representatives deemed necessary in the interest of the project in addition to the above. PSC will sit at least once a year or whenever it is needed. If required, the PSC will provide implementation advice and guidance and policy directions in the following aspects:

- To provide oversight, policy guidance and approve the project's Annual Work Plan and Budget;
- To facilitate inter-agency coordination to ensure compliance and adherence to the project's development objectives;
- To resolve disputes or conflicts related to the project, if any;
- To approve any policy, regulatory and institutional recommendations from the project;
- To approve changes in the project implementation arrangements, if it requires.

A Project Implementation Committee (PIC) will be formed to guide and enhance performances. The PIC will be chaired by the Chief Conservator of Forests (CCF) and may co-opt members if required. The PIC will review the progress of the project on a regular basis (may be quarterly) and shall provide proper implementation and improvement suggestions. In case of serious events the committee may visit the field to assist the successful implementation of the project. The PIC will comprise of:

- Chief Conservator of Forest, Forest Department (FD): Chairman
- Deputy Chief Conservator of Forest, Planning Wing, FD: Member
- Deputy Chief Conservator of Forest, Education & Training Wing, BFD: Member

- d. Conservator of Forests, Central, Chittagong, Barisal, Wildlife Circle, Jessore Circle: Members
- e. Deputy Chief, Ministry of Environment and Forests: Member
- f. Representative from Planning Commission (Agriculture, Rural Development and Research Sector): Member
- g. Representative from IMED: Member
- h. PD, SUFAL Project: Member Secretary.

Project Management Unit (PMU): At the Central Level: A full-fledged PMU headed by a Project Director (Deputy Chief Conservator of Forest or above) will be established within BFD. The PMU will be equipped with relevant qualified specialists (Financial Management Specialist, Account Specialist, Procurement Specialist, Social and Communication Specialist, Environmental Specialist), compensated at market value. Three Deputy Project Directors (Deputy Conservator of Forest) will be dedicated to supervise the day-to-day field activities at the assigned zones (the coastal zone, hill forest zone (excluding CHTs) and plain land forest zone), provide technical guidance and input for different components. A Project Manager will be hired to coordinate the day-to-day managerial activities and provide technical guidance and input for the different components. The program manager will be responsible for preparing the draft monitoring report based on the input from different consultants and officials. The project will have provision for need-based consultants to provide technical input and review different reports produced by the firm consultants. BFD officials will work closely with specialists and will receive appropriate on-job training to develop individual and institutional capacity to design and implement large scale projects. The central level PMU structure is presented in Figure 2.2.

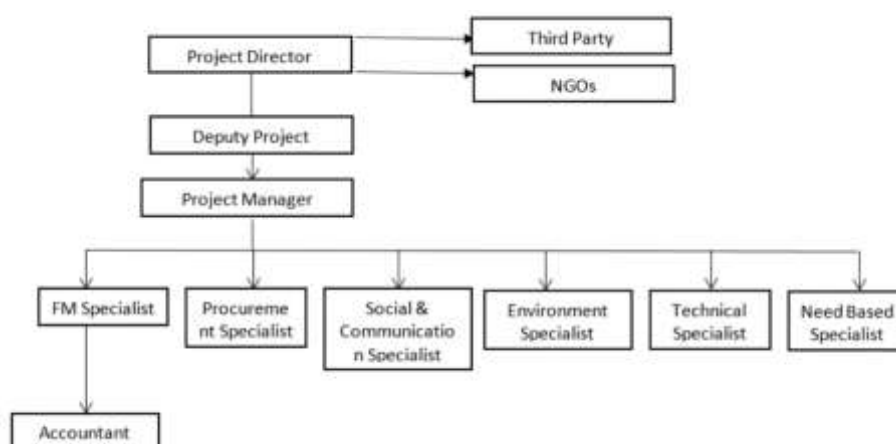


Figure 2.2: Structure of the Project Management Unit

At Divisional Level: BFD's 27 Divisional Forest Offices headed by the forest officers and will be responsible for implementation activities on ground. Each DFO will be supported by one Community Mobilization Officer (Junior Consultant) and one Account Officer (Junior Consultant) through project financing. The afforestation and reforestation program will be executed in the field by the beat officers, range officer will be responsible for monitoring and reporting to the DFO. DFO will also be responsible for both environmental and social safeguard compliance for of the project activities in his/her jurisdiction.

Collaborative Forest Management: The project will support strengthening of the existing and formation of the new collaborative forest management committee (CFMC). The beat officer will be a member of the CFMC. The community mobilization officer (CMO) will play an active role in

collaboration between community and BFD. Project implementation structure at DFO office level is provided in Figure 2.3.

The CMO will be responsible for the following tasks

- Support DFO in implementation of the participatory afforestation and reforestation program
- Facilitate the beneficiary selection process through open public meeting
- Liaison with community for collaborative forest management
- Liaison with NGOs for alternative livelihoods activities
- Coordinate with Union Parishad and field level forest offices
- Work closely and monitor the community training and awareness campaign program
- Support environmental and social screening and monitoring
- Work under supervision of DFO and PM

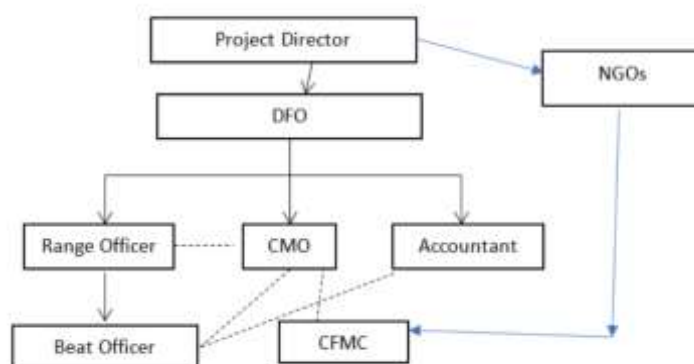


Figure 2.3: Project implementation structure at DFO office level

Seven NGOs will be hired to mobilize and organize and provide the necessary training to communities to prepare the AIGA plans, and support them during implementation. Each NGO will work in a cluster of districts/Upazilas. The NGOs will provide technical assistance throughout the implementation of the activities and help with the forward linkages to markets and banking and credit facilities where required. Funding will be channeled from the PMU directly to community accounts. Each community will have two accounts: (i) a collaborative forest management committee (CFMC) account for a village development fund of \$5000 per village for carrying out priority development activities that benefit the village as a whole; and, (ii) livelihoods fund for starting up alternative income generation activities with matching savings from eligible members. The NGOs will

- Mobilize necessary technical support and material inputs from relevant resource organizations (public, private, NGO) to promote alternative livelihoods development of the forest-dependent communities
- Provide backstopping support in implementation of training program
- Provide backstopping support in preparing annual plan of operation of NGOs
- Prepare various technical reports of the project as instructed by the PD
- Document success stories and identify weakness and potential areas for improvement
- Prepare quarterly and annual progress reports and report to PD
- Work closely with CMO and DFO

CHAPTER 3: ENVIRONMENTAL AND SOCIAL MANAGEMENT REQUIREMENTS

This Chapter presents a review of the national policy, legal, and regulatory framework relevant to the environmental and social aspects of the Program. Also reviewed in the Chapter are the WB environmental and social safeguard policies that apply to SUFAL. Review of Environmental Policy and Regulatory Framework.

3.1. Forestry Sector Acts, Policies, Rules and Standards in Bangladesh

The major legislations reviewed in forestry sector of Bangladesh include Forest Act 1927, Forestry Sector Master Plan for 2017-2031 (drafted in 2016), Forest Policy 2016 (draft), Wildlife (Conservation and Security) Act, Bangladesh 2012, Forest Investment Plan 2017, a recent GoB gazette to ban felling in natural forests through 2022, Social Forestry Rules 2004 (amended through 2011), Protected Area Management Rules, 2017 etc. The acts, policies, rules and standard of forest sector of Bangladesh⁷, in the Table 3.1A and B.

⁷ Identification of Policies and Measures to Address Drivers of Deforestation and Forest Degradation in Bangladesh, PMU, UN- REDD, Bangladesh National Programme, Bangladesh Forest Department, 2018.

Table 3.1A: Acts and Regulations Governing the Forestry Sector in Bangladesh

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
1	The Constitution of Bangladesh	The Constitution of the People's Republic of Bangladesh is the highest law of the country and has recently adopted through the Constitution (Fifteenth Amendment) Act, 2011 (Act XIV of 2011) "protection and improvement of environment and biodiversity" as one of its state policies in accordance to Bangladesh's commitment to international obligations to environments, protection of bio-diversity and sustainable development. Stipulated in Part II, "The Fundamental of Sate Policy", it says, "The State shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens" (Article 18A). Although the Constitution enshrines the "right to life and personal liberty" as one of the fundamental rights and does not explicitly recognize the right to environment as a fundamental right (Article 31 and 32), in two recent cases the Supreme Court has resolved that the "right to life" enshrined as a fundamental right includes the "right to a healthy environment" [XLVIII DLR, 1996, p.438, and XVII Bangladesh Legal Digest (BLD), 1996 (AD), pg. 1].		
2	The Forest Act, 1927 (Act No. XVI of 1927)	The Forest Act is the main legal instrument for the protection and management of forests and recognizes four forest types in terms of the rights to the property; these are reserved forest, protected forests, village forests and vested forests. Modified up until 2000, it applies to all forests across the country under the Department of Forest, but excluding the Un-classed State Forests (USF) in Chittagong Hill Tracts region and the districts of Sylhet Division. Key provisions of the law deal with the fine details of constituting reserved and protected forests, and the rights of individuals and communities to be conceded, the power and authority of forest officers, and the penalties and procedures relating to forests offences. Significantly, the law provides the legal mandate for the making of rules and regulations for the management, improvement and protection of forests, and the movement and transportation of forests produces. Enacted in 1927 during the British colonial rule, the law is a simply a modification of the Forest Act of 1878 and is mainly relating to legal procedures of reservation and protection of forests through territorial control, exclusions, and punishments. Interestingly, the law does not have any provision on Forest Department, which is the sole agency of the government entrusted with the management and protection of forests, and thus the forest department has never had any defined	The law should define the responsibility of Forest Department in relation to different forests and their management.	The does not support effective and transparent forest governance.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		responsibilities by the law. Importantly, notwithstanding participatory forestry, it does not support effective and transparent governments or sustainable forest management.		
3	Forest Transit (Control) Rules 2011	The Forest Transit Rules is made under the Sections 41 and 76 to regulate and controls the extraction and transportation of all kind of forest produces, as defined in the Sections 2(4) and 2(6) of the Forest Act 1927, whether they be originated in forests, imported or exported. It also regulates veneer factories and other timber processing units through licensing. The law extents to all districts of the country, excepting districts in Chittagong Hill Tracts region as well as districts in Khulna and Barisal Divisions. The extraction and transportation of timbers or other forest produces from private land, tea estates, or land under government and other local government institutions also come under its purview. The procedures for the collection and transportation of forest products from land other than Forest Department are a charge-free certificate, but very lengthy and exhaustive. However, the forest produces from trees commonly found on homestead are exempted from the application of the Transit Rule. In addition, the Chief Conservator of Forests hold power to include or exclude a list of such species exempted from the preview of the Rules and shall also review and update such list from time to time.	The forest produces from trees commonly found on farms, and other small private or community owned properties but not commonly found in natural or planted forest should be exempt from the application of the transit rules. time to time.	Considering the recent development road networks across the country, the planning of forest check-posts need serious rethinking.
4	The Private Forest Ordinance 1959	The Private Forest Ordinance repealed Sections 35, 36, 37 and 38 of the Forest Act 1927, relating to the control of private forests land in order to regulate and control the management of “Control Forests” for conservation, which were private forests but had not previously been vested with the Forest Department. The law has also provided the legal basis and continuity of the management of Vested Forest by the Forest Department, whether they be a reserved or a protected forest under the Section 36 or 38. The law has Seven Chapters and Sixty-Four Sections, and keys to the most of the provisions relate to procedures of working plan regime for private forests, rights and responsibility of the owner of private forests and forest officials, penalties for the failure. Key aspect of this law is processes and procedure of taking over the private forest under the Forest Department. At present the scope of law extents only to Vested Forests and is		

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		limited as the government by Section 10 of the Forest (Amendment) Act 2000 repealed the requirement of working plan for the private forest management.		
5	Saw Mills (License) Rules 2012	The Saw Mills Rules made under the Section 41 of the Forest Act 1927, the law regulates and controls over all operation of saw mills through licensing with stringent conditions. The law gives Divisional Forest Officer authority to issue a license, contingent upon the recommendation of a Committee headed by the Deputy Commissioner of the district, which also includes the representatives of local chambers and the Department of Environment. The crux of the conditions for license is that the license is to be renewed annually, while maintaining of a monthly registrar of sawing, selling and buying of timbers. In addition, the law also gives power to civil magistrate and police to inspect the business without notice.		Serious confusion and many interpretations exist regarding the category of Vested Forests, and their legal status and extents to which they exist.
6	The Environmental Conservation Act 1995	The Environmental Conservation Act contains 21 sections and sets new standards for environmental protection and management in the country. The law is the principal legal instrument of the Department of Environment (DOE) and its power and functions for the control, regulation, and improvement of environmental standards and environmental pollution in air, land and water; the protection, conservation and management of ecology of critical importance; and for procedures of trial and punishments of environmental crimes. The law has been amended several times up until 2010 and provides for the Environmental Conservation Rules 1997 and the Environmental Court Act 2010. Considering forests and their management and bio-diversity, important provisions of the law and the rules are the protection and management of “Ecologically Critical Area”, and the mandatory requirement and procedures of Environmental Clearance Certificate and Environmental Impact Assessment for industry and development projects. According to the Rules 1997, the ecologically critical areas may include among others National Park, forest sanctuary; game reserve; wild animal’s habitat; wetland; mangrove; forest area. Very recently, the law has also provided for the Management of Ecological Critical Area Rules 2016, and the Gazette to confirm the declaring the Sundarban and the adjacent areas of 10 kilometer in radius as Ecologically Critical Areas.	Because of the Wildlife (Protection Act) 2012 help protect the forest, wildlife and their ecologies, the Environmental Conservation application of Act can further secure this protection through this law, provided livelihood support programs for forest neighboring communities.	

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
7	Environment Court Act 2010	The Environmental Court Act repealing Environment Court Act 2000 in order to speedy trial of environmental offences in pursuance of the Environmental Conservation Act 1995. The Act provides for two kinds of trial courts, the environment court and special magistrate court, and one appeal court. The environment court is to be constituted in every civil district in the country with the joint district judge who is to perform the functions of environmental court in addition to his general duties, while the special magistrate is also to be set up in every civil district, constituted with a judicial magistrate or with a first class magistrate. The environmental court trials all the cases under the Act 1995 on the written report of an inspector of the Department of Environment (DOE) as well as the cases refer to it by the special magistrate court. The court can also receive a case directly from private persons without the written report from DOE if the court is satisfied that the would-be suitor made a written request to the Inspector of DOE to accept the case and no action was taken within 60 days after such request. However, in such circumstance, the court may direct the said Inspector to investigate the case.		The court established under the Act should have been designed in such a manner that can overcome the adversarial drawbacks of civil and criminal courts. The environmental court should have removed from the workloads of civil suits and criminal cases.
8	The Brick Manufacturing and Brick Kilns Establishment (Control) Act 2013	The Brick Manufacturing and Brick Kilns Establishment (Control) Act repealed the Brick Burning (Control) Act 1989 (amended up to 2001) in order to bring brick manufacturing and brick kiln establishment in line with recent legal provisions for the interest of protection and conservation of environment, ecology and biodiversity. As such, the Act prohibits such establishments in residential, protected, commercial and agricultural areas and also in forests, sanctuaries, wetlands and Ecological Critical Areas (ECAs) with fine and imprisonment. Similarly, the Act further limits the establishment of brick manufacturing and brick kiln within minimum half kilometer to one kilometer from any special structure, railways, educational institutions, hospitals, clinics and research institutions and also from Upazila or Union roads made by the Ministry of Local government. The law also prohibits the use and conservation of agricultural land or hill or hillock for brick making, but only pond, canal, swampland, creek, deep tank, rivers, haor-baor, char land and fallow land with the approval of the DOE. Significantly, the law strictly prohibits the use of wood as fuel in brick kilns, but coal according to environmental slandered by the ECA 1995, and makes provision environment courts to trial of any offence punishable under this Act.	Considering the current pace of economic development and industrialization in the country, brick manufacturing and brick kiln need to be subsidizes for control, like agriculture and Ready-made garments (RMG).	There are only three Environment Courts in Dhaka, Chittagong and Sylhet, and DoE has office only in 22 districts. So it is practically impossible to establish Environment Court and effective implementation of this Act.
9	Social Forestry Rules 2004	The Social Forestry Rules is framed under the Section 28A (4 and 5) of the Forest Act 1927 and is one of earliest attempts to formalized participatory forestry programs by Forest Department that		The Rules implies beneficiaries are to

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
	(Amended up to 2011)	had previously been practiced under projects in 1980s and 1990s in order to meet the increased demands fuel woods and forest resources. Amended several times up until 2011, the Rules have 26 sections and provide for detailed processes, procedures and structures of various social forestry programs, roles of individual participants and Forest Department, and their share of benefits arising from the programs. Speaking broadly, the Rules recognize several models of plantation technologies such as woodlot, strip plantation, agro-forestry and six different social forestry programs with varying degree of sharing benefits, depending on land ownership and control. Of the different models, the Rules imply woodlot and strip plantation should be planted with fast growing species, limiting their timing of the final harvest and the period of rotation Maximum 30 years and minimum 10 years, depending on a number of strict conditions. As such the Rules require participants of woodlot and strip plantation with fast growing species renewing their contracts with Forest Department in every 10 years. However, as to Sal and natural forests, the timing of the final harvesting and the period of rotation 60 years and 40 years respectively, requiring the participants to renew their contracts with the Forest department every 20 years. Critical to the Rules of social forestry programs -whether they be initiated either by the Forest Department or by local community, various government and non-government organizations, or individuals- is selection of individual participants or beneficiaries and their benefits, while ensuring their collective responsibility. In the case of Forest Department led program, the general rules for the selection criterion is social and economic justice and gender equity. As such the Rules set down preferential groups and individuals to be given priority in the selection of participants; they are: landless, women, backward classes, poor indigenous people or forest villagers, and insolvent freedom fighters. The Rules further set down the mechanism of conflict resolutions, and also the requirements of Non-government Organizations, to be part of social forestry programs, and their roles and responsibilities.		be grouped for the management and the protection of the plantation, however, it falls short as to how participant selected on individuals' social and economic or gender ground to make an effective working groups.
10	The Wildlife (Preservation	This law, Wildlife (Preservation and Protection) Act 2012, repealed Bangladesh Wildlife (Preservation) Order 1973 and is currently the principal legal mechanism for the conservation of bio-diversity of the country as well as their protection and sustainable management through		

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
	and Protection) Act 2012	constitution and co-management of “Protected Areas”. Originally published in Bengali the law is made under the Article 18 of the Constitution and has fourteen chapters and more than hundred rules and sub rules. As such Protected Areas includes all sanctuaries, national parks, community conservation areas, safari parks, eco-parks, and botanical gardens as well as special biodiversity conservation area, national heritage and grove, while bio-diversity refers to both genetic and species diversity of species and sub-species of flora and fauna living in aquatic, terrestrial and marine ecosystems as well as diversity of their ecosystems section (Chapter 2). Apparently, the law takes all comprehensive approaches to delineate legal limits and procedures relating to constitution and administration of protected areas, and the regulation of domestication, hunting, export and import of wild animals and plants. Keys to the administration are statutory bodies, Wildlife Advisory Board, and Scientific Committee, made up with bureaucrats and experts, but overall responsibilities for conservation, development of safety measures and management of biodiversity, forests and wildlife of the country lie to Forest Department and their senior management officials who fill the ranks of ex-officio, Chief Warden, Additional Chief Warden and Warden (Chapter 3). There are several innovative aspects to the management of “Protected Areas” that deserves mentioning, one of which is spatial strategy to partition protected areas into core which is closed to people, buffer zone or corridor to allow animal movements, protects natural forests and long rotation forest from degradation from collection of forest products. Another aspect is the provision for public-private partnership for Protected Areas on private land. Nevertheless, the law takes very punitive approaches to the violations of law, prohibiting all kind of agriculture, hunting, collection of trees, timber, plants, mining, pasturing, changing water course, etc., with fine and imprisonment, and in some cases imprisonment with bail.		
11	The Management of Protected Areas Rules 2017	Made under the Section 52 of Wildlife (Preservation and Protection) Act 2012, the Protected Area Rules concern details on structures, functions and obligations of management of some of the protected areas”, but excluding Safari-park, zoo, botanical garden, private park, wildlife fertility center from their application . The Rules have 33 sections and provide for a model for participatory co- management, consisted of forest dependent communities, Forest Department, civil administration and civil society organizations. At the bottom of the co-management structure is Village Conservation Form (VCF) and all villages within the distance of five kilometer from the boundary of a Protected Areas have a VCF, consisting of all villagers in it. Two elected members of		

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		each VCF from all VCFs of the Protected Area form People's Forum, representing VCFs at the top of the co-management structure, Co-management General Committee. The Committee is headed by executive officer of civil administration of the sub-district to which the Protected Areas belongs to, and includes a large number of individual public administrations relating to forests, and across society and groups including indigenous persons and members of local government institutions. Both People's Forum and the Committee have an executive committee for each, lead by elected representatives of the concerned bodies, but also includes nominees of various groups. Critical to the governance of the protected areas is Petrol Groups, consisting of members of VFCs for policing the protected areas, and provisions and power for the planning and review of development projects to support livelihoods of the VCF communities, and the management of the protected areas. Significantly, the Rules provide for financial benefits and income incentives to shareholders through participatory social forestry programs to be planted in buffer and landscapes areas, and eco-tourism.		
12	Bangladesh Biodiversity Act 2017	The Biodiversity Act is made under the Article 18 (A) of the constitution of Bangladesh in order to regulate the Biodiversity conservation and sustainable use of its resources, biota and the fair and equitable share of the benefits derived from their use of and other matters. Consisting of nine Chapters, the Act deal with the following issues: Biodiversity and related activities undertaken and transfer restrictions, approved and rejected applications; Functions of the National and Technical Committees on Biological Diversity; Biodiversity management teams, associations and sub-committees, etc.; Biota fair share distribution; Biodiversity strategy and action plan, traditional activities causing adverse effects on biodiversity, etc.; Fund, accounting and audit and Annual Report; Crime, investigation, trial and punishment; and Miscellaneous. Significantly, the law bans on non-residents and foreign entities from the use of bio-resources and their intellectual property rights over bio-resources in the country, while regulating the limited rights of citizens and communities over bio-resources through various structures from grassroots community to national levels. The law prohibits all actions harming or having adverse impact on the ecological system or endangers ecological community with fine and imprisonment.		
13	The Chittagong Hill Tracts Regulation of	The Chittagong Hill Tracts Regulation of 1900 (Regulation 1 of 1900) Act is the main legal instrument of land revenue, forests outside the reserve forests and administration of Bandarban, Khagrachari and Rangamati districts of the Chittagong Hill Tracts (CHT) region. The Act has five		The law provides administration and local government

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
	1900 (Regulation 1 of 1900)	chapters containing twenty sections, and a schedule including the declaration of laws in force in the region. Of the chapters, the first is Preliminary, dealing the application of law and its extent; the second, Laws, deals with the policy of administration and laws to govern the region; the third, Appointment and powers of certain officers, deals with structure and power of civil administration and court; the forth, Arms, Ammunition, Drugs and liquor, deals with the control and regulation of arms and drugs; and finally the fifth, Miscellaneous, deals with police, civil and criminal justices, and very importantly, the power and authority of making rules. Significantly, the Act provides for Rules for the Administration of Chittagong Hill Tracts, fundamental to the territorial separation between civil and forest administration and the exceptional traditional administration of land and the hill people under the civil administration. Of these Rules, Rule 35 delimits the boundary between the reserved forests of CHT and the territories of three Circles' Chiefs, implying the territorial division of the jurisdiction of Forest Department over the reserved forests and the remaining so-called "un-classed state-forest" (USF) over which traditional administration of the Chiefs under the civil administration is established. Rules 37, 38, 39 and 40 provides for the divisions of the Chiefs' territories into Mouzas, the power and authority of Chiefs and Mouza Headmen, and their relations to the civil administration vis-à-vis, the Deputy Commissioner(s) for the revenue administration and customary system of justice. Critical to the Rules and the land administration, customary and land rights of the hill peoples is Rules 34, 41, 42 and 50. Rule 34 is amended up until 1979, relating to land, land lease, transfer, division, and subletting. This Rule implies all land is Khas, the property of the government, if land is not permanently settled with, and sets down conditions of lease, their ceiling, and conditions for transfer, division, and subletting, and more importantly, tenancy rights of Raiyats. Rule 41 gives power to the Deputy Commissioner(s) to control and regulate jhum cultivation, and 41A to Mouza Headmen to regulate and control forest in his Mouza, including conservation of certain part of forest land, recognizing customary rights of the hill people over forests for domestic uses. Rules 45 and 50 further recognizes customary rights of the hill peoples over forest produces, namely sun grass, and grazing lands, and also urban homestead plot. In sum, the Regulation of 1900 and the Rules regulates and control the land and forests in areas outside the reserved forest in CHT and clearly limits the power of the Forest Department over them.		over people who use their land through jhum as common property. The Notion of private property and deforestation are contradictory with the system of cultivation which has been practices for centuries.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
14	Chittagong Hill Tracts Transit Rules 1973	The Chittagong Hill Tracts Transit Rules contains nine sections and regulate the felling, movement and transportation of timbers from both reserved forests and Un-classed State Forest (USF) and their depots in Chittagong Hill Tracts region through permits and license, while the violation of the rules is penalized with imprisonment and fines. The Rules provide for the list of forest check-stations, and procedures of license for timber depots for the control of illegal transportation of timber from the region. Significantly, the Rules explicitly recognizes customary rights of the hill peoples over fuel wood and other minor forest produces from the USF for domestic consumptions without royalty or pass.		
15	Tourism Act 2010	This Tourism Act was promulgated in 2010. The main target is to attract tourists to visit Bangladesh. It has various provisions to improve rules and regulations on tourism. It has the provision to support small investors in this sector. This will protect women's right, create data base, undertake research, etc. to encourage and nourish tourism so that it can flourish with quality.	It should have provisions to conserve ecosystems	Pollution of natural habitats need to be guarded strictly.

Table 3.1B: Forestry and Other Relevant Sectoral Policies Governing the Forestry Sector

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
1	Forest policy 1994	The Forest Policy 1994 has 29 policy statements. It has innovative directive to go for social forestry, by involving communities. It aims to bring 20% of land under forest by the year 2015. It aims to extend afforestation activities in rural areas, new accretions, USF land of CHT, marginal lands, institution premises, urban areas, etc. through peoples' participation and NGOs. It aims to conserve biodiversity, manage watersheds, declare 10% of the national forests as Protected Areas. It aims to prepare an integrated management plan for Sundarban, afforest the encroached and denuded forest lands, and reduce loss while processing forest produces. It suggested continuing with the ban of wood export. This policy suggested that no forest land should be brought under non-forest use without the permission of the head of the government. It suggested a safeguard for ethnic	Updating is required incorporating climate change aspect in forest management and administration.	BFD has proposed an updated & revised Forest Policy in 2016.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		communities, encourage tourism in forests within the limit of its carrying capacity. It has suggested involving women in tree planting. It has encouraged forestry education and research. It is quite elaborate and for the first time incorporated the participatory forestry concept in clear terms. This has opened up the avenue of co-operation between NGOs and Government (BFD) under the participatory forestry concept.		
2	Forest Policy 2016 (Draft)	The Forest Policy proposed in 2016 is lying with the MOEF, awaiting final approval. This proposed forest policy is reasonably elaborate and has 16 objectives and 162 clear policy statements under 13 well stated sections. The main aim of this forest policy (2016) is to: • manage all existing forests, wildlife and other forestry resources, under the principles of sustainable management and climate resilience; • enrich degraded forest areas; and enhance land areas under forest/tree cover; • produce a wide array of goods and ecosystem services for the benefit of present and future generations; • enhance the forest density to 50% by 2035. • It has a statement that no forest land be given for non-forestry use without the permission of the prime minister vetted by the cabinet. • Under the present-day context this is an “smart” one.	Looks fine for the presence.	May be reviewed after 20 years.
3	Land Use Policy 2001	While expressing concerns over the extreme shortage of land against the food security aspect of the large population of the country, this Land Use Policy has laid all possible of propositions to upkeep all of the arable lands for agriculture. It has suggested for zoning and strict prohibitions on conversion of any agricultural land for non-agricultural use. It has however, stated that the forest land should remain as such. It has a soft statement for afforestation of the newly accreted char lands. It has expressed some concern on siltation of rivers and loss of wetlands. It has encouraged the expansion horticulture in CHT areas. It has suggested for the creation of land data bank for the country. It has suggested for the creation of a coastal shelter belt. It has suggested for establishing strip plantations along the roads and highways.	Since it does not contradict forestry it may be kept as such for the presence.	May be reviewed later.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
4	Coastal Zone Policy 2005	In absence of any globally accepted definition of “coastal zone”, Integrated Coastal Zone Management Plan (2001) identified 147 upazilas under 19 coastal districts of the country as the coastal zone for the purpose of management. Since this area has involvement of many sectors, co-ordination of concerned sectoral policies⁹ is necessary to ensure sustainability. ICZMP developed the Coastal Zone Policy in 2005 for the GOB, with the expectation that the relevant sectors will pay their roles and the 'Co-ordination, Monitoring & Evaluation' will be the responsibility of WARPO. The Coastal Zone Policy 2005, while recognizes the existence of diverse ecosystems in the coastal zone, along with the possible opportunities and specialties, it has no mention of adaptation or mitigations approaches. This policy has recognized that many ministries are implementing their sectoral policies, but did not identify any process to incorporate all of these in one policy. Some parts of the policy look like directives. Though the main principles of integration have been stated, there is no mention as to how these main principles are to be incorporated into various sectoral policies to achieve the required. This policy laid high emphasis on economics and engineering, with very little or no emphasis on ecosystems.	Need immediate review to bring it at par with prevailing administrative norms of the country.	Since WARPO is designated to take lead over various ministries it is not expected to work. It is highly engineering biased, needs immediate updating.
5	Fisheries Policy 1998	Major objectives of the National Fisheries Policy, briefly, are: • Enhancement of the fisheries production • Poverty alleviation through self-employment • Fulfill the demand for animal protein • Earn foreign exchange	Incorporation of use of plastic poles in fish catching might have been helpful	May be updated clarifying the conservation issues of wetland forests.

⁸ The districts are Bagerhat, Barguna, Barisal, Bhola, Chandpur, Chittagong, Cox's Bazar, Feni, Gopalganj, Jessore, Jhalkati, Khulna, Lakshmipur, Barisal, Noakhali, Patuakhali, Pirojpur, Satkhira and Shariatpur.

⁹Environment Policy (MoEF 1992); Livestock Development Policy (MoFL 1992); National Tourism Policy (MoCA&T 1992); National Forestry Policy (MoEF 1994); National Energy Policy (MoEP&MR 1996); National Fish Policy (MoFL 1998); National Policy for Safe Water Supply and Sanitation (MoLGRD&C 1998); National Agricultural Policy (MoA 1999); Industrial Policy (MoI 1999); National Water Policy (MoWR 1999); National Shipping Policy (MoS 2000); National Rural Development Policy (MoLGRD&C 2001); National Land Use Policy (MoL 2001), etc.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		Maintain ecological balance It has 16 statements about the fish harvest from open water resources, 20 statements encouraging fish culture and 23 statements about coastal shrimp culture. Its statement number 8.4 clearly prohibits expansion of shrimp culture in mangrove forest or destruction of mangroves in the name of shrimp culture. It is in favor of ecological balance and at the same time looking for enhanced production.	to REDD+ approach.	
6	National Water Policy 1999	The National Water Policy is an engineering biased, 22 page long policy, looking for control of both surface and underground water including distribution, usages, etc. It has 6 objectives mostly looking to ensure water supply. It has specific mention of river basin management, planning and management of water resources, water rights, public and private involvement, water for agriculture, water for fisheries and wildlife, water for navigation, water for hydro power, preservation of wetlands, peoples' participation, etc.	Willingness to pay for the water harvested from catchment will be beneficial towards REDD+.	Ecosystem benefits need to be recognized in this policy.
7	National Tourism Policy 2010	Very broadly the main aim of this policy is to identify the sites, suitable and attractive, to the local and foreign tourists and develop physical facilities therein for the visitors. It is a 13-page policy having 6 chapters. The Civil Aviation & Tourism Ministry expects accountability of other government departments in ensuring services to the tourists. It has a mention of enhancing the economic activities of the local people through tourism.	Collaborative arrangement with BFD may be beneficial.	May be updated incorporating BFD's inputs.
8	National Agriculture Extension Policy 2012	The main content of this policy is to enhance the production of crop, livestock and fishes. This policy has 5 key objectives. The basic target is "food security" and nutrition. In connection with the climate change, it aims to identify disaster prone areas, subjected to draught, flood, salinity intrusion, etc. and take adequate steps to combat these for crop production. It has expressed concern on high population growth, soil depletion, shrunk individual farm sizes, etc. It has the vision to make the nation "to become self-reliant", with respect to food. It has an item encouraging organic products. One of the key principles of this policy is "Increasing production (horizontal and vertical)". The horizontal expansion of agriculture is likely to cause conversion of forest land (LULUCF). It has a detail policy implementation matrix.	This policy may prohibit use of fuelwood in paddy parboiling plants. It could suggest low foliage trees on the dividers of agricultural fields.	Since Agri Extension workers reaches most people, they may advocate for ICS.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
9	Agriculture Policy 1999	The National Agricultural Policy has identified the main objective as “to make the nation self-sufficient in food through increasing production of all crops” and ensure food security. This policy while highlighting the labor-intensive aspects of agriculture towards large scale employment opportunities of the huge population, expressed concern over the population growth. While appreciating the favorable natural environment for agriculture, it expressed concern over decreasing yields. It has advocated for high yielding varieties, crop diversification, emphasized on the use of good quality seeds, balanced fertilizers, improvement of market-chain, developed irrigation, integrated pest management, mechanization of agriculture, research, etc. It has expressed concern over the loss of fertile agricultural land under housing, brickfields, acquisition of agricultural lands for non-agricultural use, etc. While expressing concern on environmental hazards on agriculture, suggested to harness support from environmental and water policy.	It could suggest low foliage trees on the dividers of agricultural fields.	It could advocate for ICS.
10	Forestry Master Plan 1995-2015	The first Forestry Master Plan for Bangladesh prepared for 20 years starting in 1995. It expressed concern over the high rate of loss of natural forests at the rate of 3% per annum. This master plan suggested activities and investments under three main branches of forestry sector namely, People-Oriented Forestry, Production-Directed Forestry and Institutional Strengthening. It had strong recommendations for activities on energy conservation, people-oriented forestry, development of forest industries, restructuring of BFD, etc. The principal forestry activity during this FMP period was the establishment of social forestry plantations on encroached Sal forest areas, strip plantations and coastal afforestation especially on newly accreted mud-flats. During the period of this FMP, the natural forests have got seriously depleted, but the forestry sector has benefited from establishment of various types of ‘plantations, including coastal afforestation. Huge chunks of encroached Sal forest land have been brought back under some sort of tree cover through social forestry programs, which was also instrumental to encourage tree planting on privately owned lands. This FMP had suggestions for energy conservation, development of forest industries, reorganization of BFD, etc. but the GOB’s response was not there. This FMP proposed an investment of 60.24 billion BDT. The total development expenditure of the BFD during this period was only Tk.23.7 billion (38.3%) and all of these cannot be designated for achieving goals of FMP.	GOB should use the lessons learned.	Next FMP formulation may be designed to be more reality oriented.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		Though there was a Forestry Master Plan (FMP), the government did not pay minimum attention required in this connection.		
11	Forest Master Plan 2016 (Draft)	This 256-page Forestry Master Plan (FMP) document was prepared in 2016, for 20-year period, from 2016 to 2036. The FMP 2016 has indicated that out of the total of 1,658,657 hectares, owned by the BFD; 104,154 hectares have got encroached and 125,626 hectares have got transferred to other agencies for non-forestry use. It mentioned that less than 20% of the forest that was vested with the BFD in 1950, is under tree cover and that too is degraded. It has mentioned that till 2015, about 618,257.69 hectares have been declared as protected area, of which 45,746.53 ha as National Park, 398,485.37 hectares as Wildlife sanctuaries, 221.49 hectares as Special Biodiversity Conservation Area, 173,800 hectares as Marine Protected Area, 4.2 hectares as Eco-Park. It has stated that the population using wood-fuel is declining. It has stated that the production of both Golpata and honey from Sundarban is declining. This plan mentioned that 1,197,000 hectares of village areas under private ownership has more than 10% tree cover. It has mentioned that since 1990 the tree-covered areas outside notified forests has increased, while the forest areas have got denuded alarmingly. It has indicated that about 40 thousand hectares of village homestead areas has no tree cover, and 1625 thousand hectares of village homestead areas has a tree cover below 10%. It has expressed concerned over the terrible shortage manpower, scanty allocation of funds, poor condition of research and forestry education, etc. Only 38.3% of the allocation, proposed in previous Forestry Master Plan (1994 to 2015) was made available to the BFD, though all of those were not at par with the activities proposed therein. The FMP has suggested 3 scenarios for implementation by BFD during the 20-year Master Plan period. Scenario 1 stated that if the BFD is dependent on revenue budget as it received during last decades, the BFD will have to limit almost all of its activities and may get only 76.7 billion Taka only during this 20-year period of the master plan. Scenario 2, indicated that with some assistance from development funds, BFD should get 538.7 billion Taka only during this 20-year period. The FMP has opined that this may be the minimum realistic one. Scenario 3 indicated	GOB need to take proper interest and implement this plan and ensure that it receive at least 538.7 billion Taka during this plan period.	GOB's notion of low priority towards forestry sector need to be changed.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		that if the BFD is expected to be active fully functional, it should get 754.2 billion taka during this period. This FMP has a chapter on “Impact of Climate Change” and discussed the Climate Change issues in details. It has indicated that in future the species composition may change. The population of Gewa and Keora species may increase. It has suggested for interventions for mitigations and adaptations. It has specifically suggested to supply ICS either free or at subsidized price. It has a section on ‘Deforestation, REDD+, CDM and LULUCF’. This document has taken good care of climate change and has the concurrence with the REDD+ activities.		
12	Jalmahal Management Policy 2009	The Jalmahal Management Policy while aiming to earn maximum revenue for the government, encourages biodiversity conservation. It has attempted to look for actual fishers in getting lease of water bodies from the government. It has divided all the water bodies into two groups namely, up to 20-acre in size and more than 20-acre in size. The 20-acre or smaller water bodies that were handed over to youth ministry in the past has been brought back for open lease, after expiry of its current lease. Hence forth, these water bodies will be leased out by a 14-member upazila committee, with Upazila Nirbahi Officer (UNO) as chair. The water bodies that are more than 20-acre in size will be leased out by a 15-member district level committee with Deputy Commissioner (DC) as chair. It has all the provisions to ensure so that actual fishers can get the lease. It has detailed out the whole process of leasing the water bodies, especially from administrative view point and control, but very little on proper management of the resources. Its emphasis is mostly on administration and control rather than management.	The fishers use lots of wood and bamboos. This policy may have provisions of incentives for using alternatives.	May be revised prohibiting use of wood in all fishing gears including that in boats.
13	Gender Policy Draft 2016	This Gender Policy has been formulated by DoE. This policy has mentioned about article 10, 19 & 28 of constitution wherein the rights of women have been elucidated. This policy will execute all the regulations about women. This policy ensures equal rights, opportunities and obligations for both women and men. This policy prevents all forms of violence in its workplace. This policy encourages women’s participation in all activities and ensures equal opportunities for carrier development.	It may have some clauses to aware about climate change.	Improvement may be done by adding Climate Change aspects.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
14	NDC (INDC) 2015	Bangladesh's Intended Nationally Determined Contribution (INDC) turned Nationally Determined Contribution (NDC) following the signing of the Paris Climate Agreements has an unconditional commitment to reduce the emission by 5% in three sectors namely power, transport and industry by 2030. With some international support the emission will be reduced by 15% in these tree sectors. For other sectors the emission reduction will need external support. While projecting the emission, the emission from LULUCF could not be modelled due to data deficiency. Under business as usual (BAU) scenario the emission in 2011 was 64 MtCO₂e, which will become 234 MtCO₂e in 2030. By 2030 Bangladesh will reduce the emission by 12 MtCO₂e. Out of this 64 MtCO₂e, 21 comes from power sector, 17 comes from transport sector and 26 comes from industry sector. Under business as usual, by 2030, the emissions from power, transport and industry will be 91, 37 and 106 MtCO₂e respectively. Under the existing mitigation arrangements, it has mentioned that 1.5 million improved cooking stoves and 4 million solar homes are in use. With external support it has proposed sets of programs under each of the three sectors. To address adverse impact of climate change, government has identified the following areas. • Food security, livelihood and health protection, • Comprehensive disaster management, • Coastal Zone Management including control of salinity intrusion • Flood Control and Erosion protection • Building Climate Resilient Infrastructure • Increased Rural Electrification • Enhanced Urban Resilience • Ecosystem based adaptation (including forestry co-management) • Community based conservation of wetlands and coastal areas and • Policy and Institutional Capacity Building.	It has not recognized afforestation &/or reforestation as tool.	It should have a clause on afforestation.
15	National Energy Policy 2004	The National Energy Policy is promulgated by the Ministry of power, energy and mineral resources. The first energy policy was announced in 1996. It was updated in 2004. It is a 65-page long document. While identifying the short comings of the 1996 policy, this policy has set 10 objectives.	It should have some provision to	Too long and does not have straight forward policy statement.

No	Policy, Laws & Rules	Summary	Recommendation	Remarks
		These aims to bring the whole country under the cover of electricity by 2020, ensure rational use of energy, ensure development of indigenous energy sources, etc. It has stated that in 2000; only 30% of households had electricity connections. About 2.2% of total households had natural gas for cooking and 3.9% of total households used kerosene for cooking. It has stated that shortage of draught-animal, especially for agriculture will need alternate energy source. This policy has identified 3 types of biomass fuels, namely wood-fuel, agricultural residues and animal dung. It has identified 7 items, namely natural gas, oil, coal, peat, biomass fuel, renewable energy, and imported fuel as sources of energy. This policy has put emphasis on renewable energy sources and has identified mini hydro power, solar, wind, tidal, wave, bio mass, river current, waste, etc. as energy sources. It has laid strong emphasis on energy conservation. It has suggested that the basic principle of prevailing practices of energy programs to continue. It has suggested judicious use natural gas. It stated that the outputs of the energy sector need to meet the energy demands. It has prohibited commercial mining and quarrying inside the RF areas. It has suggested the promulgation of energy act under this policy. It has recommended for “non-renewable energy policy”. It has suggested for a balance on rural and urban energy supply.	provide incentives for solar power.	

3.2. Implication of GoB Policies, Acts and Rules on SUFAL and their Classification

3.2.1. Review of GoB Normative Framework

The legislations relevant for environmental assessment for SUFAL are the Environmental Conservation Act 1995 (ECA'95) and the Environmental Conservation Rules 1997 (ECR'97). As per ECR'97, most the components/sub-components and associated activities are likely to fall under Green Category as has no significant impact on the environment.

The proposed interventions of the SUFAL will comply with all the policy directives of the National Environmental Policy, 1992 emphasizing reducing probable environmental impacts. The SUFAL broadly contributes toward achieving the aims and objectives of the climate change adaptation strategies and will contribute towards achieving the objective of pillars of Bangladesh Climate Change Strategy & Action Plan, 2009, such as (i), (ii), (iii), (iv), and (vi).

SUFAL's interventions will be implemented in accordance with the Bangladesh Wildlife (Protection and Preservation) Act 2012; Bangladesh Wildlife (Preservation) Order & Act (1974); Forestry Acts & its amendments; Private Forest Act (PFA), 1959; Embankment and Drainage Act, 1952; Bangladesh Water Act, 2013; Bangladesh Labor Act, 2006; Bangladesh National Building Code, 2006.

The constitution of the country affirms the environmental safeguards as "The state shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, biodiversity, wetlands, forests and wildlife for the present and future citizens (Article 18A)". The vision 2021, in the perspective plan of Bangladesh (2010-2021), sets national development priority as 'growth with equity and social justice remains the overarching goal of our development strategy and will be achieved on a sustainable basis without damaging the environment' (GoB 2012b).

Forestry sector also aligned its strategy for raising national productive forest coverage to 15% from 13% by 2021, increase of tree coverage on 2.84 million hectares designated for forest, diversification of tree species to sustain ecological balance, increasing employment from forestry (particularly for women) under expanded social- and agro-forestry, priority to the creation of a coastal green belt and increasing accountability and transparency in public forest management. The Wildlife (Conservation and Security) Act, Bangladesh 2012 (GoB 2012c) empowered the government to declare any area as sanctuary, community conservation area, safari park, eco- park, botanical garden, wildlife reproduction center, landscape zone, buffer zone, core zone in relation to wildlife and plant preservation, protection and their natural growth. The Social Forest Rules 2004, revised in 2011 (GoB 2011) emphasized to ensure peoples' participation while also assigned the management committee to conserve and proper maintenance of the social forestry plantations. A recent gazette (01 Dec 2016) from MoEF declared ban on felling from reserved and natural forests till 31 Dec 2022 (GoB 2018). Similarly, the Environment Conservation Act, 1995 affirms prevention of any environmental degradation in forests, wetlands and ECAs; and empowered Department of Environment, MoEF for its enforcement. Subsequent amendments in 2000, 2002, and 2010 further specified environmental concerns for effective implementation of the conservation act.

3.3. World Bank's Environmental Safeguard Policies

The World Bank has developed a number of Safeguard Policies to ensure that all possible impacts are considered and mitigation measures are spelled out prior to the implementation of any proposed project. These policies ensure that the quality of operations is uniform across different settings worldwide. If the decision is taken that a Safeguard Policy should be applied, mitigation measures and plans must be developed and in place before the implementation of a proposed project.

The Bank requires environmental screening and classification for all investment projects (including ones financed by Trust Funds, Project Preparation Facilities and Guarantees) proposed for Bank financing, to help ensure that they are environmentally and socially sound and sustainable. Screening and classification take into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, Indigenous Peoples); cultural property; and transboundary and global environmental aspects.

The objectives of environmental screening and classification are: to evaluate the environmental risks associated with a proposed operation; to determine the depth and breadth of Environmental Assessment (EA); and to recommend an appropriate choice of EA instrument(s) suitable for a given project. The Bank recognizes that environmental screening and classification is not absolute and involves professional judgment on a case by case basis. When screening, careful consideration needs to be given to potential environmental impacts and risks associated with the proposed project. Judgment is exercised with reference to the policy expectations and guidance; real impacts on the ground; and established regional and Bank-wide precedence and good practice.

The environmental safeguards that apply to the SUFAL project are as follows:

Environmental Assessment (OP/BP 4.01)

The World Bank has developed a number of Safeguard Policies to ensure that all possible impacts are EA requirement. The World Bank requires environmental assessment (EA) of projects proposed for Bank support to ensure that they are environmentally sound and sustainable, and thus to improve decision making. The Bank Policy OP/BP 4.01 considers that EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. EA takes into account the natural environment (air, water and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples and physical cultural resources); and transboundary and global environmental aspects. The Bank Policy also envisages that the borrower Government is responsible for carrying out the EA and the Bank advises the borrower on the Bank's EA requirements.

The present ESMF has been prepared in compliance with this OP/BP.

EA classification. The World Bank classifies the proposed project into one of the four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts. These categories are defined below.

Category A: A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works.

Category B: A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas—including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects.

Category C: A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further EA action is required for a Category C project.

Category FI: A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary (FI), in sub-projects that may result in adverse environmental impacts.

The proposed SUFAL has been classified as **Category B**, as the potential impacts are limited and largely mitigable and reversible. However, since some of the activities deemed to require further assessment for better understanding. Therefore, additional assessments are recommended to be carried out for SUFAL activities in which screening exercise necessitate to do so, in accordance with **OP 4.01**.

Natural Habitats (OP 4.04)

The Policy describes the conservation of natural habitats, like other measures that protect and enhance the environment, to be essential for long-term sustainable development. The Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats and their functions in its economic and sector work, project financing, and policy dialogue. The Bank also supports, and expects borrowers to apply a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. The Bank promotes and supports natural habitat conservation and improved land use by financing projects designed to integrate into national and regional development of conservation of natural habitats and the maintenance of ecological functions. Furthermore, the Bank promotes the rehabilitation of degraded natural habitats. The Bank does not support projects that involve the significant conversion or degradation of critical natural habitats.

The activities under the proposed program could potentially alter the natural habitat hence this policy is triggered. Habitat restoration and enhancement measures will be included in the program design to avoid, minimize, mitigate and or compensate any adverse impacts on the natural habitat.

Forests (OP/BP 4.36)

This Policy recognizes the need to reduce deforestation and promote sustainable forest conservation and management in reducing poverty. The Bank believes that forests are very much essential for poverty reduction and sustainable development irrespective of their location in the world. The Bank assists borrowers with forest restoration activities that maintain or enhance biodiversity and ecosystem functionality. The Bank also assists borrowers with the establishment and sustainable management of environmentally appropriate, socially beneficial, and economically viable forest plantations to help meet growing demands for forest goods and services.

The Bank does not finance projects that, in its opinion, would involve significant conversion or degradation of critical forest areas or related critical natural habitats. Furthermore, the Bank does not finance projects that contravene applicable international environmental agreements.

Pest Management (OP/BP 4.09)

Through this OP, the WB supports a strategy that promotes use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides. All projects have to avoid using harmful pesticides as much as possible. However, if required pesticides can be used, but only as an element of an Integrated Pest Management Plan (IPMP) that emphasizes environmental and biological controls.

WB Policy on Access to Information

This BP deals with the World Bank policy on disclosure of information. It is a mandatory procedure to be followed by the borrower and Bank and supports public access to information on environmental and social aspects of projects.

Once finalized, the English-language ESMF, together with the Bengali translation of its Executive Summary, will be disclosed to the public and will also be available on the official website of the BFD. The ESMF will also be sent to the WB InfoShop.

3.4. Review of Social Policies and Regulatory Framework

This section deals with the laws, regulations and policies of the GoB and additional Operational Policies of the World Bank, related to social issues. Only the laws, regulations and policies relevant to the project are discussed here. This section will be updated as needed when new laws, regulations and policies are made and enforced or the existing ones are revised.

With respect to the legal framework of the GoB, it is important to note that the majority of forest dependent people are known to use lands and forest resources under customary/traditional rights that are not recognized in the country's land administration system. Just the same, these same people will be engaged in the project via multiple activities, including collaborative forest management, access to AIGAs, PAs and wildlife management, and so on. Their physical displacement and resettlement will not be pursued, though a safeguards instrument that addresses the impacts involved, a “Resettlement Policy Framework”, has been developed on a precautionary basis. On the other hand, it is expected there will be impacts on their livelihoods and incomes that need to be addressed, mitigated and/or managed.

Land acquisition is governed by the Acquisition and Requisition of Immovable Property Ordinance, 1982 (Ordinance II of 1982). The ordinance supersedes earlier laws including the Land Acquisition Law of 1894 and others that have been in force between 1947 and 1982. In addition to the Ordinance, acquisition of any land or forest area in Chittagong Hill Tracts (CHT) districts requires consent under the Chittagong Hill Tracts (Land Acquisition) Regulation 1958, the CHT Regional Council Act 1998 and the Forest Act (1927). There is no national policy in Bangladesh governing social effects of infrastructure development projects on the project area communities. However, the Constitution of Bangladesh provides some rights to the affected persons, communities and groups those are not upheld in the Ordinance II of 1982 which is the instrument followed for land acquisition. The active instruments under the legislative and regulatory framework in Bangladesh are discussed below:

3.4.1. Constitutional Provisions

The fundamental rights under the Constitution indicate the general guidelines for a policy on resettlement/rehabilitation of citizens adversely affected (whatever be the mechanism) due to any

activity of the State. Article 40 of the constitution states categorically that every citizen has the right to practice any lawful occupation which implies that anything impeding such right (a) should not be done or (b) there should be supplementary measures to make good the losses incurred by the citizen. Resettlement and rehabilitation of adversely affected people due to infrastructure projects very clearly falls within this requirement for supplementary measures. However, as per Article 42, sub-clause 2, no law with provision of compensation for acquisition of land can be challenged in a court on the ground that such compensation has been inadequate. However, under WB OP 4.12 on Involuntary Resettlement, every affected person will have access to a project specific Grievance Redress Mechanism for dispute resolution before the matter is moved to the courts. Complaints, the resolution process and the outcome will be reviewed by the project proponents as well as the Bank. Until the dispute is resolved the funds for the disputed asset must be held in an escrow account (top-up payments due from the project agency can be held until the project closes; the amount placed with the DC may be held for 10 years or more if necessary).

3.4.2. The Acquisition and Requisition of Immovable Property Act 2017

The principal legal instrument governing land acquisition in Bangladesh is the Acquisition and Requisition of Immovable Property Ordinance, 1982 (Ordinance II of 1982 with amendments up to 1994), which recently replaced by the new law (Act 21 of 2017) and other land laws and administrative manuals relevant to land administration in Bangladesh. According to the Act and the formal Ordinance, whenever it appears to the Government of Bangladesh that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, the Government can acquire the land provided that no property used by the public for the purpose of religious worship, graveyard and cremation ground. The 1982 Ordinance/Act 21 of 2017 requires that compensation be paid for (i) land and assets permanently acquired (including standing crops, trees, houses); and (ii) any other damages caused by such acquisition. The Deputy Commissioner (DC) determines (a) market value of acquired assets on the date of notice of acquisition (based on the registered value of similar property bought and/or sold in the area over the preceding 12 months), and (b) 200% premium on the assessed value (other than crops) due to compulsory acquisition. There is also provisions for payment of crop compensation to tenant cultivators. The law specifies methods for calculation of market value of property based on recorded prices obtained from relevant Government departments such as Registrar (land), Public Works Department (structures), Department of Forest (trees), Department of Agriculture (crops) and Department of Forest (Forest stock). Given that people devalue land during title transfer to minimize tax payment, compensation for land paid by DC including premium largely remains less than the actual market price.

The Ministry of Land (MOL) is authorized to deal with land acquisition. The MOL delegates some of its authority to the Commissioner at Divisional level and to the Deputy Commissioner at the District level. The Deputy Commissioners (DCs) are empowered by the MOL to process land acquisition under the Ordinance and pay compensation to the legal owners of the acquired property. Khas (government owned land) lands should be acquired first when a project requires both khas and private land. If a project requires only khas land, the land will be transferred through an inter-ministerial meeting following the acquisition proposal submitted to DC or MOL as the case may be. The DC is empowered to acquire a maximum of 50 standard bigha (6.75 ha) of land without any litigation where the Divisional Commissioner is involved for approval. Acquisition of land more than 50 standard bigha is approved from the central land allocation committee (CLAC) headed by the chief executive of the Government of Bangladesh proposed by the MOL.

The land owner needs to establish ownership by producing record-of-rights in order to be eligible for compensation under the law. The record of rights prepared under 4. 143 or 144 of the State Acquisition and Tenancy Act 1950 (revised 1994) are not always updated and as a result, legal land owners have faced difficulties trying to “prove” ownership. The affected person (AP) has also to produce rent receipt or receipt of land development tax, but this does not assist in some situations as a person is exempted from payment of rent if the area of land is less than 25 bighas (3.37 ha).

3.4.3. World Bank’s Social Safeguard Policies

The Bank social safeguards that apply to SUFAL are Involuntary Resettlement (OP/BP 4.12) and Indigenous Peoples (OP/BP 4.10). These operational policies have been reviewed in relation to relevant national laws and constitutional measures, and their provisions are outlined below.

Indigenous Peoples (OP 4.10):

For purposes of this Policy, the term ‘Indigenous Peoples’ is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees¹⁰:

- self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- an indigenous language, often different from the official language of the country or region.

The OP defines the process to be followed if the project affects the indigenous people.

The SUFAL area has indigenous communities residing in the program area therefore, impacts on them are expected under the project. A Small Ethnic Communities Development Framework (SECDF) has been developed at the preparation stage, to provide guidance for the preparation and implementation of site specific Small Ethnic Communities Development Plans (SECDP) as and when required. The framework will be fully cognizant of local and cultural nuances associated with designing and proposing alternative livelihood measures, grievance redress processes and all other project interventions including community consultation and communication. This will be further reviewed through the detailed assessments to be carried out during program implementation for the subsequent stages.

Involuntary Resettlement (OP/BP 4.12):

The WB’s experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social, and environmental risks; production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the

¹⁰ Excerpts from the OP 4.10. WB Operational Manual. July 2005.

competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost. This policy includes planning and implementation measures to address and mitigate these impoverishment risks.¹¹

The overall objectives of the Policy are given below:

- Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.
- Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits.
- Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.
- Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

The Resettlement Policy Framework (RPF) prepared for the project serves as the guideline for BFD to oversee and monitor social safeguards actions relate to resettlement and rehabilitation, in the unlikely event that there is any. The specific objectives would be the following:

- (1) Social screening for identifying implications of project interventions on involuntary resettlement;
- (2) Social impact assessment and community consultations;
- (3) Inventory of lost assets and provisions for their restoration;
- (4) Preparation and implementation of resettlement plans;
- (5) Provision resources and institutional arrangement including grievance redress; and
- (6) Measures for monitoring of involuntary resettlement.
- (7) OP 4.12 has a set of lesser known provisions relating to impacts deriving from “restriction of access” to natural resources in legally designated protected areas. These provisions are relevant in the case of SUFAL given that, overall, the project is not expected to necessitate any land acquisitions and resettlement. However, there is the possibility that during the project’s implementation, access to land and forest-based natural resources by some forest dependent communities and households could be restricted, with adverse effects on their livelihoods. Similarly, the project also involves construction of some infrastructures for BFD (such as office buildings and complexes) which, although will be constructed on BFD’s own land, could result with restricting access to the nearby communities. Therefore, a Process Framework (PF) has also been prepared following the World Bank policy OP 4.12 on Involuntary Resettlement for the purpose of establishing a due process to avoid, minimize and mitigate the negative impacts from the project’s interventions. It will also guide the project to ensure effective participation of the affected communities and relevant stakeholders in the project.

While SUFAL is not seeking to reform existing laws to allow human activities in reserved forests, it will promote greater flexibility (in policy and in practice) in local-level uses of forest resources by those dependent on them. Project affected persons (PAPs) whose livelihood are entirely based on the

¹¹ Excerpts from WB OP 4.12. WB Operational Manual. December 2001.

forest will also be provided new income generation opportunities that are non-land-based and could therefore require diversification, which would in turn require training and support by BFD.

3.5. Dissimilarities between OP 4.12 and National Laws

There are some gaps between existing land acquisition law of the country and WB Operation Policy on Involuntary Resettlement (OP 4.12) in terms of identification of affected persons and compensation packages. Gaps between GoB LA law (new Act 21 of 2017) and WB OP 4.12 and suggested ways of filling them are given in Table 3.2 below.

Table 3.2: Gaps between GoB LA laws and World Bank OP 4.12.

Sl. No	Gaps between WBG OP 4.12 and GoB Act 21 of 2017	Gap-filling measures/ actions to be taken in this Project
1	Avoidance and minimization of project impacts.	The project designs should aim to minimize impacts and adjust designs further to avoid or reduce impacts.
2	Existing GoB laws recognize title owners only; informal settlers are not covered.	All affected persons irrespective of titles will need to be identified for compensation and/or assistance.
3	Existing laws and methods of assessments do not ensure full replacement costs.	Provisions will be adopted for additional top up payments to ensure replacement costs at current market price. Transaction cost will be built upon on current market price and no depreciation, tax or deductions will be applied.
4	Consultation with affected community not legally required.	Extensive consultations are carried out during the preparatory phase; similar consultations continue during project implementation.
5	The affected land owners can object to the acquisition in the beginning but once hearing is done and settled, there is no scope of further complaint during the acquisition process.	There needs to be a grievance redress mechanism (GRM) in the project to hear grievances and resolve them amicably, ideally to the satisfaction of the aggrieved persons.
5	No relocation assistance or support under the land acquisition law (Act 21 of 2017).	Affected households and businesses will be assisted for their relocation, financially and institutionally, from the project.
6	No support or program for income and livelihood restoration.	The project benefits will include income and livelihood restoration.
7	No provision for reconstruction of common property resources.	All religious, cultural and community structures affected by the project need to be reconstructed.

CHAPTER 4: DESCRIPTION OF SOCIAL AND ECONOMIC ENVIRONMENT

4.1. Geographical information

Bangladesh covers an area of 1, 47,570 sq. km and bounded with India on the west, Myanmar and India on the east and the Bay of Bengal on the south. As per decision of International Arbitral Tribunal (2012-2014), Bangladesh currently has 118,813 sq. km of marine area (DoE 2015). About 80% of total land surface of Bangladesh is considered as floodplain (BBS 2011). Hilly terrain covers only some 12% of total land area in the northeast and southeast, with average elevations of 244m and 610m, respectively (UN-REDD 2012). Overall, 17.49 % of total land surface area of Bangladesh is now considered as state owned land to support tree cover. However, the Perspective Plan of Bangladesh (2010-2021) entitled 'Making Vision 2021 a Reality' (GED 2012a), reported that the recorded state-owned forest land (not necessarily supporting tree cover), and potential forest/tree growing areas, has been identified as 7 million acres (2.82mha), which is 20% of the land area.

4.2. Population Demographics Status

Bangladesh is a small but highly populous country. The current population is 165.7 million (165,771,453 estimated) and ranks on 8th position by the population and presents highest density (1287 per km²) in the world¹². The population scenario of the SUFAL project area is almost same as the country i.e., highly populous. *The project is going to implement 169 Upazila (sub-districts) under 28 districts with the population of 50.79 million (1.12 million HHs), and covers one-third of total population in Bangladesh.* A detailed population status of SUFAL area has given in the annex 1.

From the baseline survey findings, the HHs size found 4.9 nos. in plain land, 4.8 nos. in costal and 5.2 nos. in the hill area. However, the average HHs size is 5 nos., it is expected that the size of the HHs would be the same in other areas. Among them around 59% people are in between 16-60 years and only 4% is above 60 years. Among the children, 26% are in between 6-15 years and 10.5% below 5 years.

The population ratio shows 50.43% is male and 49.56% is female in the project area, (detailed in Table 4.1).

Table 4.1: Population ratio in different three eco-system

Ecosystem	No of households	Male	Female	Male (%)	Female (%)	Size of household
Plain Area	205	520	487	51.63	48.36	4.9
Coastal Area	150	357	365	49.44	50.55	4.8
Hill area	351	921	915	50.16	50.16	5.2

¹² UN population estimation on 24 February, 2018. <http://www.worldometers.info/world-population/bangladesh-population/>

Ecosystem	No of households	Male	Female	Male (%)	Female (%)	Size of household
Total	706	1798	1767	50.43	49.56	5

Source: Baseline Survey, 2018

4.3. Religion Status

Based on the sample survey, the population classified by religion and locality is shown 74 % are Muslim, 17% Hindus, around 5% Buddhist and 4% belong to other ethnic communities (Table 4.2.). The religion status of the study area found that does not correspond to the real status of the country or any ecosystem. It reflects the target area(s) where base line survey was conducted.

Table 4.2: Religion status in the project area

Religion	Plain Area	Coastal Area	Hill area	Total	Percentage
Muslim	159	220	140	519	74%
Hindu	24	86	9	119	17%
Buddhist	-	37	-	37	5%
Others/different ethnic groups	22	8	1	31	4%
Total	205	351	150	706	100%

Source: Baseline survey, 2018.

4.4. Ethnic Peoples in The Project Area

The small ethnic groups officially recognized as tribes, minor races, ethnic sects and commonly known as tribal peoples. These peoples are concentrated in the north, and in the Chittagong Hill Tracts (CHT) in the south-east of the country commonly known as tribal peoples. However, tribal peoples are also scattered in small proportion all over Bangladesh. According to the BBS Population and Housing Census- 2011, ethnic population status of 28 SUFAL districts have putted in the table 4.3.

Table 4.3: Tribal Population in the Project Area

Distribution of Ethnic Population and Households by Zila, 2011. Tribal				
Name of Zila	(General) Household	Population	Male	Female
Bangladesh	353727	1586141	797477	788664
1. Barguna	325	1143	565	578
2. Barisal	15	76	45	31
3. Bhola	11	57	28	29
4. Chittagong	6834	32165	16329	15836
5. Cox's Bazar	2885	14551	7045	7506
6. Dhaka	4615	20123	10400	9723
7. Dinajpur	15999	66861	33030	33831
8. Faridpur	651	3233	1670	1563
9. Gazipur	3525	15368	7702	7666
10. Gopalganj	348	2066	1080	986
11. Habiganj	14534	65802	33038	32764
12. Jamalpur	376	1569	803	766
13. Jessore	3790	17432	8779	8653

Distribution of Ethnic Population and Households by Zila, 2011. Tribal				
Name of Zila	(General) Household	Population	Male	Female
14. Kishoreganj	94	433	227	206
15. Lakshmipur	56	244	131	113
16. Maulvibazar	13217	63466	31422	32044
17. Mymensingh	8632	35907	17288	18619
18. Naogaon	28374	116736	57863	58873
19. Netrokona	6021	25247	12323	12924
20. Noakhali	51	347	201	146
21. Panchagar	383	1528	751	777
22. Patuakhali	376	1399	707	692
23. Rajshahi	11132	49312	24136	25176
24. Sherpur	4180	16231	8091	8140
25. Sunamganj	1444	6911	3521	3390
26 Sylhet	2484	12781	6470	6311
27. Tangail	6071	25584	13022	12562
28. Thakurgaon	2139	9632	4891	4741

Source: Population and Housing Census- 2011, BBS.¹³

4.5. Access to Basic Civic Facilities

It is widely accepted that the provision of basic social services, such as schooling and health care, represents both ends and means of economic development. Despite increased supply of basic service across Bangladesh, our field observations on forest dependent communities show that the poor and marginalized groups failed to gain sufficiently from such increases. Most of the participants mentioned that they could not get access to sufficient food, education, health and shelter facilities. They were not included in social safety net support programs of governments that's why fully dependent on forest. Around 17% FDC in hill, 61% in plain and only 4% in coastal area were received the social services. They were bound to cut off trees to meet their basic needs. This is rather regrettable because the ultimate goal of any development effort is to help to the poor. Consequently, there is a need to explore the causes of such failures of forest dependent community.

4.6. Land Ownership and Housing Structure

There are various types of forest dependent communities in Bangladesh. It was found that some people live inside the forest and heavily dependent on forests for their livelihood. Some people live near the forests, usually involved in agriculture outside the forest who regularly use forest products partly for their subsistence and partly for income generation. Some people depend on forests for income by selling their labor without having income from selling forest products, etc. But, the most important issue for all of them is the land ownership. Survey, conducted in three ecosystems shows that the real land owner is only 3% in all ecosystems. Most of the forest dependent communities (79%) live in so called leased forest land and only 18% recognized that they are living in encroached land.

¹³ 2016 Statistical Year Book, Bangladesh, 36TH EDITION, বাংলাদেশ পরিসংখ্যান, বর্ষগ্রন্থ ২০১৬, প্রকাশকাল: বৈশাখ, ১৪২৪, Published: May

The finding presents 60% HHs in coastal area used thatched/wood/tally for housing structure and 33% used mud/thatched/tin for housing. While 78% in hill area used mud/thatched for housing and 18% use wood/tally for housing. The housing in plain land area shows that 70% housing by mud/thatched while 28% used wood/tin/tally structure.

4.7. Levels of Income and Poverty

Poverty can be earmarked by income level of the households. The concept of absolute poverty is the minimum level of income that is needed for physical survival. The Household Income and Expenditure Survey (HIES) 2010 used the Cost of Basic Needs (CBN) method to measure poverty incidence in the country. The HIES 2010 have measured two types of poverty: moderate poverty and extreme poverty. Extreme poverty line is the minimum income to support basic foods however the moderate poverty line is the income to support basic food and non-food expenses. The national poverty rate is 31.5 percent (World Bank, poverty assessment, 2013). It is assumed that the poverty status would be almost same in SUFAL project area. Nationally, upper poverty line is 31.5 % and lower poverty line is 17.6% (WFP/WB/BBS 2014). A detailed poverty status of SUFAL project Upazila has given in the Annex 1.

As wealth ranking is important issue to select the beneficiary, so the following criteria can be applicable to select extreme poor, poor and non-poor in the SUFAL project area, which are as following the Table 4.4.

Table 4.4: Wealth Ranking Criteria

Ultra-poor (extreme poor)	Poor	Non-poor
- Landless households - Homeless households - Day-labour households - Less than 10 decimals of agricultural land - No fixed source of income - Disabled or 65+ years old female-headed households	- Up to 100 decimals of land (agricultural and homestead) - Sell manual labour for living	Household that do not fall in any of the other category

Source: Unit for policy implication, Pro-poor strategy of Local Government Division 2005

A household is considered ultra-poor if it satisfies at least two of the above-mentioned criteria.

These criteria may be relaxed for hill and costal area¹⁴. The local government division has used this criteria for selecting Ultra-poor (extreme poor), poor and non-poor since 2005.

Recently, the finance minister said around 22% people now living under the below poverty line in Bangladesh (June, 2018), yet this data is not available. Despite its impressive economic growth and consistent reduction in the rate of poverty, Bangladesh is still struggling with the poor and the extreme poor. However, these criteria can be revised based on the project needs during implementation.

¹⁴ Unit for policy implication, pro-poor strategy of water and sanitation sector in Bangladesh, Local Government Division Ministry of Local Government, Rural Development & Cooperatives Government of People's Republic of Bangladesh, ITN-BUET, 2005. P-3.

4.8. Activity, Income and Consumption

Most of the inhabitant in three ecosystems are highly engaged in forest related activities. The overall occupation, economic activities and their comparative status for primary and secondary sources of income activity were very small. Around 45% people earn from selling labor, around 8% from agriculture, about 27% earn from forest resources, 5% from service in GO/NGO/private sector and 6% earn from livestock and poultry sources. Around 71% earning spent for food, 6% for health, 4% for clothing, 4% for education, 3% for social functions and similar consumption of fuel and other bills.

4.9. Access to Finance

The finding shows that around 60% of costal, 75% of plain and 64% of hill FDC received loan from different sources. Among them 75% loan received from NGOs, 3% from Bank, 12% from relative or from friends and 9.8% from money launders. The result shows that most of FDC are dependent on NGOs for financial access.

4.10. Access to Water and Sanitation

It was found that public health condition of FDC in all three regions were minimum standard of living. Most of the area drinking water access were scares. During dry seasons the situation goes too critical, they need to collect water from too far way, and colleting time took more than 30 munities in most of the areas. Regarding sources, about 76% FDC were collecting dirking water from hand tube well, 13% collect from deep hand set tube well, 10% from well and remaining 1% collect water from pond, canal, river sources. It was found that 42% in coastal, 38% in hill and 55% in plain land area were using sanitary latrines, 44 to 60% people were using hang or unhygienic latrine in three ecosystems. Still 7% people in coastal area are habituated in open defecation.

4.11. Forest Dependency Status

The project intends to increase the income of FDCs through alternative non-forestry activities. This will contribute in reducing dependency on forest resources through alternative livelihoods. Around 62% respondents mentioned fuel wood collection in coastal area as reason of forest degradation that 34% in hill forest and 41% in plain land forest. The forest dependency status shows, 37% high dependency, 53% medium to high and 9% mentioned medium dependency.

4.12. Women Participation and Decision-Making

It is widely believed that sustainable forestry may have particular positive impacts on the ultra-poor, poor and vulnerable communities, especially for the women. Women are often less powerful or influential than they could be because of the social and cultural norms that limit their mobility and participation in decision making. It has been found that 35% in costal, 33% in hill and 32% in plain land women can influence on decision making process in their families. However, 44% in hill, 35% in plain and 23% costal women can influence on decision making in social participation and activities.

CHAPTER 5: ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

5.1. Environmental Assessment and Management Processes

The SUFAL project will use a systematic and integrated approach to environmental and social management, to follow the hierarchy of avoidance, minimization, and/or mitigation of negative impacts and enhancement of positive impacts where necessary. The following sections describe what needs to be done at each stage of the overall project life: implementation of the project activities, monitoring of the activities, and reporting on progress.

5.1.1. General Principles

The project components e.g. afforestation, rehabilitation/reconstruction of field offices, and community level livelihood development activities will be subject to an environmental screening in order to prevent significant environmental impacts. Due to the nature of some of the proposed activities under SUFAL program and potential environmental and social impacts. Therefore, the ESMF is prepared based on the following principles that can lead the planning and implementation of the project activities.

- The Project Director of BFD is responsible for the compliance with national policies, regulations and World Bank Operational Policies and Guidelines, as mentioned in this ESMF report. The ESMF will serve as the basis for ensuring the compliance of SUFAL.
- BFD is responsible for obtaining environmental clearance from DoE or other departments, if required.
- Planning and design of the any additional activities should ensure minimal cumulative impacts.
- Environmentally Sensitive areas, cultural sites, restricted or disputed lands should be taken care of with appropriate mitigation measures during implementation.
- Participation of stakeholders especially forests dependent community, and ethnic people should be ensured by BFD in planning, implementation and monitoring of each sub-components and associated activities.
- BFD will ensure appropriate institutional set up for implementing environmental and social management plan and inter-agency coordination.
- BFD will ensure safety provision i.e. occupational, paste control etc. for infrastructure development activities.
- BFD will undertake public disclosure about the project interventions and potential impacts.

5.1.2. Environmental Assessment and Management Process

- The environment consultant of the PMU/ main consulting firm will perform the environmental screening. The environmental consultant will start the task during the preparation stage.
- Environment consultant will update the Baseline condition and IEE of SUFAL.
- PMU will review and clear screening and environmental assessment reports made by Environmental consultant.
- BFD will conduct verification of some screening and assessment.
- BFD will ensure due diligence to the related government rules (laws, ordinance, acts, etc.) and World Bank Operational Policies and guidelines related to environment while implementation of the project activities, in line with this ESMF;
- The project will promote the environmental friendly practices in afforestation, infrastructural development and livelihood initiatives;

- In crop-based AIGAs and in afforestation/reforestation program, pesticides/herbicides will not be used; and physical infrastructural development will not be carried out in disputed lands or environmentally sensitive areas;
- The success of the project authorities may be attributed to vigorous and continuous monitoring of all its activities including environment and social issues. The official having environmental background at the PMU will be dedicated for monitoring entire project activities and reporting to the Project Director.

5.1.3. Environmental Screening

Environmental screening is essential to gather information on existing baseline status and to assess potential environmental impacts of the SUFAL activities. Environmental screening identifies the consequence of the proposed project in broader sense based on similar project experiences, stakeholder's perceptions and expert judgment, without having very much detailed investigation. Critical issues are also identified through the screening which needs detailed investigation. Based on the extent of environmental impact obtained from the environmental screening, the decision for further environment impact assessment will be taken.

Environmental screening is usually carried out with the help of simple matrix that includes a set of check list to identify the baseline status and proposed potential impacts of the project intervention. Based on an extensive literature review and expert consultation, a screening matrix should be developed for SUFAL which will be attached to the Environmental Assessment report for the SUFAL. Members of environmental assessment team will update and use this matrix for collecting information through site visit, interview/ consultation with stakeholders, focus group discussion in the project site at the later stages.

The screening matrix will help to decide whether the project activities can be implemented or not, and the level of Environmental Assessment required. During environmental screening, if it is found that the project may create major irreversible environmental damage or may violate an existing environmental rule or regulation, the sub-components/ activities will be rejected. For instance, any activities that may encroach into an ECA or a national/ global heritage site will be rejected. BFD must confirm the findings of the environmental screening carried out by the consultants. Moreover, alternative project activities/ methods and/ or operation will be considered and the environmental impact will be assessed to make the project more environment friendly.

5.1.4. Environmental Assessment

Initial Environmental Examination (IEE)

The IEE study will be conducted under SUFAL. However, according to the project planning, the activities those need IEE will be implemented at different periods and hence, multiple IEEs will be required clustering the similar activities prior to the actual intervention start. The purpose of the IEE is three folds:

- (i) to obtain Clearance from DoE and obtaining decision from DoE whether the particular project activities need further assessment such as detail EIA or not;
- (ii) provide/ finalize the ToR for the EIA study, if required; and
- (iii) continue consultations with project stakeholders.

The Process of IEE is briefly outlined below:

Analysis of the Project Components: All the components of the SUFAL, like afforestation, rehabilitation/reconstruction of field offices, and community level livelihood development activities will be examined thoroughly which will in fact guide the development of checklist for reconnaissance survey.

Preparation of Checklist: A comprehensive checklist of potential environmental components likely to be impacted need to be prepared based on the guidelines of different agencies such as DoE and World Bank.

Initial Screening/ Survey: Not all the parameters selected in previous step may be significant for the project; hence the first activity will be to shorten this list to concentrate on significant effects. Data should be collected from all possible secondary sources, if available, and conduct an environmental reconnaissance with the relevant checklist in hand to identify and delineate the significant effects of the project and eliminate the others from further considerations. Public consultation will play an important role in initial screening.

Analysis of alternatives: Alternative site and technological design should be analyzed for the proposed project interventions considering environmental, social, and technological criteria.

Identification and Scaling of Impacts: All the potential short- and long-term environmental impacts should be identified. The impacts can be graded qualitatively (e.g. high, medium, low) in order to identify major impacts and relevant components. In addition, cumulative and residual impacts of the project interventions need to be clearly addressed.

Identification of Enhancement and Mitigating Measures: From literature survey and applying expert judgment and based on assessed impacts, a list of possible enhancement and mitigating measures for beneficial and adverse effects respectively should be prepared.

Preparation Environmental Management and Monitoring Plan: Environmental management plan for the proposed project should be prepared mentioning the impact mitigation/ enhancement measures with institutional responsibilities. Also, environmental monitoring plan should be prepared that will include monitoring parameters, frequency, method and responsible agencies.

Recommendations on the need of EIA study: The IEE study should recommend as to whether a full-scale EIA study is needed or not.

Preparation of ToR for EIA: Based on the IEE findings, a detailed ToR for subsequent EIA study should be prepared. The ToR will specially focus on the adverse impacts of high magnitude. Attention should also be given to cumulative and residual impacts.

Environmental Impact Assessment (EIA)

Environmental Impact Assessment (EIA) is considered as a planning tool which assist planner in anticipating potential future impacts of alternative development activities, both beneficial and adverse. It is viewed to selecting the optimal alternative which maximizes beneficial effects and mitigates adverse impacts on the environment. EIA is basically concerned with identifying and assessing the environmental consequences of development projects, plans programs and policies in an attempt to ensure that the best alternative for development is selected (Govardhan 1993). Identifying and assessing the environmental impacts of development are complex tasks because of the diversity of impact which may be caused by human interference with environmental, and social systems. Identification and assessment of these impacts requires collection and manipulation of large

amount of data, and most importantly, communicating the final results to decision-makers and members of the public many of whom are unlikely to be experts in environmental sciences. It consists of the following steps (Govardhan 1993);

- i. Impact identification
- ii. Impact prediction and measurement
- iii. Impact interpretation or evaluation
- iv. Identification of monitoring requirements and mitigating measures
- v. Communications of impact information to decision makers and public

EIA is a legal requirement for development projects. Both legal and institutional mechanisms need to be simultaneously developed in order that EIA procedures can be implemented effectively. Natural resources namely water, land, soil, flora and fauna constitute the resource capital on which development process itself must be based (Hosetti & Kumar 1998). Good management of the environment process is essential for making the best use of natural resources to meet basic human needs without destroying the basis of which sustainable development depends.

The important components of EIA are Purpose, Screening and IEE, Scoping, Preparation of Terms of reference, EIA report and Assessment methodologies, Mitigation measures, Review of Draft of EIA, Impact monitoring, Evaluation of EIA process. Assessment methodologies consists of ad hoc, checklist, matrices, overlays, cost-benefit ratio and simulation modeling methods, etc.

Environmental codes and best practices

Bangladesh Forest Department will carry out regular monitoring on application of Environmental Code and best Practices (ECP) on the afforestation and reforestation program (Table 5.1). A monitoring plan will be developed by the Staff Officer (SO) for each division. The third-party monitoring will also carry out independent monitoring of the ECP implementation.

Table 5.1: Environment Codes of Practice (ECP) for Afforestation and Reforestation

Sl	Item	Guideline
1.	Planning and Operational Management	- Plan to avoid remedy or mitigate adverse environmental effects. - Do not burn off cleared vegetation – where feasible, chip or mulch and reuse it for the rehabilitation of affected areas, temporary access tracks or landscaping. - Water quality, stream stability and habitat values will be maintained in the forest environment including the development area and adjoining lands. - Adequately trained workforce with clear work instructions will ensure efficient and reliable implementation whilst meeting appropriate environmental standards and ensuring applicable environmental regulation is met - Consider the hydrological response for selecting the plant species - Forest operations do not result in long-term adverse impacts to soil productivity, water resources, and hydrology

Sl	Item	Guideline
2.	Land Management	• Make every reasonable effort to avoid damage to restricted areas e.g. protected vegetation areas, archaeological sites, public recreation areas, neighboring properties and water bodies • Maintain cut-off spacing according to local soil, rainfall and topographic conditions. • Remove all rubbish from the forest and dispose in a legally and environmentally acceptable way. • Minimize soil disturbance, such as compaction, soil erosion and fertility loss, and degradation of water quality • • Ensure sediment runoff is contained within the work site and do not direct runoff into restricted areas or water bodies.
3.	Site Management	• Passageway of wild animals and the original vegetation between the nearby planting patches • Preservation of existing natural regeneration and integration with reforestation and rehabilitation • Safe distance from cultural and natural heritage • Avoid land with steep slopes to avoid erosion
4.	Plant Management	• Tree seedlings are planted in a way that minimizes damage to the soil, while facilitating seedling survival. Tree seedling species are selected appropriate for maintaining long-term productivity. • Focus on tree species suitable for site condition • Prevent unreasonable species resulting in slow growth, less water and soil conservation and pest or disease outbreaks • Local species as planting materials, since natural selection and succession are most suitable for local climates and natural conditions • Ensure avoid single species or clone monoculture
5.	Agrichemical application	• Agrichemical applications must be planned, supervised, and undertaken by appropriately trained personnel e.g. hold an approved handler certificate and Comply with applicable legal requirements, • minimize the risk to human health, and minimize the adverse impacts on the environment by proper chemical selection, Handling and storage, applications rates (quantity) and method for healthy plantation • (no pesticides or herbicides will be used in the project), • Remove both full and empty spray containers from work sites daily – do not leave unattended and dispose the waste by authorized disposal methods only .
6.	Planting	• Leave set back requirements around streams, restricted areas e.g. native vegetation, protected riparian strips, historic and heritage sites, research areas. • In case of forestry plantations, uproot the infected seedlings and destroy that immediately and plant a fresh vigorous seedling again. Because of involvement of the participants, this activity is often performed without any formal programming. • For nursery raising, physical and biological controls are practiced to control the pests and diseases in the nurseries. • Do not plant spread-prone species on sites where there is a high risk of uncontrollable wilding spread beyond the boundaries of the plantation. • Consider appropriate species, patterns and layout when planting areas with high visual values and/or with important recreational values.

Sl	Item	Guideline
7.	Fertilizer application	• Store fertilizer in suitably located sites e.g. well away from waterways and neighboring properties. • Remove unused or empty fertilizer bags and dispose properly • Minimize the adverse impacts on the environment by using proper brand fertilizer, adopting accurate method of application with an optimize rate. • Where necessary due to topography, soils, or other conditions, measures are taken to prevent damage from fertilizer runoff or leaching.
8.	Waste management	• Remove all waste from the forest and dispose in a legally and environmentally acceptable way. • Composting the biodegradable waste by digging 2x2x1.5m³ earthen hole at convenient location of forest and decomposed waste can be used as bio-fertilizer. • Dumping of non-biodegradable waste in the forest is prohibited.
9.	Pest management plan	• During outbreak of any deadly plant disease develop a plan to manage pest in coordination with neighbors by identifying existing pests and diseases and the risks for the introduction of new pests and diseases. • Share the plan with Bank before application.
10.	Biodiversity	• No net loss of biodiversity values associated with new plantation development. • Compensate by expanded conservation activity in other areas if essential for the viability of the plantation • Develop to protect endangered or threatened species.
11.	Water Resource Management	• Install temporary sediment basins, where appropriate, to capture sediment-laden run-off from site • Divert runoff from undisturbed areas around the harvesting site • Stockpile of fertilizer or agrichemical away from drainage lines • Prevent all solid and liquid wastes entering waterways by collecting solid waste, oils, chemicals, fertilizer waste and transport to an approved waste disposal site
12.	Fire management	• A strategy is in place to control fire damage. • Slash is concentrated only as much as necessary to achieve the goals of the site preparation and the reduction of fuels to moderate or low levels of fire hazard.
13.	Polypropylene Bags Handling	• Make a Borrow Pit at each site for collection of poly bags • Collect all bags at the pits after plantation • Inform private sector to collect those bag for recycling

For the small-scale rehabilitation and construction, the Environmental Code of best Practice (ECP) will be applicable. The ECP for small-scale rehabilitation is provided in the Table 5.2.

Table 5.2: Environmental Codes of Practice (ECP) for Small Forest Office

Item	Guideline
Construction Camp Management	Good accommodation for all workers for Safe and reliable water supply. Hygienic sanitary facilities and sewerage system. Storm water drainage facilities. Display emergency contact numbers clearly and prominently at strategic places in camps. Communicate the roles and responsibilities of laborers in case of emergency in the Monthly meetings with contractors.

Item	Guideline
Waste Management	Ensure proper collection and disposal of solid wastes within the construction camps Provide refuse containers at each worksite, Insist waste separation by source; Minimize the production of waste materials by 3R (Reduce, Recycle and Reuse) approach. Establish waste collection, and disposal systems. Dispose organic wastes in a designated safe place on daily basis. Take care to protect groundwater from contamination by leachate formed due to decomposition of wastes.
Worker Health and Safety	Provide personal protection equipment (PPE) for workers, such as safety boots, helmets, masks, gloves, protective clothing, goggles, full-face eye shields, and ear protection. Maintain the PPE properly by cleaning dirty ones and replacing them with the damaged ones. Provide Safety training to prevent accidents, injury etc. Provide health care facilities and first aid facilities are readily available.
Topsoil Management	Collect the topsoil due to excavation of earth from the construction area, and stored and re-use for tree plantation.
Excavation and Earth works.	Ensure no dust blow during earth excavation by spraying of water Maintain slope to resist soil erosion
Water Resources Management	Prevent deterioration of surface and groundwater quality during construction due to surface runoff or percolation of waste water/ sewerage from construction sites and work camps.

5.2. Social Assessment and Management Process

5.2.1. Initial Social Screening

During the identification and preliminary stages of any activity preparation, BFD will employ the screening check-lists designed for the project. A preliminary assessment to identify the types, degree and scale of potential social impacts of the activity will be undertaken via the checklist attached in Annex 2 (social impact screening checklist). In cases where the preliminary assessment indicates that the potential adverse impact of the proposed project will be significant, appropriate preparation will be done for further surveys and consultation with key stakeholders.

5.2.2. Categories of probable Social Impacts

Given that acquisition of land resulting in loss of land-based assets and incomes is highly unlikely, the following are some basic categories of impacts or issues may take place under this project:

- a) Loss of access or limited access to the usual forest areas and their resources;
- b) Loss of source of livelihood;
- c) Loss of private or community-based areas or similar facilities;
- d) Loss of network; and vulnerability to local power elites
- e) Loss of culture and tradition

5.2.3. Social Impact Assessment (SIA)

When the sites for specific activities are identified and if, according to the substantive social effects are anticipated a brief SIA (based on PRA techniques) will be undertaken to identify project beneficiaries, particularly focusing on poor, impacted people and other relevant stakeholders. The SIAs will utilize a well-planned and all-inclusive communication and consultation strategy and include a baseline survey covering the prevailing status of income, employment, education, age, skills and other

socio-economic aspects along with cultural and community aspects in the areas. The assessment will feed into the individual RPs created for each location and will be incorporated, along with consultation feedback from those identified in the PAP census and all other relevant stakeholders, in the development of mitigation measures, especially livelihood strategies. The project should develop a guideline for SIA specific to the intervention sites.

5.2.4. Procedure of Social Impact Assessment (SIA)

The implementing agency will undertake a survey for identification of the persons and their families likely to be affected by the project. Every survey shall contain the following information for the project affected families:

- i. Families who are residing, practicing any trade, occupation or vocation in the project affected area;
- ii. Families belonging to categories of indigenous peoples/ethnic minorities;
- iii. Vulnerable persons, including female-headed households;
- iv. Families that are landless (not having homestead land, agriculture land or other homestead or agriculture land) and are below poverty line, but residing in the affected area;
- v. Losing access to private or common property resources within legally designated forest areas.

The implementing agency on completion of the assessment will disseminate the results among the affected community. Based on the assessment, project will prepare an action plan to mitigate or minimize the adverse impacts as identified during the survey. The project includes a Process Framework for those situations where communities face restrictions of access to natural resources in legally designated parks and protected areas that they depend upon for their livelihoods. The Process Framework describes the participatory processes by which the following activities will be accomplished for the SUFAL project:

- a. The project component will be prepared and implemented. The SUFAL project and components or activities that may involve new or more stringent restrictions on natural resource use and forest dependent community participate in project design.
- b. Criteria for eligibility of affected persons will be determined. The SUFAL should establish that potentially affected communities will be involved in identifying any adverse impacts, assessing of the significance of impacts, and establishing of the criteria for eligibility for any mitigating or compensating measures necessary.
- c. Measures to assist affected persons in their efforts to improve their livelihoods or restore them, in real terms, to pre-displacement levels, while maintaining the sustainability of the forest resources involved. The SUFAL should describe methods and procedures by which communities will identify and choose potential mitigating or compensating measures to be provided to those adversely affected, and procedures by which adversely affected community members will decide among the options available to them.
- d. Potential conflicts or grievances within or between affected communities will be resolved. The SUFAL should describe the process for resolving disputes relating to resource use restrictions that may arise between or among affected communities, and grievances that may arise from members of communities who are dissatisfied with the eligibility criteria, community planning measures, or actual implementation.

Additionally, the Process Framework should describe arrangements relating to the following;

- e. Administrative and legal procedures. The document should review agreements reached regarding the process approach with relevant administrative jurisdictions and line ministries (including clear delineation for administrative and financial responsibilities under the project).

- f. Monitoring arrangements. The document should review arrangements for participatory monitoring of project activities as they relate to (beneficial and adverse) impacts on persons within the project impact area, and for monitoring the effectiveness of measures taken to improve (or at minimum restore) incomes and living standards.

5.2.5. Community Engagement

The project will ensure the engagement of target communities through continued consultations for planning and full community management of implementation and monitoring of sub-project activities. Consultations will be held at regular intervals with target communities. In general, the following consultations will be carried out during the project cycle.

- Socio-economic survey for preparing the baseline of the households;
- Identification of land for small-scale infrastructure construction;
- Implementation of the IEC/ Communication plan for awareness creation about project activities
- Identifying livelihood support programs;
- To keep the momentum of engagement, activity specific consultations and a quarterly overall consultation will be held with all community groups.

5.2.6. Stakeholder Participation

The project recognizes that forest dependent communities are primary and key stakeholders of the project. Hence, project will ensure that these stakeholders are consulted on issues and they participate in all the sub-project activities including planning and implementation. The project will address the legitimate concerns of community members and provide opportunities and avenues for consultation and their participation. In order to provide a sense of ownership and ensure sustainability, the community members would be a part of the decision-making process. The project has a commitment for community participation in each of the sub-projects taken up.

5.2.7. Gender, Women, Children, Person with Disability/Excluded Groups' Needs

Advancement of gender equality, transforming traditional gender roles and progressive changes in power relationships between women and men are essential to the success of any development initiative. Therefore, BFD will ensure that both genders will have a chance to benefit as equally as possible from SUFAL interventions. Women's and excluded group's involvement in decision-making should be a genuine and meaningful participation.

The poor, women, excluded groups remain in a disadvantaged position in different three ecosystem forests area under SUFAL. The land ownership status, income opportunity, existing livelihood status, education rate of poverty amongst the forests dependent communities are reportedly far behind the national rates. In fact, their development has always been lagging behind due to socio-political discrimination, geographically in disadvantaged position and paternalistic attitude of the state and powerful social actors. Therefore, BFD has given a special attention to creating an enabling environment for women, adolescent girls, children, elderly physically challenged people and excluded groups for their empowerment.

The BFD has developed guidelines on gender equity following international best practice in the realm of gender and forests to create gender equality in its SUFAL project and within the department. Thus, gender inclusiveness and sensitivity is a core guiding principle for all of the SUFAL activities. It recognizes existing gender norms, roles and power relations, therefore address gender inequities.

The voice of women, girls and excluded groups are important during all stages and cycles of project implementation. The setting and tracking of indicators includes alternative livelihoods, AIGAs supports, afforestation and reforestation, capacity building, the design of gender-responsive infrastructure, the participatory planning of projects and financial plans etc. Economic, political, social and physical empowerment of women and excluded groups will also be stimulated by the alternative income generating activities and value chain development such as supporting women as entrepreneurs who sell alternative livelihood products.

The project seeks to develop the following approaches towards mainstreaming gender and equality at BFD, SUFAL and community level for more strategic inclusiveness;

- a. Approaches at BFD/ partner level:
 - Gender Policy.
 - Staffing ratio following existing government policy.
 - Equal logistical and capacity building support.
 - Internalization of learnings and experiences into policies and practices.
- b. Approaches at SUFAL Project level:
 - Fixed the gender indicator.
 - Gender audit provision.
 - Gender training.
 - Disaggregated data management system.
 - Integrated monitoring system.
 - Transparent decision-making provision.
- c. Approaches at community level:
 - At least 25% of women of participation in group/committee formation.
 - Equal decision-making power.
 - Equal access to, control over resources & benefits.
 - Priority to most vulnerable on resource allocation.
 - Provision of transparency and accountability.
 - Women in leaders' position.

5.2.8. Status of the Small Ethnic Communities in Project Area

Most of the Small Ethnic Community (SECs) are rural while some are urban. A very few families have been able to make a good progress in terms of social and economic status with higher education and diverse employment. Majority found that they are not able to make influence in decision-making, lack access to information and resources, less of mobility, lack of skills, lack of confidence, and lack of ability to bargain and social participation.

The SECs are amongst the poorest in the project districts and hence will receive priority in the project support activities. SECs are likely to be the beneficiaries of the SUFAL project according to its approach and interventions for livelihood improvement and transformation. Key weaknesses and vulnerability of the small ethnic communities as follows:

Backwardness and Impoverishment:

- Lack of awareness among SECs women and men on income generating activities.
- High incidence of landlessness.
- Depletion of natural forest and common property resources.
- Lack of skill development activities.
- Lack of awareness on processing and marketing of agriculture and horticulture produce.

- Lack of market linkages for handicrafts made by SECs.
- Lack of employment to educated youth.
- Lack of assistance to differently abled persons.
- They do not have strong and permanent organization.
- Less empowered.

Insecurity and Vulnerability:

- Food insecurity seasons.
- Vulnerability to natural disasters and social shocks.
- Forest eviction cases.

Lack of Awareness:

- Lack of awareness on Small Ethnic Communities culture by the field level functionaries.
- Lack of aware on forest law and regulation.
- Lack of aware on education and good health practices.
- Lack of gender sensitization among field level functionaries.

Other Issues:

- Involvement of traditional Small Ethnic Communities councils in development.
- Use of only ethnic minorities' languages are a hindrance for access to education.
- High incidence of dropouts especially among girls.
- Lack of awareness on health, hygiene and sanitation.
- Lack of access to common property resources.

The inequitable distribution of rights, resources and power—as well as repressive cultural traditions and norms—constrain the ability to take action (CARE, 2010). In this regard, one of the prerequisites of a successful development plan for the SECs is the preparation of a culturally appropriate development plan, with the involvement of the SECs and based on full consideration of the options preferred by them. The project will create opportunity for active involvement of the SECs at each stage of its operation. The involvement of the SECs in planning, implementation and monitoring of the programs meant for their own development would be the cornerstone of SECDF strategy of the project.

5.2.9. Small Ethnic Community Development

In Bangladesh, there are about 35 SECs with distinct culture, tradition, and language -- covering about two percent of the total population; the number is, however, debated by many based on different definitions. In any estimate, ethnic peoples constitute no more than between 1-2% of the total population of Bangladesh. However, around 4% ethnic people was found in the survey findings of SUFAL project area. So, it is important to ensure that small ethnic communities are sufficiently and meaningfully consulted allowing their free, prior and informed consultation (FPIC) to project interventions; they have equal opportunity to access the benefits; and that any potential negative impacts to those communities are avoided, minimized and the residual impacts are properly mitigated.

The Small Ethnic Community Development Plan (SECDP) will be developed as needed in the course of SUFAL implementation. The SECDP will consider the ethnic and demographic characteristics of the project affected population; prevailing intuitions, such as, family, religion, language and education; and other indigenous variables and social stigmas. This Plan will accommodate the local traditional

leadership, gender issues, civil society engagement and NGOs in the implementation process of the project activities.

Although the ethnic minorities are scattered all over Bangladesh, they are overwhelmingly concentrated in several geographical pockets; namely North-West (Rajshahi & Dinajpur), North-East (Sylhet), Central region (Dhaka and Mymensingh), South (Barishal & Patuakhali), with the most significant concentration in the south-eastern corner – the Chittagong Hill Tracts. The SUFAL project envisages restoration of degraded forest ecosystems and conserves biodiversity through sustainable forest management practices for enhancing carbon sequestration, ecosystem services, livelihoods opportunities, climate change resilience and improves Protected Area (PA) networks in selected forest landscapes of Bangladesh. The project will develop livelihoods of targeted people from the most poor, vulnerable, forest dependent communities through conservation-focused. Alternative Income Generating Activities (AIGAs) and market based value chain development. Potential interventions of the project are Afforestation/ Reforestation (A/R), Small-scale constructions and Market driven livelihood activities. Major project areas are hill forests, plain land Sal forests, Fresh water swamp forests and coastal lands including their community landscapes (detailed in the Small Ethnic Community Development Policy Framework document).

5.2.10. SECs Consultation Needs

In order to complete the picture of the SECs development framework of SUFAL, additional field visits and research will be required at the SIA stage to define the current needs and interests of SECs. There will be needed further extensive discussions and consultation with the SECs throughout the SUFAL project sites to discuss the project components, sub-components, activities, potential positive and negative impacts and measures taken to mitigate those impacts. It is also required to record the views of each of the SECs of the consultations, irrespective of gender, profession, religion, and age groups.

5.2.11. Impact Assessment and Prediction

This section discusses the guideline to predict the potential and mostly typical impacts on the key environmental parameters of the SUFAL area based on the overall baseline, assessment of project components/sub-components and the primary assessment of the activities.

5.2.12. Impact Assessment Methodology

The assessment of effects and identification of residual impacts takes account of any incorporated mitigation measures adopted due to any potential impact of Program activities, and will be largely dependent on the extent and duration of change, the number of people or size of the resource affected and their sensitivity to the change. Potential impacts can be both negative and positive (beneficial), and the methodology defined below will be applied to define both beneficial and adverse potential impacts.

The criteria for determining significance are generally specific for each environmental and social aspect but generally the magnitude of each potential impact is defined along with the sensitivity of the receptor. Generic criteria for defining magnitude and sensitivity used for the Program are summarized below:

Impact Magnitude: The assessment of magnitude shall be undertaken in two steps. Firstly, the key issues associated with the SUFAL program are categorized as beneficial or adverse. Secondly, potential

impacts shall be categorized as major, medium, minor or negligible based on consideration of the parameters such as:

- Duration of the potential impact;
- Spatial extent of the potential impact;
- Reversibility;
- Likelihood; and
- Legal standards and established professional criteria.

The magnitude of potential impacts of the program shall be identified according to the categories outlined in Table 5.3.

Table 5.3: Parameters for Determining Magnitude.

Parameter	Major	Medium	Minor	Negligible/Nil
Duration of potential impact	Long term (more than 20 years)	Medium Term Lifespan of the Program (5 to 10 years)	Less than program lifespan	Temporary with no detectable potential impact
Spatial extent of the potential impact	Widespread far beyond program boundaries	Beyond immediate Program components, site boundaries or local area	Within program boundary	Specific location within program component or site boundaries with no detectable potential impact
Reversibility of potential impacts	Potential impact is effectively permanent, requiring considerable intervention to return to baseline	Potential impact requires a year or so with some interventions to return to baseline	Baseline returns Naturally or with limited intervention within a few months	Baseline remains constant
Legal standards and established professional criteria	Breaches national standards and or international guidelines/obligations	Complies with limits given in national standards but breaches international lender guidelines in one or more parameters	Meets minimum national standard limits or international guidelines	Not applicable
Likelihood of potential impacts occurring	Occurs under typical operating or construction conditions (Certain)	Occurs under worst case (negative impact) or best case (positive impact) operating conditions (Likely)	Occurs under abnormal, exceptional or emergency conditions (occasional)	Unlikely to occur

Sensitivity of Receptor; The sensitivity of a receptor shall be determined based on review of the population (including proximity/ numbers/ vulnerability) and presence of features on the site or the surrounding area. Criteria for determining receptor sensitivity of the program's potential impacts are outlined in Table 5.4.

Table 5.4: Criteria for Determining Sensitivity.

Sensitivity Determination	Definition
Very Severe	Vulnerable receptor with little or no capacity to absorb proposed changes or minimal opportunities for mitigation.
Severe	Vulnerable receptor with little or no capacity to absorb proposed changes or limited opportunities for mitigation.
Mild	Vulnerable receptor with some capacity to absorb proposed changes or moderate opportunities for mitigation
Low/Negligible	Vulnerable receptor with good capacity to absorb proposed changes or/and good opportunities for mitigation

Assigning Significance: Following the assessment of magnitude, the quality and sensitivity of the receiving environment receptor shall be determined and the significance of each potential impact established using the potential impact significance matrix shown in Table 5.5.

Table 5.5: Assessment of Potential Impact Significance.

Magnitude of Potential impact	Sensitivity of Receptors			
	Very Severe	Severe	Mild	Low /Negligible
Major	Critical	High	Moderate	Negligible
Medium	High	High	Moderate	Negligible
Minor	Moderate	Moderate	Low	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

5.3. Potential Key Environmental Impacts

The overall impact assessment of the proposed project to be implemented reveals that most of the likely adverse impacts could be minimized or eliminated by adopting standard mitigation measures; there is also scope to enhance some of the beneficial impacts to be generated from the proposed project.

The potential impacts of the program on the key environmental parameters that have been identified as part of the ESMF are listed in Table 5.3 and 5.4. Also, given in the table is the significance of each impact based upon the criteria defined. In the subsequent sections, these impacts are discussed and guidelines are included for the EMF of the SUFAL.

The potential impacts of the program on the key environmental parameters that have been identified as part of the ESMF are listed in tables below Table 5.6 & 5.7. Also, given in the table is the significance of each impact based upon the criteria defined.

Table 5.6: Categorization of sub-components based on EA requirements

Components/ Sub-components	Activities/Specific task	Potential Negative Impact	EA Requirement
Component 1. Strengthening Institutions, Information Systems and Training			
Sub-Component 1.1 Strengthening Organizational Capacity:			
	Functional review of BFD	Nil	Excluded from EA
	Updating of policies and regulations in the sector	Nil	Excluded from EA
	Upgrading of physical infrastructure for the BFD	Potential negative (-) impact from building infrastructure at the local level	IEE Required
Sub-Component 1.2 Applied Research			
	Applied research by BFRI	Nil	Excluded from EA
	Innovation Window	Nil	Excluded from EA
Sub-component 1.3 Training			
Sub Component 1.4 Strengthening monitoring, information management systems and forest inventory			
	Development of a robust Forest Management Information System (FMIS)	Nil	Excluded from EA
	Design and development of a new Forest Management Planning system	Nil	Excluded from EA
	Establishment of National Forest Inventory Unit and updating of forest inventory	Nil	Excluded from EA

Components/ Sub-components	Activities/Specific task	Potential Negative Impact	EA Requirement
Sub-component 1.5. Communication & Outreach		Nil	Excluded from EA
Component 2. Strengthening Collaborative Forests and Protected Areas Management			
Sub-component 2.1 Institutionalizing collaborative forest management (CFM)			
	identifying policy and regulatory measures to strengthen collaboration with communities in different ecosystems	Nil	Excluded from EA
	identifying the most forest dependent communities where the project will form CFM committees	Nil	Excluded from EA
	awareness raising, capacity development and training on the CFM approach for the Committees and BFD staff	Nil	Excluded from EA
	strengthening CFM committees with own bank account, an operating fund	Nil	Excluded from EA
	developing an institutional framework and rules for CFM during implementation	Nil	Excluded from EA
Sub-Component 2.2: Reforestation, Coastal Green Belt and Plantations			
	Assisted Natural Regeneration	Potential (-)ve impacts can be in the process of site preparation, species selection and establishment of ANR sites	IEE required
	Enrichment plantations	Potential (-)ve impacts can be in the process of site preparation, and species selection	IEE required

Components/ Sub-components	Activities/Specific task	Potential Negative Impact	EA Requirement
	Mixed plantation with indigenous fast-growing species	Potential (-)ve impacts can be in selection of sites and species	IEE required
	Mixed plantation with indigenous slow growing species	Potential (-)ve impacts can be in selection of sites and species	IEE required
	Mangrove Afforestation (Plantation raising on new land formations) and in coastal districts	Potential (-)ve impacts can be in selection of sites and species	IEE required
	Site Specific Planning (SSP)	Nil	Excluded from EA
	Accountability and Quality Assurance of SSPs	Nil	Excluded from EA
Sub-Component 2.3 Improving Protected Areas (PAs) and Wildlife management			
	Scaling up endangered species conservation programs	Nil	Excluded from EA
	developing protected area management plans	Nil	Excluded from EA
	enhancing capacity for wildlife law enforcement	Nil	Excluded from EA
	restoration and protection of natural habitats in select wildlife corridors	Nil	Excluded from EA
	Regional networking for wildlife law enforcement	Nil	Excluded from EA
	SMART patrolling for wildlife and biodiversity monitoring and evaluation	Nil	Excluded from EA
Component 3. Increasing Access to Alternative Income Generating Activities (AIGAs), Forest Extension Services & Trees Outside Forests (TOF)			
Sub-Component 3.1 Community mobilization and organization			

Components/ Sub-components	Activities/Specific task	Potential Negative Impact	EA Requirement
	mobilization of communities with CFM committees in forest dependent villages and socializing the SUFAL project and the AIGA program	Nil	Excluded from EA
	Establishing and/or strengthening CFMC bank account and starting community savings	Nil	Excluded from EA
	Initiating village development activities through a village development fund	Nil	Excluded from EA
	Training on livelihood diversification, preparation of livelihoods proposals, accounts and book-keeping	Nil	Excluded from EA
Sub-Component 3.2 Alternative Income Generation Activities (AIGAs)			
	Developing a Community Operation Manual (COM)	Nil	Excluded from EA
	Selection of AIGA funds recipients	Potential (-)ve impacts can arise if the beneficiary selection process does not take views from co-management organizations, and focus highly dependent households, including indigenous people and women-headed ones.	Excluded from EA
	Funding of AIGAs	Nil	Excluded from EA
	Implementation of AIGAs		
	Agroforestry	Potential (-)ve impacts can be from species selection	IEE
	Homestead NTFP production	Potential (-)ve impacts can be from the settlers inside the forests	Excluded from EA

Components/ Sub-components	Activities/Specific task	Potential Negative Impact	EA Requirement
	Nurseries	Potential (-)ve impacts can be from the use of chemical pesticide and fertilized	IEE
	Sustainable fisheries	Potential (-)ve impacts can be once the natural sources, e.g. flood plain aquaculture and pond/gher aquaculture are considered similarly	IEE
	Alternate energy	Nil	Excluded from EA
	Cottage/handicraft industries	Potential (-)ve impact can be if the industries are heavily dependent on natural stock and not invest in production of raw materials	IEE
	Wood processing (small workshops)	Nil	Excluded from EA
Sub-component 3.3 Extension services and Trees Outside Forests (TOF)			
	Improved planting stock	Nil	Excluded from EA
	Nursery technology improvement and extension services	Nil	Excluded from EA
	Strip plantations will be established on bare and other unused land	Potential (-)ve impacts can be in selection of species	IEE
	Golpata plantations will be established on canal banks and mudflats	Potential (-)ve impacts can be in selection of sites	Excluded from EA
	Distribution of seedlings, to farmers	Nil	Excluded from EA
	Development of market intelligence on TOF	Nil	Excluded from EA
Component 4. Project Management and Monitoring			

Components/ Sub-components	Activities/Specific task	Potential Negative Impact	EA Requirement
Sub-Component 4.1. Project Management		Nil	Excluded from EA
Sub-component 4.2 Monitoring, Reporting and Evaluation		Nil	Excluded from EA

Table 5.7: Summary of Potential Environmental Impacts and their Significance

Potential Impacts	Duration of Impact	Spatial Extent	Reversible or not	Likelihood	Magnitude	Sensitivity	Significance Prior to Mitigation	Significance after Mitigation
Potential Environmental Impacts based on ecosystems								
Conversion of natural forests to plantation	Long term	Local	Not reversible	Certain	Major	High	highly negative	Moderate negative
Loss of wildlife habitats	Long term	Local	Not reversible	Certain	Major	High	highly negative	Moderate negative
Land cover and land use changes	Long term	Local	No	Certain	Medium	Moderate	Moderate negative	Low negative
Loss of ecological connectivity	Long term	Local	No	Certain	Medium	Moderate	Moderate negative	Low negative
Loss of aquatic habitat	Long term	Local	No	Likely	Minor	Mild	Moderate negative	Negligible negative
Loss of coastal/marine habitats	Long term	Local	No	Likely	Medium	Moderate	Moderate negative	Low negative
Drainage congestion and water logging	Long term	Local but beyond project foot print	Yes	Likely	Medium	Mild	Moderate negative	Low negative
Loss of agriculture land	Long term	Local	No	Likely	Minor	Moderate	Moderate negative	Low negative
Environment impacts during project implementation phase								
Site clearance and burning for plantation and infrastructure	Long term	Local	Yes	Certain	Major	High	highly negative	Moderate negative

Potential Impacts	Duration of Impact	Spatial Extent	Reversible or not	Likelihood	Magnitude	Sensitivity	Significance Prior to Mitigation	Significance after Mitigation
Promotion of Monoculture with exotic species	Long term	Local	Yes	Certain	Major	High	highly negative	Moderate negative
Soil/Water pollution	Long term	Local but beyond project foot print	No	Certain	Medium	Moderate	Moderate negative	Low to moderate negative
Solid wastes and hazardous wastes	Short term	Local	Yes	Certain	Medium	Mild	Moderate negative	Low negative
Impacts on aquatic habitat (coastal/char land)	Long term	Local but beyond project foot print	No	Certain	Medium	Moderate	Moderate negative	Low negative
Extensive agriculture/aquaculture/ livestock for livelihoods	Short term	Local	Yes	Certain	Medium	Mild	Moderate negative	Low negative
Occupational health and safety	Short term	Local	Yes	Certain	Medium	Moderate	Moderate negative	Low to moderate negative

5.4. Potential Social Impacts

When the sites for specific activities are identified and if, according to the substantive social effects are anticipated a brief SIA (based on PRA techniques) will be undertaken to identify project beneficiaries, particularly focusing on poor, impacted people and other relevant stakeholders. The SIAs will utilize a well-planned and all-inclusive communication and consultation strategy and include a baseline survey covering the prevailing status of income, employment, education, age, skills and other socio-economic aspects along with cultural and community aspects in the areas. The assessment will feed into the individual site-specific plans created for each location and will be incorporated, along with consultation feedback, in the development of mitigation measures, as needed.

5.4.1. Intended Benefits

The project has been designed to provide a holistic response to a set of dynamic issues that poor, vulnerable forest dependent communities face. It aims to increase the alternative livelihood, poverty reduction, and environmental sustainability. Project's inclusive approach will result in benefits to households and individuals, especially the most disadvantaged like ethnic people, female-headed households, widows, the poorest, and the elderly peoples in the target communities.

The project will support the establishment and empowerment of community co-management associations to make decisions on afforestation and reforestation, AIGAs support and alternative livelihoods. The project with its inclusive approach will target to reduce gender gaps those are the most vulnerable

5.4.2. Involuntary Resettlement Impacts

A vast majority of forest dependent communities are known to use lands and forest resources under customary/traditional rights that are not recognized in the country's land administration system. An assessment of land ownership carried out for the project found just 3% of respondents have their legal ownership documents. The lands that they use without legal titles are considered public and make them ineligible for any assistance in cases where they are adversely affected. Neither land acquisition nor physical displacement of forest dependent communities is being considered as part of the project; instead, such communities will be engaged in the project via multiple activities, including collaborative forest management, afforestation, access to AIGAs, PAs and wildlife management, and so on, in order to bring a greater area of land under forests and achieve more sustainable forest resource use patterns in that area. Just the same, a Resettlement Policy Framework (RPF) has been developed on a precautionary basis for the purpose of establishing processes to minimize and mitigate the negative impacts from any project-related involuntary resettlement that could take place. It will also guide the project to ensure effective participation of PAPs in such situations.

5.4.3. Impacts on Small Ethnic Communities

SECs present in the project area can be characterized as indigenous peoples in view of their unique characteristics including language, culture, occupation, and traditions. These communities are amongst the poorest living in the Project areas. A very few families have been able to make a good progress in terms of social and economic status with higher education and diverse employment. Tribal peoples are present in all 28 SUFAL districts, hence will receive priority in the project benefits. The Bank operational policy on indigenous peoples has therefore been triggered and a Small Ethnic Community Development Framework (SECDF) to guide community participation and benefit sharing

inclusive of the SECs. The involvement of the SECs in planning, implementation and monitoring of the programs meant for their own development would be the cornerstone of SECDF strategy of the project.

Livelihood Impacts: Alternative livelihoods development is one of core component of the project.

The social risks and impacts associated with the project has categories may take place are as follows Table 5.8.

Table 5.8: Activities vs probable key social impacts

Component activities	Potential Impacts
Component 1: Strengthening Institutional Development, Information Systems and Training	
Sub-Component 1.1 Strengthening Organizational Capacity	This component will be helpful for involuntary resettlement screening, gender based disaggregated data collection, appropriate beneficiary, selection, skill development, alternative income generation, decision-making, knowledge management, assessment and management. Adequate staff resources will be ensured with BFD for social safeguards management in project cycle.
Sub-Component 1.2 Applied Research and Training	
Sub Component 1.3 Strengthening Information Management Systems and Forest Inventory	
Sub-component 1.4 Communications & Outreach	
Component 2: Collaborative Forests and Protected Areas Management	
Sub-component 2.1Institutionalizing Collaborative Forest Management (CFM)	No land acquisition but construction of small scale infrastructure may induce involuntary displacement of formal and informal users of existing land.
Sub-Component 2.2 Restoration of Degraded Forests, Plantations & Coastal Green Belt	There may also be issues of inclusion of small ethnic community, gender, public health risks and labor influx associated with the activities
Sub-Component 2.3 Improving Protected Areas and Wildlife Management	No involuntary displacement issues will be associated. There may also be issues of inclusion of small ethnic communities, gender, vulnerable groups, public health risks and labor influx associated with the activities. Alternative livelihoods improvement program – no involuntary resettlement issues are expected. Small infrastructure construction may be involved on existing available land upon confirmation of negative social attributes.
Component 3: Alternative Income Generating Activities (AIGAs)	
Sub-Component 3.1 Community Mobilization and organization	No involuntary resettlement impact is associated. However, the program will follow all-inclusive selection and placement approach.
Sub-Component 3.2 Community Livelihood Grants for AIGAs	

Sub-Component 3.3 Extension Services for Trees Outside Forests	
Component 4: Project Management and Monitoring	
Sub-Component 4.1 Project Management	This component will be conducive for involuntary resettlement screening, transparency and accountability, measuring the result of performance against the target, assessment and management. Adequate staff resources will be ensured with BFD for social safeguards management in project cycle.
Sub-Component 4.2 Project Monitoring	

5.5. Identifying Social Impacts and Mitigation Measures

Each intervention will be scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential adverse impacts. The impact may be both positive and negative. The extent of assessment required to identify and mitigate the impacts largely depends upon the complexities of activities.

Table 5.9: Possible social impacts and mitigation measures

Type of Impact	Measures	Implementing Agency
Basic needs development	Food, Cloths, Education, Health and shelter status will be increased	BFD and Partners NGOs
Gender and Equality	Decision making power, access to finance, bargaining power will be increased, and will be created equal community	BFD and Partners NGOs
Creation of number of working days	Recurrent Resources Income Generating Activities will be increased	BFD and Partners NGOs
Livelihood adaptation, vulnerability and resilience	Alternative livelihood options will be increased	BFD and Partners NGOs
Poverty reduction	Poverty will be reduced	BFD and Partners NGOs
Well-being and capabilities	Technical skills will be increased and treated as valuable resources.	BFD and Partners NGOs
Natural resource base sustainability	Forest degradation will be reduced and sustainable natural environment will be built	BFD and Partners NGOs
Social awareness	Increased the social responsibility, and awareness will be increased	BFD and Partners NGOs
Community development	Increased livelihood options, tourism, employment	BFD and Partners NGOs

CHAPTER 6: TENTATIVE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

6.1. Environmental Impact Management

The overall impact assessment of the project reveals that most of the likely adverse impacts could be minimized or eliminated by adopting standard mitigation measures; there is also scopes for enhancement of some beneficial impacts to be generated from the project. The major interventions of the SUFAL project will be afforestation/reforestation (A/R), Small-scale infrastructure development and Alternative Income Generating Activities (AIGAs). The following description shows a primary understanding of the impacts of the project interventions.

6.1.1. Afforestation and Reforestation Programs

Afforestation and reforestation activities include a diverse array of activities ranging from restoration of native forests to large-scale monoculture plantations. Given this variety, it is inevitable that some A/R projects have positive impacts on biodiversity while others can seriously degrade it. The Figure 2¹⁵ summarizes some of the most common factors that determine the likeliness of positive and negative

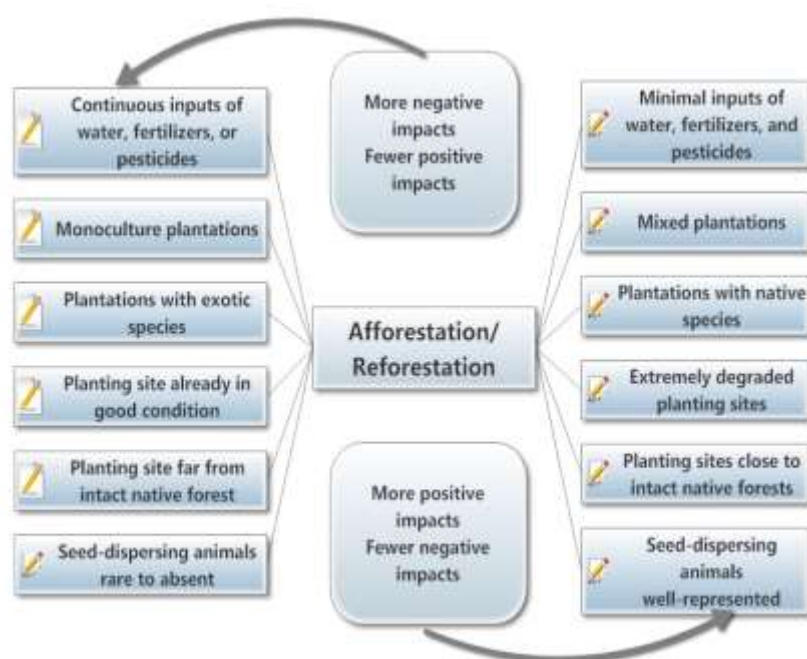


Figure 6.1: Factors of Afforestation/Reforestation activities impacting the environment

impacts in such project. The project will improve forest ecosystems over a large geographical area and is expected to have complex and long-term positive environmental impacts. In addition, the ability to fix CO₂ and maintain air balance, minimizing dust and pollutants, will be greatly enhanced with the growth of plantation. Soil stability and fertility after project implementation will be improved by

¹⁵ Adopted from the Social and Biodiversity Impact Assessment (SBIA) manual for REDD+ projects

humus accumulation under canopy and top soil. Environmental improvements will offer favorable living conditions for soil micro-organisms. Local species by natural selection and succession are most suitable for local climates and natural conditions and key elements to develop stable forest ecosystem which fulfill multifunctional roles.

The plantation may also contribute to negative environmental impacts. The major impacts are discussed in the following paragraphs.

Plantation site selection: Plantation site selection will be one of the most important steps for project preparation. If the site selection is wrong, project activities will trigger adverse impacts on the local environment and cultural heritage. If planting land is selected at higher levels of bushes or scarcely afforested land in drought areas this would be detrimental to regional biodiversity and integrity. Distribution of planting land is not only affects the efficiency of mixed forests but also the habitat of wildlife and the landscape of nature reserves.

Planting material selection: Planting material selection needs to be raised from seeds originating locally and match well to the local site conditions. The species mixture has to respect the individual growth characteristics and to be geared to generate synergies in the vegetation cover and improvement of soil quality. Otherwise, the plantation will not bring the expected benefits.

Impacts on Biodiversity and Protected Species: No impacts on nature reserves or protected species were identified. It is expected that the project will have a positive effect on biodiversity if correct forestry management practices are applied. Construction activities will be halted and preventive action will be taken if impacts on protected species is discovered during implementation.

Clearing planting sites: Clearing planting sites may cause permanent or temporal disturbances or damage original vegetation and incur water and soil erosion, increase rainfall runoff and soil nutrient loss, break animal passageways and create potential forest fire hazards in a wide area.

Fertilizer: Excessive use of chemical fertilizers, inappropriate application methods and wrong proportions result in the seepage of chemicals into underground aquifers as well as loss through surface runoff and rain water discharge. Excessive and continuous application of chemical fertilizers over a long duration will change physical and chemical features of the soil and result in soil hardening and damage, and deteriorate soil quality and reduce productivity. In addition, excessive and inappropriate application of fertilizers will affect the quality of nearby water bodies.

Pesticides: During any plant disease outbreak, the borrower may need to use pesticide. The misuse of pesticide will cause adverse environmental impacts. The application of pesticides can kill the natural predator of harmful insects, and cause biodiversity decline and the imbalance of species. The pesticide can pollute water supplies and soil, and endanger the health of the residents, livestock, crops, and wild animals, directly or indirectly. And the pesticide spraying equipment will contaminate the water and soil if not cleaned correctly. Plant diseases and insect pests control should use precaution and microbiological processes. The first year of the planting farmyard manure will be applied and then the organic fertilizers will be used after. These will improve the physical and chemical properties of soil, and cause slight adverse environmental impact. Besides, the packing receptacle of the pesticides and fertilizers should be collected and treated centralized, and also the vessel must be forbidden to wash in the river or lake.

Polypropylene Bags used for Seed Germination: Due to the humid weather effect of Bangladesh, BFD will use cost effective plastic (poly propylene) bag instead of non-biodegradable polythene bags for seed germination. Use of polythene is banned in Bangladesh. Polythene bags (PB) are non-degradable, If PB bags are not collected properly after plantation, non-degradable PB bags may create long term water logging.

6.1.2. Small-Scale Infrastructure

Small-scale infrastructure i.e., rehabilitation/reconstruction of Bangladesh Forest Department field level offices involve some amount of construction. Construction includes one or more of several diverse activities: demolition, site-clearing, excavation, pipe laying, soil grading, leveling, and compacting. Adverse environmental impacts related to the small-scale construction work can be direct and indirect (Figure 6.2). These impacts can be managed with proper planning and management.

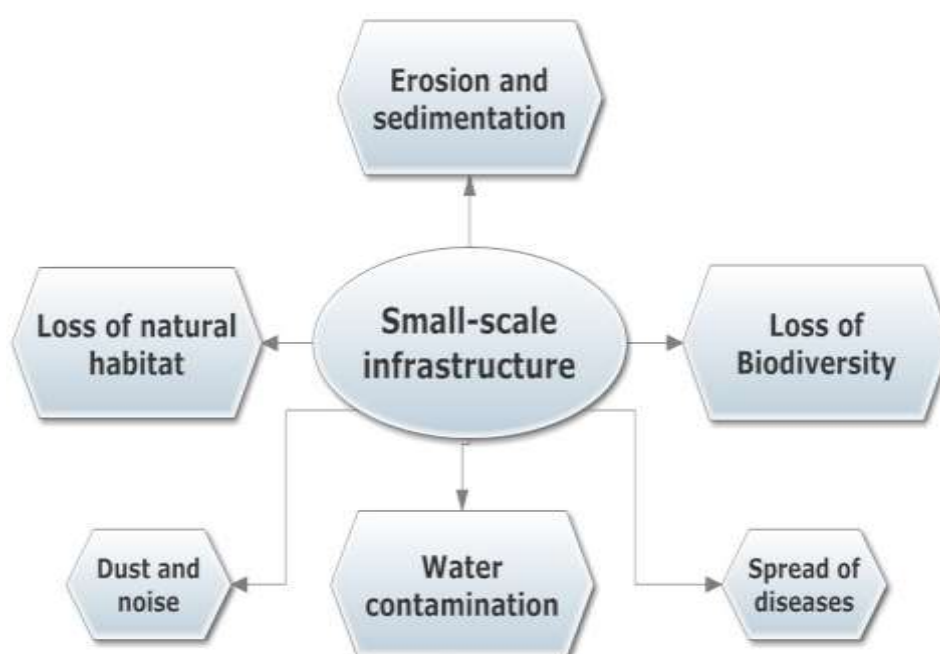


Figure 6.2: Impacts of small-scale infrastructure construction under the SUFAL project in Bangladesh

6.1.3. Loss of Natural Habitat and Biodiversity

The clearing of existing vegetation during construction and the development may result in the complete loss of associated ecological habitats and their fauna, within the footprint of the development. Noise, vibrations, and intrusive activities related to preparation and construction works may tend to scare away any animals remaining on the site after vegetation clearance. Construction in wetlands, estuaries or other sensitive ecosystems may destroy or damage exceptional natural resources and the benefits they provide. This damage may reduce economic productivity, impair essential ecosystem services (such as flood control or breeding habitat for food fish), or degrade the recreational value of these resources.

6.1.4. Erosion and Sedimentation

Removal of natural land cover, excavation, extraction of construction materials and other construction-related activities can result in soil erosion. Erosion can, in turn, lead to sedimentation in receiving waters. Sedimentation may reduce capacity of ponds and reservoirs, increasing flood potential, or substantially alter aquatic ecosystems.

6.1.5. Contamination of Ground and Surface Water Supplies

Toxic materials are often used in construction. Examples include solvents, paints, vehicle maintenance fluids (oil, coolant), and diesel fuel. If these are dumped on the ground or wash into streams they may contaminate ground or surface water supplies. This may harm the health of the local community, as well as populations living down gradient and downstream. Aquatic and terrestrial ecosystems may also be damaged. Where sanitary facilities for construction workers are inadequate, human waste may contaminate water resources.

6.1.6. Adverse Impact on Human Health and Safety

Potential concerns include:

Dust and Noise: A certain amount of air borne particulate matter (dust) will be generated by earth moving activities during site development and construction. This situation may be worse during the dry season. Air borne particulates may pose a hazard to residents in the vicinity or downwind of the construction site that suffer from upper respiratory tract problems. Otherwise it may only be a nuisance. The impact of dusting is short-term, lasting for the duration of the construction activity, but it may be severe if it causes significant health problems. The use of construction materials and labor activities during site clearance, land filling and construction works will inevitably generate noise, which may disturb neighbors.

Spread of disease: An influx of construction workers from other regions may introduce new diseases to the local population or increase the incidence of local infection. This is a particular concern with sexually transmitted diseases, such as HIV/AIDS. Specific types of facilities such as those for healthcare, sanitation, and solid waste can also increase the spread of a variety of diseases unless they follow proper waste-handling procedures. The screening format for Small-scale infrastructure is shown in the Annex-5.

6.1.7. Livelihoods Interventions

The household level alternative livelihood activities will be very small scale like goat and poultry rearing, vegetable cultivation, small scale trade, etc. These activities will not require any environmental screening. The community level alternative livelihood activities may include e.g. establishing cooperatives for improving marketing channels for local products, water facilities, community based eco-tourism, making energy efficient cooking stoves, and agricultural firms etc. Since the activities are not limited, it is not possible to identify the general environmental impact at this stage. The screening format for livelihood interventions is shown in the Annex 6.

Plantation Plan: A plantation plan will be prepared for the trees to be planted on the project construction site. The Plan will include the species to be planted, the plantation methodology, and plantation layout.

Environmental Management of Resettlement Sites: will be prepared by the Contractor in compliance with the stand-alone EMP prepared for Resettlement Sites and presented in the main EIA. However, the project is not expected to have any such site.

Health, Safety and Environment Plan: will be prepared by DoF to address solid waste and emergencies associated with workers and community health and safety and to properly manage waste effluents generated from the maintenance works. The Plan will be submitted to the World Bank for review and approval prior to completion of construction.

6.1.8. Technical Assistance and Capacity Building

Capacity building for effective implementation of the environmental and social safeguard requirements is a key element of the EMP. Capacity building for environmental and social safeguard management will need to be carried out at all tiers of the program, including BFD staff, community and relevant stakeholders. The SUFAL will take the lead in implementing the capacity building plan, and the partner will also be responsible to conduct trainings for their own staff and workers. The various aspects that are covered under the capacity building will include general environmental and social awareness, key environmental and social sensitivities of the area, key environmental and social impacts of the program.

6.2. Social Impact Management Plan (SIMP)

6.2.1. Scope and Objective of SIMP

The management of social risks and impacts associated with the project intervention relating afforestation and reforestation, alternation livelihoods development, infrastructure development works as well as income generating activities in the target communities. As neither land acquisition nor physical displacement of forest- dependent people is being considered under the SUFAL, therefore, the Social Impact Management Plan (SIMP) entails a Process Framework following the World Bank policy OP 4.12 and paras 26-27 principles (instead of resettlement). The purpose of the Process Framework is to establish a process by which members from the potentially affected communities participate in design of the project components, determination of necessary measures, and implementation and monitoring of relevant project activities. The project approach will be to engage targeted beneficiaries inclusive of their gender, disability, ethnic identity, poverty and any other exclusion excuses. The Social Impact Management Plan (SIMP) provides guidance to the BFD SUFAL and others on the social development requirements during implementation of the Project and applies to all Project activities. The SIMP provides for obligations of the executing agencies and project staff on social development and safeguards requirements of the World Bank in supplement with national legislative requirements and guides BFD in identification, planning, auditing, monitoring, reviewing, evaluation and reporting of social performance of project implementation.

The SIMP includes action plans for consultation and participation framework, gender framework, livelihood, and grievance management. The SIMP also refers to RPF and SECDF guiding management of involuntary resettlement and small ethnic communities at the implementation level.

6.2.2. Consultation and Participation Plan

Objectives, Approach and Methodology: The objectives of consultation and participation are to inform, consult, engage, collaborate and empower the forest dependent communities and other local

stakeholders at all levels of project cycle. Consultation and community participation will be undertaken to achieve the following specific objectives at identification, planning, design, implementation and evaluation stages:

- Identification ; to sensitize the community about the project objectives, its components and their role and identify inclusive ground needs;
- Planning ; to ensure transparency of the planning process, reflect community expectations in project design, acceptable work schedule and procedures; ensure identification of adverse impacts and measures to mitigate them;
- Implementation; to ensure that benefit accrues to the targeted beneficiaries inclusive of all groups including the very poor and vulnerable groups and activities designed and implemented at a standard satisfactory to the communities.
- Review and evaluation; to evaluate the beneficiary satisfaction and outcomes of the project activities for intended benefits to targeted group beneficiaries.

Involvement of communities is not limited to interactions with them but also disclosing relevant information pertaining to the project tasks and targets. Consultation and participation involves communities and other stakeholders and will take place through interpersonal communications, focused group discussions and small and large community meetings. BFD will be responsible to carry out continued consultation with and information dissemination to the key stakeholders regarding:

The relevant details of the project;

- The target group beneficiaries and targeting criteria;
- Intended benefits and sharing of project benefits among target group beneficiaries;

Definition of small ethnic communities and their rights in accessing project benefits;

- Eligibility for entitlements and compensation procedures in the case of involuntary resettlement;
- Project's accountability mechanism including GRM;
- Objectives and methods of consultation and participation.

The implementing agencies shall enlist the help of community leaders and other influential stakeholders in encouraging the participation of the communities and affected persons in project activities. Finally, they shall attempt to ensure that all vulnerable groups and indigenous peoples/ethnic minorities understand the process and that their needs are specifically taken into consideration.

Public participation will be performed and information will be made available during preparation and implementation of the resettlement plan and small ethnic communities development plans at the minimum includes community meetings and focus-group discussions. Public consultation must be appropriately documented.

It is also required to record the views of each of the respondents of the consultations, irrespective of gender, profession, religion, and age groups.

Framework for Future Stakeholder Consultations

Further consultations with the key stakeholders will need to be carried out throughout the SUFAL project implementation. These will include consultations and liaison with forest dependent communities, ethnic people and other stakeholders during the project implementation and also extensive consultations with the grass-root as well as institutional stakeholders.

Access to Information

A national workshop will be held at Dhaka to present the detailed project including safeguard social aspects of SUFAL to the key stakeholders. In addition, stakeholders' meetings will be held at all selected districts and upazilas to disclose the results of SUFAL activities. Representative of implementing authority, the study team, and the government officials from different departments, representatives from NGOs, local communities of different occupation, journalist, and local elite/civil society may attend the workshops.

The information on program interventions and the findings of environmental assessment would also be disclosed through newspapers and electronic media (e.g. internet, TV, radio, etc.). The report would be disclosed in Bengali language.

Summary of the EIA and SIA report will be translated into Bengali language and disseminated locally. The full report (in English) and the summary (in Bengali) will also be uploaded in the website of BFD and World Bank. Hard copy of the report will also be available at BFD District and Upazila SUFAL area.

Consultations as part of the implementation will enable direct interactions of the implementation agency with the target beneficiaries, affected persons and the local communities including ethnic groups. Community engagement will be continued in the project implementation stages using two-way processes involving communication, consultation, collaboration and empowerment mechanisms

6.2.3. Beneficiary Identification and Selection Procedure

The project targets the poor, vulnerable coastal fishing communities. Households and individual members, especially the most disadvantaged of those communities like the female-headed households, widows the poorest and the elderly will be focused under the project

The SUFAL project will use livelihoods transformation through a holistic support package including Alternative Income Generating Activities (AIGAs), financial resources, and investments in infrastructure, assets, and capacity building to help poor forest dependent households break out of the poverty cycle and transform their better livelihoods. The package will involve asset transfer and skill development supports. The AIGA delivery approach will enable the gender equitable distribution of resources to enhance coping capabilities for both men and women. Ultimately, this holistic transformation will be achieved poverty reduction in forest dependent communities, and thereby enable more sustainable forest management.

6.2.4. Balancing Poverty, Vulnerability and Resilience

The project will ensure that all members of the forest community will have access to the project services and benefits. Special Attention to Women and Other Vulnerable Groups. The vulnerable groups include Women Headed Households, Destitute, Below Poverty Line families, Old Aged, Differently Aabled, Chronically Ill and Orphans. It is envisaged that during conducting Social Assessment and preparing and implementing Social Management Plans, interests of these vulnerable groups would be adequately addressed and protected. To ensure social justice, the project will prioritize the beneficiaries based on Poverty, Vulnerability to Shocks and Disasters and their Resilience to Shocks and Disasters. This will be done in the following manner on Table 6.1.

Table 6.1: Participatory Identification of Beneficiaries

Participatory Identification of Beneficiaries (PIB) from among community members
Rank each poor forest dependent household for its Poverty on a 1 to 5 scale using Participatory Ranking System: Outcome PR
Rank each poor household's Vulnerability to shock and natural disasters on a 1 to 5 scale, using Participatory Ranking System: Outcome VR
Rank each poor household's Resilience to shock and natural disasters on a 1 to 5 scale, using Participatory Ranking System: Outcome RR
Prioritize beneficiaries using the scores of the Participatory Rankings of Poverty, Vulnerability and Resilience: Prioritization: PR+VR-RR

This above exercise will be conducted during pre-planning phase of the project during initiation of project in the village. The project team will perform this ranking exercise in a participative manner with the assistance of identified informed villagers. The Project teams need to be trained in this ranking method. In the process, project will form a Forest Development Group and a Social Audit Committee in the village.

6.2.5. Gender Action Plan

This approaches will be done by adjusting the Gender Action Plan (GAP), design, implementation, monitoring and evaluation of policies, concerns, experiences and interests.

Table 6.2: Gender Action Plan

S L	Activities	Target Groups	Participants		Responsibilities		Indicator - %	Means of Verification Methods	Timeline duration
			M	F	Main	Supporting			
1	Gender Training to SUFAL Staff								
2	Orientation on gender mainstreaming								
3	Organizing Workshop on gender mainstreaming								
4	Leadership training								
5	Development of gender promotional communicational materials								

The BFD/SUFAL project will appoint a gender specialist/social safeguards specialist who will provide regular training and orientation and overall guidance on gender and safeguard issues at the project and field level. Gender-sensitive communication materials, leaflet, guidelines will be developed with the support of all concern at PMU and field level which will be continued during the project phase. She/he will monitor/audit and influence the gender mainstreaming from field to policy level.

The project's awareness raising will address the access to, benefit all, equal participation, free and prior access of excluded groups, equal decision-making...related to alternative livelihoods the awareness will include gender-sensitive environment and gender-transformation, – addressing the needs of the different demographic groups (men, women, adolescent girls, adolescent boys, and children, ethnic people), and also aimed at changing gender roles to promote equity. The group/committee formation and beneficiary selection will follow participatory approaches and open consultation with the forest dependent community so that each of groups have the equal rights, access to, and control over resources.

For gender related communication the materials might be used flipcharts, leaflet, posters, newsletter, local drama, and folk song, organizing cultural events, short video clips, meant as guidelines or conversation points. Awareness-raising issues will also address the importance of disability-inclusive as well as gender friendly facilities at all stages (detailed on gender and equity guideline).

6.2.6. Grievance Redress Mechanism

BFD will establish a grievance redress mechanism (GRM) for the project to address complaints and grievances in implementing the ESMF. Based on discussion and consensus, the GRM will try to resolve the issues/conflicts amicably and quickly to ensure unhindered implementation of the project activities.

BFD, as part of GRM, will set up project and sub-project specific Grievance Redress Committees (GRCs) which will include representatives of the forests dependent community, at least the local level, besides other relevant stakeholders including representatives of BFD itself. The GRC will carry out all its transactions in a transparent manner with full disclosure of the relevant information to the stakeholders. Decisions agreed at any level of GRC hearings will be binding on BFD and its partners organizations involved in the implementation of the project.

In addressing grievances, a bottom up approach will be adopted. Grievances will be discussed first at local level i.e. in group level to solve among the community themselves. If required, the issue will be referred to the upper tier GRCs at district/regional level and finally it may be addressed at central level in the PMU.

BFD will prepare the relevant process for smooth operation of the GRM. It'll develop a related Communication Policy which will be disclosed to the public and relevant stakeholders. The aggrieved stakeholders will be able to register their grievances. Further, at the sub-project/field level, it will also maintain a grievance register where by any cases of grievance brought by aggrieved persons will be received and duly registered. All cases of grievance will be resolved with a reasonable timeframe not exceeding one month. In this regard, BFD/SUFAL management will develop an appropriate monitoring mechanism so that all concern will know and understand the status of grievance redress progress at implementation level.

All along the grievance redress process, the aggrieved person(s) will have the option to seek redress in a court of law in Bangladesh. In this regard, BFD will facilitate the concerned persons from the forest

dependent community, especially for ethnic community in getting free legal aid from the relevant department/agency of the government. The PMU will also ensure that there is no cost imposed (such as for travel and accommodation) on the aggrieved person if the person belongs to a vulnerable group. In case communities and individuals who believe that they are adversely affected by project interventions he/she may also submit their grievance to the WB Grievance Redress Service (GRS).

6.3. Monitoring and evaluation

The BFD is primarily responsible for monitoring to ensure conformity to the requirements. They will measure the result of performance and will take corrective measures against the target. Annual Operating Plan (AOP) should be aligned with the project components and monitoring design also need to be formulated based on all indicator and activities. The monitoring will cover all stages of planning and implementation.

As one of the key elements of the EMP, a three-tier monitoring program is proposed comprising compliance monitoring, effects monitoring, and external monitoring. The main purpose of this monitoring program is to ensure that the various tasks detailed in the EMP particularly the mitigation measures are implemented in an effective manner, and also to evaluate program impacts on the key environment parameters. Various types of EMP monitoring are discussed below.

6.3.1. Integrated Monitoring

Integrated Monitoring System are a combined data management and verification systems that includes different methods, techniques and tools for decision making. This system could validate the transparency and accountability of service delivery. This system includes three monitoring systems; a. Management Information System (MIS) through Monthly Performance, b. Monitoring and Quality Control (M&QC) from BFD Range and Beat Office and c. Qualitative Information System (QIS) annual evaluation which between them cross-check and provide appropriate information to ensure that learning and ultimately, management of the program will be based on good evidence. A vital part of SUFAL management will be the measurement of activity performance and outcomes.

6.3.2. Compliance Monitoring

The purpose of the compliance monitoring is to ensure that the contractor implements the mitigation measures given in the EMP are effectively and timely implemented. The monitoring will be carried out through the compliance reports that will form a part of Monthly Progress Reports (MPR) and regular visits by the BFD/ partners. The following components will be monitored, Table 6.3.

Table 6.3: Monitoring heads of SUFAL

Component	What was the target and how much of it achieved	Remarks
Institutional development, Information Systems and Training	Sub-component 1.1. Improving organizational effectiveness Sub-component 1.2. Research coordination Sub-component 1.3. Training Sub-component 1.4. Equipment and physical infrastructure Sub-component 1.5. Forestry information system and ICT support	
Collaborative Forest and Protected Area Management	Sub-component 2.1. Improving policy and institutional framework and implementation of collaborative forest management. Sub-component 2.2. Management and restoration of forests, including establishment of coastal forests.	

Component	What was the target and how much of it achieved	Remarks
	Sub-component 2.3. Integrated Protected Area management plans, including co-management, ecotourism and biodiversity conservation.	
Alternative Income Generating Activities (AIGAs)	Sub-component 3.1. Community mobilization Sub-component 3.2. Alternative Income Generating Activities (AIGAs)	
Project Management, Monitoring and Learning	It will support the establishment of the Project Implementation Unit (PIU) in BFD. The PIU will support financial management, collaborative management, data management and IT service, Forestry, accounting, social and environmental safeguards, communications and procurements.	

6.3.3. Effects Monitoring During Implementation

Effects monitoring is important aspect of environmental management to safeguard the protection of environment. The effects monitoring is needed after a specific EIA, this program will be revisited and revised. This monitoring will comprise surveillance to check whether the contractor is meeting the provisions of the contract during implementation of the program including the responsible agencies for supervision.

6.3.4. Third Party Monitoring

BFD will engage an independent consulting firm to conduct external and independent monitoring of the EMP implementation. The main purpose of the external monitoring will be to ensure that all the key entities are effectively and adequately fulfilling their designated role for EMP implementation, and that all the EMP requirements are being implemented in a timely and effective manner.

6.3.5. Monitoring Practice

During implementation, (quarterly) meetings will be organized by BFD inviting all actors for providing information on the progress of the project work. In addition to that, third party will also measure the result of performance and evaluate the impact of the project activities.

The monitoring indicators will be adopted from logical framework of SUFAL. The impact performance indicators will be used to monitor project objectives along with the milestones. The Table 6.4 gives the assessment methodology and the expected outputs for the various stages of implementation process.

Table 6.4: Monitoring Implementation Process, Input and Output

Progress	Assessment Methodology	Expected Output
Implementation Process		
Dissemination of information on project and social issues	Check the registers with the BFD	Adequate knowledge on project and its various components on SUFAL
Consultations conducted under the project with PAPs and others	Check the minutes of meetings registers.	Awareness and information on the project and participation
Consultations with different gender groups	Check the registers. Two-way communication, meeting	Awareness on Benefits

Progress	Assessment Methodology	Expected Output
Information on modes of valuation of assets, payment schedules and disbursement modes	Check the registers. Structured Schedule, informal and formal discussion	Awareness on methods of valuation, satisfaction with the payment schedules, disbursement etc.
Needs assessment and training programs for income generation	Structured Schedule, informal and formal discussion	Awareness and satisfaction with the training programs for AIGAs
Services of the partner NGOs	Structured Schedule, informal and formal discussion	Proper knowledge, guidance and assistance in rehabilitation and income generating activities
Functioning of the Grievance redressed mechanism	Check the records of BFD for the complaints registered	Appropriate and timely action on the grievances of the affected people
Consultations for the identification of the Community Development Works	Verify copies on agreements made on issues raised and discussed.	Participation in decision making process and satisfaction with the identified areas of development
Financial progress		
Amount disbursed for land taking, structure, etc.	Structured Schedule, informal and formal discussion	More than land loss of same quality assists
Amount disbursed for extension of development programs, training and capacity building.	Structured Schedule, informal and formal discussion	Alternative income restoration programs initiated and lost income restored.
Amount disbursed for training of implementation staff BFD and partners	Formal Discussion with concerned officials	Better implementation and coordination
Physical progress		
Total land taken of A/R	Scheduling for A/R	Progress of A/R
Social well being		
Women time disposition and decision-making power for women groups trained for alternative livelihood	Participatory Appraisal	Women Empowerment
All gender group and ethnic groups will access to the project benefits.	Structured Schedule	Social well and improved social status.
Increased annual Household income and expenditure due to project intervention	Structured Schedule	Improved income Economic Status

6.4. EMP Implementation Cost

Cost estimates will need to be prepared for all the mitigation and monitoring measures. The cost estimates for some of the mitigation measures to be identified in the EMP will be part of the associated contracts. Some of suggestive activities from EMP will be implemented by hiring competent institutes.

CHAPTER 7: STAKEHOLDER CONSULTATIONS AND DISCLOSURE

7.1. Stakeholder Consultations and Disclosure

Consultations with different stakeholders, survey, focus group discussions (FGDs) that were carried out to develop this Environmental and Social Management Framework (ESMF) of SUFAL, are not enough considering the project area and dimension of the stakeholders. Extensive field visits and consultations are required as part of the additional environmental and social assessment (e.g. IEE, EIA/SIA) stage to overcome this shortcoming with the relevant stakeholders throughout the program sites to discuss components, sub-components, activities, potential positive and negative impacts and measures taken to mitigate those impacts. It is also required to record the views of each of the respondents of the consultations, irrespective of gender, profession, religion, and age groups.

As part of approval process of SUFAL, this ESMF and along with the other safeguards documents, namely; (1) Pest Management Plan, (2) Resettlement Process Framework, (3) Small Ethnic Community Development Framework and (4) Resettlement Policy Framework, have been disclosed in English and the translations of the Executive Summaries in Bangla on BFD's website along with hardcopies in field offices. Subsequently, the ToRs of the further environmental and social assessments will be disclosed in the public meetings during the initial stage of these assessments in all the sites of the proposed project. Findings of these assessments will also be presented in local language going back to the same stakeholders while the draft is ready to submit for DoE or other relevant agencies' clearance, if it is required. Consultation meetings are necessary to identify issues and problems to enable BFD to include corrective measures and to identify lessons and opportunities to enhance program implementation mechanism.

7.1.1. Objective of the Consultations

The GoB and the World Bank place great importance on involving primary and secondary stakeholders for determining the environmental and social impacts associated with project implementation. In order to gather local knowledge for baseline conditions, understand perceptions of the community regarding impact significance, and propose meaningful mitigation measures, participation of stakeholders is an integral part of the environmental assessment process. During the preparation of the present ESMF, initial consultations with the key stakeholders have been carried out at 28 sites covering districts to obtain their views on program interventions.

- The consultation process has been conceived, planned, and initiated with the following key objectives:
- To provide key program information and create awareness among various stakeholders about the SUFAL intervention;
- To share the terms of reference of the current ESMF and proposed IEE/EIA;
- To have interaction for primary and secondary data collection with program beneficiaries, affectees, and other stakeholders;
- To identify environmental and social issues such as displacement, safety hazards, employment, and vulnerable persons;
- To begin establishing communication and an evolving mechanism for the resolution of social and environmental problems at local and program level;
- To involve program stakeholders in an inclusive manner; and

To receive feedback from primary stakeholders on mitigation and enhancement measures to address the environmental and social impacts of the program.

7.1.2. Methodology and Tools for the Consultation

The consultation and participation process undertaken so far has adopted a highly participatory approach fully involving all the stakeholders, both primary and secondary through FGDs. However, this should be more participatory irrespective of gender, profession, religion and age groups during conducting IEE/EIA. The various tools will be used for consultations including household level interviews, participatory rural appraisal, FGDs, stakeholder's consultation meetings, issue specific consultation meetings, open meetings, and workshops at both local and national levels. During additional environmental and social assessments, consultation meetings and FGDs will be carried out in all selected Range, Beat or Unions (lowest administrative unit) and local level workshops will be organized in all selected Upazilas (Sub-district) to ensure a comprehensive coverage of the entire program area.

7.1.3. Consultation Meetings and FGDs

In order to prepare an Environmental and Social Management Framework (ESMF) of the SUFAL, 9 FGD sessions and four regional workshops were organized in the three different ecosystem areas involving project beneficiaries of proposed SUFAL area. The participants were BFD officers, Range Officer, Beat Officers, local government representatives, local leader, university professor, representative from small ethnic community, teachers, businessmen, village leaders, and local elites, farmers, fisherman and relevant people. Both male and female participants were present on the discussions. Additionally, teachers, businessmen, village leaders, and local government members, farmers, and representative from small ethnic group were consulted individually. Female heads of the households were also interviewed. Summary matrix of consultation meetings and FGDs carried out, the summary findings of regional workshops and FGDs are given in the Table 7.1 and 7.2. Additional FGDs and consultation meetings are summarized in Annex 8.

Table 7.1: Regional Workshops Summary Findings in Different Ecosystems

Ecosystems	Date	Location	Findings
Coastal area	22 Feb,18	Bhola	-
	23 Feb, 18	Patuakhali	-Increase tree plantation in the homestead, increase cattle & buffalo rearing, develop ecotourism in protected forest area, microfinance support and training for Carb rearing and support FDC for marketing of shrimp fry -There are 307 staffs are available out of setup 450; among them the post of two Assistant Conservator of Forest, 4 Forest Ranger and 18 Deputy Rangers are vacant. -DFO suggested not to plan for cluster village/Asrayan. 10 Range Office and 18 Beat Office are available under Patuakhali Division -Target area for SUFAL: Char Tufania, Char Sher-e-Bangla and Sonar Char-Char Montaz

Ecosystems	Date	Location	Findings
			- Forest department should involve the community based organizations (CBOs) and representative from the local government to identify the beneficiaries.
Plain Land Area	11 March,18	Kachighata, Gazipur	-Inadequate staffs -Transport are not available for implementing field works -Offices and house to be rebuilt -Social forestry implementing successfully. One widow at Kachighata under Gazipur Mrs. Kadbanu received highest benefit Tk 672,000.00 as 45% share and she received award from Prime Minister. She is the highest social forestry award received women in Bangladesh -This range earned revenue this financial year around Tk 17,16000.00 -60—70% people are forest dependent -Many household are living inside forest area and they are members of social Forestry Group
	21 March,18	Mymensingh DFO Office	-There are 280 staffs in the Division of setup 362, vacant posts are 62 nos. -DFO targeted for SUFAL in his jurisdiction around 1200 ha plantation (Chandimonda-300 ha, Santospur-200 ha, Durgapur-50 ha, Modhutil-50 ha; Baitia, Balijuri and others area possibilities and scopes are exploring by all concern) -Mymensingh Division is working in 13 Upazila under four Districts -Social Forestry approach is successful in all areas under this division -Social forestry can reduce the degradation of forest -Alternative Livelihood they proposed as Follows: -Handicrafts, bamboo based production as bamboos are available huge in this area with training and marketing linkage development -Development ecotourism where many landless could be employed as experiences in Madhuitila -Compost Fertilizer -Development of Juice making and Achar making technologies -Major problems they raised: Staff shortage, lack of transports and fund transports and fuel

Ecosystems	Date	Location	Findings
			-Plan for species for plantation: Modhupur Area: 50% Sal Forest and 50% Fruits and Medicinal sp.; Other Areas: Sal, Fruits and Medicinal sp. Ration should be 40:40:20 -Forest areas under BFD but using by local encroacher may be planted through social forestry arrangement -Labor rate to be increased in the SUFAL budget at-least Tk 400/labor/day -Watcher payment should be payment by cheque not in cash -SFG comprised of 10 members 1 ha/HHs in previous rule but at present it is 1 acre /HH -Mr. Karim, Forester mentioned that once he file 100 cases in 1 year but last 2 years he did not file a single case in his area due to implementing social forestry
	08 March, 2018	Bandarban	-Participants recommended to include/involve NGOs in future afforestation schemes under SUFAL as the NGOs have built rapport with the local community -Some of them recommended to implement awareness raising, training/orientation and inputs supply to the individual households so that each household will plant trees in their homestead -Integrated development project should be initiated in Bandarban area so that other government partners can work together for overall development of the Hill people -Involvement of women in future project to be ensured -Local administration, local leaders and BFD should review and work together to implement such project in future -The syndicates so far active in supplying wood to brick field to be strictly controlled -Wood supply to others are in the country to be checked and prohibited -Sustainable AIGA activities which are suitable for FDC to be implemented through NGOs -They opined that only poor or ultra-poor are not only cause of forest degradation other influential parties are also active for degradation of forest -Jhum cultivation to be controlled in the forest land, jhum alternative schemes to be taken in hill area; employment opportunities to be created instead of Jhum cultivation -Sufficient budget to be kept for hill afforestation

Ecosystems	Date	Location	Findings
			-Species to be selected so that other crops can be cultivated in the forest garden. Example under segun trees other trees cannot be grown -Plot wise afforestation may be encouraged for forest sustainability -Horticulture, fisheries etc. schemes may initiated as alternative livelihood. In this regard separate study may be carried out for Bandarban area

Table 7.2: FGDs Summary Findings from Different Ecosystems

Ecosystems	BFD Divisions	Existing Livelihood Practices	Alternative Livelihood suggested
Plain land Forest	Dhaka Forest Division	-Agriculture as sharecropper --Agriculture as day labor -Non-agriculture day labor -Van/Auto rickshaw/CNG -Small trading -Job in garments -Mason/electric work/polishing	-Lemon/Lotkon garden -Handicrafts/cottage goods -Sewing -Cattle and poultry rearing -Mini poultry farm -Goat rearing -Nursery raising -Fishing in pond -IGA by cloth business - Mushroom cultivation - Auto rickshaw/van/rickshaw etc.
	Tangail Forest Division	-Fuel wood collection and sale -Agriculture -Agriculture labor -Non-agriculture labor -Small trading -Service in private sector	-Cattle and poultry rearing -Garden for lemon, banana, pineapple and papaya -Nursery raising -Supply of paddle treasure --Supply of power tiller -Small trading -Auto rickshaw/van/rickshaw etc. -Haukering(jhalmuri/ badam/chola etc.) -Supply of machine for producing chanchur/soap/juice maker -Producing jute bag/jute goods -Flower cultivation and sale -Rabbit rearing - Mushroom cultivation -Producing plastic goods -Producing putir mala
	Mymensingh for Sherpur	-Fuel wood collection and sale -Agriculture -Agriculture labor	-Cattle and poultry rearing -Honey culture -Vegetable cultivation - Mushroom cultivation

Ecosystems	BFD Divisions	Existing Livelihood Practices	Alternative Livelihood suggested
		-Non-agriculture labor -Cow rearing	-Handicrafts/cottage goods -Garden for lemon, banana, pineapple and papaya -Nursery raising -Small trading-tea stall, grocery etc. -Auto rickshaw/van/rickshaw etc. -Haukering(jhalmuri/ badam/chola etc.) -Supply of machine for producing chanchur/soap/juice maker/Achar -Producing jute bag/jute goods -Flower cultivation and sale -Rabbit rearing -Producing putir mala -Employment in BFD project -Involve in social forestry -Provide skill development training
Coastal Forest	Bhola	-Fishing in river -Agriculture labor -Non- agriculture labor -Small trading -Rickshaw/van/auto	-Boat and net making -Fishing in river + finance -Small trading -Rickshaw/van/auto rickshaw/motorcycles -Cattle and poultry rearing - Poultry farm -Buffalo rearing -Development ecotourism -Sewing, handicrafts -Nursery raising -Mini machine for producing candle/chanchur/achar/juice -Mushroom cultivation
Hill Forest	Chittagong North, Chittagong South and Cox's Bazar North	-Collection and sale fuel wood -Agriculture and non-agriculture labor -Lemon cultivation in reserve area -Share cropping -Small trading -Cow/poultry rearing -Serving in garments -van/auto/rickshaw -Paddy cultivation in winter -Work as mason/brick field	-Involve them in social forestry -Provide skill development training as per need -Employment in BFD project/project related works -Provide microfinance support for IGA -Cattle and poultry rearing -Handicrafts/cottage good/Catha sewing and other sewing activities -Employment through development of ecotourism -Mushroom cultivation

Consultations as part of the implementation will enable direct interactions between implementing agency with the target beneficiaries, affected persons and the local communities including ethnic groups. Community engagement will be continued in the project implementation stages using two-way processes involving communication, consultation, collaboration and empowerment mechanisms. All consultation proceedings will be appropriately documented and feedback considered in the implementation process.

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ANNEX 1: ADMINISTRATIVE LOCATIONS, POPULATION AND POVERTY STATUS OF SUFAL PROJECT AREA

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
1	Dhaka	1	DHAKA CITY CORPORATION	788420	176640	52010	6.60	4178	0.53
2	GAZIPUR	2	KALIAKAIR	487140	116720	53502	11.0	19018	3.9
		3	SREEPUR	487180	122880	70151	14.4	28879	5.9
		4	GAZIPUR SADAR	1822620	449160	403005	22.1	148456	8.1
		5	KAPASIA	346480	79940	93721	27.0	61737	17.8
3	TANGAIL	6	SAKHIPUR	276880	71040	72100	26.0	42954	15.5
		7	KALIHATI	413760	98660	97080	23.5	51700	12.5
		8	MIRZAPUR	402580	93860	107673	26.7	64466	16.0
		9	GHATAIL	420520	104020	120712	28.7	74352	17.7
		10	MADHUPUR	299300	75840	108993	36.4	64283	21.5
		11	TANGAIL SADAR	523100	116880	165848	31.7	109492	20.9
		12	GOPALPUR	253240	63980	74228	29.3	42785	16.9
4	FARIDPUR	13	FARIDPUR SADAR	470360	103560	180367	38.3	100417	21.3
		14	MADHUKHALI	203820	45960	62210	30.5	32764	16.1
		15	BOALMARI	254220	56320	99790	39.3	54753	21.5
		16	ALFADANGA	110480	24300	33059	29.9	17092	15.5
		17	NAGARKANDA	194320	42900	69698	35.9	37249	19.2
		18	BHANGA	257420	57180	86310	33.5	43763	17.0
		19	SALTHA	168800	35600	71128	42.1	41206	24.4
		20	SADARPUR	191740	40220	70824	36.9	39376	20.5
		21	CHAR BHADRASAN	61600	14280	22028	35.8	12182	19.8
5	GOPALGANJ	22	GOPALGANJ SADAR	343880	73160	141359	41.1	86673	25.2
		23	TUNGIPARA	97960	20560	41710	42.6	25552	26.1

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
		24	KOTALIPARA	232840	48040	101619	43.6	64389	27.7
		25	MUKSUDPUR	287620	61820	133627	46.5	85874	29.9
		26	KASHIANI	209360	46340	81783	39.1	51560	24.6
6	CHITTAGONG	27	CHITTAGONG City C	206480	47220	25664	12.4	7387	3.6
		28	HATHAZARI	442600	81180	4891	1.1	400	0.1
		29	FATIKCHHARI	524720	99960	92420	17.6	37159	7.1
		30	MIRSHARAI	399800	79540	53599	13.4	18376	4.6
		31	SITAKUNDA	392580	77260	45006	11.5	14281	3.6
		32	RAOZAN	326740	63340	27826	8.5	9528	2.9
		33	BANSHKHALI	435100	84220	121264	27.9	49058	11.3
		34	LOHAGARA	280900	52880	51369	18.3	19463	6.9
		35	CHANDANAISH	233820	44480	31596	13.5	11179	4.8
		36	SATKANIA	384920	70760	58367	15.2	21218	5.5
		37	PATIYA	525260	101560	42413	8.1	12529	2.4
		38	SANDWIP	279600	56640	53489	19.1	20776	7.4
		39	RANGUNIA	341880	67720	47804	14.0	17305	5.1
7	COX'S BAZAR	40	CHAKARIA	472820	88400	134530	28.5	62470	13.2
		41	RAMU	270320	47880	92785	34.3	48241	17.8
		42	COX'S BAZAR SADAR	457920	82780	119906	26.2	56066	12.2
		43	UKHIA	207080	37940	78301	37.8	41726	20.1
		44	TEKNAF	263200	46340	100411	38.2	51959	19.7
		45	PEKUA	170060	31960	52567	30.9	24382	14.3
		46	MAHESHKHALI	319100	58180	128285	40.2	68155	21.4
8	NOAKHALI	47	NOAKHALI SADAR	519500	100200	53034	10.2	19191	3.7
		48	HATIYA	453160	91020	72585	16.0	26763	5.9
		49	SUBARNACHAR	291020	55420	54458	18.7	21138	7.3

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
		50	BEGUMGANJ	555480	101700	32596	5.9	10168	1.8
		51	KABIRHAT	194540	36060	24066	12.4	8648	4.4
		52	SENBAGH	288980	53920	15504	5.4	4812	1.7
		53	CHATKHIL	232020	46040	11092	4.8	3481	1.5
		54	COMPANIGANJ	246100	49020	18717	7.6	6179	2.5
		55	SONAIMURI	329020	60540	16501	5.0	5080	1.5
9	LAKSHMIPUR	56	LAKSHMIPUR SADAR	683500	144180	311740	45.6	196883	28.8
		57	ROYPUR	274020	60100	45828	16.7	23878	8.7
		58	RAMGATI	259640	55720	78853	30.4	41440	16.0
		59	KAMALNAGAR	225920	46080	42223	18.7	17280	7.6
		60	RAMGANJ	283700	59280	60697	21.4	34053	12.0
10	MYMENSINGH	61	MYMENSINGH SADAR	771120	167420	403159	52.3	303276	39.3
		62	MUKTAGACHHA	414820	96640	179822	43.3	99346	23.9
		63	FULBARIA	452260	101200	238045	52.6	148280	32.8
		64	GAURIPUR	325700	72080	164896	50.6	99452	30.5
		65	HALUAGHAT	288620	69720	145249	50.3	88314	30.6
		66	PHULPUR	602480	135860	354231	58.8	236122	39.2
		67	BHALUKA	431880	106920	134239	31.1	64000	14.8
		68	DHOBURA	196700	44000	114473	58.2	75620	38.4
11	SHERPUR	69	JHENAIGATI	162640	41120	60033	36.9	35190	21.6
		70	SREEBARDI	259420	65900	127325	49.1	78922	30.4
		71	NALITABARI	251800	64800	105163	41.8	60754	24.1
12	JAMALPUR	72	BAKSHIGANJ	220940	52220	111336	50.4	75883	34.3
		73	SARISHABARI	325080	80200	145411	44.7	89782	27.6
		74	JAMALPUR SADAR	609560	152200	303340	49.8	199106	32.7
13	NETRAKONA	75	DURGAPUR	225780	50600	68231	30.2	26979	11.9

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
14	KISHOREGANJ	76	NETROKONA SADAR	373040	81420	114795	30.8	60285	16.2
		77	KARIMGANJ	290200	62760	78773	27.1	40758	14.0
		78	BAJITPUR	244120	53380	68882	28.2	36078	14.8
		79	KULIAR CHAR	184020	39140	60227	32.7	31732	17.2
15	SYLHET	80	SYLHET SADAR	819100	158240	116932	14.3	79669	9.7
		81	COMPANIGANJ	172720	28760	59671	34.5	49588	28.7
		82	GOWAINGHAT	287180	48000	151018	52.6	133632	46.5
		83	JAINTIAPUR	156820	27700	54343	34.7	45339	28.9
		84	KANAIGHAT	264500	46140	121073	45.8	105082	39.7
16	SUNAMGANJ	85	CHHATAK	409940	66700	96817	23.6	76220	18.6
		86	DOWARABAZAR	226820	42700	67853	29.9	55123	24.3
		87	TAHIRPUR	213480	37960	66603	31.2	54096	25.3
		88	BISHWAMBARPUR	156860	29340	47676	30.4	38717	24.7
		89	DHARAMPASHA	221200	43920	56400	25.5	44577	20.2
17	MAULVIBAZAR	90	SREEMANGAL	318700	65160	93526	29.3	78616	24.7
		91	KAMALGANJ	253220	51920	67651	26.7	55768	22.0
		92	KULAURA	359140	66460	100957	28.1	83014	23.1
		93	JURI	148460	27500	53876	36.3	46430	31.3
		94	BARLEKHA	259380	44220	66604	25.7	53926	20.8
18	HABIGANJ	95	BAHUBAL	196920	37340	47421	24.1	37943	19.3
		96	CHUNARUGHAT	307020	61140	84438	27.5	69121	22.5
		97	MADHABPUR	327260	62280	84684	25.9	67622	20.7
19	JESSORE	98	JESSORE SADAR	734660	169100	259271	35.3	120454	16.4
		99	ABHAYNAGAR	264140	62220	95080	36.0	41990	15.9
		100	MANIRAMPUR	419700	101200	168781	40.2	81629	19.4
		101	KESHABPUR	254540	62320	106997	42.0	52018	20.4

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
		102	BAGHER PARA	219700	50000	93420	42.5	45952	20.9
		103	SHARSHA	344020	82860	140404	40.8	66648	19.4
		104	CHAUGACHHA	230960	56440	98896	42.8	47737	20.7
		105	JHIKARGACHHA	309700	72220	120343	38.9	55293	17.9
20	DINAJPUR	106	BIRAL	256500	61440	99628	38.8	52826	20.6
		107	DINAJPUR SADAR	485740	111760	136826	28.2	80267	16.5
		108	KHANSAMA	174240	39440	80984	46.5	44929	25.8
		109	CHIRIRBANDAR	288580	68440	111212	38.5	65328	22.6
		110	NAWABGANJ	232120	57840	86532	37.3	47610	20.5
		111	BIRAMPUR	172540	42120	61925	35.9	32723	19.0
		112	GHORAGHAT	118660	30080	49631	41.8	28845	24.3
		113	HAKIMPUR	90760	22880	35308	38.9	20295	22.4
		114	KAHAROLE	152600	36760	67585	44.3	39020	25.6
		115	BIRGANJ	313580	73900	135279	43.1	77813	24.8
		116	BOCHAGANJ	158020	39240	60618	38.4	33131	21.0
		117	FULBARI	179660	43120	60673	33.8	32059	17.8
		118	PARBATIPUR	363280	88740	144400	39.7	80219	22.1
21	THAKURGAON	119	THAKURGAON SADAR	582020	133340	166675	28.6	102809	17.7
		120	PIRGANJ	381120	58300	178698	23.3	107692	9.6
22	PANCHAGARH	121	PANCHAGARH SADAR	270300	60120	65399	24.2	30193	11.2
		122	DEBIGANJ	226860	133080	52420	34	37721.0	16.6
		123	TENTULIA	126180	27920	27172	21.5	11161	8.8
		124	ATWARI	135000	32040	32470	24.1	15048	11.1
		125	BODA	231020	56120	61435	26.6	27795	12.0
23	RAJSHAHI	126	PABA	314340	76600	104992	33.4	53618	17.1
		127	MOHANPUR	170580	44000	42430	24.9	20403	12.0

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
		128	TANORE	191840	47420	68430	35.7	39749	20.7
		129	BAGHMARA	355960	94060	104825	29.4	53125	14.9
		130	GODAGARI	326660	72200	144208	44.1	89168	27.3
		131	CHARGHAT	204880	51780	64393	31.4	34349	16.8
		132	BAGHA	182060	46720	61236	33.6	33350	18.3
		133	PUTHIA	204660	52940	54833	26.8	27169	13.3
		134	DURGAPUR	185980	48540	47861	25.7	22921	12.3
24	NAOGAON	135	NAOGAON SADAR	405760	100860	70767	17.4	33552	8.3
		136	MANDA	362020	97240	53220	14.7	19510	5.4
		137	PATNITALA	230920	58640	42848	18.6	18623	8.1
		138	DHAMOIRHAT	184820	49040	32996	17.9	14245	7.7
		139	SAPAHAR	161060	36220	34406	21.4	14506	9.0
		140	PORSHA	130360	30760	28339	21.7	12272	9.4
25	BARISAL	141	BARISAL SADAR (KOTWALI)	515940	114780	257404	49.9	159706	31.0
		142	BAKERGANJ	312060	71540	172804	55.4	131622	42.2
		143	BABUGANJ	139000	31680	67707	48.7	51193	36.8
		144	BANARI PARA	148520	34200	77601	52.2	56620	38.1
		145	AGAILJHARA	148820	32840	76062	51.1	56904	38.2
		146	GAURNADI	189180	41560	104904	55.5	75445	39.9
		147	WAZIRPUR	233200	52960	121404	52.1	88099	37.8
		148	MULADI	175820	38420	102347	58.2	77613	44.1
		149	MEHENDIGANJ	300460	65240	193394	64.4	150138	50.0
		150	HIZLA	145540	30540	90613	62.3	72109	49.5
26	BHOLA	151	BHOLA SADAR	430680	88140	211716	49.2	153538	35.7
		152	CHAR FASSON	454840	94620	128359	28.2	67868	14.9
		153	TAZUMUDDIN	125420	28740	27944	22.3	14132	11.3

SL. No.	District Name	SL. No	Upazila Name	Total Population (N)	No. of HHs (N)	No. of Poor (N)	Poverty headcount (national 31.5) %	Number of extreme poor (N)	Extreme poverty headcount %, (national 17.6)
		154	DAULAT KHAN	171020	34660	51857	30.3	30758	18.0
		155	MANPURA	76840	17060	25211	32.8	14891	19.4
		156	LALMOHAN	284780	61000	79108	27.8	43289	15.2
27	PATUAKHALI	157	PATUAKHALI SADAR	313600	68820	115852	36.9	73133	23.3
		158	MIRZAGANJ	121820	28220	21647	17.8	11665	9.6
		159	KALA PARA	238700	57540	48473	20.3	23178	9.7
		160	BAUPHAL	301220	67840	72143	24.0	41755	13.9
		161	RANGA BALI	69580	15540	15328	22.0	9142	13.1
		162	DASHMINA	123200	28500	26808	21.8	13981	11.3
		163	GALACHIPA	361940	80120	93942	26.0	52079	14.4
28	BARGUNA	164	PATHARGHATA	162560	43100	20977	12.9	9956	6.1
		165	BARGUNA SADAR	263080	62080	50616	19.2	26016	9.9
		166	BAMNA	77140	19540	13152	17.0	6866	8.9
		167	AMTALI	269300	63220	61317	22.8	32207	12.0
		168	BETAGI	118260	27920	23158	19.6	12215	10.3
		169	TALTALI	88004	20655	17913	20.4	9984	11.3
Total				50794664	11203575	15353702	30.2	8972031	17.7
				50.79 m. Population	1.12 m. HHs	1.53 m. poor		0.89 m. extreme poor	

Source: WFP/WB/BBS 2014.

ANNEX 2: TENTATIVE BUDGET FOR ESMF IMPLEMENTATION:

Position	No	Man month	Rate (US\$/month), unit	Total	Fringe benefits (US\$/annum)	Fieldwork (\$/annum)	Total (US\$)
Environmental Management Specialist (3000X5 year=1500)	1	72	4,000	288,000	15,000	15,000	318,000
Social Management and Safeguards Specialist	1	72	4,000	288,000	15,000	15,000	318,000
Environmental Management Associate	4	72	1,000	288,000	24,000	20,000	332,000
Social Safeguards Associate	4	72	1,000	288,000	24,000	20,000	332,000
Total							1,300,000

ANNEX 3. SOCIAL SCREENING CHECKLIST

General Information	1. Name of village				
	2. Name of Union				
	3. Name of Upazila				
	4. Name of District				
	5. Name of sub-project				
	6. Location				
	7. Type of sub-project	New Construction		Reconstruction	
		Rehabilitation		Others (please specify)	
8. Objective of the SUFAL and brief description					
		Please Tick mark (✓)			
	9. Does the SUFAL project involve all types and classes of the people in the village	Yes	No	Not applicable	
Social and gender	1. Is there any chance of destruction of homestead land?	☐	☐	☐	
	2. Is there any chance of resettlement of people living in the government land for the implementation of the scheme?	☐	☐	☐	
	3. Is there any chance of destruction of religion and cultural place?	☐	☐	☐	
	4. Is there any chance of loss of employment of the people of lower down the living standard for the implementation of the scheme?	☐	☐	☐	
	5. Is there any chance of destruction of cultural tradition of people?	☐	☐	☐	
	6. Is there changing the socio-economic status of forest-dependent communities	☐	☐	☐	
	7. Is there reducing gender gap (needs additional info)	☐	☐	☐	
	8. Is there maintaining gender disaggregated data	☐	☐	☐	
	9. Is there increasing social awareness	☐	☐	☐	
	10. Is forest dependent community receiving AIGAs	☐	☐	☐	
	11. Mitigation Measure	☐	☐	☐	

c. Livelihood	1. Is there any chance of losing access to the usual Forest area due to implementation of the scheme?	☐	☐	☐
	2. Is there any chance of losing means of livelihood due to the implementation of the scheme?	☐	☐	☐
	3. Is there any chance of losing private community-based Forest or similar facilities?	☐	☐	☐
	4. Is there any chance of losing existing social or financial safety network due to implementation of the scheme?	☐	☐	☐
	5. Is there any chance of being vulnerable to or come under the wrath of local elite due to Forest association with this scheme?	☐	☐	☐
D. Small Ethnic Communities (Tribal People)	1. Is the SUFAL located in an area where Tribal people or small ethnic communities live?			
	N.B. If yes, please answer the following question			
	2. Are the tribal people involved in the planning and implementation of the scheme?	☐	☐	☐
	3. Is there any chance of tribal people be affected?	☐	☐	☐
	4. What are the feeling of tribal people to the schemes?	☐	☐	☐
	Positive	☐		
	Negative	☐		
	Not any one	☐		
	If the answer of the question number 4 is negative, please briefly describe the reason and mitigation measure:			
Other Information (if any)				
Signature of the Social Safeguard Coordinator				

ANNEX 4: SCREENING FORMAT FOR IEE (AFFORESTATION/ REFORESTATION)

General Information	
Name of the Site/union/Upazila/District	
Who owns the land	
Name of the Forest Division	
Brief Description of site location	
Was the proposed activity consulted with the people in the locality?	

Screening Questions	Yes	No	Scale of Impact				Remarks
			High	Medium	Low	No	
Is the project area adjacent to or within any environmentally sensitive areas?							
Will the subproject disturb the ecosystem of habitats, populations, movement or effects on rare, threatened or endangered species of flora or fauna?							
Will the implementation of the subproject involve any land acquisition and involuntary resettlement							
Will the subproject cause pollution of water bodies due to disposal of agrochemical, fertilizer or other wastes							
Will the subproject cause soil infertility due to harvesting							
Will the subproject create scope for plantation of trees and laying vegetative coverage in the area?							
Will the subproject require tree felling or disruption of vegetation in the area							

Screening Questions	Yes	No	Scale of Impact				Remarks
			High	Medium	Low	No	
or impair beneficial uses of traditional forest							
Will the sub-project create drainage congestion or water logging, cross-drainage problem contributing risks to natural systems							
Impact on fish migration and navigation?							
Negative effects on groundwater quality, quantity or movement?							
Degradation or disturbance of historical or culturally important sites (mosque, graveyards, monuments etc.)?							
Impediments to movements of people and animals?							
Health risks to labors involved in activities?							
Possible Mitigation measures (if the area is affected)	Possible Alternative Measures:						

Note: Please add any other screening questions relevant to the demonstration. Also provide additional comments and/or positive impacts in 'remarks' column.

Recommendations:

Filled and signed by the Beat Officer

Name: _____

Date: _____

Verified and signed by Range Officer:

Name: _____

Date: _____

Reviewed and signed by CMO/SO:

Name: _____

Date: _____

ANNEX 5: SCREENING FORMAT FOR IEE (SMALL-SCALE INFRASTRUCTURES)

Screening formats for IEE (Small-Scale Infrastructure)

General Information	
Name of the Site/union/Upazila /District	
Who owns the land	
Name of the Forest Division	
Brief Description of site location	
Was the proposed activity consulted with the people in the locality?	

Screening Questions	Yes	No	Scale of Impact			Remarks
			High	Medium	Low	
Adjacent to or within any of the environmentally sensitive areas?						
Lead to any agricultural land loss or crop loss?						
Involve any land acquisition and involuntary resettlement						
Destruction of trees and vegetation						
Impact on fish migration and navigation?						
Insufficient drainage and Negative effects on surface water /groundwater quality						
Traffic disturbances due to construction material transport and wastes?						
Increased noise due to transportation of equipment and construction materials?						
Degradation or disturbance of historical or culturally important sites (mosque, graveyards, monuments etc.)?						
Impediments to movements of people and animals?						

Screening Questions	Yes	No	Scale of Impact			Remarks
			High	Medium	Low	
Will the subproject cause health hazard from generated air/dust pollution from machineries						
Possible Mitigation measures (if the area is affected)						Possible Alternative Measures:

*Please consider scale of 1 -2 for Low, 2 -3 for Medium and 5 for High impact.

** Protected areas are lands and waters where development and use is restricted by legal or other means for the conservation of nature

Recommendations:

Filled and signed by the Beat Officer

Name: _____

Date: _____

Verified and signed by Range Officer:

Name: _____

Date: _____

Reviewed and signed by CMO/SO:

Name: _____

Date: _____

Template for environmental mitigation plan

Sub-project Activity	Potential Environmental Impact(s)	Mitigation Measures	Location	Estimated Mitigation Cost	Responsibility	
					Implementation	Supervision
Pre-Construction Activities						
Construction Phase Activities						
Post-construction Operation & Maintenance Phase Activities						

Templates for environmental monitoring plan

MITIGATION MONITORING							
Mitigation, & Environmental Indicator	Location	Procedures / methods	Frequency / Duration	Baseline Environmental Standards	Responsibilities		Estimated Cost
					Implementation	Analysis/ Reporting	
Pre-construction Phase							
Mitigation/ Indicator							
Mitigation/ Indicator							
Construction Phase							
Mitigation/ Indicator							
Mitigation/ Indicator							
Post-construction Operation & Maintenance Phase							
Mitigation/ Indicator							
Mitigation/ Indicator							

ANNEX 6: SCREENING FORMAT AND GUIDELINES FOR IEE (LIVELIHOODS INTERVENTIONS)

Environmental screening format

Name of Community:

District:

Upazilla:

Union:

Village:

Type of Subproject:

Major Activities under the proposed intervention:

.....

.....

.....

Screening Questions	Yes	No	Scale of Impact			Remarks
			High	Medium	Low	
A. Subproject Siting						
Is the sub-project area adjacent to or within any of the following environmentally sensitive areas?						
▪ Protected Area	☐	☐	☐	☐	☐	
▪ Wetland	☐	☐	☐	☐	☐	
B. Potential Environmental Impacts						
Will the sub-project cause.....						
▪ loss of top soil?	☐	☐	☐	☐	☐	
▪ loss of agricultural land?	☐	☐	☐	☐	☐	
▪ negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat?	☐	☐	☐	☐	☐	
Negative effects on designated wetlands?	☐	☐	☐	☐	☐	
Negative effects on locally important or valued ecosystems or vegetation?	☐	☐	☐	☐	☐	
Destruction of trees and vegetation?	☐	☐	☐	☐	☐	
Impact on fish migration and navigation?	☐	☐	☐	☐	☐	

Screening Questions	Yes	No	Scale of Impact			Remarks
			High	Medium	Low	
Obstruction of natural connection between river and wetlands inside project area?	☐	☐	☐	☐	☐	
Water logging in polder areas?	☐	☐	☐	☐	☐	
Insufficient drainage leading to salinity intrusion?	☐	☐	☐	☐	☐	
Negative effects on surface water quality, quantities or flow?	☐	☐	☐	☐	☐	
Negative effects on groundwater quality, quantity or movement?	☐	☐	☐	☐	☐	
Increased soil erosion and /or sedimentation?	☐	☐	☐	☐	☐	
Negative impact on soil stability and compactness?	☐	☐	☐	☐	☐	
Increased noise due to day-to-day construction activities?	☐	☐	☐	☐	☐	
Increased wind-blown dust from material (e.g. fine aggregate) storage areas?	☐	☐	☐	☐	☐	
C. Other Potential Impacts						
Will the subproject cause						
Potential social conflict between occupational groups – farmers vs. fisheries?	☐	☐	☐	☐	☐	
Degradation or disturbance of historical or culturally important sites (mosque, graveyards, monuments etc.)?	☐	☐	☐	☐	☐	
☒ conflicts in water supply rights and related social conflicts?	☐	☐	☐	☐	☐	
☒ health risks to labors involved in activities?	☐	☐	☐	☐	☐	

Note: Please add any other screening questions relevant to the demonstration. Also provide additional comments and/or positive impacts in 'remarks' column.

Observations and Recommendations:

Filled and signed by NGO:

Name: _____

Title: _____

Date: _____

Endorsed by BFD:

Name: _____

Title: _____

Date: _____

ANNEX 7: ENVIRONMENTAL MONITORING CHECKLISTS

Monitor(s) Name: _____ Monitoring Dates: _____

Complies parameters	Complies (yes / no)	If yes what measures are being taken
Was screening carried out		
Accuracy of baseline and the assumptions		
Forests act as a contributor to local or regional identity and to the aesthetics and amenity value of a local place		
The cultural, ecological, economic and religious significance are clearly identified and managed in cooperation with stakeholders		
Meets or exceeds all applicable laws and/or regulations covering health and safety of employees, their families and the broader public		
Protection for special species		
Following the harvesting rates & levels of resource use		
Forest protection (from illegal harvesting, settlement and other unauthorized activities)		
Managing the waste from harvested resources (maximizes product output and minimizes waste, such as utilizing timber, branch wood & bark from harvested trees, or utilizing both pulp and seeds of forest fruits)		
Indigenous forest and plantations (forest type, age class distribution, area temporary unplanted, new afforestation / deforestation)?		
Obtaining the biological diversity - type/species distribution		
Waste disposal		
Indigenous trees replanted		
Appropriate mechanisms for resolving grievances and for providing fair compensation in the case of loss or Damage affecting the legal or customary rights, property, resources, or livelihood of local peoples.		
Ensuring adequate training and supervision		

Complies parameters	Complies (yes / no)	If yes what measures are being taken
Installing appropriate water and sediment controls e.g. Water bars & cut-offs sediment traps to prevent water pollution caused by run-off from harvesting areas disturbed by		
Leave set back requirements around streams, restricted areas e.g. Native vegetation, protected riparian strips, historic and heritage sites, research areas		
Diverting runoff from undisturbed areas around the harvesting site		
Measures are taken to prevent damage from fertilizer runoff or leaching.		

ANNEX 8: SUMMARY OF CONSULTATIONS CONDUCTED FOR THE SUFAL PROJECT

A. COMMUNITY LEVEL CONSULTATIONS AND FOCUS GROUP DISCUSSIONS

A.1. Community Level Consultations

1. Venue: BFD Beat Office, Ukhia, Cox's Bazar

Date: 11 July 2018

Name of the Participants	Main points of the consultation
1. Mohammad Rashid Mia, CMC member 2. Helal Uddin, CMC Member 3. Abul Manjur 4. Jafar Alam. Villager 5. Aziz Uddin, CMC member 6. Ba U Nu Chakma, ethnic minority 7. Aung Cha Gya Chakma. Villager 8. Saiful Islam 9. Md. Hanif 10. Amir Hossain 11. Shamsul Alam 12. Syed Nur Hadi, CPG Member and CMC Member 13. Bujrij Mia 14. Chabbir Ahmed 15. Nurul Islam 16. Siddiq Ahmed, UP Member 17. Ms. Khorsheda Begum, UP Member 18. Mohammad Ali Kabir, DFO, BFD 19. Kazi Sazol, ACF, Ukhia, BFD 20. Kirti Nishan Chakma, World Bank	The participants include cross-sections of the local communities, such as members of Community Forest Management Groups, village elders, community patrol groups, local government institutions, etc. There were also 2 members from the local ethnic minority communities. Prior notice about the meeting was served to the participants informing the aims and objectives of the consultation. Kirti Nishan Chakma, Social Development Consultant, was present as observer on behalf of the Bank. Mr. Mohammad Ali Kabir, DFO, BFD made a presentation in PowerPoint explaining to the participants about the SUFAL project, its aims and objectives, project's Social and Environmental safeguard provisions and Collaborative Forest Management. He also asked the participants to share their opinions about the recent influx of the Rohingya refugees from Myanmar and its impact on the host communities and the possible constraints/challenges/issues that this can present in the implementation of the SUFAL project. The key points of the discussion by the participants are provided below: • The participants all welcomed the interventions by BFD (SUFAL Project) and committed their support to its success. • They expressed their preference on native species (such as Gurjan, cibit, boilam, etc.). • Akashmoni trees also can be planted. However, Akashmoni plantation should be interspersed with native species. The native species give shade and create watershed which Akashmoni does not. • The streams and watershed have dried up in absence of tree cover. People are suffering a lot from lack of water and drinking water in particular. By planting more native species, watersheds should be created. • The participation of the local communities and local government representatives much be ensured in the project activities. Otherwise, its success will remain compromised. • The communities should be supported with alternative livelihoods and these support should be designed in consultation with the beneficiaries and taking into account of the local context. • The participants raised serious concerns on the recent influx of the Rohingyas and the impact it is having on their daily lives. To collect firewood for cooking, the Rohingyas are indiscriminately felling trees.

	In many cases, the standing trees are without any branches and even leaves which the Rohingyas have collected for firewood. Nearby shrubs and bushes have been already largely decimated. • The participants categorically told that unless this 'firewood' problem of the Rohingyas is solved, no afforestation initiative will succeed. They must be provided cooking gas or other alternative. • Some participants suggested fencing around the plantations and putting watchmen for protecting the plantations. However, most agreed that this may be impractical. • Therefore, they suggested to maintain a buffer zone of at least 2-3 kilometers from the Rohingya refugee camps for the project activities. • However, the forest dependent communities who live next to the refugee camps should receive livelihood support as they are most affected from the refugee influx. They say their cash crop fields have been destroyed by the Rohingyas and many of them are living in a worse condition than before. • With the arrival of the Rohingyas, local wage labour rate was decreased. Many local people who depend on daily wage labour for livelihood are now in serious economic hardships. Basically they cannot compete with the Rohingyas on daily wage rate. • There is also a growing law and order problem in the area. Not long ago, a local man was attacked by the Rohingyas when he tried to stop them from tree cutting. In the attack, he was seriously injured and have had to be hospitalized for more than 20 days.
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2. Venue: BFD Beat Office, Teknaf, Cox's Bazar

Date: 12 July 2018

Name of the participants	Discussion points
1. Ms. Nazma Alam, CMC Member and Treasurer 2. Nazir Ahmed, Member, Union Parishad 3. Jalal Ahmed, Member, Community Patrol Group (CPG) 4. Ms. Khurshida Begum, Member, Women CPG 5. Ms. Sajeda Begum, Member, Teknaf CMC 6. Mr. Zahirul Islam, Head Teacher, Beruntali Govt. Primary School 7. Ms. Nurjahan Begum, Teacher, Teknaf Girls High School 8. Abu Bakkar, community elder 9. Ali Akbar Member, community elder 10. Ms. Ratna Rani Shil, Member, CPG 11. Mohammad Ilias, Member, CPG 12. Mohammad Ismail, Member, CPG 13. Imam Hossain, Member, CPG 14. Thanda Mia, Member CPG 15. Ms. Morzina, Ward Member, Union Parishad 16. Ms. Jamalida, Teacher 17. Mohammad Usman, Member, CMC	Mr. Mohammad Ali Kabir, DFO, BFD made a presentation on the project in PowerPoint following which the discussion among the participants took place. The participants were informed with earlier notice about the consultation and the aims & objectives of the SUFAL project. Kirti Nishan Chakma, Social Development Consultant, was present as observer on behalf of the Bank. The key points of the discussion are given below: • All the participants expressed their support to the project and committed their cooperation. • They particularly welcomed the participatory design of the project and told that the livelihood support must be based on the particular local context. • The Rohingyas are seen as a very serious problem for the region. Most expressed their pessimism that this problem is unlikely to be solved even in the next 20-30 years. • A key problem with the Rohingyas is their need for firewood for which they cut trees indiscriminately, become even violent and are destroying even the bushes and shrubs on the nearby areas. This problem must be solved at first. Otherwise, no tree plantation/afforestation programme will see success. • The project must expand also coastal mangrove forests in the region. This is very important to save the region from bank erosion, tidal surge and cyclones. The Shah Pari Dwip area must be included in the project.

18. Nurul Amin Chowdhury, Community elder 19. Ms. Bu Bu, CMC member from ethnic minority communities 20. Ms. Ma Mya Shing, CMC Member from ethnic minority community (Rakhain) 21. Md. Lutfor Rahman, BFD 22. AKM Mamun ur Rahman, BFD 23. Md. Mokhlesur Rahman, BFD 24. Md. Mainuddin, BFD 25. Mohammad Ali Kabir, DFO, BFD 26. Kirti Nishan Chakma, World Bank	• The local communities must be involved in the implementation of the project. Otherwise, the project will not succeed. • The forest dependent communities must receive livelihood support. They should be imparted with skill development programme with access to finance. Micro-credit will be very useful for them. • The selection of the beneficiaries is very important. The local people must be involved in the selection and they should be selected at first as beneficiaries. If the selection of the beneficiaries is left to the 'leaders', they will simply include their family members, friends and cronies. This must be avoided at all cost. • The community level committees should be inclusive and include members from different categories of the socio-economic and ethnic background. • Caution must be made in the selection of the beneficiary group members and other committees. Member of political parties, people with dubious records, local hoodlums must be avoided. • The priority given to the women, ethnic minorities, poor and landless households is very good approach of the project and all extended their support to it. • The scarcity of drinking water is the number 1 problem in the region. Only creation and conservation of forests will solve this problem to create watershed. • Native species of trees should be given priority rather than alien variety such as acacia. • The private nurseries should be supported from the project. This will ensure sustainability • The honorarium of the CPG members should be increased. The CPGs play an important role in BFD projects. Higher remuneration will act as a further motivating factor. • The SUFAL project must include awareness raising activities among general public on forest conservation/creation. Otherwise, long term sustainability of the interventions will remain compromised. • The selected beneficiaries for afforestation should be given larger land plot. The current ceiling of one acre per household is too small. • One participant noted that it is easy to blame the Rohingyas for all the ills in the region. We should also introspect and accept our failures and faults. The land grabbers, who are often influential and have affiliations with political parties, are the number one problem. These are the people who have encroached on forest land and are forcibly occupying these land. Unless this problem is dealt with properly, the issue will remain burning. • Enforcement of the relevant laws must be ensured. Otherwise, the law violators will not be deterred. • The personnel of the BFD should receive more training.
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3. Location: Madhupur

Venue: Dokhola Sadar Range Beat, Madhupur, Tangail

Date: 17 March 2018

Participants' name	Discussion points
1. Md. Abul Kalam Azad 2. Rafiqul Islam	• Alternative livelihood options suggested by the participants are as following:

3. Maria Rema 4. Swapna Chisim 5. Maria D. Costa 6. Md. A. Salam 7. William Dazel 8. Rana Sharma 9. Md. Nahar Ali 10. Helen Rema 11. Suresh Barman 12. Md. Jahangir 13. Prantosh Mekla 14. Azahar Ali 15. Austina Chiran 16. Shikha Nokrek 17. Md. Ayub Khan 18. Md. Chand Mia	○ Handicrafts, bamboo based production as bamboos are available in this area with training and marketing linkage development ○ Development of ecotourism where many landless could be employed drawing from the experiences in Madhutila ○ Compost Fertilizer ○ Development of juice making and Achar making technologies • BFD suggested that through social forestry or collaborative forest management forest areas which are currently occupied by illegal encroachers could be reforested. BFD also informed the problems they confront which include: staff shortage, lack of transports and lack of funds for transports and fuel. • A key recommendation of the participants is about raising the daily wage labour rate, at least 400 taka/day. The allotment of land plot for plantation/afforestation should also be considered. The current rule of 1 acre per family is too small. • BFD informed that ratio for future plantation should be as follows: 40% sal forest, 40% fruits and 20% medicinal and other type of plantations. • Mr. Karim, Forester mentioned that once he filed 100 cases related to encroachment in 1 year but last 2 years he did not file a single case in his area due to implementing of social forestry.
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A.2. Focus Group Discussions (FGDs) in Cox's Bazar

1. Venue: Vamoria Ghona Beat Office, Idgaon, Cox's Bazar

Date: February 2, 2018

Name of the participants	Discussion points
1. Md. Hamid Ullah 2. Md. Idris 3. Taslima Akhter 4. Md. Faruk 5. Maleka Begum 6. Azizur Rahman 7. Monziara Begum 8. Samsul Alom 9. Md. Abdur Rashid 10. Nur Banu	• The area can make plantation of 3,500 hectares • The participants supported planting trees and creating more forests. They told that this will create employment, generate incomes and also develop their skills. • Communities supported co-management method. They think that this will have more success on sustaining afforestation initiatives. • The area was once covered with thick natural forests. They all supported regeneration of these forests. They think this will create more biodiversity, protect wildlife and also will be good for carbon capture. • For alternative livelihoods support, they suggested the following options: support to private nursery, poultry, small cottage industry, improved agriculture production technology, and rickshaw/van purchase.

2. Venue: Kauarghop, Bakkhali Beat Office, Ramu, Cox's Bazar

Date: February 5, 2018

Name of the participants	Discussion points
1. Abdul Kader 2. Shah Alam 3. Md. Sirajul Islam 4. Abdus Shukkur 5. Siraj Mia	• The participants supported co-management method. They consider that it will create a relationship of trust between them and BFD • They also supported regeneration of the forests as their area in earlier times was covered with thick natural forests.

6. Md. Hossen 7. Abu Bakkar Siddiq 8. Faridul Alam 9. Nur Mohammad 10. Aman Ullah	For alternative livelihoods support, they suggested the following options: nursery, cottage industry such as bamboo and cane works, sewing of caps, purchase of rickshaw and vans, etc.
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3. Venue: Meherghona Beat Office, Cox's Bazar

Date: February 8, 2018

Name of the participants	Discussion points
1. Nurul Huda 2. Jafar Alam 3. Jamil Uddin 4. Abdur Rahim 5. Abul Mansur 6. Ms. Razia 7. Abu Taher 8. Nesarul Haque 9. Ms. Saheda 10. Ali Ahmed	- The area can cover 3,500 hectares for afforestation. - The communities strongly supported the co-management system. They think that it will strengthen trust between them and BFD and will also ensure sustainability of the forests. - They strongly supported the regeneration of the natural forests which will create more biodiversity and wildlife. - They asked for nursery, small cottage industry, agro-processing and rickshaw/van for livelihoods support.

4. Venue: Eidgaon Beat Office, Cox's Bazar

Date: February 12, 2018

Name of the participants	Discussion points
1. Romena Afaz 2. Manzur Alam 3. Abu Hena 4. Amanu 5. Ramzan Ali 6. Sadequn Nahar 7. Afsar 8. Nurul Azim 9. Nurul Huda 10. Romena Hossain Rumi	- The area can create 700 hectares of afforestation. - They supported co-management system. - They also supported plantation of trees which, they think, will create more employment for them. - They asked for poultry, nursery, cow rearing and cottage industry for livelihoods support.

5. Venue: Joriakhola Beat Office, Ramu, Cox's Bazar

Date: February 10, 2018

Name of the participants	Discussion points
1. Md. Fakhruddin 2. Abdur Rahim 3. Omar Faruk 4. Md. Salim Ullah 5. Md. Nurul Islam 6. Monowara Begum 7. Hazra Begum 8. Hasina Begum 9. Md. Rizuan Uddin 10. Mahbubul Haque	- The potential area for afforestation in the beat is about 855 hectares. - Afforestation will stop landslides and protect wildlife and will also improve environment and bio-diversity. - They supported the co-management system which will allow the communities in the management of forests. - The alternative livelihoods support will help them with income generation and skill development.

6. Venue: Dighirghona Beat Office, Cox's Bazar

Date: February 13, 2018

Name of the participants	Discussion points
1. Abdul Jabbar 2. Md. Didarul Alam 3. Nurul Alam 4. Md. Akhter Hossain 5. Md. Akhtar 6. SM Abu Taher 7. Md. Rashid Ahmed 8. Abu Syed 9. Mahmud Nur 10. Md. Hossain	• They support the co-management system. This, according to them, will ensure sustainability of the forests. • Afforestation will stop landslides and also contribute to protect biodiversity and wildlife. • Afforestation will also provide the communities more income generation and employment.

7. Venue: Kakra Beat Office, Fashiakhali, Chokoria, Cox's Bazar

Date: February 10, 2018

Name of the participants	Discussion points
1. Masud Reza 2. Saiful Islam 3. Shahadat Hosain 4. Md. Nurul Absar 5. Anisul Islam 6. Abu Naser 7. Md. Faruk 8. Minhaz Uddin 9. Md. Ashem 10. Robiul Awal	• The programme should be based on co-management method. • It can be implemented with the participation of the beneficiaries. • The villagers should be included in the Community Patrol Groups. • The native species should be planted. • Proper supervision and monitoring by BFD should be ensured.

8. Venue: Fashiakhali Beat Office, Chokoria, Cox's Bazar

Date: February 10, 2018

Name of the participants	Discussion points
1. Md. Nurul Islam 2. Md. Bodruddoza 3. Jalal Ahmed 4. Md. Nurul Huda Manik 5. Anwar Hossain 6. Foiz Ahmed 7. Md. Jamal Uddin 8. Md. Faridul Alam 9. Md. Azim 10. Md. Saiful Islam	• They supported the co-management method which will ensure the participation of the communities in the project activities. • The planting of trees should emphasize the native species. • BFD needs to ensure proper monitoring and supervision. • Communities should be involved in CPGs.

9. Venue: Manikpur Beat Office, Chokoria, Cox's Bazar

Date: February 10, 2018

Name of the participants	Discussion points
1. Suttu Mia	• They support the co-management method.

2. Md. Mohiuddin 3. Md. Didar 4. Md. Erhan 5. Abdur Rahim 6. Hafaz Uddin 7. Nurul Amin 8. Md. Jahangir Alam 9. Nurul Kader 10. Sorowar Alam	- Beneficiaries should be involved in the tree planting/forest regeneration. - Natives species should be planted (instead of alien varieties). - CPGs should involve the communities.
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10. Venue: Sudhakhali Beat Office, Chokoria, Cox's Bazar

Date: February 8, 2018

Name of the participants	Discussion points
1. Bahadur Alam 2. Muhammad Humayun Kabir 3. Md. Abdus Shakur 4. Saidul Kiran 5. Towhidul Huq 6. Anisa Soltana 7. Rasheda 8. Ramzan Ali 9. Tuhura Begum 10. Romena Akhtar	- The co-management method will ensure better maintenance of the forests and their sustainability. - Forests will support wildlife habitat and maintain good environment. - It will also help in poverty reduction of the communities. - Forests will also resist climate change.

11. Venue: Rajghat Beat Office, Cox's Bazar

Date: February 8, 2018

Name of the participants	Discussion points
1. Firoz Ahmed 2. Md. Shafi Alam 3. Abdur Rahman 4. Mostafizur Rahman 5. Nurul Huq 6. Syed Alam 7. Chakir Ahmed 8. Nurul Huq (Gura Mia) 9. Badiul Alam 10. Yusuf Nabi	- The sustainability of the forests will be better ensured through the co-management method. - This will help to protect wildlife, and improve the environment. - It will also help in reducing the impacts climate change. - Forest will support in poverty alleviation.

12. Venue: Napitkhali Beat Office, Cox's Bazar

Date: February 8, 2018

Name of the participants	Discussion points
1. Shafi Alam 2. Setara Begum 3. Mohammad Ali 4. Md. Abu Taher 5. Azizul Huq 6. Nurul Amin 7. Zafar Alam	- The co-management method will ensure success of the plantations. - The forests will support the wildlife of Bangladesh and improve environment. - It will also help in reducing the impacts climate change. - Forest will support in poverty alleviation.

8. Anwarul Azam Khokon 9. Nurul Alam 10. Joynal Abedin	
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13. Venue: Fulchari Beat Office, Cox's Bazar

Date: February 8, 2018

Name of the participants	Discussion points
1. Md. Gias Uddin 2. Md. Ashraf Ali 3. Md. Saber Ahmed 4. Md. Muhidul Islam 5. Md. Anwar Hossen 6. Md. Abdul Kalam 7. Md. Alam 8. Md. Nasir Uddin 9. Md. Abdu Sukkur 10. Md. Lutu Mia	• The participants supported the regeneration of forests and forest-based resources through the co-management method. • This will reduce the risks from climate change. • This will also resolve the firewood problem of the local communities. • The project will create employment opportunities for the local communities and promote socio-economic development. • The forests will protect wildlife and their development.

B. DISTRICT AND REGIONAL LEVEL CONSULTATIONS

1. Venue: BFRI Hall, Chittagong

Date: March 7, 2018

Key discussion points

Participants highly appreciated the idea of livelihood support for sustainable forest management and conservation. One of the participants was associated with monitoring of livelihood activities and plantation by Bangladesh Forest Department said that success of CRPARP has led the scaling up of the activities in wider areas. However, he raised a concern over dropping Arannayk Foundation from the livelihood component and inclusion of Palli Sanchay Bank, which has no experience of community organizing and capacity building of communities. He said that PSB does not have any track record of such activities. On the contrary, if replacement of Arannayk is desired, then why not BRAC – a Bangladeshi NGO that is also the largest NGO in the world having micro-enterprises as well as microfinance experiences. They are equally good for group organizing and capacity building.

Forest productivity is unacceptably low in Bangladesh. Participants recommended for using genetically improved seed/planting materials to ensure at least 10-20 m³/ha/yr. Present yield is only 2.0-2.5 m³/ha/yr.

Research must be strengthened to achieve improve forest management and higher yield. There is need for manpower and developing skill. Emphasis should be given to establishing GIS/RS based monitoring cell, genetic engineering lab, quality seed production by BFRI, strengthen linkage between education and research.

Environmental issues such as site-specific species selection, impact of species on underground vegetation, soil-plant relation, ecosystem services, biodiversity and forest health.

Social forestry approach should be revisited. Clear felling after 10-12 years must be avoided. Some alternative mechanism must be developed to distribute benefit to the social forestry participants.

All vacant positions in BFD and BFRI should be filled up before undertaking SUFAL project.

Assisted/aided natural regeneration (ANR) should be preferred over mono-plantations of exotics since the process eroded the Forest Genetic Resources from the forest significantly.

List of the Participants

1. Dr. Zakir Hussain, Team Leader, SUFAL project preparation team	33. Monowara Begum, ED, Prottiyashi
2. Mozharul Islam, Senior Consultant, SUFAL Project	34. Md. Ali Kabin, DFO, Cox's Bazar (S), FD
3. Md. Zainal Abedin, Livelihood consultant, SUFAL	35. Mahbub Morshed, DFO, Cox's Bazar, North Forest Division
4. A R Jafree, CEO, Ghashful	36. Shah Alim, Korerhat Federation
5. Md. Mahbubur Rahman, Director, YPSA	37. Mohammad Sohel Rana, ACF, Cox's Bazar South
6. Narayan Das, Regional Coordinator, CODEC	38. Mohammed Didarul Alam, MAO, DAE, Panchlaish, Chittagong
7. Dr. Md. Zaglul Hossain, CF, Chittagong, BFD	39. Mominur Rashid, DFO, Forest Utilization Division
8. Dr. Khurshid Akhter, Director, BFRI	40. Mozammel Huq Shah Chowdhury, DFO, Chittagong South Forest Division
9. Dr. Md. Mohiuddin, CRO (M), BFRI	
10. Dr. Mohammad Kamal Hossain, Professor, IFES, Chittagong University	

11. Dr. M. Danesh Miah, Director, IFES, CU	41. Md. Humayun Kabir, DFO, Coastal Forest Division
12. Salmul Huq Chowdhury, Member, Bangladesh Rubber Board	42. G M Mahbubul Kabir, DFO, Coastal Forest Division, Chittagong
13. Mohammad Kamaluddin, President, Bangladesh Rubber Owners' Association	43. Mohammed Hossain, ACF, Chittagong North, Chittagong Coastal
14. Dr. M. Jasimuddin, Professor, CU	44. M. Zahirul Alam, ASF, BFRI, Chittagong
15. Md. Motlabur Rahman, Director, Botanical Garden, Chittagong	45. Maruf Hossain, ACF, Coastal Forest Division, Chittagong
16. Md. Akhter Hossain, Assistant Professor, IFES, CU	46. Md. Akhter Hossain, Research Officer, BFRI
17. Md. Sarwaruddin, Boroidhyala CMC	47. Abdu Rashid, Shital Gahat, Satkania
18. Rafiqul Islam, Vice President, CMC	48. Md. Abul Hashem, Dantmara, Fatikchari
19. Dr. Md. Enkayessuddin, Sr. Scientific Officer, PRTC	49. Harishchandra Tripura, Harutanachari, Fatikchari
20. Md. Jahangir Alam, Divisional Officer, BFRI	50. Md. Ali, Mirzapur Federal
21. Dr. M. Zakir Hossain, Divisional Officer, BFRI	51. Md. Nurl Alam, Narayanhat, Fakirhat, Fatikchari
22. Md. Ramizuddin, Divisional Officer, BFRI	52. Osman Sarkar, Sharupvata
23. M. Manik Hossain Bhuiyan, Librarian, BFRI	53. Md. Abu Taher, Padua Village Cooperative Ltd.
24. Md. Shahidul Islam, Divisional Officer, BFRI	54. Fatema Khatun, Salimpur
25. Nusrat Begum, DFO, Silviculture, BFRI	55. Dalia Begum, Salimpur
26. Syeda Rehnuma Merry, Divisional Officer, BFRI	56. Anna Karmokar, Fisheries Extension Officer, DFO Office
27. Dr. Hasina Mariam, Divisional Officer, BFRI	57. Md. Anisur Rahman, Senior Research Officer, BFRI
28. Dr. Daisy Biswas, Divisional Officer, BFRI	58. Ahmed Kabir, FF, YPSA
29. Md. Rafiqul Islam, Divisional Officer, FPD, BFRI	59. AHM Kamal, Aranyak Foundation
30. Md. Abul Hasnat Shahjalal, Divisional Officer, FED, BFRI	60. Farid Uddin Ahmed, Executive Director, Aranyak Foundation
31. Dr. Md. Mahbubur Rahman, Divisional Officer, SCD, BFRI	61. Md. Ariful Rahman, Assistant
32. Md. Shahid Ullah, Divisional Officer, FID, BFRI	62. Md. Monayet Ali, Boatman
	63. Md. Hasnat Ullah, Mechanic
	64. Md. Ibrahim, Seed Collector

2. Venue: Hotel Royal, Bandarban

Date: March 8, 2018

Discussion points

The consultation workshop on Sustainable Forest Management was held at Royal Hotel Auditorium of Bandarban Hill District, Chittagong Hill Tracts on 8 March 2018. There were participants from BFD, NGOs, traditional leaders, social leaders, line agencies like Department of Agricultural Extension, Department of Livestock, Department of Fisheries, Cotton Research Centre, Soil Resources Development Institute, Headman from different regions, community representatives from village common forests, journalists, representative of Bohmong Chief and several others.

The following were the key recommendations of the workshop:

1. Ethnic communities desired to see BFD as service providers like Department of Agricultural Extension, Department of Livestock and Department of Fisheries. They believe that as long as BFD will be in implementation, the natural forests would be lost in the name of plantations. It will destroy their natural resources on which they live and also habitat of wildlife would be lost. They prefer natural forest

conservation over plantation. However, they suggested that if plantation is absolutely necessary to restore degraded forests, it should be done by indigenous species.

2. They don't want any social forestry in Chittagong Hill Tracts. They feel that social forestry does not provide either habitat for wildlife or meet their own demand of forest resources. Moreover, when trees are harvested, the area becomes denuded or devoid of trees. They suggested that if any committee is required for planting trees and protection of plantation raised in BFD land, small committee should be formed mainly with forest dependent or related people.
3. They suggested to retain at least 100-500 acres of land in each hamlet (para) as community reserve (village common forests) They know that VCFs are very rich in biodiversity and VCFs are the only source of water for the indigenous communities in CHT.
4. They recommended for alternative livelihood support for forest dependent people either in VCF conservation and restoration or restoration of BFD reserve forests. They appreciated the livelihood approach adopted by the Arannayk Foundation for conservation and restoration of VCFs in Bandarban, where communities were supported with capacity building followed by creation of a revolving loan fund to provide access to microfinance. In some VCFs, water harvesting mechanism is established.
5. They recommended to provide alternative to jhum (shifting) cultivation so that the production is increased with longer fallow period to rejuvenate the soil. They suggested to keep some land for agroforestry to grown fruit, fuel, agricultural crops, etc.
6. They demanded for quality planting materials of both fruit and timber trees.
7. Plantation, if any, shall be raised by the beneficiaries.
8. Stone collection must be stopped.

List of the Participants

1. Md. Anisur Rahman, DLO, DLS, Bandarban	33. Shyamal Bikash Chakma, Asst Project Director, CHTDB, Bandarban
2. Zakir Hossain, Team Leader, SUFAL, Bandarban	34. Mozaharul Islam, Sr. Consultant, BFD
3. Aung Thowai Ching Marma, Chairman, Ruma Upazilla	35. Ting Ting Mya, Councilor, B-HDC
4. Abu Taher Mostafa Kamal, Project Coordinator, AF	36. Mahbub Mannan, Advocate, Bandarban Judge Court
5. Faridul alam Suman, Secretary, Press Club	37. Buddha Jyoti Chakma, Journalist, Prothom Alo
6. Md. Ziauddin, SUFO, DoF	38. Thoai HI among Marma, Member, B-HDC
7. Salim Uddin, PD, Tahzingdong	39. U Ni Hla, Headman
8. Monirul Islam, Journalist	40. Sway Ting Yee, Project Coordinator, AKS
9. Piching U, Project Coordinator, Tahzingdong	41. Dr. Mohammad Mohiuddin, CRO(M), BFRI, Chittagong
10. Ne Mong, Treasurer, Tulachari, Roangchari	42. Dr. mohammad Kamal Hossain, Professor, Chittagong University
11. Mensing Mro, Menlung Para	43. Ching Mra U Marma, Village elder
12. Mendoi Mro, Karbari	44. Mong Nu Marma, Headman
13. Ching Shing Prue, Executive Director, Tahzingdong	45. Bijoy Ketan Tanchangya, Chairman, Aung Daw Para
14. Kham Chyan Mro, Karbari	46. Kh. Shamsul Huda, Forest Ranger, Lama Division, BFD
15. Aung Daw Mong, President, PRUPOK	47. Mondira Sarkar, Accounts Officer, TZD
16. Hla Mong Prue, Programme Officer, CCDB, Bandarban	48. Swe Ching Mong, OSS, MJF, TZD
17. Subarang Tripura, Toymu – HRO	49. U Chaw Nu, EC Member, Tahzingdong
18. Manab Kalyan Chakma, Project Officer, Humanitarian Foundation	50. Kyawshing Marma, FM, TZD
19. U Chong, Karbari	51. Mong Ba Thowai, PF, TZD
20. Prentay Mro, Renikhyang Bagan Para	52. Mewai Ching, PF, TZD
21. ===== Karbari	53. Sultan Ahmed, PPD
22. Md. Mahbubul Islam, PSO, Solid Water Convention, Bandarban	54. Md. Kamaluddin, BFD Bandarban
23. Md. Shahidul Islam, Forest Ranger, Bandarban	55. Md. Mahbub Alam, Upazilla Sadar, Bandarban
24. Md. Anwar Hossain Sarkar, ACF, Pulpwood Division, BFD	56. Khorshed Ali
25. Kazi Md. Kamal Hossain, DFO, Bandarban	57. MP Mong
26. Najib Kumar Tanchangya, DAD, BAPC, Bandarban	58. Elen Bawm
27. Md. Omar Faruque, Upazilla Agriculture Officer, DAE	59. Key Maeching, PF
28. Saw Hla Prue, Social Activist	60. U Ma Prue, FF
29. Mr. Kuddus, Upazilla Chairman, Bandaban Sadar	

30. Kyaw Swe Prue (Khoka), Rtd. School Teacher	61. Mong Hla Thowai, FF
31. Plukan Mro, Chairman, Tankabati	62. Kra Nu Prue, FF
32. Md. Zainal Abedin, ENRAC-SUFAL	63. Mong Kya Prue, FF
	64. Dr. Md. Zaglul Hossain, Conservator of Forest, Chittagong
	65. Abu Taher,

3. Venue: Hotel Gran Park, Barishal

Date: March 21, 2018

Discussion points

The consultation workshop was held at Hotel Grand Park of Barisal on 21 March 2018. Executive Director of Arannayk Foundation facilitated the workshop. The workshop was attended by the representatives from the Bangladesh Forest Department, NGOs, Department of Agricultural Extension, Department of Livestock Services, Department of Fisheries, Bangladesh Agricultural Research Institute, Soil Resources Development Institute, UNDP, Palli Sanchay Bank, representatives from forest dependent communities (from earlier project – Climate resilient participatory afforestation and reforestation project), Social Development Foundation, Agroforestry Department and Animal Husbandry Departments of Patuakhali Science and Technology University, representatives from SUFAL project and Arannayk Foundation.

The workshop began with a brief introductory note from the Executive Director of Arannayk Foundation, who facilitated the workshop followed with introduction of the participants. After introduction, the Conservator of Forests gave a welcome address in which he highlighted the potential of coastal areas in adaptation to climate change. He said that there are around 25,000 hectare of land available for coastal plantation, while there is chance of obtaining newly accreted land. He also highlighted the success of BFD in establishing 200,000 ha of coastal plantation which is unique in the world. He said that such plantation saved life and properties of people living in the coastal areas. So, coastal plantation is very much needed. Almost half of the coastal plantation is handed over to the Ministry of Land for allocation to the poor for agriculture and shelter as per government rules. In the remaining areas, many plantations need assisted natural regeneration or enrichment plantation. He suggested to include those issues in the SUFAL project.

After welcome address, Dr. Zakir Hossain, team leader of SUFAL project, gave a brief presentation to introduce the project. He said that following success of CRPARP, a project with financial assistance of the World Bank and Government of Bangladesh is going to be undertaken to ensure sustainable forest management and livelihood of forest dependent communities. Following the presentation of Dr. Zakir Hossain, Mr Mozaharul Islam, Senior Consultant of SUFAL made a presentation on legal aspect of collaborative forest management. Finally, Executive Director of Arannayk Foundation shared the experience of alternative livelihood support to forest dependent communities of 'Climate resilient participatory afforestation and reforestation project'. He said that in the project, Forest Department was responsible for plantation establishment while Arannayk Foundation was responsible for providing livelihood support to the forest dependent communities. Through livelihood support, forest dependent communities could improve their livelihood by 51% while their dependence on forest was reduced by 57%.

After three presentations, the participants were divided into four groups to have feedback of the participants on two critical issues – alternative livelihood approach and institutional set up for collaborative forest management.

The recommendations emerged from the groups are as follows:

Alternative livelihood

1. Forests are degraded due to encroachment and over-exploitation for fuelwood collection and illegal forest resources harvesting. To reduce such pressure, community should be involved in forest protection. It can be achieved through alternative livelihood support to forest dependent people.
2. Each household must use improved cooking stove.
3. Homestead agroforestry should be strengthened, so that the income of forest dependent households is increased.
4. Fodder production in the newly accreted land or under the plantation may help stall feeding of cattle. Forest is also destroyed by the cattle during grazing in newly established plantation. There is tremendous potential to grow fodder in open areas as well as under the plantation.
5. Some bamboo species tolerate some degree of salinity. Bamboo helps stabilization of soil. Species like *Bambusa vulgaris* and *Dendrocalamus longispathus* have been found to grow in the coastal areas. Along with bamboo some cane species such as *Calamus viminalis* and *C. tenuis* are also found to grow in the coastal areas.
6. Sheep, buffalo and cows are found in abundance in coastal areas. Through detail value chain analysis, there is scope for scaling up the production of meat and milk including processing of milk.
7. Forest dependent communities must be provided with capacity building support along with critical inputs for commercial production of high value crops.
8. There is need for creating access to microfinance with low interest.
9. Apiculture, floating agriculture, vermicompost and crab fattening have potential for further scaling up.

Collaborative mechanism for engaging communities

1. Availability of land for plantation is essential for establishing plantation and green belt around the coastal areas. It is necessary to involve all stakeholders for availability of land, establishing plantation and its protection. A committee should be formed involving UNO, BFD (3 members), AC Land, OC (police), coast guard, UP Chairman, line agencies such as Agriculture Officer, Fisheries Officer, DLO or his representative, Cooperative Department and Forest Users (2 male and one female). Hon'ble MP, DFO, DC and SP should be in the advisory committee.
2. Their roles and responsibilities may include allocation of newly accreted land or khas land, assist BFD in establishing plantation, protect plantation from illegal harvesting, reduce fuelwood collection, protect earth excavation, stop wildlife poaching, grazing, fish poisoning and fire control.
3. Forest dependent households shall have AIGAs.
4. The fund for the committee and the forest dependent people will be made available from ecotourism.
5. There is need for mass awareness.
6. The community may be granted 75% of the income to support their livelihood and other development activities in their respective areas, while 25% may be given to the BFD.
7. Different agencies may be involved in AIGAs promotion.

List of the Participants

1. Dr. Zakir Hussain, Team Leader, SUFAL	36. Al Mamun Talukdar, PC, CODEC
2. Junaid K. Chowdhury, Consultant, PAP	37. Ashraful Koum, Manager, CAB
3. Mozharul Islam, Senior Consultant, SUFAL	38. Md. Shabbir Hossain, PSO, SRDI, Barishal Division
4. Gobinda Roy, DFO, Coastal Circle, Barishal	39. Md. Golam Mowla, Divisional Officer, BFRI
5. Mohammad Aminul Islam, DFO, Coastal Forest Division	40. Md. Abdul Quddus Miah, Field Investigator, BFRI
6. Md. Abul Kalam, DFO, Barishal	41. Md. Saidur Rahman, Regional Manager, SDF
	42. Nirmal Chandra Sutradhar, District Officer, SDF

7. Farid Uddin Ahmed, Executive Director, Aranyak Foundation	43. Mohammad Aminul Islam, DFO, Patuakhali coastal forest Division
8. Hasina Parvin, Project Coordinator, Uttaran	44. Dr. Mohammad Alamgir Kabir, Chairman, Department of Agro-forestry
9. Abu Hena mostafa Kamal, Project Coordinator	45. Jahin shams Shukkur, PDS, Uttaran
10. Md. Nuruzzaman, Joint Registrar, Dept. of Cooperatives	46. Md. Dulal Hossain
11. G M M Kabir Khan, Horticulture Specialist, DAE	47. Md. Abdul Karim, DCF, Coastal Circle, Barishal
12. Motaleb Sharif, Vice President	48. Md. Jahirul Huq Mridha, DD, DRDB, Barishal
13. Rafiqul Islam, General Secretary	49. Md. Abul Kashem, DD, DLS, Barishal
14. Shila Gomez, President	50. Khalea Akhter, President, Isladi Federation
15. Md. Farid Mia, DFO, Bhola	51. Jashimuddin, SAPPO, DAE
16. Md. Jamal Uddin Bhuiyan, ACF, Bhola	52. Shafiqur Rahman, UNDP
17. Karar Mahbub Hossain, RO, Dhalchar Range	53. Mizanur Rahman, SNPP
18. SM shamshuddoha, FR, Patuakhali, BFD	54. MD. Mafizur Rahman, FAO, Uttaran
19. Md. Jahangir Hossain, FR, Patuakhali CD	55. Sazzad Hossain, FF, Barishal
20. Mrs. Amina, Secretary	56. SM Hafizur Rahman, FF BD, Noakhali
21. Firoz Alam Chowdhury, FR	57. Md. Rakibul Islam, FF, Patuakhali
22. Mrs. Rahima, President	58. Md. Mahmudul Harun Khan, Scientist, BARI
23. Amir Joardar, LSP	59. Md. Khokon Miah, FFBD, Uttaran
24. Mrs. Beauty Begum, President	60. Kishor Kumar Patra, FC, BFD Bhola
25. Mr. Selim, Treasurer	61. Md. Shahidul Alam, BFD
26. AHM Shafiqul Islam, RO, Nolchira, Noakhali	62. Md. Rafiqul Islam, Rtd. Research Officer
27. Tapas Kumar Sarkar, RO, Sadar Range, Barishal	63. Md. Masud Rana, BFD
28. Md. Bashir Mia, UNDP	64. Md. Ahad Hossain, BFD
29. Md. Ismail Hossain, UNDP	65. Md. Motaleb, BFD
30. Syed Nuruzzaman, Forest Ranger	66. Debashish Roy, BFD
31. Md. Tariqul Islam, Administrative Officer, Saints Bangladesh	67. Gazi Md. Selim, BFD
32. Dr. Md. Selim Ahmed, Associate Professor	68. Azizul, BFD
33. Dr. Asit Kumar Pal, Associate Professor	69. Md. Abul Kalam, BFD
34. ABM Mahiuddin Chowdhury, Range Officer, BFD	70. Md. She I Islam, SRDI
35. Kanta Dey, PO, AVAS	71. Manik Nandi, SDF

4. Location: Mymensingh

Venue: Syed Nazrul Islam Conference Hall, Bangladesh Agricultural University

Date: March 28, 2018

Discussion points

The workshop was held on 28 March 2018 at Syed Nazul Islam Conference Hall of BAU. The participants included representatives from BFD, Bangladesh Agricultural University, ethnic communities from Madhupur, Arannayk, SDF, Proshika and CMC of CREL in the workshop.

Prof. Dr. Abdur Rahim gave welcome address followed by presentations from Dr. Zakir Hossain, Mr. Mozharul Islam, Farid Uddin Ahmed, Prof. Mostafizur Rahman and Prof. Dr. Abdur Rahim.

The main recommendations of the workshops include:

1. Sal forest is highly vulnerable in terms of encroachment and conversion of sal forest land in non-forestry use. Two other serious issues in sal forest management are grazing and fire. Sustainable forest management must consider all those issues along with livelihood improvement of forest dependent communities.

2. Fruit trees can significantly contribute in livelihood improvement at homestead level agroforestry. BAU has the second largest fruit tree germplasm centre in the world having 180 fruit species and 11,550 varieties. There are fruit trees that can be produced under shade, some high value crops like dragon fruits, multicolored potatoes and carrots having carotene and flavonoids along with other vitamins and minerals, mangoes with low sugar contents and without seeds, and several other seeds. Based on the site conditions, specific species can be introduced. BAU-Germplasm Centre had been providing such services to CREL project in Cox's Bazar areas and they are willing to work closely with SUFAL for sustainability of forest management.
3. BAU provides training to farmers on fruit tree management and also provides planting materials for small and largest scale production. Beneficiaries of CRPARP received training from BAU and produced most of the fruit tree seedlings from BAU. BAU welcomed the SUFAL project to avail such opportunity so that it contributes to livelihood improvement of forest dependent communities in particular and the country at large.
4. Department of Animal Sciences, Plant Pathology, Entomology, Fisheries and horticulture offered their services for different livelihood options of the SUFAL.
5. BAU has an excellent arboretum having almost all critically endangered and endangered species of Sal forests along with medicinal plants. BAU expressed their willingness in allocating about 40 ha of land for establishment of seed orchards with 200 seedlings of 500 species of Sal forests (including medicinal plants). They claimed that it will not only help restoring vegetation of Sal forests through providing seeds for future but also a hub for researchers and academia to study the species in depth and develop or screening high yielding varieties of different species including cane and bamboo. They also offered their facilities for biotechnological and molecular research to study genome of different species and alkaloids in medicinal plants.
6. Livelihood improvement of forest dependent communities is anonymously considered as one of the most effective means of forest conservation. It should be specific to interests of households and localities as well as market. BAU would like to extend support for apiculture, sericulture, agroforestry, poultry production, fodder production, fuelwood production, aquaculture, value chain, value addition, IPM including Trichoderma and mycorrhiza inoculation in nurseries and crops.
7. BAU is willing to support establishment of seed bank or gene bank for tree species of sal forests.
8. Forest dependent people should be properly identified, organized and supported to have access to fund through creation of fund for alternative livelihood.
9. Ecotourism is an effective means of forest conservation. It would require mass awareness about ecotourism to support both flora and faunal conservation. It would require good wildlife habitat and vegetation cover in sal forests. Measure should be taken to improve present state of sal forests through conservation and aided natural regeneration.
10. Ethnic communities emphasized on natural forest conservation over social forestry or other plantations. BFD officers also believe that if forest is kept undisturbed for three years, even the degraded forest areas will turn to a natural forest. However, to ensure restoration of sal associates, assisted natural regeneration may be useful.
11. There should not be clearing of natural forest for social forestry.
12. Wild fruit trees and medicinal plants may be integrated in degraded land.
13. Relationship between forest dwellers and BFD must be strengthened to establish trust.
14. Forest dwellers should be encouraged to use improved cooking stoves. If possible alternative to fuelwood may be provided.
15. In collaborative management, voice of local people must be heard.
16. Community patrol group may be formed to protect forests.
17. People living within forests should not be evicted; rather they may be involved in forest protection and regeneration.
18. People involved in deforestation must be identified and legal measures should be taken to stop illegal harvesting.
19. Sal forest can be restored through coppice management, assisted natural regeneration, regeneration of sal associates in social forestry area and completely denuded areas.
20. In encroached forest land participatory forestry such as farm forestry, agroforestry and agro-aqua-silvicultural system may be introduced.
21. Surveillance in sal forests should be increased.
22. For restoration of indigenous species, plantation budget should be higher than the fast-growing species as there is less survival percentage which require repeated plantation.

23. Local elites and local administration must be involved in forest management.
24. There is strong need for mass awareness among all stakeholders.

List of the Participants

1. Zakir Hussain, Team Leader, SUFAL	37. M. Bahadur Miah, BAU
2. Mozharul Islam, SUFAL Team	38. Dr. Md. Habibur Rahman, BAU
3. Prof. Mustafizur Rahman, PCRf	39. Dr. MA Rahim, BAU
4. Faruid Uddin Ahmed, Executive Director, Aranyak Foundation	40. AKM Hassan Sazed, Director Programme, Proshika
5. Dr. Paresh Kumar, SSO, BAURES	41. Md. Abdul Kuddus, Sr. Prog. Officer, Aranyak
6. Dr. Md. Harunnur Rashid, PSO, SRDI	42. Md. Saidur Rashid, DFO, Mymensingh
7. Md. Rakibul Hassan Mukul, CF, BFD	43. SM Habibullah, Range Officer, BFD
8. Md. Zillur Rahman, DCF, BFD	44. Md. Abdullah Al Mamun, Forest Ranger, BFD
9. Md. Shahab Uddin, ACF, BFD	45. Md. Masud Rana, UP Chaiman
10. Enamul Haque, ACF, Dhaka Forest Division	46. Md. Arshadul alam, Forrester. BFD
11. Md. Mozammel Hossain, Range Officer, BFD	47. Md. Dulal Mia, BFD
12. Md. Ashraful Alam, Forrester, BFD	48. Md. Abul Kalam Azad, BFD
13. Monirul Islam, Forrester, BFD	49. Tonjina Alam, RM-ICB, SDF
14. Din Muhammad, BFD	50. Harunur Rashid, Programme Manager (Livelihood), SDF
15. Md. Shamsul Haque, BFD	51. Rozina, Community Leader, SDF
16. Hossain Muhammad Nishad, DFO, BFD	52. Hafiza, Community Leader, SDF
17. Md. Sazzaduzzaman, ACF, Tangail	53. Hasina, Community Leader, SDF
18. MA Hassan, ACF, Tangail	54. Lucky, Community Leader, SDF
19. Abu Yusuf, ACF, Tangail	55. Md. Tabibur Rahman, ACF, Mymensingh
20. Md. Rezaul Matin, Range Officer, BFD	56. Md. Feroz Ali, Range Officer, BFD
21. Swapna Chisim, CNRS	57. Dr. Kazi Shahnara Ahmed, BAU
22. Mollika Ritchill, Dokhola CMC Members	58. Dr. Md. Abdur Rahman Sarkar, BAU
23. Jostina Nokrek, Do	59. Dr. MA Salam, BAU
24. Ayaj A. Mri, Chairman, GMAVC	60. Dr. Prantosh Chandra Roy, ACF, BFD
25. Eugene Nokrek, Chairman, JAUP	61. Md. Ashraful Alam Khan, Forrester, BFD
26. Sheshon Mrony, Chairman, JAUP-CMC	62. Md. Abdur Razzak, CMC Member
27. Mrinal Hasan, AD, DoF, Mymensingh	63. Dr. FM Jamil Uddin, BAU
28. Dr. MA Hashem, Professor, BAU	64. Dr. GM Mujibar Rahman, BAU
29. Dr. MD. Shawkat Ali, Professor, BAU	65. MD. Abdul Wadud, BAU
30. Md. Yeakub Ali, President, Dhakhola CMC	66. Dr. MA Farukh, BAU
31. William Dazel, Chaiman, TWA, Madhupur, Tangail	67. Md. Abul Hashem Bhuiyan, Ex-UNDP
32. Md. Abdur Rahim, Programme Manager, POPE	68. Forkia, Dharakandi, SDF
33. Md. Nazrul Islam, Member, Proshika, Sakhipur	69. Anwar Hassan, P Hd. Student
34. Md. Tofazzal Hossain, Member, Do	70. Dr. Md. Rezaul Kaim, BAU
35. Md. Khosru Alam, Forest Ranger, BFD	71. AKG Mostafa, BFD
36. Mahbuba Siddiq, Professor, BAU	72. Farhana Khan Pushpa, Aranyak Foundation
	73. Abu Hena Mostafa Kamal, PC, Aranyak Foundation

5. Location: Rangamati

Venue: Parjatan Conference Hall

Date: April 4, 2018

Discussion points

The consultation workshop was organized on 4 April 2018 in Parjatan motel conference hall. It included participants from Rangamati and Khagrachari hill district involving a broad range of stakeholders: BFD,

government line agencies, CHT Regional council, Rangamati and Khagrachari Hill District Councils, ethnic communities and their traditional leaders (headmen and karbari), NGOs, civil society, media and academic institutions. The representative of the CHT Regional Council made a written statement on BFD and its activities in the region with suggestions. The recommendations from the consultation workshop is given below:

1. BFD should concentrate on reserve forests, preferably in forest land, reserved before 1960. Chittagong Hill Tracts Regional Council shall extend all possible help to execute the field level program.
2. Settlements within reserve forests should not be evicted. Rather the inhabitants within reserve forests should be made beneficiaries of the project so that effective collaborative mechanism is established.
3. Activities outside reserve forests will be administered by the CHT Regional Council. If any assistance is needed for restoration and conservation of such forests, the CHT Regional Council shall support from BFD and other relevant organizations.
4. BFD should work as service providers in CHT for promotion of restoration and conservation of forests, like Department of Agricultural Extension, Department of Fisheries or Department of Livestock.
5. Conservation of natural forests should be given priority over establishment of plantation with limited number of species. Areas which are highly degraded may be brought under assisted natural regeneration (ANR) involving the communities. However, in case of assisted natural regeneration, only indigenous species should be used.
6. Livelihood of forest dependent people must be improved to reduce pressure on forests. To reduce pressure on land, alternative livelihood including support for marketing of produce must be included in any new interventions under the project. In other words, the interventions must include value chain approach so that the development become market driven.
7. Social forestry is highly discouraged in CHT as the area become devoid of trees after tree harvesting. Moreover, only limited number of people derive benefit of social forestry while majority of the people do not get any benefit. Social forestry does not support wildlife and production of non-timber forest products. Local communities prefer to have ecosystem services such as water from the forests, non-timber forest products and habitat of wildlife.
8. All VCFs in CHT should be identified and delineated. An assessment of socio-economic condition of communities and biodiversity of VCF must be made. The VCF should not be leased out by the district administration in future.
9. Capacity of VCF management committee should be improved.
10. For livelihood improvement, agroforestry system should be considered. It means that during establishment of plantation, along with timber trees, fruit trees, medicinal plants and other non-timber species including bamboo should be planted.
11. No exotic trees should be planted in CHT.
12. Local institutions and traditional leaders such as Headman and Karbari should be involved in any development activities.
13. The project must include a mass awareness program for conservation of forests in CHT.
14. Some facilities for storage of perishable products, such as fruits and vegetables, may be considered.
15. In each village of CHT, there must have a provision of keeping at least 100 acres of land as VCF to conserve flora and fauna of the area.
16. For livelihood support, experience of CRPARP must be used. Selection of participants, organizing them in groups and federating them at union level to provide institutional capacity building support was very effective in CRPARP. It is important to select right organization for sustainability of the program. Idea of including Palli Sanchay Bank was appreciated but the participants suggested that the role of PSB may be limited to microfinance only while capacity building may be done by NGOs. They also proposed the name of BRAC for diversified development activities in the country and abroad.
17. Forest productivity is unacceptably low in Bangladesh. Participants recommended for use of genetically improved seed/planting materials to ensure production of wood at least 10-20 m³/ha/yr. Present yield is only 2.0-2.5 m³/ha/yr. The participants recommended use of seeds produced by Seed Orchards of BFRI. However, it is also recognized that the capacity of BFRI in quality seed production is limited. They recommended that BFRI should be strengthened to produce large quantity of quality seeds not only for BFD but for the private nurseries of the country.
18. Research must be strengthened to achieve improve forest management and higher yield. There is need for manpower and developing skill. Emphasis should be given to establishing GIS/RS based monitoring

cell, genetic engineering lab, quality seed production by BFRI, strengthen linkage between education and research. 19. Environmental issues such as site-specific species selection, impact of species on underground vegetation, soil-plant relation, ecosystem services, biodiversity and forest health. 20. Social forestry approach should be revisited. Clear felling after 10-12 years must be avoided. Some alternative mechanism must be developed to distribute benefit to the social forestry participants. 21. All vacant positions in BFD and BFRI should be filled up before undertaking SUFAL project. 22. Assisted/aided natural regeneration (ANR) should be preferred over mono-plantations of exotics since the process eroded the Forest Genetic Resources from the forest significantly.	
List of the Participants	
1. Dr. Zakir Hussain, TL, SUFAL 2. Ishtiaq U Ahmed, CCF (Rtd) 3. Rakibul Hassan, CF, BFD 4. Md. Sanaullah Patwary, CF, Rangamati 5. Dr. Mohammed Mostafa Feroz, Professor, Jahangir Nagar University 6. Dr. Mohammad Kamal Hussain, Chittagong University 7. Hafizul Islam Chowdhury, DFO-USF, BFD 8. Md. Saiful Islam, ACF, USF Plantation 9. Dr. Munshi Rashid Ahmed, CSO, BARI-Khagrachari 10. Mollah Mohammad Mizanur Rahman, DFO, Jhum Control Division 11. Subarna Chakma, Executive Officer, CHTRC 12. Helen Lushai, Headmen Representative, Rui Lui, Sazek 13. Anitya Tripura, Asst. Karbari 14. Kirtimoy Chakma, Headman, Bhuachari Mouza 15. Binoy Bahu Chakma, President, Kamalchari Palli Kalyan Samity 16. Anupam Chakma, Secretary, Do 17. Ch. H. Changa, Headman, Konglak, Sazek 18. Babu Tripura, Karbari, Konglak para, Sazek 19. Suchorita Chakma, Executive Director, Progressive 20. Amal Kanti Chakma, Headman, Uluchari Mouza 21. Samrat Sur Chakma, Headman 22. Md. Tofiqul Islam, DFO, BFD 23. Md. Zuhurul Islam, Forest Ranger, BFD 24. Md. Fazlur Rahman Miah, Forrest Ranger, BFD 25. Md. Majedul Alam, Forrest Ranger, BFD 26. Naba Dwip Chandra Dewan, President, Rangamati District Committee VCF 27. R. Dolian Pankhua, Asst. General Secretary, Do 28. Moniruzzaman Miah, ED, Ananda 29. Shuva Siddhi Chakma, Headman 30. Bokul Bikash Chakma, Headman 31. Mantosh Kumar Das, Coordinator, Proshika 32. Goutam Kumar Chakma, Member, CHTRC 33. Monisha Chakma, Karbari, Barkal 34. Ronti Chakma, Karbari, Rangamati Sadar 35. Pradip Chakma, Karbari, Barkal Kukichara 36. Dayal Chandra Chakma, Karbari 37. Muhommod Golam Kibria, Forrest Range Officer, BFD	50. Buddha Rakkhit, Badal Chari Vihara 51. Chandra Sen Chakma, Freelance Photographer 52. Chanchu Moni Chakma, Chairman, Khagrachari Sadar Upazilla 53. Md. Maksud Alam, Deputy Conservator of Forrest, Rangamati, BFD 54. Md. Shafiqul Islam, DFO, CHT – North Division 55. Md. Shofiqul Islam, DFO, BFD 56. Mohammad Mizanur Rahman, DFO – Khagrachari 57. Thoi Aung Marma, President, CHT VCF Network 58. Kanak Barua, Forrester, Pulpwood Plantation Division 59. Jeevan Roaza, Executive Engineer, K-HDC 60. Md. Kamal Uddin, The Daily Purbodesh 61. Shanti Bijoy Chakma, Headman 62. Jyoti Bikash Chakma, PD, Hill Flower 63. Md. Mostafa Kamal, BTV, Rangamati 64. Md. Munna, BTV – Rangamati 65. Dr. Nilu Kumar Tanchangya, Member, CHTRC 66. Kaingwai Mro, CHTDB 67. Md. Nurzzaman, CHTDB 68. Milan Chakma, Hill Flower 69. Jiten Kumar Barua, BSS, Khagrachari 70. Sabir Kumar Chakma, Member, R-HDC 71. Tridip Kanti, R-HDC 72. Chowdhury Ataur Rahman, Member, Khagrachari Press Club 73. Abu Taher Muhammad, General Secretary, Khagrachari Press Club 74. Oli Ahmed, Journalist 75. Pulak Chakraborty, ATN Bangla, Rangamati 76. U Thing Shing Marma, Chairman Rajasthali Upazilla 77. Bara Rishi Chakma. Chairman, Baghaichari Upazilla 78. Subha Mangal Chakma, Chairman, Bilaichari Upazilla 79. Bijoy Giri Chakma, Chairman, Balukhali UP 80. Md. Shahid Ullah, DGM (Forrest), KPM 81. Dr. MMA Quader, MD, KPML 82. Dr. MD. Abdul Jabber, DD, Horticulture Centre, Rangamati 83. Krishna Prasad Mullick, District Training Officer, DAE

38. AKM Hashem Sazed, Director, Proshika	84. Tapan Bikash Chakma, CHTRC
39. Ushaloy Chakma, Scientific Officer, SRDI, Rangamati	85. Avay Tripura, R-HDC
40. Shyamal Kumar Mitra, Range Officer, BFD	86. Shapan Kumar Chakma, Agriculture Research Centre
41. Sattrong Chakma, Journalist, Daily Samakal	87. Mong Sha Marma, R-HDC
42. Sadhan Bikash Chakma, Prothom Alo	88. Sanu Bai, BFD
43. Dr. Mano Ranjan Dhar, DLO, Rangamati	89. Kya Shing Mong Marma, Rajasthali Upazilla Parishad
44. Sakhawat Hossain Rubel, President, Press Club	90. Muslim Sheikh, BFD
45. Anna Sadhan Chowdhury, Secretary, UKJKS	91. Md. Shakil, DLO
46. Dayal Chandra, Office Secretary, Karbari Society	92. Suman, Driver
47. Biplob Chakma, Executive Director, Taungya	93. Prasenjit Chakma, SID-CHT, UNDP
48. Sushil Prashad Chakma, District Correspondent, Daily Jugantor	94. Abul Hashem, BFD
49. Janalal Chakma, CEO, CIPD Rangamati	95. Abdul Khaleque, BFD
	96. Abdul Sobhan, BFD
	97. Md. Nasir, KPM
	98. Nasir, BFD
	99. Tofael Ahmed, Anando
	100. Sajal Das, DAE
	101. Abu Hena Mostafa Kamal, Aranyak Foundation
	102. Farid Uddin Ahmed, ED, Aranyak Foundation

C. NATIONAL LEVEL CONSULTATIONS

1. Location: Dhaka

Venue: Korobi Conference Hall, BFD

Date: January 10, 2018

Discussion points

A workshop was held to identify livelihood interventions and collaborative forest management approaches for hill forests, plain land sal forests and coastal areas of Bangladesh on 10 January 2018 at the Korobi Conference Hall of Bangladesh Forest Department. The meeting was Chaired by Mr. Jahir Uddin Ahmed, DCCF. Mr. Safiul Alam Chowdhury, CCF was the Chief Guest in the workshop. The workshop was attended by two former CCF, many senior forest officers and representatives from Arannayk and CREL who were involved in livelihood program along with BFD in its earlier projects.

Mr. Abdul Latif Miah in his introductory speech said that SUFOL – an upcoming World Bank funded project is planned for enriching hill forests, plain land sal forests and coastal forests of Bangladesh. It has two major components:

- a. Collaborative Forest Management
- b. Livelihood support to Forest Dependent communities for effective forest management

He said that BFD has been working on community forestry since 1980s. Several projects have been implemented including SRCWP and CRPARP. BFD has also been working on Protected Area Managed since 2000 with support from USAID. In at least two projects namely CRPARP and CREL, livelihood activities were integrated in forest management. The main objective of the workshop is to consolidate the experiences of earlier projects with livelihood development and its sustainability along with development of effective modalities for restoration and conservation of hill forests, sal forests, char land and coastal areas.

He invited Arannayk Foundation to share its experience on livelihood development under CRPARP.

Executive Director of Arannayk Foundation made a presentation on its livelihood development in CRPARP as well as other projects jointly implemented by Arannayk and BFD. The key points of his presentation included:

1. Arannayk Foundation selects forest dependent communities for livelihood support through monitoring of forest resource collection from target areas. It selects only those people who collect forest resources and whose livelihood is dependent on forests by more than 50%. However, in case of CRPARP, it followed a systematic approach approved by the World Bank. In this approach, beneficiaries were selected on the basis of criteria set in social forestry rules. More specifically priority was given to forest dependent poor and extreme poor women headed, disabled households whose income was less than Tk 3000 per month and more than 50% of their income coming from forests. The primary list of beneficiaries was shared with local leaders for validation followed by sharing with BFD at different levels. Based on the feedback, necessary adjustment was made. Finally, the selected beneficiaries were informed and they were asked to nominate one person from each household. Out of 6,000 households as per their nomination, 86% were women. This is because their husbands were out of the area, especially at Dhaka or some major cities to earn cash for their families. This made the women and children more vulnerable to impact of climate change. The AF provided them organizational and technical capacity building support and they were organized in village level groups. They were further federated at Union Level to form union level federation.
2. The AF created initial resources through introducing monthly saving scheme followed by matching grant from the project to establish a revolving loan fund. After capacity building training, they started in small scale but with success, their loan size gradually increased. The loan size at the beginning was Tk 5000 but at the end of project period, the demand increased to 30,000 to 50,000. Even some entrepreneurs were requesting for BDT 100,000 or more.
3. The AF made a baseline survey at the beginning of the project. It also included some non-participants to measure the impact of project on income. It was observed that due to scaling up of different AIGAs, the income

gradually increased. At the end of the project, the income was increased by 51% while their forest dependence was reduced by 57%.

4. Each household was provided with an improved cooking stove. It reduced their fuelwood required by about 45-50%.
5. Each household was provided with seeds and seedlings of different agricultural crops, fruit trees, fuelwood trees, bamboo and cane. They were trained on different production technologies. The trees planted in the homestead created a kind of windbreak to fight against impact of climate change.
6. Poultry, cattle and fish value chain in the area provided benefit to not only beneficiaries but almost all households of the villages.

He further said that the main lessons from CRPARP include:

- a. Participants selection by BFD and AF was different. BFD followed social forestry rules while AF followed World Bank approved guidelines. In future, selection process should be done jointly following a set guideline.
- b. Social and environmental management frameworks are very important while implementing livelihood development program. The guidelines must include impact management system which must be monitored periodically.
- c. Value chain approach on potential commodities provided benefit to entire village population. As it is market driven approach, it helps in sustainability of interventions.
- d. Community patrol groups were most effective in conservation of natural forests and older plantations. The AF formed 21 CPG based on the request of BFD.
- e. With gradual improvement of livelihood, the demand for capital in business increases. To ensure sustainability of project interventions, especially livelihood, it is necessary to establish linkage between CBOs and a financial institution like Palli Sanchay Bank (PSB) so that they get bigger loan from the bank for their business. Thus, if AF is included in SUFAL, it would be appropriate to work closely with PSB so that after phasing out project the CBOs remain active. The AF should work support in participant selection, organizational development, capacity building and creation of revolving loan fund. The PSB should support micro-finance to the CBOs.
- f. The AF registered the CBOs formed through CRPARP in cooperative department. Thus they are under some kind of monitoring while the AF has also brought them under their network through monitor their technical and financial management activities by the monitoring NGOs of AF.

After presentation of Arannayk Foundation, experience of CREL in livelihood was shared by Mr. Abu Mostafa Kamal Uddin.

He said that CREL has also been implementing livelihood program as one of the strategies of forest conservation. They have been supporting forest dependent groups in protected areas to undertake different AIGA. The AIGA ranges from agricultural production to handicrafts making. They formed several CPGs including women CPG. They have been providing cash incentive for forest conservation. They have observed that the main cause of deforestation is fuelwood collection, which is more than 62%. He suggested to include alternative fuelwood source to save forests. He also said that through livelihood support they could increase income of forest dependent people by more than 80%. He concluded that livelihood program is essential for forest conservation.

The third presentation was from Dr. Mihir Kanti Mazumder, Chairman, Palli Sanchay Bank. He said that Palli Sanchay Bank is working following the vision of Hon'ble Prime Minister to make each household a farm. Palli Sanchay Bank works following ecosystem based approach. It provides matching grants to the savings of beneficiaries; for every BDT 200, it provides BDT 200 and then it provides seasonal loan support at 8% rate of interest. He also added that there are several examples of projects where CBOs were working most efficiently as long as there is project. But after phasing out of the projects, the CBOs become inactive. He cited examples CLSP and SEAL project where the beneficiaries were doing excellent during the project period but after the project they are inactive now. He said that Palli Sanchay Bank can support those groups in order to ensure sustainability. He recommended that under livelihood program if Palli Sanchay Bank is involved, it will be able to support in micro-finance which will ensure sustainability and entrepreneurship development while other supports such as participants selection, capacity building and value chain supports may be given by organization like Arannayk.

After three presentations, the floor was opened for discussion. There was in-depth discussion on all three presentations.

First round of discussion was to set livelihood approach or modalities for upcoming SUFOL project. Mr. Jahir Uddin Ahmed invited the participants for open discussion.

Former CCF Mr. Yunus Ali, former CCF Mr. AKM Shamsuddin, former Country Rep of IUCN Mr Istiaq Uddin Ahmad, former CF Mr. Uttam Kumar Saha, Mr. Tarek, former CF, Mr. Amir, CF, Ms Rafiq, Mr. Ashit Ranjan Paul, Mr. Rakibul Hassan Mukul, Mr. Gobinda Roy, Mr. Syed Ali, Ms Marufa, Dr. Jaglul, Dr. Quddus, Mr. Mabud, Ms Neela Datta, Mr. Sunil Kumar Kundu participated in discussion.

The salient features of the discussions are as follows:

1. SUFAL should bank on existing experiences, rather than trying a new approach.
2. The livelihood program should commensurate site and prevailing opportunities.
3. The approach must follow the legal framework of government of Bangladesh.
4. There must have some program to widen understanding of different levels of forest officers on co-management and livelihood support program.
5. Livelihood program must be compatible with sustainable forest management.
6. Some civil society organizations must promote best works of Forest Department to create mass awareness on forest conservation.
7. Livelihood program implementation should be linked with financial institution so that once groups are formed and their capacity for AIGA are developed they can have access to finance. It will lead to sustainability and entrepreneurship development.
8. Creation of revolving loan fund (endowment) within forest dependent CBOs is very effective for their sustainability.
9. Establishment of a cell within BFD for promoting co-management may be considered.
10. Agroforestry, as an effective alternative income generating activity, should be promoted.
11. Value chain approach promotes market driven development. It must be promoted to establish linkage between producers and the market. It also helps distributing benefits to beyond project targeted beneficiaries.
12. Livelihood program must consider fuelwood production and reduced consumption so that it contributes more in forest conservation.

The second round of discussion was held on collaborative forest management approach in hill forests, sal forests, char land and coastal areas. Mr. Jahir Uddin Ahmed invited participants in open discussion.

Former CCF Mr. Yunus Ali, CCF, Mr. AKM Shamsuddin and Mr. Ishtiaq Uddin Ahmad along with other participants participated in discussion. The salient features of the discussions are:

1. Emphasis should be given on conservation rather than plantation.
2. Plantation should be limited to ANR and enrichment plantation.
3. The weightage of forest management and livelihood program should be equal (50:50).
4. Agroforestry should be considered in restoration of degraded hills.
5. Bamboo plantation should be established in sites where appropriate. It gives quick return and protects soil from erosion.
6. In CHT, participatory approach should be adopted. Ethnic communities may be provided with seedlings for planting and incentives may be provided on survived trees.
7. Planting exotic species in hills especially within natural forests must be avoided.
8. No exotic species should be planted in core zone.
9. Forest management should not be project driven. Each forest division must have management plan so that management activities become core program of BFD.
10. Sal coppice has lost its vigor. It is necessary to replace weak coppice with good genetic materials from home and abroad.
11. Core zone and buffer zone must be delineated. Core zone should have protection only. However, in degraded site enrichment plantation may be made. It should not use more than 400 seedlings of indigenous species in core zone.
12. Grazing problem in coastal areas must be addressed. Attempt may be made to produce improved fodder grass in the project site.

13. There must have definite guidelines for raised land in coastal areas.
14. Mound planting in coastal areas needs more cost. During budget, it may be mentioned.
15. Private land owner may be supported for fuelwood plantation.
16. Indigenous species must be conserved.
17. There must have landscape based management of forests to ensure habitat for mega fauna like elephant. The corridors are being lost due to allocation of forest land for non-forestry purposes.
18. Bushes, outside forests should be conserved. Some incentive mechanism may be considered.
19. Agroforestry outside forest land may be considered.
20. Private nursery owners should be brought under SUFAL project.
21. Nurseries of BFD may be used for conserving indigenous species.
22. To reduce impact of thunderstorm, species like palmyra palm should be planted.
23. Memorial plantation may be encouraged in each district.
24. Big trees in the villages should be conserved. Such tree is an independent ecosystem.
25. Medicinal plants should be planted in places, where appropriate.
26. Seed orchards should also be established for quality seed production.

List of the Participants

1. Md. Shahidul Alam Chowdhury, CCF, BFD	27. Mohammad Shakil Azam, PD, BSMS Park, BFD
2. Md. Abdul Latif, DCCF, BFD	28. Md. Abdullah Abraham Hussain, ACF, BFD
3. AKM Shamshuddin, CCF (Retired)	29. Abdul Mannan, Programme Officer, Aranyak Foundation
4. Ishtiaque U. Ahmed, CCF (Retired)	30. Imran Ahmed, ACCF, BFD
5. Junaid K. Ahmed, DCCF (Retired)	31. AHM Kamal, PC, AF
6. Dr. Niaz Khan, Professor, DU	32. Md. Ahsanul Kamal, Consultant, BFD
7. Gobinda Roy, CF, BFD	33. Dr. Md. Zaglul Hossain, CF, BFD
8. Marufa Akhter, CF, BFD	34. Md. Masud Rana, DCF, BFD
9. Rakibul Hasan Mukul, CF, BFD	35. Md. Zaheer Iqbal, DCF, RIMS, BFD
10. Md. Rakibul Haque, Director, ENRAC	36. Dr. Md. Zahidur Rahman Miah, DCF, Legal Unit, BFD
11. Md. Sarowar Alam, DFO, Social Forestry Division, Jessore	37. Md. Syed Ali, ACCF, BFD
12. Md. Ariful Haque Belal, ACCF, BFD	38. Abdul Mabud, DCCF (PRL)
13. Dr. Mohammad Zahirul Haque, ACCF, BFD	39. Ziaul Huq Chowdhury, Principal Architech, BFD
14. Md. Amir Hossain Chowdhury, CF, Khulna	40. Md. Sayedul Islam, DFO, Social Forestry Division, BFD
15. Dr. Ruma Hossain, Research Officer, BFD	41. Mohammad Aminul Islam, ACCF, BFD
16. Rafiq Sultana, ACF, BFD	42. Farhana Khan Pushpa, CS Aranyak
17. Nasima Sultana, Research Officer, BFD	43. Ashit Ranjan Paul, CF (Retired)
18. Kazi Tariqur Rahman, ACF, BFD	44. Dr. Sushil Kumar Kundu, CF (Retired)
19. Mahmuda Roksana Sultana, ACF, BFD	45. Md. Sayedur Rahman, MFA, Aranyak Foundation
20. Farid Ahmed, SUFAL Team	46. Farid Uddin Ahmed, Executive Director, Aranyak Foundation
21. Uttam Kumar Saha, CF, BFD	47. Abdul Hoq Chowdhury, MFA, Aranyak Foundation
22. Md. Tariqul Islam, CF, BFD	48. Md. Ali, Aranyak Foundation
23. Abu Mostafa Kamaluddin, DCOP, CREZ Project	49. Md. Shakil Hossain, Aranyak Foundation
24. Md. Mozharul Islam, SUFAL Team	50. Azad Chowdhury, Aranyak Foundation
25. Dr. Zakir Hossain, Team Leader, SUFAL Team	51. Abidur Rahman, Aranyak Foundation
26. Neela Dutta, CF, BFD	52. Mohd. Abdul Quddus, SPO, Aranyak Foundation

Agenda of the consultations

**Stakeholders consultation
Sustainable Forests and Livelihood Project
Bangladesh Forest Research Institute
Solasahar, Chittagong
07 March, 2018**

Facilitator: Professor M. Kamal Hossain

Session 1

0930-1000 hrs	Registration
1000-1010 hrs	Address of welcome. Dr. Khurshid Akhter, Director, Bangladesh Forest Research Institute
1010-1030 hrs	Introduction to the SUFAL Project. Dr. M. Zakir Hussain, Team Leader, SUFAL Project
1030-1045 hrs	Questions and clarification
1045-1100 hrs	Tea break

Session 2

1100-1120 hrs	Presentations on Institutional arrangements for collaborative management of forests, Mr. Mozharul islam, Senior Consultant, SUFAL
1120-1140 hrs	Presentation on relevant social issues Mr Zainul Abedin, Consultant ENREC
1140-1200 hrs	Presentation on relevant environmental issues. Professor M. Danesh Miah, IFESCU
1200-1230 hrs	Discussion and clarifications
1230-1330 hrs	Lunch and prayer break

Session 3:

1330-1500 hrs: Groups Discussions

Group 1	Institutional Issues for collaborative management
Group 2	Social Issues including livelihood issues
Group 3	Environmental Issues

Group 4	Forestry Issues
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Session 4

1500-1540 hrs	Group reports
1540-1555 hrs	Remarks from the facilitator Professor M. Kamal Hossain
1555-1600 hrs	Concluding remarks by. Dr. Zaglul Hossain, Conservator of Forests, Chittagong Circle

Stakeholders consultation
Sustainable Forests and Livelihood Project
BANDARBAN ROYAL HOTEL
08 March, 2018

Facilitator: Professor M. Kamal Hossain

Session 1

0930-1000 hrs	Registration
1000-1010 hrs	Address of welcome. Mr. Shaw Hla Prue Jemi, Representative of Raja, Social Worker, Bandarban
1010-1030 hrs	Introduction to the SUFAL Project. Dr. M. Zakir Hussain, Team Leader, SUFAL Project
1030-11:00 hrs	Presentations on Institutional arrangements for collaborative management of forests, Mr. Mozharul islam, Senior Consultant, SUFAL
1100-1120 hrs	Tea break

Session 2

1120-1200 hrs	Presentation on relevant social and environmental issues by Farid Uddin Ahmed, Executive Director, Arannayk Foundation
1200-1300 hrs	Groups Discussions

Group 1	Institutional Issues for collaborative management
Group 2	Social Issues including livelihood issues
Group 3	Environmental Issues
Group 4	Forestry Issues

Presentation of the groups

1300-1400 hrs	Presentation of the groups
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1400-1500: Lunch

Stakeholders consultation
Sustainable Forests and Livelihood Project
Hotel Grand Park, Barisal
21 March, 2018

Session 1

0930-1000 hrs	Registration
1000-1010 hrs	Address of welcome. Mr. Gobindra Roy, Conservator of Forest , Coastal Circle, Barisal
1010-1030hrs	Introduction to the SUFAL Project. Dr. M. Zakir Hussain, Team Leader, SUFAL Project
1030-11:00hrs	Presentations on Institutional arrangements for collaborative management of forests, Mr. Mozharul Islam, Senior Consultant, SUFAL
1100-1130 hrs	Tea break

Session 2

1130-1200 hrs	Presentation on livelihood and forest conservation including social and environmental issues by Farid Uddin Ahmed, Executive Director, Arannayk Foundation
1200-1330 hrs	Groups Works
1330-1430 hrs	Lunch and prayer break

Group presentation: 1430-1630 hrs

Group 1: Protected Area management

Group 2: Char land afforestation and management

Group 3: Social Forestry

Group 4: Village forest improvement

Stakeholders consultation
Sustainable Forests and Livelihood Project
Syed Nazrul Islam Conference Hall, Mymensingh
28 March, 2018

Facilitator: Farid Uddin Ahmed

Session 1

0930-1000 hrs	Registration
1000-1015hrs	Address of welcome. Mr. Zahir Uddin Ahmed, Deputy Chief Conservator of Forests and Project Director, SUFAL Project, Bangladesh Forest Department, Dhaka
1015-1030hrs	Briefing on the proposed SUFAL Project. Dr. M. Zakir Hussain, Team Leader, Bangladesh Forest Department, Dhaka
1030-1045 hrs	Presentations on Institutional arrangements for collaborative management of forests, Mr. Mozaharul Islam, Senior Consultant, SUFAL Project,. Bangladesh Forest Department, Dhaka
1045-1100hrs	Tea break

Session 2

1100-1115hrs	Presentation on livelihood and forest conservation including social and environmental issues by Farid Uddin Ahmed, Executive Director, Arannayk Foundation , Dhaka
1115-1130hrs	Brief presentation on potential of fruit trees in livelihood improvement and forest conservation - Prof. Mohammad Rahim, BAU, Mymensingh
1130-1145hrs	Brief presentation on trees of Sal Forests at BAU campus - Prof. Mustafizur Rahman, BAU, Mymensingh
1145-1200 hrs	Open discussion

Session 3

1200-1330 hrs	Group Exercise
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The participants will be grouped into the following:

1. Forest Dependent People: People living in and around sal forests whose livelihood is dependent on sal forests (partial or full dependence on Sal Forest) . Do they feel that

poverty has any linkage with deforestation (What are the direct drivers of deforestation)? If yes, what actions would help in improving their livelihood (How these drivers can be addressed?) and if their livelihood is improved/supported, how would they contribute in sal forest restoration and conservation? How they want to be involved in collaborative forest management (structure, incentives and functions).

2. Professionals from BAU: How they perceive sustainable forest management? Do you think that poverty has linkage with forest conservation (what are the drivers of deforestation)? What actions and interventions should improve forest management and ensure sustainable forest management? How BAU would be able to contribute in livelihood improvement of forest dependent communities? How they want to be involved in sal forest management (What are their stake in Sal Forest management).
3. Professionals from BFD: What problem they face in conservation and management and how they want (what interventions are needed) to ensure sustainable Sal forest management?
4. NGOs and civil society organizations: What are their stake and How they can contribute in restoration and sustainable forest management of sal forests?

1330-1430 hrs	Lunch and prayer break
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1430-1530 hrs	Group presentation:
1530-1600 hrs	Open Discussion
1600 hrs	Concluding remarks and vote of thanks. Rakibul Hasan Mukul, Conservator of Forest, Central Circle, Dhaka

Stakeholders consultation
Sustainable Forests and Livelihood Project
Parjatan Conference Hall, Rangamati
04 April 2018

Facilitator: Farid Uddin Ahmed

Session 1: Inaugural Session – Session Chair: Mr. Ishtiaq Uddin Ahmed, Chairman, Arannayk Foundation

0900-1000 hrs	Registration
1000-1010 hrs	Welcome address: Mr Sanaullah Patwary, Conservator of Forest, Rangamati
1010-1030 hrs	Self-introduction
1030-1045 hrs	Introducing SUFAL Project. Dr. M. Zakir Hussain, Team Leader, Bangladesh Forest Department, Dhaka
1045-1100 hrs	Institutional arrangements for collaborative forest management. Mr. Rakibul Hasan Mukul, Conservator, Central Circle, BFD.
1100-1115 hrs	Experience of UNDP in forests and biodiversity conservation in Chittagong Hill Tracts, Mr. Prashenjit Kabil Chakma.
1115-1130 hrs	Speech by the Chief Guest: Barrister Raja Devasish Roy, Chakma Raja, Rangamati
1130-1145 hrs	Speech of the Chair
1145-1200 hrs	Tea Break

Session 2: Technical Session

1200-1220hrs	Floral diversity of CHT- Past and Present: Prof. Mohammad Kamal Hossain, Institute of Forestry and Environmental Sciences, Chittagong University
1220-1240hrs	Faunal Diversity of Village Common Forests, Prof M. Mostafa Feeroz, Jahangirnagar University
1240-1400 hrs	Group Exercise
Group 1	Reserve Forests
Group 2	VCF
Group 3	USF
Group 4	Institutional arrangements for collaborative forest management – BFD and other stakeholders
1400-1500 hrs	Lunch and prayer break

Session 3: Input from participants

1500-1530 hrs	Presentation of groups
1530-1600 hrs	Open discussion
1600 hrs	Closing

ক্রমিক নং	নাম	পদবী, অর্জন	মোবাইল নম্বর	স্বাক্ষর
১১.	জনাব মোঃ ইলিয়াছ	সদস্য সি.পি.জি	০১৪৫৬৭০২৫৩২	মোঃ ইলিয়াছ
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১৪.	জনাব হীড়া জিয়া	সদস্য সি.পি.জি	০১৪১৫৫৪০২২৪	হীড়া জিয়া
১৫.	জনাব মোঃ মতিয়া ~~হোসেন~~	সদস্য ২নং ইউপি.সি	০১৪১৪২১৩২৬	মতিয়া
১৬.	জনাব মোঃ ~~হাসিনা~~ জামানিয়া	সি.পি.জি	০১৪৩০৪২৪০১২	হাসিনা
১৭.	জনাব মোঃ উল্লাহ	সদস্য সি.জ.সি	০১৪২১৫৩১১৭৪	উল্লাহ
১৮.	জনাব নূরুল আধিনজো	সদস্য সি.পি.জি	০১৪২০৫০৫৩৪৩	নূরুল আধিনজো
১৯.	জনাব সুব্র	উপজাতি	০১৪২৫-২৭৪০৬১	সুব্র
২০.	জনাব মাহা সিং	উপজাতি	*	মাহা সিং

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3. Madhupur, Tangail

স্বাক্ষরিত: ২৭/০৬/১৮ (মহাপুর গ্রাম) (১৫৫৫ ফুট)

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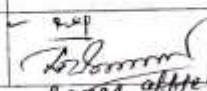
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০৬/	মি: মাহিদা হিম্মত	০১৭৪৬৬৪১১২৭	_____
০৭/	মি: মাহিদা হিম্মত	০১৭৪৬৬৪২৫৩৮	_____
০৮/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
০৯/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১০/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১১/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১২/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৩/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৪/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৫/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৬/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৭/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৮/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
১৯/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____
২০/	মি: মাহিদা হিম্মত	০১৭১৬৬৩৬১৩৬	_____

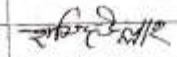
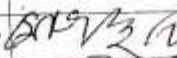
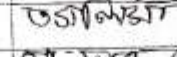
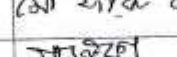
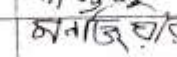
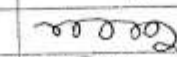
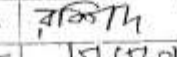
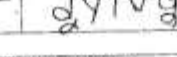
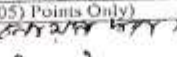
4. FGD: Vamoria Ghona Beat Office, Idgaon, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under The Sustainable Forests and Livelihoods (SUFAL) Project

Date: 08/02/2026

Division	: Cox's Bazar North Div	Area (in ha.) of Interest (Approx.)	: 350.0 ha.
Range	: Idgaon	Upazila	: Ramu e Cox's Sadar
Beat	: Vamoria Ghona	Location/Block	:
Beat/Range Officer's Name	: Md. Abdur Rashid B/O Md. Manharul Islam A/O.	Signature of Beat Officer	: 

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	Md. Hamid Ullah	M	01824727820	
2.	Md. IDDRIS	M	01828417246	
3.	Taslima Akter	F.	01836430905	
4.	MD. Faruk	M	01876257593	
5.	MRS. MALIKA Begum	F	01881034280	
*6.	MD. Azizur Rahman	M	01585851993	
7.	MRS. Mongiaza Begum	F	01845092588	
8.	MD. Somgul Alam	M	01881034265	
9.	MD. Abdur Rashid	M	01884032053	
10.	MRS. Nur Banu	F.	01881034235	

Summary of the Resolution based on Responses of the Local Communities (Main- Five (05) Points Only)

- (১) প্রকল্পের উদ্দেশ্য এবং প্রকল্পের কার্যক্রম সম্পর্কে স্থানীয় জনগণের মধ্যে সচেতনতা বৃদ্ধির জন্য প্রচারণা চালানো হবে।
- প্রকল্পের কার্যক্রম সম্পর্কে স্থানীয় জনগণের মধ্যে সচেতনতা বৃদ্ধির জন্য প্রচারণা চালানো হবে।
- প্রকল্পের কার্যক্রম সম্পর্কে স্থানীয় জনগণের মধ্যে সচেতনতা বৃদ্ধির জন্য প্রচারণা চালানো হবে।
- প্রকল্পের কার্যক্রম সম্পর্কে স্থানীয় জনগণের মধ্যে সচেতনতা বৃদ্ধির জন্য প্রচারণা চালানো হবে।
- প্রকল্পের কার্যক্রম সম্পর্কে স্থানীয় জনগণের মধ্যে সচেতনতা বৃদ্ধির জন্য প্রচারণা চালানো হবে।

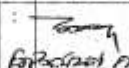
Note: (01) Beat Officer may use more forms when participant number are more; (02) Further information may be written on the opposite site of the page;

Consultation Meeting Agenda: (a) Proposed Plantation/Restoration Types (Area ha.); (b) Community interest on SUFAL; (c) Livelihood Choice; (d) Forestry/Forest Protection with People (New Concept: Example: Collaborative Forest Management)

5. FGD: Kauarghop, Bakkhali Beat Office, Ramu, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under The Sustainable Forests and Livelihoods (SUFAL) Project

Date: ০৫/০৪/২০২২

Division	কক্সবাজার উত্তর সার্কিল	Area (in ha.) of Interest (Approx.)	৫১৫.০০২২
Range	রামুখালী টাঙ্গুর	Upazila	রাঙ্গু
Beat	রামুখালী ডিবিয়ারামালা	Location/Block	২০২২০১০১
Beat Officer's Name	ডায়েরি অফিসার মাহবুব	Signature of Beat Officer	

List of Community Members Who Participated the Local Level Consultation Meeting

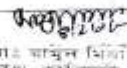
Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	আব্দুল করিম হনু ডাঙ্গুর কাউপার (খামা ডিবিয়ারামালা)		০১৮১৩-২৩৯৩৬৩	আব্দুল করিম
2.	আব্দুল জামান হনু ডাঙ্গুর কাউপার (খামা)		০১৮৬৪-১৭৩৬২৪	আব্দুল জামান
3.	আব্দুল হামিদ হনু ডাঙ্গুর কাউপার (খামা)		০১৮৩১-৪১৪৪৭৭	আব্দুল হামিদ
4.	আব্দুল মাকসুদ হনু ডাঙ্গুর কাউপার (খামা)		০১৮৫৩-৭৪২৪৩০	আব্দুল মাকসুদ
5.	আব্দুল মঈন হনু ডাঙ্গুর কাউপার (খামা)		০১৮৭১-৬৭৪৬১৭	আব্দুল মঈন
6.	আব্দুল হান্নান হনু ডাঙ্গুর কাউপার (খামা)		০১৮৩৩-২৭৭০৪০	আব্দুল হান্নান
7.	আব্দুল বাকির হনু ডাঙ্গুর কাউপার (খামা)		০১৮২৬-১৬৪০৭৭	আব্দুল বাকির
8.	আব্দুল আলম হনু ডাঙ্গুর কাউপার (খামা)		০১৮৫৩-৬৭৬৪৫৭	আব্দুল আলম
9.	আব্দুল মাকসুদ হনু ডাঙ্গুর কাউপার (খামা)		০১৮৩৭-৭১৬৩৬৪	আব্দুল মাকসুদ
10.	আব্দুল হান্নান হনু ডাঙ্গুর কাউপার (খামা)		০১৮৬২-৩১২২৪৪	আব্দুল হান্নান

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)	
→ রামুখালী ডিবিয়ারামালা	০১: মিলিত বসতি স্থান নির্ধারণ
→ রামুখালী ডিবিয়ারামালা	০২: মিলিত বসতি স্থান নির্ধারণ
→ রামুখালী ডিবিয়ারামালা	০৩: মিলিত বসতি স্থান নির্ধারণ
→ রামুখালী ডিবিয়ারামালা	০৪: মিলিত বসতি স্থান নির্ধারণ
→ রামুখালী ডিবিয়ারামালা	০৫: মিলিত বসতি স্থান নির্ধারণ

6. FGD: Meherghona Beat Office, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under The Sustainable Forests and Livelihoods (SUFAL) Project

Date: ০৪/০১/২০১৮

Division	Cox's Bazar North Division	Area (in ha.) of Interest (Approx.)	800.0 Hec
Range	Meherghona	Upazila	Sadar, Cox's Bazar
Beat	Meherghona	Location/Block	
Beat/Range Officer's Name	MD. Mamun Mia R/O Meherghona	Signature of Beat Officer	
	MD. Asrabul Islam, O/o Meherghona		কক্স বাঙ্গালার পিআই ১৯৮১ সালে কাজে নেইরুগুনামা লেখা সংক্রান্ত কোন নথি নেই

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	মুহম্মদ হুদা কাতিয়া	পুরুষ	০১৮৩৪২২৬৭১৫	মুহম্মদ হুদা
2.	জাহাঙ্গীর আলম কাতিয়া	পুরুষ	০১৮৫১০৬৬৫৫২	জাহাঙ্গীর আলম
3.	আবুল হুদা কাতিয়া	পুরুষ	০১৮৭০০৫৫১১১	
4.	আবুল হুদা কাতিয়া, পিআই	পুরুষ	০১৮২০০৭৭২২৬	
5.	আবুল হুদা কাতিয়া	পুরুষ	০১৮৭৬৭৩২৩৭৬	আবুল হুদা
6.	আবুল হুদা কাতিয়া, পিআই	পুরুষ	০১৮৭৫১০৭১৩০	
7.	আবুল হুদা কাতিয়া	পুরুষ	০১৮৭১৬০৭০৭৬	আবুল হুদা
8.	আবুল হুদা কাতিয়া, পিআই	পুরুষ	০১৮১২৩৭০০৬৩	
9.	আবুল হুদা কাতিয়া	পুরুষ	০১৮৫৬০৭৭২৭৭	আবুল হুদা
10.	আবুল হুদা কাতিয়া	পুরুষ	০১৮৬৭১৭৭৭৭৬	

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

- ⇒ যেহেতু এখানে স্থানীয় জনসংখ্যা ১০০০ এর নিম্নে রয়েছে তাই প্রকল্পে স্থানীয় জনসংখ্যা কমানো হবে।
- ⇒ স্থানীয় জনসংখ্যা কমানোর উদ্দেশ্যে প্রকল্পে স্থানীয় জনসংখ্যা কমানোর ব্যবস্থা নেওয়া হবে।
- ⇒ স্থানীয় জনসংখ্যা কমানোর উদ্দেশ্যে প্রকল্পে স্থানীয় জনসংখ্যা কমানোর ব্যবস্থা নেওয়া হবে।
- ⇒ স্থানীয় জনসংখ্যা কমানোর উদ্দেশ্যে প্রকল্পে স্থানীয় জনসংখ্যা কমানোর ব্যবস্থা নেওয়া হবে।

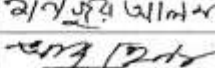
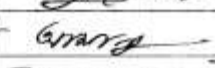
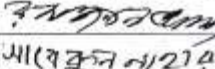
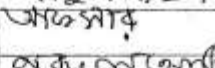
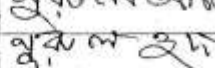
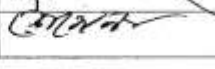
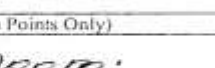
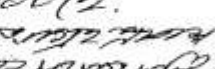
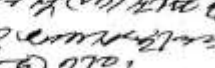
7. FGD: Eidgaon Beat Office, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under
The Sustainable Forests and Livelihoods (SUFAL) Project

Date: 12.11.2018

Division	Coxsbazar North Forest Div	Area (in ha.) of Interest (Approx.)	700. ha
Range	Eidgaon	Upazila	Ramu
Beat	Eidgaon	Location/Block	Eidgaon
Beat/Range Officer's Name	Md. E. Lyes Hossain ANDADUL HAQ R/o km.	Signature of Beat Officer	

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	আবুল কালাম	F	01824626030	
2.	আবুল কালাম	M	01827365068	
3.	আবুল কালাম	M	01846428282	
4.	আবুল কালাম	M	018417264005	
5.	আবুল কালাম	M	01811600070	
6.	আবুল কালাম	F	0184007776	
7.	আবুল কালাম	M	01815060067	
8.	আবুল কালাম	M	01884253840	
9.	আবুল কালাম	M	01830109925	
10.	আবুল কালাম	F	01819829982	

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

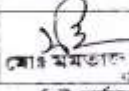
১. প্রকল্পের উদ্দেশ্য ও লক্ষ্য সম্পর্কে স্থানীয় জনগণের মধ্যে সচেতনতা বৃদ্ধির প্রয়োজন। ২. প্রকল্পের বাস্তবায়নে স্থানীয় জনগণের অংশগ্রহণ ও সহযোগিতা প্রদানের প্রয়োজন। ৩. প্রকল্পের বাস্তবায়নে স্থানীয় জনগণের মতামত ও পরামর্শ গ্রহণের প্রয়োজন। ৪. প্রকল্পের বাস্তবায়নে স্থানীয় জনগণের ক্ষমতা বৃদ্ধির প্রয়োজন। ৫. প্রকল্পের বাস্তবায়নে স্থানীয় জনগণের জীবিকা নির্বাহের প্রয়োজন।

Note: (01) Beat Officer may use more forms when participant number are more; (02) Further information may be written on the opposite site of the page;

Consultation Meeting Agenda: (a) Proposed Plantation/Restoration Types (Area ha.); (b) Community interest on SUFAL; (c) Livelihood Choice; (d) Forestry/Forest Protection with People (New Concept: Example: Collaborative Forest Management)

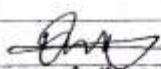
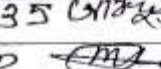
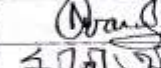
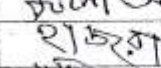
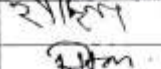
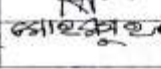
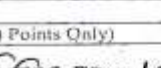
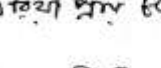
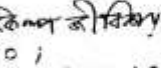
8. FGD: Joriakhola Beat Office, Ramu, Cox's Bazar

**Local Level Community Consultation For Future Plantation/Restoration Under
The Sustainable Forests and Livelihoods (SUFAL) Project**
Date: 10.02.2018.....

Division	Coxbager	Area (in ha.) of Interest (Approx.)	855'0
Range	Joraiakhola	Upazila	Ramu
Beat	Joraiakhola	Location/Block	
Beat Officer's Name	MD. Momtaj Ali MD. ABUL KASSAM	Signature of Beat Officer	

মোঃ মমতাজ আলী
বিট অফিসার

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	আব্দুল হক	Male	01823151951	
2.	আব্দুল হক	Male	01817724835	
3.	আব্দুল হক	Male	01813779822	
4.	আব্দুল হক	Male	01815-070387	
5.	আব্দুল হক	Male	01876 221484	
6.	আব্দুল হক	Female	01860624588	
7.	আব্দুল হক	Female		
8.	আব্দুল হক	Female	01864297002	
9.	আব্দুল হক	Male	01819045664	
10.	আব্দুল হক	Male	01726444167	

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

□ জেলা/বিভাগ ও ক্যান্টনমেন্ট বিধি মামুলি-ক্যান্টন বিধি মামুলি □ পান্ডা ও বন্য প্রাণী ও বন্যজীবন সংরক্ষণ □ অর্থ-সামগ্রিক উন্নয়ন, কর্মসংস্থান, চাকরি, বিদ্যমান বন্যপ্রাণী □ বন্যপ্রাণী ও প্রাণীজীবন উন্নয়ন □ মত-বিনিময় ও আলোচনা-বিশেষ
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Note: (01) Beat Officer may use more forms when participant number are more; (02) Further information may be written on the opposite site of the page;

Consultation Meeting Agenda: (a) Proposed Plantation/Restoration Types (Area ha.); (b) Community interest on SUFAL; (c) Livelihood Choice; (d) Forestry/Forest Protection with People (New Concept: Example: Collaborative Forest Management)

9. FGD: Dighirghona Beat Office, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under The Sustainable Forests and Livelihoods (SUFAL) Project
Date: ২০/০২/২০২১

Division	চন্দ্রাবাড়ী উপর বন বিভাগ	Area (in ha.) of Interest (Approx.)	৩০.০০:
Range	সিওরঘাট	Upazila	সদর
Beat	দিঘীরঘোনা	Location/Block	দিঘীরঘোনা
Beat Officer's Name	আবুল কালাম মল্লিক সি.এম.এ. আঃ জাহাঙ্গীর কামরান R.O সিওরঘাট	Signature of Beat Officer	R.O pmkhal: 

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	আবুল কালাম মল্লিক সি.এম.এ.		০১৮২৬৩০৭৬৩২	
2.	মোঃ দিদারুল আমিন, ব'		০১৮৫৭২১৮২৬১	
3.	নূরুল আমিন, ব'		০১৮৭৭৬৭৭৭৩১	
4.	মোঃ আব্দুল হামিদ, ব'		০১৮৩১৬৪৩৬৮৮	
5.	মোঃ আজহার, ব'		০১৮৪০-৬৭৪১২৭	
6.	মোঃ আব্দুল আজহার, ব'		০১৮১৫-৭৫৭১৩৫	
7.	মোঃ রশিদ আমিন, ব'		০১৮২৪০৮৭৫৩৫	
8.	আব্দুল নূর, ব'		০১৮২৪৭০০৬৭৮	
9.	আব্দুল মঈদ, ব'		০১৮১৭-৬৪০২৪৭	
10.	মোঃ শাহাদাত, ব'		০১৮৭৪৪৩২৪০৫	

- Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)
- উক্ত এলাকায় বনায়ন পরলে প্রকৃতিস্বন্দিত প্রাণীর সংরক্ষণ সহজ হবে।
 - বনায়ন পরে মাছের সংরক্ষণ সহজ হবে।
 - বনায়ন পরে জনস্বাস্থ্যের জন্যে প্রকৃতিস্বন্দিত প্রাণীর সংরক্ষণ সহজ হবে।
 - বনায়ন পরে মাছের সংরক্ষণ সহজ হবে।
 - বনায়ন পরে প্রকৃতিস্বন্দিত প্রাণীর সংরক্ষণ সহজ হবে।

Note: (01) Beat Officer may use more forms when participant number are more; (02) Further information may be written on the opposite site of the page;

Consultation Meeting Agenda: (a) Proposed Plantation/Restoration Types (Area ha.); (b) Community interest on SUFAL; (c) Livelihood Choice; (d) Forestry/Forest Protection with People (New Concept: Example: Collaborative Forest Management)

10. FGD: Kakra Beat Office, Fashiakhali, Chokoria, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under The Sustainable Forests and Livelihoods (SUFAL) Project

Date: 20/2/2020

Division	Cox's Bazar North	Area (in ha.) of Interest (Approx.)	300.0 ha.
Range	Fashiakhali	Upazila	Chokoria
Beat	Kakra	Location/Block	Kakra
Beat Officer's Name	Herman Kabin	Signature of Beat Officer	

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	MASUD REHA	M	01713628982	
2.	SAIFUL ISLAM	M	01878210804	
3.	SHADAT HOSSEN	M	01673969720	
4.	MD. YURUL ABSAR	M	01822335511	
5.	AMISUL ISLAM	M	01843063844	
6.	ABU MASAR	M	01812256384	
7.	MD. FARUK	M	01876246032	
8.	MINHAZ UDDIN	M	01740838777	
9.	MD. ASHEM	M	01855420144	
10.	ROBIUL ADWAL	M	01859232444	

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

- স্থানীয় জনগণের মতামত অনুযায়ী স্থানীয় মানুষের ক্ষতি হওয়া উচিত নয়।
- স্থানীয় জনগণের মতামত অনুযায়ী স্থানীয় মানুষের ক্ষতি হওয়া উচিত নয়।
- স্থানীয় জনগণের মতামত অনুযায়ী স্থানীয় মানুষের ক্ষতি হওয়া উচিত নয়।
- স্থানীয় জনগণের মতামত অনুযায়ী স্থানীয় মানুষের ক্ষতি হওয়া উচিত নয়।
- স্থানীয় জনগণের মতামত অনুযায়ী স্থানীয় মানুষের ক্ষতি হওয়া উচিত নয়।

Note: (01) Beat Officer may use more forms when participant number are more; (02) Further information may be written on the opposite site of the page;

Consultation Meeting Agenda: (a) Proposed Plantation/Restoration Types (Area ha.); (b) Community interest on SUFAL; (c) Livelihood Choice; (d) Forestry/Forest Protection with People (New Concept: Example: Collaborative Forest Management)

12. FGD: Manikpur Beat Office, Chokoria, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under
The Sustainable Forests and Livelihoods (SUFAL) Project

Date: 20/2/2018

Division	Cox's Bazar North	Area (in ha.) of Interest (Approx.)	250 ha.
Range	Fasaitkhali	Upazila	Bhakarua
Beat	Manikpur	Location/Block	Manikpur
Beat Officer's Name	Sultan Mahmud	Signature of Beat Officer	boal

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1	MD. SUTTU MIA	M.	01812-585111	01.502.01
2	MD. MOHIUDDIN	M.	01824-202922	20.20.01
3	MR. DIDER	M.	01823-438519	20.20.01
4	MD. ERFAN	M.	01825-654034	20.20.01
5	ABDUR RAHIM	M.	01815-673650	01.502.01
6	HAFIZ UDDIN	M.	01823-842051	20.20.01
7	NURUL AMIN	M.	01829-396553	20.20.01
8	MD. JAHANGIR ALAM	M.	01823-167055	20.20.01
9	NURUL KADER	M.	01828-642338	20.20.01
10	SORWAR ALAM	M.	01834-295055	20.20.01

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

- ১। প্রকল্পের ক্ষতিগ্রস্ত জনগণের সমস্যা সমাধান করা হবে।
- ২। প্রকল্পের ক্ষতিগ্রস্ত জনগণের সমস্যা সমাধান করা হবে।
- ৩। প্রকল্পের ক্ষতিগ্রস্ত জনগণের সমস্যা সমাধান করা হবে।
- ৪। প্রকল্পের ক্ষতিগ্রস্ত জনগণের সমস্যা সমাধান করা হবে।
- ৫। প্রকল্পের ক্ষতিগ্রস্ত জনগণের সমস্যা সমাধান করা হবে।

Note: (01) Beat Officer may use more forms when participant number are more; (02) Further information may be written on the opposite side of the page;

Consultation Meeting Agenda: (a) Proposed Plantation/Restoration Types (Area ha.); (b) Community interest on SUFAL; (c) Livelihood Choice; (d) Forestry/Forest Protection with People (New Concept: Example: Collaborative Forest Management)

13. FGD: Sudhakhali Beat Office, Chokoria, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under
The Sustainable Forests and Livelihoods (SUFAL) Project

Date: 08/09/2023

Division	: সুনামগঞ্জ জেলা প্রশাসন	Area (in ha.) of Interest (Approx.)	: ১৫০০, ২০০০, ৬০০০
Range	: খুলনা-১ (১৯৮১)	Upazila	: চকরিয়া
Beat	: খুলনা-১ (১৯৮১)	Location/Block	: ৬৬ নং ব্লক
Beat Officer's Name	: সুধাখালি বীট অফিসার	Signature of Beat Officer	: [Signature]

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	আব্দুল হক, বড়োপাড়া	ম	01840568501	[Signature]
2.	আব্দুল হক, বড়োপাড়া	ম	01831739344	[Signature]
3.	আব্দুল হক, বড়োপাড়া	ম	01862569723	[Signature]
4.	আব্দুল হক, বড়োপাড়া	ম	01836234417	[Signature]
5.	আব্দুল হক, বড়োপাড়া	ম	01858166365	[Signature]
6.	আব্দুল হক, বড়োপাড়া	ম	01871758380	[Signature]
7.	আব্দুল হক, বড়োপাড়া	ম	01863615970	[Signature]
8.	আব্দুল হক, বড়োপাড়া	ম	01813219097	[Signature]
9.	আব্দুল হক, বড়োপাড়া	ম	01882368861	[Signature]
10.	আব্দুল হক, বড়োপাড়া	ম	01876708752	[Signature]

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

- আবাদে সহযোগিতা করা হবে।
- আবাদে লাভবান হওয়া হবে।
- আবাদে লাভবান হওয়া হবে।
- আবাদে লাভবান হওয়া হবে।
- আবাদে লাভবান হওয়া হবে।

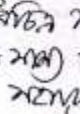
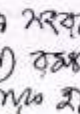
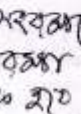
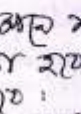
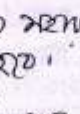
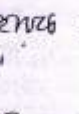
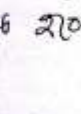
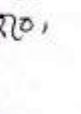
14. FGD: Rajghat Beat Office, Cox's Bazar

**Local Level Community Consultation For Future Plantation/Restoration Under
The Sustainable Forests and Livelihoods (SUFAL) Project**

Date: 08.09.2025

Division	: কক্স বাজার উত্তর বন বিভাগ	Area (in ha.) of Interest (Approx.)	: ৫০.০ (হা)
Range	: ইলদাডি	Upazila	: কক্স বাজার সদর
Beat	: রাজঘাট বন বিট	Location/Block	: জলি বন্যায়ানী (কক্স)
Beat Officer's Name	: নতুন ০৭২ হাজি, খান্দোব	Signature of Beat Officer	: 

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	মো: ফিরোজ আলম, মজিহা মোস্তাফিজা বেগম	m	01818-022577	
2.	মো: হাদি আলম, মজিহা মোস্তাফিজা	m	01875-119622	
3.	আব্দুল হামিদ, মজিহা মোস্তাফিজা	m	01840-328392	
4.	আব্দুল হামিদ, মজিহা মোস্তাফিজা	m	01813-814095	
5.	কাজিম হক, মজিহা মোস্তাফিজা	m	01855-679239	
6.	ফিরোজ আলম, মজিহা মোস্তাফিজা	m	01815-546357	
7.	হাদি আলম, মজিহা মোস্তাফিজা	m	01812-272869	
8.	মুহাম্মদ হাদি আলম, মজিহা মোস্তাফিজা	m	01822-802514	
9.	ফারুক আলম, মজিহা মোস্তাফিজা	m	01820-346799	
10.	ইউসুফ হক, মজিহা মোস্তাফিজা	m	01815-174202	

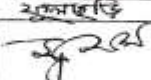
Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

• সড়ক-স্বাস্থ্যসেবা সংশ্লিষ্ট কার্যক্রম বাস্তবায়ন করে এবং মাছ খরিসা সংরক্ষণ করা। • বাস্তুসংস্থান জীববৈচিত্র্য সংরক্ষণে সহায়তা করা। • পরিবেশকে ভালো রাখা করা। • দারিদ্র্য হ্রাসের সহায়তা করা। • জল বাস্তুসংস্থান পরিচালনা করা।

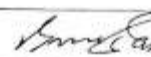
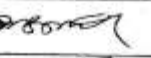
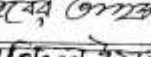
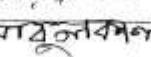
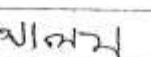
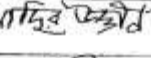
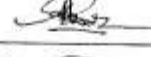
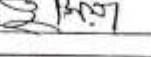
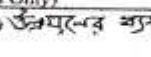
16. FGD: Fulchari Beat Office, Cox's Bazar

Local Level Community Consultation For Future Plantation/Restoration Under
The Sustainable Forests and Livelihoods (SUFAL) Project

Date: ০৫/০৭/২০২০

Division	: কক্সবাজার উত্তর-পূর্ব বিভাগ	Area (in ha.) of Interest (Approx.)	: ০০.০০ [২]
Range	: ফুলচরী	Upazila	: চকরিয়া
Beat	: ফুলচরী	Location/Block	: ফুলচরী
Beat Officer's Name	: মোঃ আমিন হোসেন	Signature of Beat Officer	: 

List of Community Members Who Participated the Local Level Consultation Meeting

Sl. No.	Name and Village/Para Name	M/F	Mobile Number	Signature
1.	মোঃ শাহাদাত হোসেন গ্রাম: পূর্ব নগরপাড়া	M	০১৮১৩০১৩২৭	
2.	মোঃ আবদুল আলী গ্রাম: কুসনগর	M	০১৮২৭-৪০৪৬৩১	
3.	মোঃ ছাদেক আলী গ্রাম: কুসনগর	M	০১৮২৪-৪৫৫০৫২	
4.	মোঃ মুহাম্মদ ইব্রাহিম গ্রাম: দরগাপাড়া	M	০১৮১৪-৩৬৪৫৬২	
5.	মোঃ আবদুল হক গ্রাম: কুসনগর	M	০১৮৩৬-৪৭৬৩৫৩	
6.	মোঃ আবদুল কাদের গ্রাম: পূর্ব পাড়া	M	০১৮৫০-৩১৫৩৩০	
7.	মোঃ আলী গ্রাম: কুসনগর	M	০১৮৫৩-৩৬৩৬৬৬	
8.	মোঃ নাজির হোসেন গ্রাম: দরগাপাড়া	M	০১৮২৩-৪৫৪১০৪	
9.	মোঃ আমদুল মুহাম্মদ গ্রাম: কুসনগর	M	০১৮১৪-১৫৫১২৪	
10.	মোঃ লুৎফু মিঞা গ্রাম: কুসনগর	M	০১৮১৫-৫৪০০৩৩	

Summary of the Resolution based on Responses of the Local Communities (Main Five (05) Points Only)

- উই জব্বানবান, মাফীল বজলবান উই, কুসনগর ও কুসনগর জব্বানবান
- উই জব্বানবান জব্বানবান জব্বানবান জব্বানবান জব্বানবান
- কুসনগর জব্বানবান জব্বানবান জব্বানবান জব্বানবান জব্বানবান
- কুসনগর জব্বানবান জব্বানবান জব্বানবান জব্বানবান জব্বানবান
- কুসনগর জব্বানবান জব্বানবান জব্বানবান জব্বানবান জব্বানবান

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
28.	Dr. Daeey Biswas	Divisional Officer, Bangladesh Forest Research Institute	01711-189819 dbiswas1961@yahoo.com	
29.	Md. Rafiqul Islam	Divisional Officer, FED, BFR	01716-823824 bfr-islam@ctpall.net	
30.	Md. Abul Hossain Shah Jalal	Divisional Officer, FED, BFR	01536-112941 bfrishahjalal@gmail.com	
31.	Dr. Md. Mahkubur Raza	Divisional Officer, SGC, BFR	01711-386639 mahkubur.bfr90@yahoo.com	
32.	Mohammed Shabid Ullah	Divisional Officer, FID, BFR	0191422025 shabid@bfr.gov.bd	
33.	MODULWARA BEAMAN	G.O. Protgasari	01819-326206	
34.	Md. Ali Kabir	DFO, Cox. B (S) FD	0199004000 dfocoxbazar3004@gmail.com	
35.	Hoy Mahabub Morshed	DFO, Cox. Bazar North Forest Division	01711-386639 hmmorshed@gmail.com	
36.	Sha. HLVI	Korant Federation		Sha. HLVI
37.	Mohammad Sahal Rana	ACF, Cox's Bazar South	01766442396, msranabfclsi@gmail.com	
38.	Mohammad Didarul Alam	MAO DAE, Pandlish, Ctg.	01864466777 mmoducdfag@gmail.com	
39.	Mominur Rashid	DFO, Forest Utilization Div.	01711457632 kishorekfb@gmail.com	
40.	Mohammad Hossain Shah Chaudhury	DFO, Chittagong South Forest Division	01716076616/mohammedhsc@yahoo.com	
41.	Md. Humayun Kabir	DFO, Coastal Forest Division, Chittagong	01819-655811, dfocoastalof@gmail.com	
42.	G.M. Mohammad Kabir	DEF, Chittagong Circle, Chittagong	01672-140210 gm.kabir1967@gmail.com	
43.	Mohammad Hossain	A.C.F., Chittagong North and Chittagong South	hossainfd@yahoo.com	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
44.	Md. Maruf Hossain	ACF, Coastal Forest Division, Chittagong	01515450211 maruf.sou@gmail.com	
45.	M. Zahurul Alam	ASS, BFR, Ctg.	01760888582	
46.	Md. Akter Hossain	Research Officer, Bangladesh Forest Research Institute	01719321630	
47.	মোঃ মাহবুব	সহকারী পরিদপ্তর	01829064620	
48.	MD. ABULHASEM	DANTMARA, FATICKHAT	01821783795	
49.	সহকারী পরিদপ্তর	সহকারী পরিদপ্তর	01878208456	
50.	মোঃ আলী	সহকারী পরিদপ্তর	01820112120	
51.	মোঃ জাহান আলী	সহকারী পরিদপ্তর	01821914584	
52.	মোঃ মাহবুব	সহকারী পরিদপ্তর	01828580386	
53.	মোঃ মাহবুব	সহকারী পরিদপ্তর	01867885668	
54.	মোঃ মাহবুব	সহকারী পরিদপ্তর	01850791926	
55.	মোঃ মাহবুব	সহকারী পরিদপ্তর	01824454453	
56.	Arone Karmoker	Fisheries Extension officer, DFO OFFICE, Ctg.	01711966591	
57.	মোঃ মাহবুব	সহকারী পরিদপ্তর	01714778152	
58.	মোঃ মাহবুব	FF-YPSA-FCSP - Ctg.	01818136203	
59.	AHM Kamal	Aranyajk Foundation	01711-194838	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
60.	Farid Uddin Ahmed	Executive Director - Af	01713-040583	
61.	Md. Arifur Rahman	Dark room Assistant	01816-284660	
62.	ডাঃ মোহাম্মদ আলী	জ্যেষ্ঠ গবেষক	01853-08333	
63.	ডাঃ আবদুল হকিম	অধ্যাপক	01817208006	
64.	ডাঃ রশিদুল	সিনিয়র গবেষক	01712050565	
65.				
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73.				

Driver and support staff

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SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
65	মুহাম্মদ আলী হোসেন	ড্রাইভার - বাস	01413-304201	
66	মুহাম্মদ আলী হোসেন	মাইক্রো ইন্টারনাল মাস্টার	01918653919	
67	মুহাম্মদ আলী হোসেন	বাস ড্রাইভার	017226883046	
68	মুহাম্মদ আলী হোসেন	স্বাস্থ্যসেবা উন্নয়ন প্রকল্প	01815176110	
69	মুহাম্মদ আলী হোসেন	C.F. অফিসার	02922 02 00 62	
70	মুহাম্মদ আলী হোসেন	মাইক্রো ইন্টারনাল মাস্টার	01815221302	
71	মুহাম্মদ আলী হোসেন	বাস ড্রাইভার - 2	01819-633356	
72	মুহাম্মদ আলী হোসেন	ড্রাইভার - মাইক্রো ইন্টারনাল মাস্টার	01931 892622	
73	মুহাম্মদ আলী হোসেন	মাইক্রো ইন্টারনাল মাস্টার	01821666165	
74	মুহাম্মদ আলী হোসেন	B.F.R. / মাইক্রো ইন্টারনাল মাস্টার	01922491029	
75	মুহাম্মদ আলী হোসেন	E.F.R. /	01928228000	
76	মুহাম্মদ আলী হোসেন	1	0171062551	
77	মুহাম্মদ আলী হোসেন	B.F.R. / মাইক্রো ইন্টারনাল মাস্টার	018-3034832	
78	মুহাম্মদ আলী হোসেন	মাইক্রো ইন্টারনাল মাস্টার		
79	মুহাম্মদ আলী হোসেন	মাইক্রো ইন্টারনাল মাস্টার		

18. Bandarban consultation

Proposed Sustainable Forest and Livelihoods Planning Workshop

Venue: Hotel Royal, Bandarban
Date: March 8, 2018

Attendance Sheet

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
1.	Md. Anisur Rahman	DLO, DLS, Bandarban	01711573843 anisurrahman48@gmail.com	[Signature]
2.	Zakir Hossain	Team Leader SUFAL PROJECT	01720281234	[Signature]
3.	Kang Thwai Ching Mong	Chairman, Ruma Upazilla	01556742536	[Signature]
4.	Abu Hena Mostafa Karim	Project coordinator - AF	0174-194838	[Signature]
5.	Faridul Alam Suman	Secretary, Press club	01558450715	[Signature]
6.	Md. Zia Uddin	SUFOL, DoF	01720886495	[Signature]
7.	Salim Ullah	PD, TAHZINGDONG	01828869028	[Signature]
8.	Ching Hing Pwe	ED, Tahzindong	01553493248, ching-hing@gmail.com	[Signature]
9.	Monirul Islam	Journalist	01558457611	[Signature]
10.	Pd. [Signature]	Project coordinator, TAHZINGDONG	0178841653	[Signature]
11.	[Signature]	Coordinator, 2 units, [Signature]	01844193277	[Signature]

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SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
12.	মানসুর চক	মানসুর চক	01535088135	মানসুর
13.	মানসুর চক	মানসুর চক		[Signature]
14.	মানসুর চক	মানসুর চক		792 T93
15.	Amirul Karim Mondol	President Dupnol Bhan	01555045915 amirulmondol@yahoo.com	[Signature]
16.	Hla Mong Pwe	Program officer CEDB, Bandarban	01558578755 hla.mong.20@yahoo.com	[Signature]
17.	SUBARANG Tripathy	TOYMU-HRO	01865023167	[Signature]
18.	Manab kalyan Chakma	Project officer, Humaneleban Foundation	01553675298	[Signature]
19.	[Signature]	[Signature]		[Signature]
20.	PRENTAY MRO	Penikhong Bokon Patra.	01559289752	[Signature]
21.	[Signature]	[Signature]		[Signature]
22.	Md. Mahbubul Islam	PSO, Solid Water Conservation on cur tree w ban	01876922222 mahbubulislam@gmail.com	[Signature]
23.	Md. Shahidul Islam	FOREST RANGERS P.P.D. Bandarban	01840-912647	[Signature]
24.	Md. Anwar Hossain Sar Kar	A.C.F. Pulo Uda & plant ation, Division, Bandarban	01711767050	[Signature]
25.	Razi Md. Kamal Hossain	Divisional Forest officer Bandarban, Dh.		[Signature]
26.	Nasib Kumar Panchang	DAD, BADE, B:RAN	01553104500	[Signature]
27.	Md. Omar Faruque	Upazila Agriculture officer on behalf DAE	0181971837	[Signature]

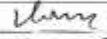
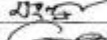
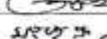
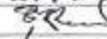
33

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
28.	Saw Hla Hnue	Social Activist	01820400022	[Signature]
29.	Kudaw	Upazilla Chairman	01820468872	[Signature]
30.	Kyau Swe Hnue (K. Hnue)	Rtd School Teacher	01556740248	[Signature]
31.	Plukan Hnue	Chairman Tongkabati	01556649962	[Signature]
32.	Md. Zainal Abadin	Senior Livelihood Specialist ENRAC-SUFAL	01074006348 zainalabadin48@yahoo.com	[Signature]
33.	Shayamal Baboo Chakraborty	Asst Project Director CH-DB Bangladesh	01829699826	[Signature]
34.	Mozaharul Islam	Senior consultant SUFAL Project/BFD	01713 002891	[Signature]
35.	Ting Ting Wza	Councillor, BHDC/B/Om	01556742422	[Signature]
36.	Madhabul Hossain	Advocate, Judge Court Bangladesh	01556743727	[Signature]
37.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	0200606666	[Signature]
38.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	01553645252	[Signature]
39.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	01556571162	[Signature]
40.	Sony Hing Yee	Project - coordinator Amnaya Kall Jan Sanghathan	01872382988	[Signature]
41.	Dr. Mohammad Mohiuddin	CRD (or) BFR, CH	01819361750	[Signature]
42.	Dr. Mohammad Kamel Hossain	Professor, Forestry, Chittagong University	01871-837689	[Signature]
43.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	0186561836	[Signature]

4

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
44.	Mong Nlu Mamma	Headman, 276 No. Tazga Mamma President, VCF Network Co.	0320969520 mongnlu@gmail.com	[Signature]
45.	Biswajit Karmakar	Dr. Biswajit Karmakar	01852172265	[Signature]
46.	Kh. Shamul Huda	Forest Ranger D.F.O. Lama Division	01711-068587	[Signature]
47.	Mondira Sarici	Accounts officer, T2D	01867368322	[Signature]
48.	Swe Ching Mong	O.S.S. MJF, T2D	01552717101	[Signature]
49.	U Chaw Hnue	EC Member, TAILING DONG	01825622088	[Signature]
50.	Kyau Hing Hnue	F.M. T2D	01556749200	[Signature]
51.	Nang Ba Hnue	PF. T2D	01840494638	[Signature]
52.	Meng Hing	PF. T2D	01556539911	[Signature]
53.	Sultan Alimul	PPD	01811003588	[Signature]
54.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	01814539331	[Signature]
55.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	01824827642	[Signature]
56.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	01815953660	[Signature]
57.	Dr. Md. Zahid Hossain	Dr. Md. Zahid Hossain	01681406727	[Signature]
58.	Elen Boam	AP/A.	01556494176	[Signature]
59.	Kay Maching	PP	01827283867	[Signature]

(6)

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
60.	Ula Paul	F.F	0155 69 76939	
61.	Devi Chandra	F.F	01842 537432	
62.	Chandra	F.F	0155 193 6550	
63.	Devi	F.F	02554069203	
64.	U. S. Chandra (U.S.)	CF, Chittagong	01711289529	
65.	Chandra	CF - Driver	01819929318	
66.				
67.				
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19. Barishal Consultation

WB-FD, FIP/IP Stakeholders Consultation Workshop-5

Venue: Hotel Grand Park, Barisal
Date: March 21, 2018

Attendance Sheet

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
1.	Dr. Zahir Hossain	Team Leader SUFAL BFD	0172 028 1234	QH
2.	Imam K. Uyy	Consultant - PAF	0171 12707 34	2
3.	Mozaharul Islam	Sr. Specialist, IS, SUFAL	01713 002891	Islam
4.	Gobinda Roy	CF, Coastal Circle, Barisal	01718688938 gobinda.difo@yahoo.com	Gobinda
5.	Mohammad Aminul Islam	DFO, Coastal Forest Division, Patuakhali	01712503499 aminul.difo@gmail.com	Aminul
6.	Md. Abul Kalam	DFO, Barisal.	01715285208 abul.kalam@gmail.com	Abul
7.	Farid Uddin Ahmed	ED, Aramangk	01713040583	Farid
8.	Hossina Parvin	Project Coordinator, Uthman	01716-328299	Hossina
9.	Abu Hena Mostofa Karim	Project Coordinator	01711-194838	Abu
10.	Md. Nuruzzaman	Joint Registrar Co-op Barisal	01711977547	Nuruzzaman
11.	G.M.M. Kabir Khan	Horticulture Specialist Dept. of Agricultural Extension	01715-762203	G.M.M. Kabir

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
12.	মোহাম্মদ হাফিজ	সহকারী কর্মকর্তা	01744577779	হাফিজ
13.	রফিকুল ইসলাম	সহকারী সিস্টেম এনালিস্ট	01923200392	Arifur Rahman
14.	ফিরোজ রহমান	সহকারী সিস্টেম এনালিস্ট	01751954584	ফিরোজ
15.	হাসান হুসাইন ফারুক	DFO, BHOLA	01761494740	হাসান
16.	ডাঃ আবদুল আজিজ	A.C.F. BHOLA	01711208458	ডাঃ আবদুল আজিজ
17.	কাজী মাহবুবুল হক	R.O. Malchar Range	01707002282	কাজী মাহবুবুল হক
18.	সি.এম. জামাল হোসেন	F.R. Patuakhali	01728-805222	সি.এম. জামাল হোসেন
19.	সি.এম. জামাল হোসেন	F.R. Patuakhali, C.D.	01782531617	সি.এম. জামাল হোসেন
20.	সি.এম. জামাল হোসেন	সহকারী কর্মকর্তা	01724996859	সি.এম. জামাল হোসেন
21.	সি.এম. জামাল হোসেন	F.R. Patuakhali, C.D.	01826121673	সি.এম. জামাল হোসেন
22.	সি.এম. জামাল হোসেন	সহকারী কর্মকর্তা	—	সি.এম. জামাল হোসেন
23.	সি.এম. জামাল হোসেন	L.S.P.	01713959300	সি.এম. জামাল হোসেন
24.	সি.এম. জামাল হোসেন	সহকারী কর্মকর্তা	01777535025	সি.এম. জামাল হোসেন
25.	সি.এম. জামাল হোসেন	সহকারী কর্মকর্তা	01780131058	সি.এম. জামাল হোসেন
26.	সি.এম. জামাল হোসেন	সহকারী কর্মকর্তা	01716-882402	সি.এম. জামাল হোসেন
27.	সি.এম. জামাল হোসেন	সহকারী কর্মকর্তা	01711-482928	সি.এম. জামাল হোসেন

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
28.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01740296883	Mr. Rashed
29.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01713959891	Dr.
30.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01711-018875	Dr.
31.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01716090518	Dr. Rashed
32.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01718525222	Dr. Rashed
33.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01716-022219	Dr. Rashed
34.	শ্রীমান রশিদ হোসেন	সি.এন.ডি.বি	01813055992	Dr. Rashed
35.	শ্রীমান রশিদ হোসেন	PO- AVAS	01719574672	Dr. Rashed
36.	শ্রীমান রশিদ হোসেন	PC- CODEC	01716-148376	Dr. Rashed
37.	Abdus Salam	Manager (AB)		Dr. Rashed
38.	শ্রীমান রশিদ হোসেন	PSO, CRDI, Barisal Region	01752118094	Dr. Rashed
39.	MR. Golam Muddus	Divisional Officer, PTED, BRD	01711-706336	Dr. Rashed
40.	MR. Abdul Quddus	Field Investigator BRD	01712-231367	Dr. Rashed
41.	MR. Saifur Rahman	Regional Manager, SDF, Barisal	0171584789	Dr. Rashed
42.	Kristin Nijal Ph.	District Officer, SDF	01758866976	Dr. Rashed
43.	Mohammad Aminul Islam	DFO, Patuakhali, Coastal Forest Division	01712503494	Dr. Rashed

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
44.	Dr. Md. Afgir Kabir	Chairman, Dept. of Fisheries, PSU	01819684967	Dr. Afgir
45.	Jahin Shams Sarker	POS. Uttaran	01794603351	Jahin
46.	Md. Dulal Hossain		01728843074	Dulal
47.	Md. Abdul Karim	DEF, Coastal Circle, Barisal	01715053422	Dr. Karim
48.	Md. Johirul Haque Mondol	D.D. BRDB, Barisal	01711780212	Dr. Mondol
49.	Md. Asim Khasan	DD DLS, Barisal	01712329102	Dr. Khasan
50.	Khaleda Akter	President, Islami Federation	01749867933	Khaleda
51.	Tasminuddin	SAPPO, DAE	01717152891	Tasmin
52.	Sabiqur Rahman	VNDP.	01767887997	Sabiqur
53.	Mizanur Rahman	SNPP	01724140017	Mizanur
54.	MD. NAJIBUR RAHMAN	FAO Officer	01911079201	MD. NAJIBUR
55.	Saad Hussain	FF - Barisal	01723-567950	Saad
56.	S.M. Hafizur Rahman	FF GD Noakhali	01795758020	S.M. Hafizur
57.	Md. Rakibul Islam	FF Panchgali	01782806205	Md. Rakibul
58.	Md. Mahmudul Haque Khan	Scientist, BARC	01673167908	Md. Mahmudul
59.	Md. Khokon Mia	FFBD Uttaran	01718-783820	Md. Khokon

Staff and Driver

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
80	ফিলিপিন্স আমান, মন	ফ.জ. প্রশাসনিক-কর্তা	০১৭১৫৬৭৮১৬৭	ফিলিপিন্স
৮১	মোঃ মাহমুদ আমান	সহকারী প্রোগ্রামার-কর্তা	০১৭১২২২৬০৭৭	মোঃ মাহমুদ
৮২	M.J. Rafiqul Islam	Retd. Res Officer	০১৭৭৫৪৪৭৭৬৬	M.J. Rafiqul Islam
৮৩	মি. আমানুল হক	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭১৭৬২০৮৭৭	মি. আমানুল হক
৮৪	মোঃ আমান (সহকারী)	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭২০৫৪৪৭১৫	মোঃ আমান
৮৫	মো. বাবুল হক	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭৫২৬২৭০৭৫	মো. বাবুল হক
৮৬	মহম্মদ আলী	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭১০১১২০৮২	মহম্মদ আলী
৮৭	সহকারী প্রোগ্রামার	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭১২৭২১০৭৩	সহকারী প্রোগ্রামার
৮৮	মহম্মদ	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭১৭১০৬২২৫৩	মহম্মদ
৮৯	মোঃ আমানুল হক	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭১৭১৭৬৭১৫	মোঃ আমানুল হক
৯০	মোঃ মোস্তাফিজুর রহমান	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭১৪৭৩৩২৬১	মোঃ মোস্তাফিজুর রহমান
৯১	মহম্মদ নজরুল	সহকারী প্রোগ্রামার - প্রশাসনিক	০১৭২১৭২০৬৪৭	মহম্মদ নজরুল

20. Mymensingh consultation

WB-FD, FIP/IP Stakeholders Consultation Workshop-6

Venue: Syed Nazrul Islam Conference Hall, BAU, Mymensingh

Date: March 28, 2018

Attendance Sheet

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
1.	Zakir Hossain	Team Leader, SUFAL PROJECT, BFD	01720281237	[Signature]
2.	Mozaharul Islam	Sr. Consultant, SUFAL BFD	01713 002891	[Signature]
3.	Faraz Khan	PCRF		[Signature]
4.	Farid U. Ahmed Aram			[Signature]
5.	Dr. Parveen Kumer	SSO, BAURES	017120 52385	[Signature]
6.	Dr. Md. Anwarul	PSO, SRDI	01711133299	[Signature]
7.	Md. Rakibul Hasan Huda	CF, BFD	01711438032	[Signature]
8.	Md. Killa Rahman	DCF, Central Circle BFD	01819596568	[Signature]
9.	Md. Shahabuddin	ACF, Dhaka Division	01711-980804	[Signature]
10.	Enamul Haque	ACF, Dhaka F. Division	01711-052996	[Signature]
11.	Md. Mozammel Hossain	Range Officer, Dhaka Div.	01731-209948	[Signature]

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
12.	Md. Ashrafur Alam	Forester, Dhaka Forest Division	01715-138307	[Signature]
13.	Momtazul Islam	Forester, Dhaka Forest Division	01712-190039	[Signature]
14.	Dr. Muhammad Parich	FC, Dhaka	01716 333095	[Signature]
15.	Md. Samirul Haque	" "	01720 562003	[Signature]
16.	Hossain Mohammad Nishad	DFO, BFD	01715005677 hmrishad@gmail.com	[Signature]
17.	Md. Sajjaduzzaman	ACF, Tangail FD	01720658107	[Signature]
18.	M. A. Hassan	ACF, Tangail F.D.	01711248556	[Signature]
19.	Abu Yusuf	ACF, Tangail F.D.	01713415673	[Signature]
20.	Md. Razul Matin	Range Officer - GUS	01552302411	[Signature]
21.	Swarna Chisim	CNRS-CREL-NRM-FD	01726551088	[Signature]
22.	Molika Rithil	Dokhola CMC member	01736490914	[Signature]
23.	Jastina Noksak	" "	01719312137	[Signature]
24.	Ajijoy M. Maw	Chairman GMAVC	01715404292	[Signature]
25.	Engin Nabr	Chairman, JAVP	01735487320	[Signature]
26.	Shahon M. Maw	Chairman JAVP-CMC	01753-101369	[Signature]
27.	Moinul Hasan	AD, DOP, Mymensingh	0171660890	[Signature]

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
28.	Dr. M. A. Hashem	Professor, Dept. of Agr. Sci. BAU.	01721-310621 hashem.as@bau.edu.bd	ash
29.	Dr. Md. Shaukat Ali	Professor, Dept. of Poultry Science, BAU	01717838105	(Signature)
30.	Md. Rezaul Karim	President, Dhaka C.M.C.	01713-563440	Hi
31.	William Dzah	Chairman, Technical Welfare Association, Madhav Tangu	01240642538	(Signature)
32.	Md. Abdul Razvi	Program Manager, FOP	01936833815	(Signature)
33.	Dr. Md. Rezaul Karim	Program Manager, FOP	01727032611	(Signature)
34.	Dr. Md. Rezaul Karim	Program Manager, FOP	01712628409	(Signature)
35.	Dr. Md. Rezaul Karim	Program Manager, FOP	01711276021	(Signature)
36.	HAHBUBA SIDDIQUH	Dept. of Hort, BAU	0170176541	(Signature)
37.	M. Bahadur Miah	Rel. Path. BAU	01743670278	(Signature)
38.	Dr. Md. Habibur Rahman	Horticulture, BAU	01724735271	(Signature)
39.	Dr. M. A. Rezaul	Horticulture, BAU	01711854471	(Signature)
40.	A.K.M. Hasan Sayed	Director, Program, Maitik	01711822110	(Signature)
41.	Mohd. Abdul Quddus	Senior Program Officer, Aranyaj Foundation	01715023283	m.a. quddus
42.	Md Saadur Rasid	Divisional Forest Officer, Mymensingh	01712544263	saadur
43.	S.M. Habibullah	Range Officer, Mymensingh Range	01716-254679	Sal

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
44.	Md. Abdullah AL. Mamun	Forest Ranger, Forest Dept	01797315831	(Signature)
45.	Md. Masud Rana	Chairman, Farishimul Upazila, Sherpur	01785696564	(Signature)
46.	Md. Ashraful Alam	Forester, Towakocha Beat	01716636844	(Signature)
47.	Md. Dulal Mia	Goyni Beat	01827502813	(Signature)
48.	Md. Masud Rana	"	01715566049	(Signature)
49.	Tanjina Akum	RM-ICB, SDF, Mymensingh Region	01711-156050	(Signature)
50.	Hasnuzzar Reza	Regional Manager - Livelihood SDF, Mymensingh	01712514070	(Signature)
51.	ROZINA	Community leader SDF		(Signature)
52.	Habiza	"		(Signature)
53.	Hasina	"		(Signature)
54.	Lucky	"		(Signature)
55.	Md. Tabibur Rahman	ACF, Mymensingh	01712-66319	(Signature)
56.	Md. Feroz Ali	Range Officer, Rasulpur Range	01823729039	(Signature)
57.	Dr. Kazi Shahamara Akmal	Professor, Dept. of Entomology, BAU	01716626087	(Signature)
58.	Professor Dr. Md. Abbas Rahman	Dept. of Agronomy, BAU, Rajshahi	01716036777	(Signature)
59.	Dr. M. A. Salam	Professor, Dept. of Agriculture, BAU	01711-024408	(Signature)

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
60.	Dr. Prantosh Ch. Roy	Assistant Conservator of Forests, Forest Department	01212224329	
61.	MD. Ashraful Alam Khan	Forester, Forest Management Division	01716-172968	
62.	MD. Abdur Razzak	Participant Member	01736-444600	
63.	Dr. F.M. Jamil Uddin	Assistant Professor, BAU	01724-628365	
64.	Dr. G.M. Mujibur Rahman	Professor, Dept. of Agronomy, BAU	01712614752	
65.	Dr. Md. Abdul Wadud	Prof. Dept. of Agroforestry, BAU	01743-105995	
66.	Dr. M.A. Faruq	Prof. & Head, Environmental Science	01712-106603	
67.	Mr. Abdul Haseem Bhuiyan	Ex-UNDP	01726-952464	
68.	FORUSA	Dharakandi, SDF	01811697783	FORUSA
69.	Anwar Hossain	PhD Student	01714782822	
70.	Prof. Dr. Md. Razul Karim	Professor, Dept. of Horticulture, BAU	01731-486337	
71.	A.R.G. Hossain	Forest Ranger / FD	01712180195	
72.	Farhan Khan Purohita	CS, Arunachal Foundation	01720956529	
73.	Abu Hena Hossain Kaur	PC-AP	01711-194838	
74.	/	/	/	/
75.	/	/	/	/

21. Rangamati consultation

WB-FD, FIP/IP Stakeholders Consultation Workshop-7

Venue: Parjatan Conference Hall, Rangamati

Date: April 04, 2018

Attendance Sheet

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
1.	DR. ZAKIR HUSSAIN	TEAM LEADER SUFAL, DFD	01720281234	[Signature]
2.	Ishtiaq, U. Ahmad	CCF (Rtd)	01712 085944	[Signature]
3.	Rakibul Hasan	CF, BFD	0171438032	[Signature]
4.	Md. Saravullah Patwary	FD, CF, Rangamati Circle	01816301439	[Signature]
5.	Dr. Mohammed Mostafa Peeror	Professor, Jahangirnagar University	01743471731 / feenazmp@gmail.com	[Signature]
6.	Dr. Mohammed Rameel Hossain	Professor, Chittagong University	01819-837689 m.hossain2009@gmail.com	[Signature]
7.	Rafiqul Islam Chowdhury	DFO, USF Plantation Division	01711482898 rafiqe1967@gmail.com	[Signature]
8.	Md. Saiful Islam	A.C.F. U.S.F Plantation Division	01711-325946	[Signature]
9.	Dr. Munshi Rashid Ahmed	CSO, HARS, BARI, Khagrachari	01552346203, 01748717603	[Signature]
10.	Md. Mohammad Muzaffar Rahman	DFO, Shum Control Forest Division, Rangamati	01732685508 mm.mizan6007@yahoo.com	[Signature]
11.	Subarna Chakma	Executive officer, CHTRE	subarnachg@yahoo.com	[Signature]

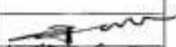
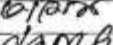
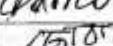
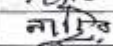
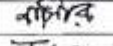
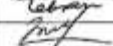
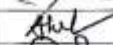
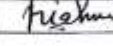
SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
12.	HELEN LUSHAI	HEADMAN REPRESENTATIVE KUNLEH SAJEK	01879101514	[Signature]
13.	মহিউদ্দিন সাজেক	মহিউদ্দিন সাজেক	01875999678	[Signature]
14.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
15.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
16.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
17.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
18.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
19.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
20.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
21.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
22.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
23.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
24.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
25.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
26.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]
27.	মোহাম্মদ আল মামুন	মোহাম্মদ আল মামুন	01556916239	[Signature]

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
28.	সুনির্মল কান্ত	নির্বাহী পরিদর্শক, জাফল	01713118371	
29.	অরুণ কান্ত	উপ-নির্বাহী পরিদর্শক, জাফল	01557004509	
30.	কুমার কান্ত	জাফল জেলা পরিদর্শক, জাফল	01557004509	
31.	জাফল কুমার	কো-অর্ডিনেটর, জাফল	01713141393	
32.	জাফল কুমার	জাফল জেলা পরিদর্শক, জাফল	01556558321	
33.	জাফল কুমার	জাফল জেলা পরিদর্শক, জাফল	01566749112	
34.	জাফল কুমার	জাফল জেলা পরিদর্শক, জাফল	01835312969	
35.	জাফল কুমার	জাফল জেলা পরিদর্শক, জাফল	01898986443	
36.	জাফল কুমার	জাফল জেলা পরিদর্শক, জাফল	01834286462	
37.	MUHAMMAD GOLAH KIBRIA	FOREST RANGE OFFICER, SAPHAR CHT SOUTH FOREST DIVISION, RANGAMATI.	01711-217173, mgkibria@gmail.com	
38.	A.K.M. Hasen Saikat	Director, Freshlink	01711822110	
39.	Ushalay Chakma	Scientific Officer, SRO Rangamati	01710297539	
40.	Sayamul Kumar Hutan	Range Officer, USF Soder Range	01745648863	
41.	Satray Chakma	State Reporter, Samakal	01550608217	
42.	Sadman Raksh Chakma	Pratim, Ato	0155270348	
43.	DR. MANORANTON DHAR	DLO, Rangamati H. D.	01718821119	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
44.	Sakshawat Hossain Rubel	President, Preschool	01826304069 shaukel.elt@gmail.com	
45.	Anna Sadhan Ch.	Secretary, DHSKS	01817765413	
46.	Dayal Chakma	Office Secretary, Kewbary Society	01719334755	
47.	Biplab Chakma	Executive Director, Tongya	01732921151 taungpachit@gmail.com	
48.	Gushil Poudyal Chakma	Dist. Correspondent, The Daily Jugantar	01739352411	
49.	Danail Chakma	CEO, CIPD, Rangamati	01831824967	
50.	Buddha Rakshit	Badal Chari Vilas	01879846785	
51.	Clonda Sam Chakma	Freelance Photographer	01881969271	
52.	Chan chu meri Chakma	Chairman, Upazila Parishad, Kaptai	01553757495	
53.	MD. Mansur Alam	Deputy Conservator of Forests, Rangamati Circle	01715246379	
54.	MD. Shafiqul Islam	DFO, CHT, North Division	01840663365	
55.	Mohammad Mizan	DFO, Kaptai	01917-015948	
56.	Thi Hong Narma	President, CHT, VCF Network	01819616045	
57.	KAWAK BARUA	Forester, Pulpwood plantation Division	01879736252	
58.	JEEBAN ROY	Executive Engr. KHDC	01550605453	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
60.	md. kamal uddin	The Daily Purbodesh	01753679084	
61.	Shanti Begum Chakraborty	(22072). 220. north side	01556701034	
62.	Joti Bikash Chakraborty	P. D. Hill Flower	01558820447	
63.	md. Mostafe Karim	BTV, Rangamati	01550601499	
64.	MD. MURTA	BTV. RST	01820322898	
65.	Dr. Nilo Kr. Tondoy	CHTRC	01819625797	
66.	KAINGWAI MKO	CHTDB, RO	01552709618	
67.	MD. Nurulaman	CHTDB, BAO	01770693266	
68.	Milim Chakraborty	Hill Flower	01556537494	
69.	Jifer Kumar Barua	BSS. Kharachari	01550606002	
70.	Sabir Rahman Chakraborty	Member R.H.D.C	01720693062	
71.	Tridip Khatun	" "	01814200134	
72.	Chowdhury Akbar Chakraborty	Member KFC club	01819425197	
73.	Abu Taher Muhammad	G.S. Press Club, Kc	01550606008	
74.	Ali Ahmed	CHT Rangamati Corv.	01550609314	
75.	Pulak Chakraborty	ATN BANGLA Rangamati	01550609318	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
76.	U Thing Singu	Chairman, UPRA, Panchayat, Rangamati	01562735775	
77.	Shanta	Chairman, Rangamati	01554921807	
78.	Subha Mangal	UPRA Chairman, Rangamati	01550608517	
79.	Binayak Chakraborty	Chairman, Rangamati	01828924620	
80.	Dr. M. M. A. Quader	DGM (Forest), KPM	01818697709	
81.	Dr. M. M. A. Quader	MD, KPML	01827-704850	
82.	Dr. MD. Abdul Jabbar	DD, Horticulture Center, Rangamati	01552431700	
83.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	0182266006	
84.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	0184996525	
85.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	01556702978	
86.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	01556605740	
87.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	01555007093	
88.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	01869807778	
89.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	01882363577	
90.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	015568490688	
91.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	0202882222	
92.	Dr. M. M. A. Quader	DD, Horticulture Center, Rangamati	01838489098	

SL No.	Name	Designation & Organization	Mobile Number	Signature
93.	Paranjit Chakma	National Project Manager.	01713000931	
94.	গোবিন্দ শর্মা	SID, CHT, CHTA, UNDP আবগাইল, বগুড়া জেলা	01557273539	
95.	গোবিন্দ শর্মা	আবগাইল, বগুড়া জেলা		
96.	গোবিন্দ শর্মা	আবগাইল, বগুড়া জেলা	01820327700	
97.	গোবিন্দ শর্মা	আবগাইল, বগুড়া জেলা	01836319943	
98.	গোবিন্দ শর্মা	আবগাইল, বগুড়া জেলা	0183492296	
99.	গোবিন্দ শর্মা	আবগাইল, বগুড়া জেলা	01742433356	
100.	গোবিন্দ শর্মা	আবগাইল, বগুড়া জেলা	01825647616	
101	Abu Hena Mostafizul	PC-AF	01711-194858	
102	Fariduddin Ahmed	ED-AF	01713-040583	

22. Dhaka consultation (January 10, 2018)

Proposed Sustainable Forest and Livelihoods Planning Workshop

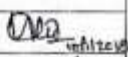
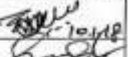
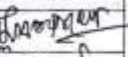
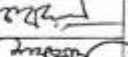
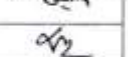
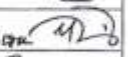
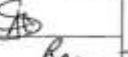
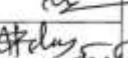
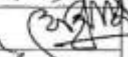
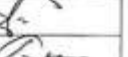
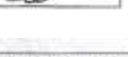
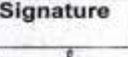
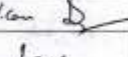
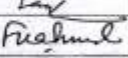
Venue: Korobi Conference Hall at BFD, Agargaon, Dhaka

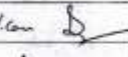
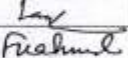
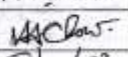
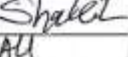
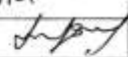
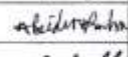
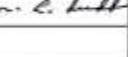
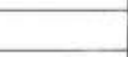
Date: January 10, 2018

Attendance Sheet

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
1.	Mt Shafiqul Alam Chowdhury	CCF		
2.	Mt Abdul Latif	CCF (M.P.)	01732500300	
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4.	Ishtiaq U. Ahmad	CCF (Rtd.)	01712 085944	
5.	Jumaid	CCF Rtd	01711270734	
6.	NIAT KHAN	Senior Asst., DN	0171136462	
7.	Gobinda Roy	CCF, FD	01718688938	
8.	Marufa Aktuen	CCF, FD	01712561317	
9.	Rakibul Hasan Mukul	CCF PTD	01711438032	
10.	Md. Rakibul Haque	Director, ENRAC	01724674813	
11.	Md. Saemur Alam	DDO, Social Forest Division, Faridpur	01723-912217	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
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13.	Dr. Mohammad Zehidul Haque	ACCF (Stn) BFD	01747 767651	
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22.	Md. Tariqul Islam	CCF (PRL)	01715026457	
23.	Abu Mostafa Kamal Uddin	DCOP, CREL Forum	0171580787	
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27.	Mohammad Shaukat Alam	PD- BSHS Park FD	01761494656	

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31.	A.H.N. Kamal	PE- AF	01711-194838	
32.	Md. Akmal Kabir	Consultant - BFD	01912850665 akamal.kabir@gmail.com	
33.	Dr. Md. Zaglul Hossain	BFD, CF, etc circle	01711279519 cfetc@bfd@gmail.com	
34.	Md. Masud Rana	BFD, DCF, (MSE)	01816573740 masudb@yahoo.com	
35.	Md. Zahoor Iqbal	DCF, RIMS, BFD	01711443750 z.iqbal60@gmail.com	
36.	Dr. Md. Zahidur Rahman Miah	DCF, Legal Unit, BFD	01761494692 Zahidur.dfo@gmail.com	
37.	Md. Sayed Ali	ACCF, Establishment Unit, BFD	01999-000002 sayed1515@gmail.com	
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39.	Z/AUL HUR CHOWDHURY	Principal Architect Designer's Guild	01711-592593 designers-guild@yahoo.com	
40.	Md. Sayedul Islam	DFO, Social Forest Div. Magerhat, BFD	01999004200 sayedulislam2004@yahoo.com	
41.	Mohammad Aminul Islam	ACCF (PA), BFD	01999000003 aminulbdf@gmail.com	
42.	Fariha Khan Roshni	CS, Arannayk Foundation	01720956529	
43.	Ashit Ranjan Paul	Conservator of Forest (Rtd)	arannajpaul158@gmail.com 01811213035	

SL No.	Name	Designation & Organization	Mobile number and Email ID	Signature
44.	Dr. Sunil Kumar Kundu	CF (Rtd), BFD	01711-801099, kundu198@gmail.com	
45.	Md. Sayedur Rahman	DCF, Wildlife Circle, Dhaka	01712-29921 sayedurrahman67@gmail.com	
46.	Farid Uddin Ahmed	ED, Arannayk Foundation	01713040583	
47.	Abdul Hov Chowdhury	MFA, Arannayk Foundation	01713040584 abdul@arannayk.org	
48.	Md. Shaker Hossain	Arannayk Foundation	01739-400499	
49.	Md. Akai	Arannayk Foundation	01730780522	
50.	Azad Chowdhury	Arannayk	01713040586	
51.	Abdon Rahman	AF	01730914240	
52.	Mohd. Mdul Qudus	S.D.O., Arannayk Foundation	01715023283	
53.				
54.				
55.				
56.				
57.				
58.				
59.				

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Arannayk Foundation
Dhaka, Bangladesh

1. Photos: Ukhia, Cox's Bazar





1. Photos: Teknaf, Cox's Bazar





2. Photos: Bandarban



3. Barishal consultation photos



4. Chittagong consultation photos



5. Rangamati consultation photos



6. Madhupur consultation photos



ANNEX 9: পরিশিষ্ট সমূহ

A 9.1 পরিশিষ্ট-ক: আইইই(বনসৃজন ও বন পুনঃসৃজন)এর জন্য স্ক্রিনিং ফরম

সাধারণ তথ্য	
স্থান/ইউনিয়ন/উপজেলা/জেলার নাম	
জমির অধিকারী কে?	
বনবিভাগের নাম	
সুনির্দিষ্ট স্থানের সংক্ষিপ্ত বর্ণনা	
প্রস্তাবিত কার্যক্রম কি স্থানীয় লোকজনের সাথে পরামর্শ করে করা হয়েছে?	

স্ক্রিনিং প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা				মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	নাই	
এই প্রকল্প এলাকাটি কি পরিবেশগত কোন সংবেদনশীল এলাকার কাছাকাছি?							
এই প্রকল্পের কোন কার্যাবলী বিরল, শংকিত বা বিপন্ন কোন উদ্ভিদ বা প্রাণীদের আবাসভূমি, তাদের জনসংখ্যা বা চলাচলের কোন বিঘ্ন সৃষ্টি করবে কিনা?							
এই প্রকল্প বাস্তবায়নে কোন জমি অধিগ্রহণের প্রয়োজন পড়বে কিনা এবং এতে কোন অনৈচ্ছিক পুনর্বাসনের প্রয়োজন পড়বে কিনা?							
কৃষি রাসায়নিক, সার কিংবা অন্যান্য বর্জ্য অপসারণে পানির কোন দূষণ ঘটবে কিনা?							
গাছ কাটার ফলে এটি মাটির কোন অনুর্বরতা তৈরী করবে কিনা?							
এই প্রকল্প কি নির্ধারিত এলাকায় গাছ লাগানোর সুযোগ সৃষ্টি করবে, যাতে এলাকায় একটি ঘন উদ্ভিদের আবরণ তৈরী হয়।							

ক্লিনিং প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা				মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	নাই	
এই প্রকল্প কি প্রথাগত উপকারী ব্যবহারে কোন বিঘ্ন সৃষ্টি করবে কিংবা সেকারণে সেখান থেকে গাছ কাটার প্রয়োজন পড়বে কি?							
প্রাকৃতিক ব্যবস্থাকে শংকিত করতে পারে যেমন পানি নিষ্কাশণে বাঁধা বা জলাবদ্ধতা ইত্যাদি এই প্রকল্পের মাধ্যমে সৃষ্টি হতে পারে কিনা?							
এই প্রকল্পের মাধ্যমে মাছের অভিপ্রয়াণ বা নৌচলাচলে বিঘ্ন সৃষ্টি করবে কিনা?							
এই প্রকল্প ভূজলের গুণগত মান, পরিমাণ বা প্রবাহে কোন বিঘ্ন সৃষ্টি করবে কিনা?							
ঐতিহাসিক বা সংস্কৃতিগত কোন গুরুত্বপূর্ণ স্থানের (মসজিদ, কবরস্থান, স্মৃতিস্তম্ভ, ইত্যাদি) কোন ক্ষতি হবে কিনা?							
জনমানুষ বা প্রাণীদের চলাচলে কোন বাঁধা সৃষ্টি হবে কিনা?							
শ্রমিকদের স্বাস্থ্যহানির কোন আশংকা আছে কিনা?							
সম্ভাব্য প্রশমন প্রক্রিয়া (যদি কোন এলাকা ক্ষতিগ্রস্ত হয়)	সম্ভাব্য বিকল্প ব্যবস্থা						

টীকা: সম্পর্কযুক্ত অন্যান্য ক্লিনিং প্রশ্নমালা যোগ করতে পারেন। মন্তব্য কলামে লিখতে পারেন।

সুপারিশ সমূহ:

বিট অফিসার কর্তৃক পূরণযোগ্য: নাম: _____

তারিখ: _____

রেঞ্জ অফিসার কর্তৃক পূরণযোগ্য:

নাম: _____

তারিখ: _____

CMO/SO কর্তৃক পূরণযোগ্য:

নাম: _____

তারিখ: _____

A 9.2 পরিশিষ্ট খ: আইইই(ক্ষুদ্র পরিসরের স্থাপনা)এর জন্য স্ক্রিনিং ফরম।

সাধারণ তথ্য	
স্থান/ইউনিয়ন/উপজেলা/জেলার নাম	
জমির অধিকারী কে?	
বনবিভাগের নাম	
সুনির্দিষ্ট স্থানের সংক্ষিপ্ত বর্ণনা	
প্রস্তাবিত কার্যক্রম কি স্থানীয় লোকজনের সাথে পরামর্শ করে করা হয়েছে?	

স্ক্রিনিং প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা			মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	
স্থাপনাটি পরিবেশগত যেকোন সংবেদনশীল স্থানের কাছাকাছি কিনা?						
এটি কোন কৃষিজমি বা ফসলের কোন ক্ষতি করবে কিনা?						
এতে কোন জমি অধিগ্রহণ বা অনভিপায়িক কোন পুনর্বাসনের প্রয়োজন পড়বে কিনা?						
এতে বৃক্ষ তথা গাছ গাছড়ার কোন ক্ষতিসাধিত হবে কিনা?						
এতে মাছের পরিভ্রমণ বা নৌচলাচলের কোন ক্ষতি হবে কিনা?						
অপর্যাপ্ত পানি নিষ্কাশণ ব্যবস্থা ভূ-পৃষ্ঠ বা ভূ-অভ্যন্তরস্থ পানি ব্যবস্থায় কোন ক্ষতিকারক প্রভাব ফেলবে কিনা?						
নির্মাণ সামগ্রীর পরিবহন ও নির্মাণ-বর্জ্য জনপরিবহনকে ব্যাহত করবে কিনা?						
নির্মাণ সামগ্রী ও অন্যান্য যন্ত্রপাতি পরিবহন শব্দদূষণ ঘটাবে কিনা?						
ঐতিহাসিক বা সংস্কৃতিগত কোন গুরুত্বপূর্ণ স্থানের (মসজিদ, কবরস্থান, স্মৃতিস্তম্ভ, ইত্যাদি) কোন ক্ষতি হবে কিনা?						

ক্রমিক প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা			মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	
জনমানুষ বা প্রাণীদের চলাচলে কোন বাঁধা সৃষ্টি হবে কিনা?						
শ্রমিকদের স্বাস্থ্যহানির কোন আশংকা আছে কিনা?						
সম্ভাব্য প্রশমন প্রক্রিয়া (যদি কোন এলাকা ক্ষতিগ্রস্ত হয়)						সম্ভাব্য বিকল্প ব্যবস্থা

*নিম্নমানের জন্য স্কেল ১-২, মাঝারী ২-৩ এবং উচ্চতম ৫ ব্যবহার করুন।

সুপারিশসমূহ:

বিট অফিসার কর্তৃক পূরণযোগ্য: নাম: _____

তারিখ: _____

রেঞ্জ অফিসার কর্তৃক পূরণযোগ্য: নাম: _____

তারিখ: _____

CMO/SO কর্তৃক পূরণযোগ্য: নাম: _____

তারিখ: _____

পরিবেশগত প্রশমন পরিকল্পনার ছক

উপ- প্রকল্প কার্যাবলী	সম্ভাব্য পরিবেশগত প্রভাব	প্রশমন প্রক্রিয়া	স্থান	আনুমানিক প্রশমন খরচ	দায়িত্ব	
					বাস্তবায়ন	তত্ত্বাবধান
নির্মাণ-পূর্ব কার্যাবলী						
নির্মাণ-পর্বের কার্যাবলী						
নির্মাণ-উত্তর ও রক্ষণাবেক্ষণকার্যাবলী						

পরিবেশগত পর্যবেক্ষণ পরিকল্পনার ছক

প্রশমন পর্যবেক্ষণ							
প্রশমন পরিবেশগত নির্দেশক	ও স্থান	পদ্ধতি	সময়কাল	পরিবেশগত আদর্শ	দায়িত্ব		প্রাক্কলিত খরচ
					বাস্তবায়ন	রিপোর্টিং	
নির্মাণ-পূর্ব পর্যায়							
প্রশমন/নির্দেশক							
প্রশমন/নির্দেশক							
নির্মাণ পর্যায়							
প্রশমন/নির্দেশক							
প্রশমন/নির্দেশক							
নির্মাণ-উত্তর ও রক্ষণাবেক্ষণ পর্যায়							
প্রশমন/নির্দেশক							
প্রশমন/নির্দেশক							

A 9.3 পরিশিষ্ট গ: আইইই (জীবিকা) এর জন্য স্ক্রিনিং ফরম

সম্প্রদায়ের দাম:

জেলা: উপজেলা:

ইউনিয়ন: গ্রাম:

উপ-প্রকল্পের ধরন:

প্রস্তাবিত মধ্যস্থতায় অধিকতর গুরুত্বপূর্ণ কার্যাবলী:

.....

.....

.....

স্ক্রিনিং প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা			মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	
ক. উপ-প্রকল্প উপ-প্রকল্পটি পরিবেশগত কোন সংবেদনশীল স্থানের কাছাকাছি কিনা?						
☐ সংরক্ষিত এলাকা	☐	☐	☐	☐	☐	
☐ জলাভূমি	☐	☐	☐	☐	☐	
খ. সম্ভাব্য পরিবেশগত প্রভাব উপ-প্রকল্পটি ঘটাবে.....						
☐ উপরের স্তরের ক্ষয়?	☐	☐	☐	☐	☐	
☐ কৃষিজমির ক্ষয়?	☐	☐	☐	☐	☐	
☐ বিরল, শংকিত বা বিপন্ন কোন উদ্ভিদ বা প্রাণীদের আবাসভূমি, তাদের জনসংখ্যা বা চলাচলের উপড়?	☐	☐	☐	☐	☐	
☐☐☐ জলাভূমির উপড় কোন ক্ষতিকর প্রভাব?	☐	☐	☐	☐	☐	
☐ স্থানীয়ভাবে গুরুত্বপূর্ণ কোন বাস্তুসংস্থান বা গাছ-গাছড়ার উপড় কোন ক্ষতিকর প্রভাব?	☐	☐	☐	☐	☐	

ক্রিনিং প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা			মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	
১ বৃক্ষ বা অন্যান্য গাছ-গাছড়ার ধ্বংস?	☐	☐	☐	☐	☐	
২ মাছের পরিভ্রমণ বা নৌচলাচলের উপড় কোন প্রভাব?	☐	☐	☐	☐	☐	
৩ প্রকল্প এলাকায় কোন নদী ও জলাভূমির সংযোগের ক্ষতি?	☐	☐	☐	☐	☐	
৪ জলাবদ্ধতা?	☐	☐	☐	☐	☐	
৫ অপরিষ্কার পানিনিষ্কাশনের ব্যবস্থা যা কিনা লবণাক্ততা বাড়াবে?	☐	☐	☐	☐	☐	
৬ ভূপৃষ্ঠের পানির গুণগত মান, পরিমাণ ও প্রবাহে কোন বাঁধা?	☐	☐	☐	☐	☐	
৭ ভূজলের গুণগত মান, পরিমাণ বা প্রবাহে কোন বিঘ্ন সৃষ্টি?	☐	☐	☐	☐	☐	
৮ মাটির ক্ষয় বা অধঃক্ষেপনে ভূমিকা?	☐	☐	☐	☐	☐	
৯ মাটির স্থায়িত্ব বা দৃঢ়তার উপর কোন প্রভাব?	☐	☐	☐	☐	☐	
১০ নির্মাণ কাজের জন্য কোন শব্দ দূষণ?	☐	☐	☐	☐	☐	
১১ বাতাস বাহিত অতিরিক্ত ধুলিবাণি?	☐	☐	☐	☐	☐	
গ. অন্যান্য সম্ভাব্য প্রভাব উপ-প্রকল্পটি ঘটাবে.....						
১২ পেশাজীবী যেমন কৃষক এবং মৎস্যজীবীর মধ্যে কোন সামাজিক দ্বন্দ্ব?	☐	☐	☐	☐	☐	
১৩ ঐতিহাসিক বা সংস্কৃতিগত কোন গুরুত্বপূর্ণ স্থানের (মসজিদ, কবরস্থান, স্মৃতিস্তম্ভ, ইত্যাদি)কোন ক্ষতি?	☐	☐	☐	☐	☐	
১৪ পানি সরবরাহ সম্পর্কিত কোন সামাজিক দ্বন্দ্ব?	☐	☐	☐	☐	☐	

স্ক্রিনিং প্রশ্নমালা	হ্যাঁ	না	প্রভাবের মাত্রা			মন্তব্য
			উচ্চতম	মাঝারী	নিম্নতম	
প্রশমিকদের স্বাস্থ্য সম্পর্কিত কোন শংকা?	☐	☐	☐	☐	☐	

টীকা: অন্যান্য স্ক্রিনিং প্রশ্নমালা থাকলে এতে যোগ করুন। আরো কোন মন্তব্য/উপকারী প্রভাব থাকলে মন্তব্যের কলামে লিখুন।

পর্যবেক্ষণ ও সুপারিশমালা:

NGO কর্তৃক পূরণযোগ্য:

নাম: _____

উপাধি: _____

তারিখ: _____

BFD কর্তৃক অনুমোদন যোগ্য:

নাম: _____

উপাধি: _____

তারিখ: _____

A 9.4 পরিশিষ্ট-ঘ: পরিবেশগত পর্যবেক্ষণের চেকলিস্ট

পর্যবেক্ষণকারীর নামঃ

পর্যবেক্ষণের তারিখঃ

স্বীকৃত হওয়া সংক্রান্ত প্যারামিটার	স্বীকৃত (হ্যাঁ/না)	হওয়া	যদি হ্যাঁ হয়, তাহলে কি ব্যবস্থা নেওয়া হয়েছে?
স্ক্রিনিং কি করা হয়েছে?			
বেসলাইন এবং অনুমানের নির্ভুলতা			
বন স্থানীয় বা আঞ্চলিক স্বরূপে ভূমিকা রাখে এবং স্থানীয় এলাকার সৌন্দর্য এবং মনোরম দ্রব্যের মূল্যমান নির্ধারণে ভূমিকা রাখে			
স্বার্থ সংশ্লিষ্টদের সহযোগীতায় সংস্কৃতিগত, বাস্তুসংস্থানগত, অর্থনৈতিক এবং ধর্মীয় গুরুত্ব পরিষ্কারভাবে নির্ধারিত হয় এবং ব্যবস্থাপনা করা হয়			
সকল চাকরীজীবী, তাদের পরিবার এবং আমজনতার স্বাস্থ্য এবং নিরাপত্তা সংক্রান্ত ব্যবহারযোগ্য সকল আইন এতে পাওয়া যায়			
বিশেষ প্রজাতির জন্য সংরক্ষণ			
বনের সংরক্ষণ (অবৈধ গাছকর্তন, অবৈধ স্থাপনা এবং অন্যান্য অবৈধ কার্যাবলী থেকে)			
সংগৃহীত সম্পদ থেকে বর্জ্য ব্যবস্থাপনা			
প্রথাগত বন ও সৃজিত বন			
জীববৈচিত্র্য অর্জিত হওয়া-প্রকার/প্রজাতির বিস্তার			
বর্জ্য পরিত্যাগকরণ			
দেশীয় গাছগাছড়ার পুনঃসৃজন			
অসন্তোষ নিবারণে ও সুষ্ঠু ক্ষতিপূরণের যথাযথ কাঠামোর ব্যবস্থা			
পর্যাপ্ত ট্রেইনিং এবং পরিদর্শনের নিশ্চয়তাবিধান			
পানি ও তলানী নিয়ন্ত্রণের যথাযথ ব্যবস্থা			

স্বীকৃত হওয়া সংক্রান্ত প্যারামিটার	স্বীকৃত (হ্যাঁ/না)	হওয়া	যদি হ্যাঁ হয়, তাহলে কি ব্যবস্থা নেওয়া হয়েছে?
পানি প্রবাহের নালা এবং নিয়ন্ত্রিত এলাকা থেকে দূরে থাকার প্রয়োজনীয়তা			
গাছ কর্তনের জায়গার আশে পাশে অ-ক্ষতিগ্রস্ত এলাকার পানি প্রবাহ অন্যদিকে চালনা করা			
সার উপচে পড়া থেকে ক্ষতি সাধনকে বাঁধা দেয়ার ব্যবস্থা নেয়া হয়েছে			