

# **Government of the People's Republic of Bangladesh**

## **Local Government Engineering Department**

Local Government Division,  
Ministry of Local Government, Rural Development and Cooperatives

## **Bangladesh Water Development Board**

Ministry of Water Resources

## **Social Development Foundation**

an autonomous organization under the Financial Institutions Division, Ministry of Finance

## **Department of Disaster Management**

Ministry of Disaster Management and Relief

## **Department of Agricultural Extension**

Ministry of Agriculture

## **Bangladesh Agricultural Development Corporation**

Ministry of Agriculture



# **Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG)**

Project Code: P508058

## **Draft Environmental and Social Management Framework (ESMF)**

## Table of Contents

|                                                                                                                 |           |
|-----------------------------------------------------------------------------------------------------------------|-----------|
| <b>Executive Summary</b> .....                                                                                  | <b>8</b>  |
| <b>1 Introduction</b> .....                                                                                     | <b>11</b> |
| <b>2 Project Description</b> .....                                                                              | <b>11</b> |
| <b>3 Environmental and Social Policies, Regulations, and Laws</b> .....                                         | <b>15</b> |
| <b>3.1 GoB Policy Framework</b> .....                                                                           | <b>15</b> |
| <b>3.2 National Approvals, Clearances, and Permits</b> .....                                                    | <b>20</b> |
| <b>3.3 World Bank’s Environmental and Social Framework</b> .....                                                | <b>22</b> |
| <b>3.4 GAP Analysis of World Bank Requirements and National Laws</b> .....                                      | <b>26</b> |
| <b>4 Potential Environmental and Social Risk Impacts and Standard Mitigation Measures</b> .....                 | <b>28</b> |
| <b>4.1 Risk Classification Methodology</b> .....                                                                | <b>28</b> |
| 4.1.1 Assigning Risk .....                                                                                      | 29        |
| 4.1.2 Impact Assessment .....                                                                                   | 29        |
| <b>4.2 Subproject Risk Classification and Instruments</b> .....                                                 | <b>30</b> |
| 4.2.1 Factors that drive subproject risk (used in screening/scoping) .....                                      | 30        |
| 4.2.2 Illustrative classification examples (for consistent application) .....                                   | 31        |
| <b>4.3 Escalation if a High-Risk Subproject is Identified</b> .....                                             | <b>32</b> |
| <b>4.4 Documentation, Review, and Gates</b> .....                                                               | <b>32</b> |
| <b>4.5 Planning and Design Considerations for Avoidance of Environmental and Social Risks and Impacts</b> ..... | <b>42</b> |
| <b>5 Environmental and Social Management Procedures</b> .....                                                   | <b>46</b> |
| <b>5.1 Sub-project Assessment and Analysis-Environmental and Social Screening</b> .....                         | <b>46</b> |
| <b>5.2 Environmental and Social Impact Assessment (ESIA)</b> .....                                              | <b>46</b> |
| <b>5.3 Environmental and Social Assessment Process</b> .....                                                    | <b>48</b> |
| 5.3.1 Environmental and Social Risk Management Procedures (Applicable for SDF).....                             | 53        |
| <b>5.4 Technical Assistance Activities (SDF)</b> .....                                                          | <b>57</b> |
| <b>5.5 Environment and Social Management Plan (ESMP)</b> .....                                                  | <b>58</b> |
| 5.5.1 Required Site Specific Environmental and Social Management Plans (ESS 1-10).....                          | 58        |
| 5.5.2 Site-Specific ESMP Preparation, Review, Consultation, Clearance, and Disclosure .....                     | 60        |
| <b>5.6 Environmental Codes of Practice (ECoPs)</b> .....                                                        | <b>61</b> |
| <b>6 Implementation Arrangements</b> .....                                                                      | <b>62</b> |
| <b>6.1 The Implementing Agencies (IAs) and Project Implementation Units (PIUs)</b> .....                        | <b>62</b> |
| 6.1.1 Compliance, Non-Compliance and Escalation (CAP).....                                                      | 66        |
| 6.1.2 Clarity of Roles and Single-Point Accountability (RACI) .....                                             | 67        |
| 6.1.3 Coordination of Multiple Firms .....                                                                      | 68        |
| <b>6.2 Specialist Responsibility</b> .....                                                                      | <b>69</b> |

|       |                                                                                           |     |
|-------|-------------------------------------------------------------------------------------------|-----|
| 6.3   | Capacity Building .....                                                                   | 70  |
| 6.4   | Guidelines for Bid Documents .....                                                        | 71  |
| 6.5   | Budget for ESMF implementation.....                                                       | 72  |
| 6.6   | Monitoring .....                                                                          | 72  |
| 6.7   | Reporting .....                                                                           | 75  |
| 7     | Stakeholder Engagement, Disclosure, and Consultations.....                                | 76  |
| 7.1   | Introduction .....                                                                        | 76  |
| 7.2   | Stakeholder Consultations and Disclosure .....                                            | 77  |
| 7.2.1 | Objective of the Consultations.....                                                       | 77  |
| 7.2.2 | SEP formulation and implementation arrangement.....                                       | 77  |
| 7.2.3 | Summary of Stakeholder Consultation Process, Key Concerns, and Influence on ES Activities | 78  |
| 7.2.4 | Stakeholder Consultation in Project Districts .....                                       | 79  |
| 7.2.5 | Outcomes of Consultation Meetings .....                                                   | 81  |
| 7.2.6 | Stakeholder Engagement During the Implementation Period.....                              | 82  |
| 7.2.7 | SEP Revision and Updating.....                                                            | 82  |
| 7.3   | Grievance Redress Mechanism (ESS10) .....                                                 | 83  |
| 7.3.1 | Structure and Operationalization of the GRM: .....                                        | 83  |
| 7.3.2 | Labor GM (for Worker-related Complaints).....                                             | 84  |
| 7.4   | Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH).....                         | 85  |
|       | List of Annexes.....                                                                      | 87  |
|       | Annex 1: Screening Form.....                                                              | 87  |
|       | Annex 2: Environmental and Social Codes of Practice (ESCoPs).....                         | 92  |
|       | Annex 3: Guideline for Preparing Environmental and Social Management Plan (ESMP).....     | 107 |
|       | Annex 4: Environmental and Social Management Plan (ESMP) Template.....                    | 109 |
|       | Annex 5: Simplified Labor Management Procedures .....                                     | 115 |
|       | Annex 6: Fertilizer and Pest Management Plan .....                                        | 122 |
|       | Annex 7: Chance Find Procedures .....                                                     | 127 |
|       | Annex 8: Sample ToR for Environmental Specialist .....                                    | 128 |
|       | Annex 9: Sample ToR for Social Specialist .....                                           | 130 |
|       | Annex 10: Sample ToR for Communication Specialist .....                                   | 131 |
|       | Annex 11: Sample ToR for Gender Specialist.....                                           | 134 |
|       | Annex 12: World Bank GRM Checklist .....                                                  | 138 |
|       | Annex 13: ToR for External Monitor/M&E consultant .....                                   | 141 |
|       | Annex 14: Exclusions List .....                                                           | 145 |
|       | Annex 15: Chance Find Guidelines .....                                                    | 146 |

|                                                                                   |     |
|-----------------------------------------------------------------------------------|-----|
| Annex 16: Environmental and Social Screening Form .....                           | 147 |
| Annex 17: Details of the Environmental and Social Code of Practices (ESCoPs)..... | 152 |
| Annex 18: Generic ToR for Environmental and Social Management Plan.....           | 162 |

## List of Tables

|                                                                                                              |    |
|--------------------------------------------------------------------------------------------------------------|----|
| Table 3.1 Summary of Applicable Environmental, Social Regulations of GoB .....                               | 15 |
| Table 3.2 Required National Approvals/Clearances/Permits by Project Activity .....                           | 21 |
| Table 3.3 WB ESS requirements and relevance to the project .....                                             | 22 |
| Table 3.4 World Bank Standards and Key Gaps with the National Framework.....                                 | 26 |
| Table 4.1 Subproject Risk Rating to E&S Instruments .....                                                    | 31 |
| Table 4.2 Environmental and Social Risks and Mitigation Measures.....                                        | 33 |
| Table 4.3 Summary of Key Environmental and Social Risks, Mitigation Measures, and Responsible Agencies ..... | 40 |
| Table 4.4 Summary of Potential Environmental and Social Impacts and their Significance (ESS Risk) ..         | 44 |
| Table 5.1 Major activities and responsibilities during different project stages .....                        | 48 |
| Table 5.2 Screening Process.....                                                                             | 52 |
| Table 5.3 Project Cycle and E&S Management Procedures .....                                                  | 53 |
| Table 5.4 Exclusion List.....                                                                                | 55 |
| Table 5.5 Time-bound workflow. ....                                                                          | 60 |
| Table 6.1 RACI — Roles and Accountability for Key E&S Processes.....                                         | 67 |
| Table 6.2 Proposed Training and Capacity Building Approach .....                                             | 70 |
| Table 6.3 Tentative ESMF Implementation Budget .....                                                         | 72 |
| Table 6.4 Monitoring Process of Key Indicators .....                                                         | 73 |
| Table 6.5 ESMF Monitoring Plan .....                                                                         | 74 |
| Table 6.6 Reporting Requirements.....                                                                        | 75 |
| Table 7.1 Summary of Consultation Meetings .....                                                             | 80 |
| Table 7.2 Outcomes of Consultation Meetings .....                                                            | 81 |
| Table 7.3 SEA/SH GRM process.....                                                                            | 85 |

## List of Figures

|                                                         |    |
|---------------------------------------------------------|----|
| Figure 6-1 Implementation Arrangement for B-STRONG..... | 64 |
| Figure 6-2 Overall Institutional Arrangements.....      | 64 |
| Figure 6-3 PIUs Institutional Arrangements.....         | 65 |

## List of Acronyms

ARAP – Abbreviated Resettlement Action Plan  
ARIPA – Acquisition and Requisition of Immovable Property Act  
B-STRONG – Bangladesh Sustainable Recovery, Emergency Preparedness, and Response Project  
BADC – Bangladesh Agricultural Development Corporation  
BAF – Bangladesh Air Force  
BBS – Bangladesh Bureau of Statistics  
BCRC – Bangladesh Climate Change Resilience (*as provided*)  
BNBC – Bangladesh National Building Code  
BoQ – Bill of Quantities  
BWDB – Bangladesh Water Development Board  
CAP – Corrective Action Plan  
CDD – Community Driven Development  
CERC – Contingent Emergency Response Component  
CESMP / C-ESMP – Contractor’s Environmental and Social Management Plan  
CHS – Community Health and Safety  
CIA – Cumulative Impact Assessment  
COM – Community Operations Manual  
D&S Firm – Design and Supervision Firm  
DAE – Department of Agricultural Extension  
DDM – Department of Disaster Management  
DoA – Department of Agriculture  
DoE – Department of Environment  
DoF – Department of Fisheries  
DMC – Disaster Management Committees  
DPD – Deputy Project Director  
DRM – Disaster Risk Management  
DRP – Displaced Rohingya Population  
DSM – Design and Supervision Management  
ECA – Environment Conservation Act  
ECC – Environmental Clearance Certificate  
ECOP – Environmental Code of Practice  
ECR – Environment Conservation Rules  
EGPP+ – Employment Generation Program for the Poorest Plus  
EHS – Environmental, Health and Safety  
EIA – Environmental Impact Assessment  
EMP – Environmental Management Plan  
ESCP – Environmental and Social Commitment Plan  
ESCOP – Environmental and Social Codes of Practice  
ESF – Environmental and Social Framework  
ESIA – Environmental and Social Impact Assessment  
ESMF – Environmental and Social Management Framework  
ESMP – Environmental and Social Management Plan  
ESMS – Environmental and Social Management System  
ESS – Environmental and Social Standards  
EBRD – European Bank for Reconstruction and Development

FAO – Food and Agriculture Organization  
 FGD – Focus Group Discussion  
 FI – Financial Intermediary  
 FPIC – Free, Prior, and Informed Consent  
 FPMU – Food Planning and Monitoring Unit  
 FSCD – Fire Service and Civil Defence  
 GAP – Gender Action Plan  
 GBV – Gender-Based Violence  
 GHG – Greenhouse Gas  
 GIS – Geographic Information System  
 GM – Grievance Mechanism  
 GoB – Government of Bangladesh  
 GRC – Grievance Redress Committee  
 GRM – Grievance Redress Mechanism  
 HCF – Health Care Facility  
 HH – Household  
 HNP – Health & Nutrition Program  
 HORMP – Human and Occupational Resources Management Procedures  
 IA – Implementing Agency  
 IBA – Important Bird and Biodiversity Areas  
 IDP – Internally Displaced Person  
 IEE – Initial Environmental Examination  
 IFC – International Finance Corporation  
 IPDP – Indigenous Peoples Development Plan  
 IPF – Investment Project Financing  
 IPM – Integrated Pest Management  
 ISCG – Inter Sector Coordination Group  
 ISPS – International Ship and Port Facility Security  
 KBA – Key Biodiversity Areas  
 KII – Key Informant Interview  
 LCC – Land Clearance Certificate  
 LGED – Local Government Engineering Department  
 LLP – Low Lift Pump  
 LMP – Labor Management Procedures  
 M&E – Monitoring and Evaluation  
 MIS – Management Information System  
 MoA – Ministry of Agriculture  
 MoDMR – Ministry of Disaster Management and Relief  
 MoEFCC – Ministry of Environment, Forest, and Climate Change  
 MoF – Ministry of Finance  
 MoLGRD&C – Ministry of Local Government, Rural Development and Cooperatives  
 MoWR – Ministry of Water Resources  
 MPA – Multi-phase Programmatic Approach  
 MSDS – Material Safety Data Sheet  
 NCR – Non-Conformance Report  
 NEP – National Environmental Policy  
 NGO – Non-Governmental Organization  
 NOC – No-Objection Certificate

OCC – Operations Coordination Cell  
OHS – Occupational Health and Safety  
OHSP – Occupational Health and Safety Plan  
PAD – Project Appraisal Document  
PAP – Project Affected Person  
PD – Project Director  
PDO – Project Development Objective  
PHI – Pre-Harvest Interval  
PIC – Project Implementation Committee  
PIU – Project Implementation Unit  
PMU – Project Management Unit  
POP / POPs – Persistent Organic Pollutant(s)  
PPE – Personal Protective Equipment  
PSC – Project Steering Committee  
PVC – Polyvinyl Chloride  
PWD – Public Works Department  
RACI – Responsible, Accountable, Consulted, Informed  
RAP – Resettlement Action Plan  
RC – Regional Coordinator  
RF – Resettlement Framework  
RO – Regional Officer  
RPF – Resettlement Policy Framework  
RRRC – Refugee Relief and Repatriation Commissioner  
RRC – Rescue and Rehabilitation Committee  
SAR – Search and Rescue  
SDF – Social Development Foundation  
SDS – Safety Data Sheet  
SEA – Sexual Exploitation and Abuse  
SEA/SH – Sexual Exploitation and Abuse / Sexual Harassment  
SECDP – Small Ethnic Community Development Plan  
SEG – Strategic Executive Group  
SEP – Stakeholder Engagement Plan  
SH – Sexual Harassment  
SPC – Sub-Project Committee  
TEDs – Training, Exercises, and Drills  
ToR – Terms of Reference  
UHNP – Urban Health, Nutrition and Population  
ULB – Urban Local Body (City Corporation/Pourashava)  
UV – Ultraviolet  
VCD – Voluntary Community Donation  
VS – Village Somiti  
WB – World Bank  
WBG – World Bank Group  
WHO – World Health Organization  
WTP – Water Treatment Plant

# Executive Summary

## Introduction

Bangladesh is one of the most climate-vulnerable countries in the world, facing frequent and severe natural disasters, particularly flooding. In 2024, the country experienced catastrophic flooding that affected millions of people, caused extensive damage to infrastructure, and disrupted livelihoods, particularly in the rural regions. This flood exacerbated the vulnerability of communities already struggling with the impacts of climate change, placing enormous strain on the country's recovery efforts.

With much of the country being a low-lying delta, Bangladesh is especially prone to flooding due to its vast river systems, seasonal monsoons, and increasing storm surges. These natural events have long undermined development progress, particularly for marginalized communities who are ill-equipped to cope with such recurring disasters. The 2024 flood intensified these challenges, with widespread destruction in critical sectors such as agriculture, infrastructure, and housing.

In response, the Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG) aims to support the country's recovery from this devastating flood and strengthen its resilience to future disasters. The project is designed to address both immediate recovery needs and the long-term resilience of the affected communities by rehabilitating essential infrastructure, restoring livelihoods, and enhancing disaster preparedness and response mechanisms. Through its comprehensive approach, the B-STRONG project will not only help rebuild Bangladesh in the aftermath of the 2024 floods but also equip vulnerable communities with the tools to better withstand future climate-related shocks.

## Project Description

**The project area covers the most vulnerable districts in Chattogram and Sylhet Divisions, which are impacted by flooding due to their low-lying geography and exposure to river systems. These divisions have experienced significant damage in recent floods, affecting millions of people and causing widespread destruction to infrastructure, agriculture, and livelihoods.**

The Project is designed with several key interrelated components:

1. **Flood Resilience Infrastructure:** This component focuses on the construction, rehabilitation, and enhancement of **flood shelters, embankments, community roads, rural markets, and culverts** in flood-prone regions. The aim is to ensure that **flood shelters** are climate-resilient, equipped with **water supply, sanitation facilities, and solar-powered lighting** to provide safe havens for communities during flooding events.
2. **Disaster Preparedness and Response Capacity:** This component aims to **strengthen disaster preparedness** by improving early warning systems, training local communities in disaster management, and providing **short-term employment** through the **Employment Generation Program for the Poorest Plus (EGPP+)** to increase the resilience of affected communities. This component also includes the provision of **disaster response equipment**, including **boats, rescue kits, and emergency shelters**.
3. **Livelihoods Recovery and Community Empowerment:** This component, led by the Social Development Foundation (SDF), will support the restoration and enhancement of livelihoods for vulnerable households in flood-affected areas. It will focus on strengthening community institutions, facilitating the formation of community groups, and providing small grants or

revolving funds to support income-generating activities. Capacity building, financial literacy training, and facilitation of access to markets and services will be included to ensure long-term economic resilience of poor and marginalized groups, particularly women and youth.

4. **Agricultural System Restoration:** This component focuses on **agriculture recovery** in flood-affected regions. It will support **irrigation rehabilitation**, provision of **seeds, fertilizers**, and **climate-resilient agricultural technologies** to help farmers restore their agricultural livelihoods. It also includes capacity-building programs for **agricultural extension workers** and **farmers** to improve resilience to future floods.
5. **Project Management and Coordination:** This component will support the **implementation** of the project through effective **project management** at the national, district, and local levels. It will ensure **coordination** across implementing agencies, monitoring of project activities, and provision of necessary **technical assistance** and **training** to local governments and implementing agencies.
6. **Contingency Emergency Response:** This component ensures that funds are available to respond to **unforeseen emergency needs**. Funds can be reallocated from other project components to this **Contingency Emergency Response Fund** to support immediate recovery efforts following unexpected disasters.

### **Preparation of Environmental and Social Management Framework (ESMF)**

The **Environmental and Social Management Framework (ESMF)** has been prepared to identify and mitigate **environmental and social risks** associated with the **B-STRONG**. This framework outlines procedures for **screening, assessing, and managing** risks during the project cycle, ensuring that all project interventions are **environmentally sustainable** and **socially feasible**. The ESMF will be reviewed and updated as and when required throughout the project lifecycle. Updates may be prompted by new environmental or social risks, changes in project scope, regulatory updates, or lessons learned from implementation.

### **Policy, Legal, and Regulatory Framework**

The project will comply with all relevant Bangladesh national regulations and the World Bank's Environmental and Social Standards (ESSs). Key national laws that apply to this project include the Environmental Conservation Act 1995 (ECA) and Environmental Conservation Rules 2023 (ECR). Additionally, the project will align with World Bank ESSs, which include environmental and social risk management, labor standards, and stakeholder engagement.

### **Potential Environmental and Social Impacts**

The Project will involve small-scale construction activities, leading to temporary environmental impacts such as dust, noise, and waste generation. However, these impacts are expected to be low to moderate and site-specific and can be effectively mitigated. Social risks include gender-based violence (GBV), labor influx, and displacement, particularly in vulnerable communities. These risks will be addressed through GBV risk reduction plans, community engagement, and inclusive project designs.

### **Stakeholder Engagement and Disclosure**

A **Stakeholder Engagement Plan (SEP)** has been prepared for the **Project**. The SEP outlines a comprehensive approach for engaging stakeholders, ensuring that their views are considered in the project design and implementation. Vulnerable groups, including **women, elderly persons, disabled persons**, and **small ethnic communities**, will be prioritized in consultations and project interventions. The project will implement a **Grievance Redress Mechanism (GRM)** to address concerns from **project-affected persons (PAPs)**. The **GRM** is designed to ensure that **grievances** are handled in a timely and

transparent manner, with specific procedures for **Sexual Exploitation and Abuse (SEA)** and **Sexual Harassment (SH)** complaints.

### **Institutional Framework and Capacity Building**

The Project will be implemented by multiple agencies across Bangladesh, with each agency managing its respective components through dedicated Project Implementation Units (PIUs) within each respective agency. Each PIU will be headed by a Project Director (PD), supported by a Deputy Project Director (DPD), along with technical staff including Senior and Assistant Engineers, as well as safeguard officers.

The project's implementation will occur across several districts and upazilas, where field-based staff from the implementing agencies, LGED, BWDB, SDF, DAE, DDM, and BADC, will provide supervision and monitoring at the local level. This will ensure effective delivery of the planned interventions, particularly in disaster recovery and agricultural restoration efforts.

The PIUs will also be responsible for ensuring the proper implementation of environmental and social (ES) safeguards, in line with the World Bank's Environmental and Social Standards (ESSs) and the national regulations. To bolster the capacity of the PIUs, specialized consultants and Design & Supervision Consulting (D&SC) firms will be engaged, providing expertise in areas such as environmental management, social safeguards, gender, and disability inclusion. These firms will support the day-to-day project operations, ensuring that all project components adhere to environmental, social, and technical standards.

To further strengthen the institutional framework, capacity-building programs will be rolled out for the PIU staff, local field officers, and relevant stakeholders. These programs will focus on improving technical, managerial, and safeguard capacities to manage the complexities of disaster response, infrastructure rehabilitation, and agricultural restoration in flood-affected areas. Additionally, dedicated Environmental Specialists and Social Development Specialists will be stationed at the PIUs full-time, ensuring continuous support and compliance with environmental and social management plans (ESMPs), the Resettlement Policy Framework (RPF), and other safeguard measures. The Project Implementation Committees (PICs) will provide oversight, assisting in the resolution of implementation challenges and ensuring that project activities meet the required quality and timelines.

# 1 Introduction

This Environmental and Social Management Framework (ESMF) is developed to support the environmental and social due diligence provisions for activities financed by the World Bank in the **Bangladesh Sustainable Recovery, Emergency Preparedness, and Response Project (B-STRONG)**. The project aims to improve access to basic services and enhance disaster and climate resilience across several districts in Bangladesh, including Noakhali, Comilla, Feni, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Lakshmipur, Chattogram, and Cox's Bazar.

The project is implemented by **LGED** (Local Government Engineering Department), **BWDB** (Bangladesh Water Development Board), **SDF** (Social Development Foundation), **DAE-BADC** (Department of Agricultural Extension - Bangladesh Agricultural Development Corporation), and **DDM** (Department of Disaster Management), with each organization overseeing specific districts and components of the project.

The ESMF follows the World Bank's **Environmental and Social Framework (ESF)** and the national laws and regulations of Bangladesh. Its purpose is to identify, assess, and mitigate potential environmental and social risks related to the project, ensuring compliance with the **Environmental and Social Standards (ESSs)** and national guidelines.

This ESMF specifically aims to:

- a) Assess the potential environmental and social risks and impacts of the Project and propose appropriate mitigation measures.
- b) Establish clear procedures for the environmental and social screening, review, approval, and implementation of project activities.
- c) Define roles and responsibilities, along with reporting procedures, for managing and monitoring environmental and social concerns related to the project.
- d) Identify staffing needs and outline the training and capacity-building requirements to effectively implement the provisions of the ESMF.
- e) Address the mechanisms for public consultation, project document disclosure, and the redress of grievances.
- f) Establish the budgetary requirements for the successful implementation of the ESMF.

This ESMF should be read together with other plans prepared for the project, including the Stakeholder Engagement Plan (SEP), the Environmental and Social Commitment Plan (ESCP), Labor Management Procedures (LMP), SEA/SH Prevention Plan and Resettlement Policy Framework (RPF). The ESMF will be reviewed and updated as and when required throughout the project lifecycle.

## 2 Project Description

**Bangladesh experienced extreme rainfall from mid-August to mid-September 2024, resulting in significant flooding that affected nearly six million people<sup>1</sup> and caused damages of at least US\$1.676**

---

<sup>1</sup> Bangladesh Shelter Cluster. October 1, 2024. *Eastern Floods Shelter Damage and Needs Assessment*.

billion.<sup>2</sup> The floods severely impacted 11 eastern districts.<sup>3</sup> Infrastructure, housing, education, health, agriculture, fisheries, and livestock sectors were critically affected. The flooding overwhelmed the affected areas, which were in the process of recovering from floods two months prior.

**The proposed project aims to address recovery, and reconstruction needs as well as strengthen disaster resilience of the country.** Altogether, the project design ensures a holistic approach to recovery and resilience building, reducing future flood risks, supporting sustainable agriculture, economic development and preventing vulnerable populations from being left behind. The August 2024 floods had affecting nearly six million people, leaving 1.26 million families stranded, and taking the lives of 74 people. Over 500,000 people sought refuge in multipurpose disaster shelters<sup>4</sup>. **The total direct physical asset damages from the August 2024 Flash Flood are estimated at US\$1.676 billion.**<sup>5</sup> The infrastructure sector was the hardest hit, accounting for a total of US\$640 million (38 percent of total estimated damages). This is followed by the agriculture sector, which incurred losses of US\$468 million (28 percent of the total damages). Highest total damages are observed in Noakhali (US\$508.8 million), Cumilla (US\$362.6 million), and Feni (US\$312.7 million).

The damages amount does not account for losses such as production or business interruption, income loss, and temporary housing/relocation costs. Infrastructure damage includes 3,700 kilometers of fully damaged and 14,000 kilometers of partially damaged roads, 87 kilometers of damaged embankments, 17 sections of breached flood control embankments, 28,000 fully damaged and 319,000 partially damaged houses, 423 fully damaged and 1,097 partially damaged bridges and culverts, as well as 430 damaged healthcare facilities. Around 3,000 education facilities were impacted, affecting 1.4 million children, including 749,390 girls in Chittagong Division alone.<sup>6</sup>

**In addition to financing gaps for immediate flood response, there is an even larger gap for medium- and long-term recovery and reconstruction.** Reconstruction of damaged assets would require more than US\$1.6 billion and could take years. Damaged public infrastructure, such as roads and electricity, hampers livelihoods and economic activities. Unrepaired embankments and drainages drastically reduce protection from disasters, implying that higher impacts may occur even with less severe disasters. These gaps need to be urgently addressed, in addition to supporting the affected population to get back on their feet. Research posits the importance of financial capital, assets, and networks as foundations for resilience to disasters.<sup>7,8</sup> Support to enhanced and diversified livelihoods, including linkages to producer networks and markets, will enable households to recover, revitalize the local economy, and contribute to building longer-term community resilience. The proposed project is multi-sectoral in order to provide a holistic recovery and will support sectors that are not sufficiently covered by existing initiatives.

---

<sup>2</sup> World Bank. 2024. *Floods in eastern Bangladesh, August 2024: Global Rapid Post-Disaster Damage Estimation (GRADE) Report*.

<sup>3</sup> Noakhali, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Cumilla, Feni, Lakshmipur, Khagrachhari, Chittagong, and Cox's Bazar.

<sup>4</sup> Inter-cluster Coordination Group (ICCG). (30 August, 2024). Bangladesh: Eastern Flash Floods - Situation Report No. 02. ReliefWeb. Retrieved from <https://reliefweb.int/report/bangladesh/bangladesh-eastern-flash-floods-2024-situation-report-no-02-30-august-2024>

<sup>5</sup> World Bank. 2024. *Floods in eastern Bangladesh, August 2024: Global Rapid Post-Disaster Damage Estimation (GRADE) Report*.

<sup>6</sup> Inter-cluster Coordination Group (ICCG). August 30, 2024. *Bangladesh: Eastern Flash Floods - Situation Report No. 02*.

<sup>7</sup> Azad, M. & Pritchard, B.. 2022. "Financial capital as a shaper of households' adaptive capabilities to flood risk in northern Bangladesh." *Ecological Economics* 195.

<sup>8</sup> Islam R., Walkerden, G. 2014. "How bonding and bridging networks contribute to disaster resilience and recovery on the Bangladeshi coast." *International Journal of Disaster Risk Reduction* 10 (Part A).

**The project will benefit over 1.6 million people across selected flood-affected districts in the Chattogram and Sylhet Divisions** (Noakhali, Sylhet, Moulvibazar, Habiganj, Brahmanbaria, Cumilla, Feni, Lakshmipur, Chattogram, and Cox's Bazar). Around 175,000 people will again be protected by flood protection infrastructure, after the structures were damaged by the Eastern Flash Floods. Approximately 237,000 will benefit from increased access to multipurpose disaster shelters. Approximately 88,000 direct beneficiaries in 550 villages in selected districts will strengthen their livelihoods, benefitting 374,880 people. Approximately 9,000 from four districts will directly benefit from temporary livelihood opportunities, benefitting 38,340 people.<sup>9</sup> Production and productivity of at least 65,000 farm households in 430 unions will be enhanced through the adoption of projects promoting production technologies and access to improved irrigation and storage facilities.

The project comprises six key components, designed to improve resilience, recovery, and livelihoods in flood-affected regions.

**Component 1** will improve resilience through the restoration, rehabilitation, and improvement of critical rural and flood protection infrastructure. Component 1 will be implemented by LGED and BWDB.

- **Subcomponent 1.1** will be implemented by the Local Government Engineering Department (LGED) and will finance the construction, rehabilitation, and reconstruction of flood-affected rural infrastructure and facilities in selected districts. Activities under this subcomponent include: (i) construction of climate-resilient multipurpose disaster shelters; (ii) capacity enhancement and rehabilitation of existing disaster shelters, including extension of an additional floor and construction of climate-resilient connecting roads (above flood level); (iii) improvement of damaged existing schools to climate-resilient standards; (iv) rehabilitation of rural roads with minor enhancement of capacity to climate-resilient standards; (v) rehabilitation and reconstruction of existing bridges and culverts with minor capacity expansion; (vi) slope protection along road alignments to protect against extreme precipitation and wave action exacerbated by climate change; (vii) supply and installation of lightning protection systems to reduce vulnerability to lightning strikes during extreme hydro-meteorological events; (viii) provision of search and rescue equipment for the Fire Service and Civil Defence (FSCD) for enhancing emergency response capacity during extreme events such as floods, landslides, cyclones, and fires; and (ix) supply and installation of Emergency Operation Systems for upazilas.
- **Subcomponent 1.2** will be implemented by the Bangladesh Water Development Board (BWDB) and will support the rehabilitation, repair, and construction of flood protection infrastructure through a combination of interventions in selected flood-affected districts. Activities under this subcomponent include: (i) re-sectioning and repair of flood protection embankments to restore defense against riverine and flash floods; (ii) re-excavation of canals to increase stormwater drainage capacity and reduce flood risks exacerbated by sedimentation; (iii) repair of flood control hydraulic structures, including damaged inlet and outlet structures, sluice gates, water regulators, and drainage systems; (iv) riverbank and slope protection works to prevent erosion and breaches of embankments; and (v) improvement of the flood forecasting system, including expansion of flood models, upgrading forecasting facilities, and enhancing technical capacity for better flood risk management.

---

<sup>9</sup> The average household size is 4.26 person/household in Bangladesh. Directly offering livelihoods support to one family member will benefit an entire family.

**Component 2** will address livelihoods recovery and resilience through community empowerment and enhancing earning opportunities of affected households. It will be implemented by the Social Development Foundation (SDF).

- **Subcomponent 2.1** will support a program of activities aimed at establishing and strengthening community institutions, including: (i) mobilization efforts at the community level to form community institutions, including Cluster Community Societies (CCS) and Regional Community Societies (RCS); (ii) provision of sub-grants to the Village Development Fund (VDF) and the CCS and RCS to implement community plans, institutional development activities, and activities to improve climate-resilient livelihood facilities; and (iii) awareness-raising activities related to hygiene, nutrition, and disaster preparedness.
- **Subcomponent 2.2** will offer a package of services to enhance earning opportunities of beneficiaries to build their resilience to shocks, including (i) provision of one-time cash transfers, sub-loans (financed from the VDF), and stipends; (ii) skills development training on market-driven needs and financial literacy; and (iii) provision of sub-grants for the Productive Investment Fund to producer alliances to support business development, market linkages, and product promotion.

**Component 3** will be implemented by DDM. The key activities under this component include providing livelihood opportunities to communities through EGPP+ and strengthening community disaster preparedness and response.

- **Subcomponent 3.1** supports the EGPP+, a shock-responsive window of DDM's national poverty targeted public works program, by providing temporary employment in flood-affected districts (Feni and Brahmanbaria) under the Chattogram Division. Activities include public works such as disaster-resilience of homesteads, rural road repair, and embankment strengthening, as well as community services like social mobilization to address GBV.
- **Subcomponent 3.2** focuses on enhancing community capacity for effective disaster preparedness and response through the supply of rescue boats and equipment, and conducting training, exercises, and drills (TEDs). The rescue boats will enhance the operational efficiency of flood response activities by enabling faster evacuation of at-risk populations; reducing casualties; and facilitating the rapid delivery of food, clean water, and medical aid to stranded communities. The TEDs include training of 2,400 volunteers on SAR operations and basic disaster risk management and integrating about 1,500 individuals into emergency response operations under the DMIC initiative.

**Component 4** will support sustainable agricultural production increase through improved technology dissemination, rebuilding and strengthening irrigation, seed and fertilizer storage facilities. DAE, together with the Bangladesh Agricultural Development Corporation (BADC) as grantee, will implement the component in 40 upazilas of selected flood affected districts<sup>10</sup>.

- **Sub-component 4.1** aims at increasing production and productivity through (i) inputs support, promote high yielding, climate resilient, water saving and sustainable crop production technologies, management methods and practices through technology demonstrations and arranging field days; (ii) technology training to farmers to enhance performance and capacity building of farmers, and entrepreneur; (iii) agricultural machinery support with the objectives to reduce laborious work, compensate labor shortage, enhance productivity and to promote farm

---

<sup>10</sup> Brahmanbaria, Cumilla, Feni, Noakhali, and Lakshmipur.

mechanization; (iv) establishment of polyshed house and seed village to supply quality seeds and seedlings; (v) establishment of community vermicompost and tricho-compost plants to improve soil health management; (vi) homestead gardening to support women, community gardening targeting the vulnerable and bringing fallow land under crop production; and (vii) support for the establishment of farmer groups to disseminate sustainable agricultural crop production technologies.

- **Subcomponent 4.2** aims to will support the construction, rehabilitation, and reconstruction of flood- affected Irrigation infrastructure and storage facilities under BADC’s jurisdiction, in selected districts, including: (i) repair and reconstruction of damaged irrigation equipment, and infrastructure; (ii) re-excavation of filled water bodies, construction of underground drainage channels, and water passes to increase surface water availability for dry season supplementary irrigation; (iii) construction of uPVC drainage pipe line and water passes to increase drainage capacity during flood or excessive rainwater; (iv) construction of uPVC pipe line for buried pipes in existing scheme to increase irrigation water use efficiency, reduce water loss and maintenance work ; and (v) construction and renovation of damaged fertilizer and seed storage godowns, construction of Sunning Floor, and Loading-Unloading Shades with climate-resilient standards to withstand the impact of high wind, flooding, extreme precipitation, and extreme temperature. These reconstruction works will secure production of food grains in the selected districts. This will ensure the provision of immediate response to eligible flood affected farmers and increase crops productivity by providing agricultural inputs (seeds, fertilizer and irrigation technology) facilities. In such an event, the component will contribute to benefit people directly and indirectly to achieve their food and nutrition security.

**Component 5** will support the day-to-day project administration, management, coordination, monitoring, and evaluation of activities by the Project Implementation Units (PIUs) and **component 6** will ensure provision of immediate response to an eligible crisis and contribute to immediate and effective response.

## 3 Environmental and Social Policies, Regulations, and Laws

This Section presents a review of the national policy, legal, and regulatory framework relevant to the environmental and social aspects of the project. In addition to the national environmental and social framework, World Bank environmental and social standards are also discussed.

### 3.1 GoB Policy Framework

All relevant applicable national acts, policies, strategies, plans, acts, rules and regulations of Government of Bangladesh pertaining to the environment and social aspects relevance to this project is presented in Table below.

*Table 3.1 Summary of Applicable Environmental, Social Regulations of GoB*

| SI No | Policies/Act/Rule                    | Key Provisions and Purpose                                                                   | Applicability to the Project                                                  |
|-------|--------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1     | Environment Conservation Rules, 2023 | National Environment Quality Standards for surface water (inland and marine/coastal), sewage | Applicable to LGED for rural infrastructure construction/rehabilitation, BWDB |

|   |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                           |
|---|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                     | <p>effluent, industrial effluents, liquid waste discharge standards industry wise, etc.; Categorization of industries, development projects, and other activities based on actual and anticipated pollution load; Procedure for obtaining Environment Clearance Certificate (ECC); Requirements for undertaking IEE and EIA's as well as formulating EMP according to categories of industries/development projects/activities; Procedure for damage claim by persons affected or likely to be affected due to polluting activities or activities causing hindrance to normal civic life.</p>                                                                                                                                                                                                                                                                                                                                                                       | <p>for flood protection works and canal re-excavation, and DAE/BADC for irrigation infrastructure requiring environmental clearance certificates and compliance with environmental quality standards.</p> |
| 2 | National Environmental Policy, 2018 | <p>Major elements of the policy are- Conserve and develop the environment and provide for the protection and security of natural resources, biodiversity and wetlands; Natural equilibrium provision and overall development of the country through environmental protection and sustainable management; Identifying and controlling all types of environmental pollution and degradation activities; Ensure environmental development in all fields; Ensure sustainable, long term, and environmentally friendly use of all-natural resources; Maintain and streamline the environmental policies and strategies among other policy strategies in the interest of sustainable development; Ensure Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) in all necessary sectors; Actively involved as much as possible with all international environmental initiatives and take necessary actions at local and national levels.</p> | <p>Relevant for all agencies to ensure environmental sustainability across infrastructure, agriculture, disaster management, and community development activities.</p>                                    |
| 3 | National River Protection           | <p>River free from illegal encroachment and prevention of re-encroachment; excavation of dead river; Ecological</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Applicable to BWDB and LGED where project works interface with rivers, canals, and related</p>                                                                                                         |

|   |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                    |
|---|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | Commission Act, 2013                                                                                | balance and sustainable management of the river; Public awareness activities to protect the river.                                                                                                                                                                                                                                                                                                                                                                                                                                 | restoration activities; DAE/BADC are also applicable where irrigation or drainage infrastructure interacts with river systems.                                                                                                                                                     |
| 4 | Bangladesh Water Act, 2013                                                                          | No person or organization shall fill the reservoir, remove soil or sand from the reservoir, stop the normal flow of the reservoir or alter its course without the permission of the authority; No infrastructure shall be constructed on the embankment without the approval of the Authority for the sake of permanent protection of the flood control embankment.                                                                                                                                                                | Applicable to BWDB for flood protection embankment works and hydraulic structure repairs, LGED for bridge/culvert construction affecting water flow, and DAE/BADC for irrigation infrastructure and drainage works affecting water bodies, requiring proper authority permissions. |
| 5 | Bangladesh Environmental Conservation Act (ECA), 1995 and subsequent amendments in 2000, 2002, 2010 | Define Applicability of environmental clearance; Regulation of development activities from environmental perspective; Framing applicable limits for emissions and effluents; Framing of standards for air and water quality; Formulation of guidelines relating to control and mitigation of environmental pollution, conservation, and improvement of environment; Declaration of Ecologically critical area.                                                                                                                     | Applicable to LGED, BWDB, and DAE/BADC for all construction, rehabilitation, and physical infrastructure activities.                                                                                                                                                               |
| 6 | Bangladesh Environment Court Act, 2000 and subsequent amendments in 2019                            | GoB has given the highest priority to environmental pollution; Passed 'Environment Court Act, 2000' for completing environment related legal proceedings effectively; Provides the Jurisdictions of the environment court, the penalty for violation, trial procedure in special magistrate's court, the power of entry and search, the procedure for investigation, procedure, and power of environment court, the authority of the environment court to inspect, appeal procedure and formation of the environment appeal court. | All agencies are accountable for compliance and subject to legal recourse in case of violations.                                                                                                                                                                                   |
| 7 | National Biodiversity Strategy and Action Plan (2004)                                               | Conserve and restore the biodiversity of the country for the well-being of the present and future generations; Maintain and improve environmental stability for ecosystems; Ensure the preservation of the unique biological                                                                                                                                                                                                                                                                                                       | Applicable to LGED, BWDB, and DAE/BADC for infrastructure and agricultural activities affecting aquatic or terrestrial biodiversity near project areas, ensuring                                                                                                                   |

|    |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                     |
|----|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                       | heritage of the nation for the benefit of the present and future generations; Guarantee the safe passage and conservation.                                                                                                                                                                                                                                                                                                                                                                                                         | biodiversity conservation and ecosystem protection                                                                                                                                                                                                                                                                                  |
| 8  | The National Water Policy, 1999                                       | Protection, restoration, and enhancement of water resources; Protection of water quality, including strengthening regulations concerning agrochemicals and industrial effluent; Fish and fisheries; Participation of local communities in all water sector development.                                                                                                                                                                                                                                                            | Applicable to BWDB for water resource management and flood protection, DAE/BADC for irrigation water quality preservation, and LGED for infrastructure affecting water resources.                                                                                                                                                   |
| 9  | Disaster Management Act, 2012                                         | To make the activities about disaster management coordinated, object-oriented, and strengthened and to formulate rules to build up the infrastructure of effective disaster management to fight all types of disaster.                                                                                                                                                                                                                                                                                                             | Applicable to DDM for disaster preparedness and EGPP+ implementation; LGED for disaster-resilient infrastructure and emergency systems; BWDB for flood protection infrastructure supporting disaster risk reduction.                                                                                                                |
| 10 | Bangladesh Delta Plan 2100                                            | Improvement of overall drainage system; Ensuring security from flood and climate change related disasters; Optimum and integrated use of land and water resources; Protection through development and improvement of embankments, barriers and water control structures; Adoption of spatial planning and flood risk zoning based on flood severity; Improve capacity and institutional strength of concerned agencies for flood control and drainage; Ensuring sustainable and integrated river systems and estuarine management. | Applicable to BWDB for flood control and riverbank protection, LGED for climate-resilient infrastructure and drainage, and DAE/BADC for optimizing land and water use in agriculture. All agencies must align interventions with national strategies for climate resilience, flood risk reduction, and integrated river management. |
| 11 | Playgrounds, Open Parks and Natural Reservoirs Conservation Act, 2000 | Conservation of playgrounds, open spaces, parks and natural water bodies.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Applies to LGED, BWDB, and DAE/BADC, if works are near waterbodies, open parks, or community spaces.                                                                                                                                                                                                                                |
| 12 | Land Use Policy 2010                                                  | Ensure optimum use of land for various purposes including agriculture, forestry, housing, infrastructure, and environmental protection; Prohibition of the recent practice of indiscriminate conversion                                                                                                                                                                                                                                                                                                                            | Applicable to LGED, BWDB, and DAE/BADC for project siting, infrastructure planning, and land management to avoid degradation or conversion of productive agricultural land.                                                                                                                                                         |

|    |                                                          |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                      |
|----|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                          | of agricultural land to non-agricultural use; Reserve special land for future physical development activities; Ensuring land use in harmony with the existing natural environment; Controlling land pollution.                                                                                                               |                                                                                                                                                                      |
| 13 | Highway Landscaping Policy, 2020                         | Construction/conservation of reservoirs to ensure drainage of highways; Improvement of road safety.                                                                                                                                                                                                                          | Applicable to LGED for rural road rehabilitation, slope protection, and roadside development ensuring proper drainage and safety measures.                           |
| 14 | National Urban Sector Policy                             | Agricultural Land Management; Urban Sprawl Control; Management of wetlands and floodplains through land use regulation.                                                                                                                                                                                                      | Applies to LGED, BWDB, and DAE/BADC where projects impact urban/rural interfaces or wetlands.                                                                        |
| 15 | Land Zoning and Protection Act, 2024                     | Three or more crop lands shall under no circumstances be used for any purpose other than agriculture; The Government, in the interest of food security of the country, may reserve any region or area of the country as an 'Exclusive Agricultural Zone' in coordination with the Ministry of Agriculture using land zoning. | Directly relevant for DAE/BADC; also applicable to LGED where infrastructure may affect zoning or agricultural land.                                                 |
| 16 | National Disaster Management Plan (2021-2025)            | Formulated for disaster prevention and risk reduction; disaster development linkages; strengthening disaster risk governance; Enhancing disaster preparedness.                                                                                                                                                               | Applies to DDM, LGED, and BWDB for infrastructure, training, equipment, and disaster coordination measures.                                                          |
| 17 | Bangladesh Labor Act, 2006, Bangladesh Labor Rules, 2015 | Provides health, safety, and well-being of the workforce during the project life cycle. In addition, it also stipulates that children under 18 years are not allowed to be employed during the project life cycle.                                                                                                           | Applicable to all agencies for ensuring safe labor conditions and prohibition of child labor during all construction, rehabilitation, and implementation activities. |
| 18 | The Noise Pollution Control Rules, 2006                  | The Noise Pollution Control Rules have been established in order to manage noise-generating activities which have the potential to impact the health and wellbeing of workers and the surrounding communities.                                                                                                               | Relevant for LGED, BWDB, and DAE/BADC for any works involving equipment or machinery near communities.                                                               |
| 19 | Road Transport Act, 2018                                 | The new Road Transport Act 2018 has finally come into effect at the start of November. After the long-standing Motor Vehicle Ordinance of                                                                                                                                                                                    | Applies to all agencies during transport of materials, equipment, and workforce under the project.                                                                   |

|    |                                                                                    |                                                                                                                                                                                |                                                                                                                                                               |
|----|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                    | 1983, the new act introduces a myriad of updated laws and adds new definitions for what constitutes an offense, with most of the fines and punishments receiving major bumps.  |                                                                                                                                                               |
| 20 | Rules for Removal of Wrecks and Obstructions in inland Navigable Water Ways (1973) | Rules for removal of wrecks and obstructions.                                                                                                                                  | Applicable to BWDB for canal re-excavation and obstruction removal in waterways, and LGED for bridge/culvert works potentially obstructing natural waterways. |
| 21 | The Building Construction Act, 1952 and Subsequent Amendments                      | This act provides for prevention of haphazard construction of building and excavation of tanks which are likely to interfere with the planning of certain areas in Bangladesh. | Applicable to LGED and DAE/BADC for infrastructure and facility construction following approved standards.                                                    |

## 3.2 National Approvals, Clearances, and Permits

This matrix translates the regulatory summary into an activity-level checklist of approvals, clearances, and permits. It specifies issuing authorities, responsible parties, required project gates (“when required”), validity/renewal, and key notes/triggers. Implementing Agencies (IAs) and contractors shall: (i) transpose relevant rows into subproject ESMPs and contractor CESMPs; and (ii) include applicable requirements in bidding documents/BoQs.

Table 3.2 Required National Approvals/Clearances/Permits by Project Activity

| Project activity (by component)                                     | Approval / Clearance / Permit                                                                | Issuing / Endorsing Authority                                      | Responsible party to obtain                | When required                                                                          | Validity / renewal                         | Notes                                                                          |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------|
| LGED – new/rehab shelters, buildings                                | Fire Safety Plan & <b>NOC</b>                                                                | <b>FSCD</b> (Fire Service & Civil Defence)                         | IA (LGED) or Contractor under IA oversight | <b>Design stage</b> ; NOC before construction; re-inspection <b>prior to occupancy</b> | As per FSCD                                | Required for buildings under <b>BNBC</b> ; attach with ESMP/CESMP and bid docs |
| LGED/BWDB/DAE/BADC – <b>civil works</b> screened under ECR Schedule | <b>Environmental Clearance Certificate (ECC)</b> (or Site Clearance/IEE/ESI A as applicable) | <b>DoE</b> (Department of Environment)                             | Relevant IA (LGED/BWDB/DAE/BADC)           | <b>Before bidding</b> for Substantial risk; <b>before works</b> for Moderate/Low       | Typically, <b>annual renewal</b> (per ECR) | Attach ECC & conditions to CESMP and contracts                                 |
| LGED – <b>building plan/occupancy</b>                               | Building construction permit / <b>Occupancy certificate</b>                                  | <b>Local authority</b> (City Corp/Pourashava/ULB)                  | IA (LGED)                                  | Permit <b>pre-construction</b> ; occupancy certificate <b>post-completion</b>          | As per local authority                     | Designs to comply with <b>BNBC</b>                                             |
| BWDB – <b>works on embankments/canals</b>                           | Right-of-way / water management consents (as applicable)                                     | <b>BWDB</b> internal approvals + local authorities (as applicable) | IA (BWDB)                                  | <b>Before works</b>                                                                    | As applicable                              | Include disposal approvals for spoil if needed                                 |
| DAE/BADC – <b>seed/fertilizer storage</b>                           | Storage/occupancy and <b>fire safety NOC</b>                                                 | Local authority / <b>FSCD</b>                                      | IA (DAE/BADC)                              | <b>Design stage</b> ; NOC pre-works; occupancy post-completion                         | As per authority                           | Ensure safe storage per <b>MSDS</b> and EHS guidance                           |
| Any IA – <b>temporary traffic management / road cuts</b>            | Road cut permit / traffic diversion approval                                                 | Local authority / Police (as applicable)                           | Contractor, endorsed by IA                 | <b>Before works</b>                                                                    | As per authority                           | Include approved Traffic management Plan in CESMP                              |

### 3.3 World Bank's Environmental and Social Framework

Since October 2018, all World Bank funded Investment Project Financing (IPF) are required to follow the Environmental and Social Framework (ESF) consisting of ten (10) Environment and Social Standards (ESSs). These ESSs set out their requirement for the proposed project relating to the identification and assessment of environmental and social risks and impacts associated with the project. A brief description of the 10 ESSs, their objectives and requirements and relevance to this project are appended in Table below.

*Table 3.3 WB ESS requirements and relevance to the project*

| <b>World Bank ESS Policy, Standards, Directive</b>                            | <b>Objectives</b>                                                                                                                                                                                                                                                                                                               | <b>Requirements</b>                                                                                                                                                                                                                                                                          | <b>Relevance &amp; Extent of Relevance to sub-project/ Project</b>                                  |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| World Bank Environment and Social Policy for Investment Project Financing     | It sets out the mandatory requirements of the Bank in relation to the projects it supports through Investment Project Financing.                                                                                                                                                                                                | The types of E&S risk and impacts that should be considered in the environmental and social assessment. The use and strengthening of the Borrower's environmental and social framework for the assessment, development and implementation of World Bank financed projects where appropriate. | Applicable to agencies implementing infrastructure and service activities.                          |
| ESS-1 Assessment and Management of Environmental and Social Risks and Impacts | Identify, assess, evaluate, and manage environment and social risks and impacts in a manner consistent with the ESF. Adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities. | The types of E&S risk and impacts that should be considered in the environmental and social assessment. The use and strengthening of the Borrower's environmental and social framework for the assessment, development and implementation of World Bank financed projects where appropriate. | Applicable to agencies which include infrastructure, service delivery, and resource-use activities. |
| ESS-2 Labor and Working Conditions                                            | Promote safety and health at work. Promote fair treatment, non-discrimination, and equal opportunity of project                                                                                                                                                                                                                 | Requirements for the borrower to prepare and adopt labor management procedures. Provisions on the treatment of                                                                                                                                                                               | Applicable to agencies employing project labor, including through contractors (e.g., construction,  |

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                            |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                                                                   | workers. Protect project workers, with particular emphasis on vulnerable workers. Prevent the use of all forms of forced labor and child labor. Support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law. Provide project workers with accessible means to raise workplace concerns.                                                                            | direct, contracted, community, and primary supply workers, and government civil servants. Requirements on terms and conditions of work, non-discrimination and equal opportunity and workers organizations. Provisions on child labor and forced labor. Requirements on occupational health and safety, in keeping with the World Bank Group's Environmental, Health, and Safety Guidelines (EHSI). | agricultural, public works).                                                                               |
| ESS-3 Resource Efficiency and Pollution Prevention and Management | Promote the sustainable use of resources, including energy, water, and raw materials. Avoid or minimize adverse impacts on human health and the environment caused by pollution from project activities. Avoid or minimize project-related emissions of short- and long-lived climate pollutants. Avoid or minimize generation of hazardous and non-hazardous waste. Minimize and manage the risks and impacts associated with pesticide use. | Requires technically and financially feasible measures to improve efficient consumption of energy, water, and raw materials, and introduces specific requirements for water efficiency where a project has high water demand.                                                                                                                                                                       | Applicable to agencies with construction, agriculture, irrigation, or energy-related operations.           |
| ESS-4 Community Health and Safety                                 | Anticipate or avoid adverse impacts on the health and safety of project-affected communities during project life cycle from routine and non-routine circumstances. Promote quality, safety, and climate change considerations in infrastructure design and construction, including                                                                                                                                                            | Requirements on infrastructure, considering safety and climate change, and applying the concept of universal access, where technically and financially feasible. Addresses risks arising from impacts on provisioning and                                                                                                                                                                           | Applicable to agencies whose activities impact communities through physical works or service interactions. |

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                               | dams. Avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials. Have in place effective measures to address emergency events.                                                                                                                                                                         | regulating ecosystem service. Measures to avoid or minimize the risk of water related, communicable, and non-communicable diseases. Requirements to assess risks associated with security personnel, and review and report unlawful and abusive acts to relevant authorities.                                                                           |                                                                                                                                                                                                                                                                 |
| ESS-5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | Avoid or minimize involuntary resettlement by exploring project design alternatives. Avoid forced eviction. Mitigate unavoidable adverse impacts from land acquisition or restrictions on land use by providing compensation at replacement cost and assisting displaced persons in their efforts to improve, or at least restore, livelihoods and living standards. | Applies to temporary physical and economic displacement resulting from different types of activities. Does not apply to voluntary market transactions, except where these affect third parties. Provides criteria for “voluntary” land donations, sale of community land, and parties obtaining income from illegal rentals. Prohibits forced eviction. | Relevant if any temporary land acquisition, access restrictions, or displacement occur during road, shelter, embankment or canal improvement works, although large-scale resettlement is not anticipated. A separate RPF has been prepared to address this ESS5 |
| ESS-6 Biodiversity Conservation                                               | Protect and conserve biodiversity and habitats. Apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity. Promote the sustainable management of living natural resources.                                                                                                | Requirements for projects affecting areas that are legally protected, designated for protection or recognized for biodiversity value. Requirements on sustainable management of natural resources, including primary suppliers.                                                                                                                         | Applicable to agencies working in or near ecologically sensitive areas (e.g., canals, wetlands, agricultural lands).                                                                                                                                            |
| ESS-7 Indigenous Peoples                                                      | Ensure that the development process fosters full respect for affected parties’ human rights, dignity, aspirations, identity, culture, and natural resource-based                                                                                                                                                                                                     | Applies when Indigenous Peoples are present or have a collective attachment to the land. Requirements for meaningful consultation, FPIC in certain                                                                                                                                                                                                      | Relevant only if Small Ethnic Communities (SECs) are present in project areas; however, no significant negative impacts or                                                                                                                                      |

|                                                                     |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                          |                                                                                |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|                                                                     | livelihoods. Promote sustainable development benefits and opportunities in a manner that is accessible, culturally appropriate and inclusive.                                                                                                                                                                                              | circumstances, and grievance mechanisms.                                                                                                                 | displacement on SECs are anticipated.                                          |
| ESS-8 Cultural Heritage                                             | Protect cultural heritage from the adverse impacts of project activities and support its preservation. Address cultural heritage as an integral aspect of sustainable development. Promote meaningful consultation with stakeholders regarding cultural heritage. Promote equitable sharing of benefits from the use of cultural heritage. | Requires a chance finds procedure to be established. Recognition of access rights and confidentiality where needed.                                      | Not relevant to the project                                                    |
| ESS-9 Financial Intermediaries                                      | Sets out how Financial Intermediaries (FI) will assess and manage environmental and social risks and impacts associated with the subprojects it finances.                                                                                                                                                                                  | FIs to have an Environmental and Social Management System (ESMS).                                                                                        | Not applicable as no financial intermediaries involved.                        |
| ESS-10 Stakeholder Engagement and Information Disclosure            | Establish a systematic approach to stakeholder engagement. Assess stakeholder interest and support. Promote effective and inclusive engagement. Ensure disclosure of information to stakeholders in an accessible manner.                                                                                                                  | Requires stakeholder engagement throughout the project life cycle and preparation of a Stakeholder Engagement Plan (SEP).                                | Relevant to the project. A separate SEP has been prepared to address ESS10.    |
| Environmental and Social Directive for Investment Project Financing | This Directive applies to the Bank and sets out the mandatory requirements for the implementation of the Environmental and Social Policy I (IPF).                                                                                                                                                                                          | Lays down responsibilities of the Bank to manage ES risks and impacts, support borrower consultation, agree on ESCP conditions, and monitor performance. | Applicable for Bank oversight during project implementation with all agencies. |
| Bank Directive Addressing Risks and Impacts on                      | Establishes directions for Bank staff regarding due diligence obligations                                                                                                                                                                                                                                                                  | Requires identification of disadvantaged groups                                                                                                          | Applicable. All agencies must ensure inclusive design and                      |

|                                                                                                                                      |                                                                                                                              |                                                                 |                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Disadvantaged or Vulnerable Individuals or Groups                                                                                    | relating to the identification of, and mitigation of risks and impacts on disadvantaged or vulnerable individuals or groups. | and differentiated mitigation measures.                         | implementation to protect and benefit women, elderly, disabled, and SECs.                                                                  |
| World Bank's Guidance note on managing the risks of adverse impacts on communities from temporary project induced labor influx, 2016 | Provides guidelines to address risks arising from labor influx, including GBV risks.                                         | Requires labor influx management and GBV risk mitigation plans. | Relevant to construction sites where significant labor influx could occur; labor influx and GBV risk mitigation measures must be in place. |

### 3.4 GAP Analysis of World Bank Requirements and National Laws

Infrastructure development and use of public and private lands for land-based developments are governed by institutional legal mandates and national laws of land acquisition and management. There are some gaps between existing land acquisition law of the country and WB ESSs on Involuntary Resettlement and on indigenous peoples in terms of identification of affected persons and compensation packages, and participation of community groups of diverse interests and vulnerabilities. Gaps between GoB LA law (new Act 21 of 2017) and suggested gap filling measures are given in Table 3.3 below.

*Table 3.4 World Bank Standards and Key Gaps with the National Framework*

| ESS                                                                           | Gaps in National Policy/Legal Instruments                                                                                                                                                                                                                                                                                             | Gap Filling Measures                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESS1: Assessment and Management of Environmental and Social Impacts and Risks | (i) EIA study screening and scoping do not guarantee coverage of all ESSs in the assessment.<br>(ii) EIA study does not advocate to include both environmental and social impacts at the same scale, but the ESF does.<br>(iii) Stakeholder engagement during the conduct of the EIA is limited, and the EIA report is not disclosed. | ESMF has put forth all relevant measures to follow the ESS1 requirements, given in the relevant sections of Environmental Management Procedures.<br>'EIA Guidelines for Industries' (Feb' 2021) by the DoE has incorporated both social impact addressing and stakeholder engagement/disclosure requirements. |
| ESS2: Labor and Working Conditions                                            | (i) The Labor Act does not specifically require that development be assessed and reviewed in terms of labor and working conditions, including OHS requirements, before approval.                                                                                                                                                      | A separate Labor Management Plan (LMP) has been prepared, which will guide the requirements for OHS plans. The LMP will regulate working conditions, workers' relations management, worker-specific GRM, terms and conditions of employment, non-discrimination and equal opportunity,                        |

|                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                        | (ii) The Labor Act does not require development projects to prepare Labor Management Plans/Procedure or OHS Plan.                                                                                                                                                                                                                                                                                                                                                                                                     | GBV, protection of the workforce, prohibition of child/forced labor, safe working conditions, and provision of OHS.                                                                                                           |
| ESS3: Resource Efficiency and Pollution Prevention and Management                      | Existing energy and water conservation policies, laws, and regulations do not require development projects to assess resource efficiency issues and incorporate resource-efficient use of water resources.                                                                                                                                                                                                                                                                                                            | ESMP will be developed for each sub-project to address this issue and incorporate mitigation measures for resource efficiency, including water conservation.                                                                  |
| ESS4: Community Health and Safety                                                      | Covered under 'EIA Guidelines for Industries,' but systems/laws do not provide clear requirements for the development project and implementation. DoE Environmental clearance recommends vigilance on community health and safety, irrespective of project nature and location.                                                                                                                                                                                                                                       | Community health and safety risks will be screened out, with necessary assessment and mitigation measures included as part of Environmental and Social Management Procedures.                                                 |
| ESS5: Land Acquisition, Land Use Restriction, and Involuntary Resettlement             | (i) ARIPA 2017 does not require the preparation of RAP in case of non-titled entities.<br>(ii) Does not provide compensation or assistance to those without formal legal claims to land.<br>(iii) No provision for transitional allowances for restoration of livelihoods for informal settlers.<br>(iv) Relies on cash compensation, with no developmental objectives.<br>(v) No provision for special attention to vulnerable groups.<br>(vi) Valuation of lost assets is not based on "replacement cost" standard. | A separate Resettlement Policy Framework (RPF) has been prepared. If any unavoidable issues arise, such as informal settlers, ESS5 requirements will be followed, and a Resettlement Action Plan (RAP) will be developed.     |
| ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources | No equivalent requirements on: (i) the application of hierarchy of measures; (ii) the preparation of Biodiversity Management Plan; (iii) differentiated measures on types of habitats.                                                                                                                                                                                                                                                                                                                                | The project will apply mitigation hierarchy measures in Environmental and Social Assessment process as directed in ESS1. Differentiated measures will be adopted based on the types of habitats that sub-projects may affect. |

|                                                          |                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESS7: Indigenous People                                  | No equivalent national legal requirements on: (i) coverage of IP impacts in IEE/ESIA; (ii) special treatment or differentiated approach to IPs and vulnerable groups; (iii) conduct of FPIC; (iv) development of IP Plan.                                              | Appropriate assessment on vulnerabilities and impacts due to the project activities will be conducted if any Indigenous community is found at or near any sub-project site. An Indigenous People Development Plan (IPDP) may be necessary to develop, incorporating differentiated approaches for different groups/clans, with stringent monitoring on implementation. FPIC will be required where applicable. |
| ESS8: Cultural Heritage                                  | No equivalent requirements on: (i) application of hierarchy of measures; (ii) development of Cultural Heritage Management Plan; (iii) adoption of project-specific Chance Find Procedures; and (iv) engagement of cultural heritage experts.                           | Not relevant                                                                                                                                                                                                                                                                                                                                                                                                   |
| ESS9: Financial Intermediaries                           | Not applicable to country system.                                                                                                                                                                                                                                      | Not relevant                                                                                                                                                                                                                                                                                                                                                                                                   |
| ESS10: Stakeholder Engagement and Information Disclosure | The ECA/ECR does not specifically require consultation, though IEE/ESIA guidelines from DoE and other agencies recommend public consultations during scoping and IEE/ESIA preparation. There is no provision for stakeholder engagement during project implementation. | A separate Stakeholder Engagement Plan (SEP) has been prepared, and the guidelines for stakeholder engagement provided in the SEP/ESMF will be followed.                                                                                                                                                                                                                                                       |

## 4 Potential Environmental and Social Risk Impacts and Standard Mitigation Measures

This chapter describes how environmental and social (E&S) risks are identified, classified, and managed for the Project. It explains (i) the approach used to classify overall project risk, (ii) how subprojects/packages are screened and classified, and (iii) which E&S instruments are prepared based on risk. The methodology aligns with the World Bank's Environmental and Social Framework (ESF) and operates alongside Government of Bangladesh regulatory requirements.

### 4.1 Risk Classification Methodology

The assessment of effects and identification of impacts takes into account of any incorporated mitigation measures 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).

**Clarification (decision point):** The subproject E&S risk category (High/Substantial/Moderate/Low) is confirmed at the completion of screening and recorded in the screening note. This decision precedes the determination of the required E&S instruments and the applicable review/clearance modality (see also Chapter 5).

#### 4.1.1 Assigning Risk

Risk or impact classification considers the assessment of magnitude, quality or sensitivity of the receiving environment and social receptor in order to determine the significance of each potential impact. Risk classification can be divided into four distinctive categories- **High, Substantial, Moderate and Low.**

**Roles:** PIU Environmental and Social Specialists (with support from consultants/ESSF, as applicable) assign the rating at the **end of screening** and propose the corresponding instruments for PIU/World Bank review per Chapter 5. Contractors then prepare a Contractor’s Environmental and Social Management Plan (CESMP) aligned with the cleared instrument(s); No physical works may commence until required instruments are cleared and disclosed and the CESMP is approved.

#### 4.1.2 Impact Assessment

The project will comply with the World Bank Environmental and Social Standards (ESSs) and the World Bank Group Environmental, Health, and Safety (EHS) Guidelines. Based on this framework, the overall environmental and social risk of the project is categorized as “Substantial.”

**Instrument linkage and Bank trigger:** Subprojects screened as **Substantial** typically require a **full ESIA with ESMP** (or a focused ESIA/ESMP as justified). If **any subproject is screened as High risk**, the PIU will **promptly consult the World Bank** to agree next steps—e.g., redesign to reduce risk, instrument scope, review modality—and note that such identification may **elevate the overall project risk classification to High.**

Environmental risks are rated as Substantial due to the scale of rehabilitation and construction activities, particularly in the flood-affected regions. The main environmental concerns include:

- Localized air, noise, and dust pollution during the construction and rehabilitation of multipurpose disaster shelters, rural roads, bridges, culverts, embankments, and hydraulic structures.
- Pollution and natural resource degradation during embankment re-sectioning, canal re-excavation, and road rehabilitation activities.
- Soil and water resource contamination from improper handling and disposal of construction debris, dredged materials, and waste products.
- Disruption to natural drainage systems from infrastructure development if not properly designed and implemented.
- Occupational Health and Safety (OHS) risks associated with construction activities, particularly involving semi-skilled or untrained laborers working with heavy equipment near water bodies and embankments.
- Solid waste and wastewater generation from infrastructure works, including risk of improper disposal affecting surrounding communities and ecosystems.
- Minor greenhouse gas (GHG) emissions from the use of heavy machinery, construction equipment, and transport of materials, although expected to be relatively low.

Social risks are also rated **Substantial**, primarily due to labor-related challenges, temporary displacement impacts, and potential exclusion of vulnerable groups from project benefits. Notable social risks include:

- Temporary access disruptions affecting mobility and livelihoods during rural road, bridge, and embankment rehabilitation activities.
- Risks of labor influx (although expected to be low) leading to potential issues such as child labor, gender-based violence (GBV), and poor labor conditions if not properly managed.
- Community health and safety risks due to construction traffic, heavy machinery operation, and construction activities near settlements.
- Risks of temporary land use impacts or displacement of informal users or farmers adjacent to embankments, roads, and canals.
- Possibility of exclusion of vulnerable groups—such as women, elderly persons, persons with disabilities, and marginalized farmers—from consultations, decision-making, or access to project benefits like disaster shelters or flood protection services.
- Risks of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) particularly in areas with construction labor concentration.

All project activities will be screened following the ESMF. Activities with significant or irreversible impacts, or those located in ecologically sensitive areas, will be excluded. Nature-based solutions, climate-resilient practices, and environmentally sound designs will be prioritized. All implementing agencies have demonstrated satisfactory performance in previous World Bank-financed projects.

All project activities will be screened following the ESMF. Activities with significant or irreversible impacts, or those located in ecologically sensitive areas, will be excluded. Nature-based solutions, climate-resilient practices, and environmentally sound designs will be prioritized. All implementing agencies have demonstrated satisfactory performance in previous World Bank-financed projects. Standard mitigation measures are outlined in **Table 4.2**. A cross-agency summary of key risks, mitigation measures, and responsible agencies is provided in **Table 4.3**. A matrix of expected impacts, their significance, and residual effects is presented in **Table 4.4**.

**Note.:** As of Appraisal (PAD), the overall project risk rating is **Substantial**. If a **High-risk** subproject is identified during implementation, the overall project risk rating **may be elevated to High**, subject to **consultation with the World Bank** (see Section 4.4)

## 4.2 Subproject Risk Classification and Instruments

Because the Project consists of multiple subprojects with potentially different risk profiles, each subproject/package is separately screened and classified. The classification determines the proportionate instruments and review/disclosure pathway. The national DoE ECC process and the World Bank risk classification are complementary but not identical; both apply, and the more stringent requirement governs.

### 4.2.1 Factors that drive subproject risk (used in screening/scoping)

- **Location sensitivity:** protected areas; natural/critical habitats; wetlands; riverbanks/in-channel works; dense settlements; proximity to schools/hospitals.

- **Magnitude/footprint:** scale/duration; night works; heavy haul; volume of spoil/disposal footprint.
- **Displacement/land:** acquisition; temporary occupation; access restrictions; livelihood impacts.
- **Community context:** vulnerable/underserved groups; GBV/SEA/SH risks; social tension/security; legacy/cumulative impacts.
- **Technical complexity:** deep excavation; cofferdams; in-channel works; hazardous materials; interfaces with utilities/waterways.
- **Packaging:** multiple co-located works compounding risks.

*Table 4.1 Subproject Risk Rating to E&S Instruments*

| Risk rating        | Core instrument(s)                                               | Typical ancillary plans                                                                                                | Review/clearance                          | Disclosure timing                                      |
|--------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------|
| <b>Low</b>         | <b>ESCAP / Checklist ESMP</b>                                    | Chance-Find; simple SEP; GRM link; basic OHS/traffic/waste notes                                                       | PIU clearance                             | Before works (or embedded in specs for micro-works)    |
| <b>Moderate</b>    | <b>Site-specific ESMP</b> (or focused ESIA/ESMP where justified) | Traffic & Road Safety; CHS; OHS; Waste & Resource; Biodiversity measures (if any); SEA/SH actions (proportionate)      | PIU clearance (WB may post-review)        | <b>Before bidding;</b> CESMP before mobilization       |
| <b>Substantial</b> | <b>ESIA + ESMP</b>                                               | SEP update; LMP implementation; Biodiversity Measures (if natural habitat); <b>RAP/ARAP</b> (if triggered)             | <b>World Bank prior review/clearance</b>  | <b>Before procurement;</b> CESMP before mobilization   |
| <b>High</b>        | <b>Full ESIA</b> (comprehensive)                                 | As agreed with WB (may include CIA, Security Risk Assessment, Critical Habitat Assessment, enhanced SEA/SH mitigation) | <b>Consult the World Bank immediately</b> | <b>Do not proceed</b> to procurement until WB decision |

**Mandatory overlays (apply at any risk if triggered).** Land Acquisition & Involuntary Resettlement (RAP/ARAP); Biodiversity/Species Management (for natural/critical habitats); Cultural Heritage (Chance-Finds always; full CH plan if known resources); SEA/SH (Action Plan; survivor-centered GRM pathways); Labor & OHS (LMP implementation; Worker GRM; Contractor OHS plan).

#### 4.2.2 Illustrative classification examples (for consistent application)

- **LGED – Shelter vertical addition** in a built-up area; no land take; daytime works → **Moderate** → **Site-specific ESMP** with OHS, Traffic & CHS; embed FSCD plan/NOC and building/occupancy permits; **CESMP** before mobilization.

- **BWDB – Riverbank protection** with limited in-channel works near a village; haul roads; spoil placement at approved site → **Substantial** → **ESIA + ESMP**; Traffic & CHS; biodiversity measures if riparian habitat; disposal approvals; strong stakeholder engagement.
- **DAE/BADC — Rehabilitation of seed/fertilizer stores; small, buried irrigation/drainage lines; agriculture extension with input support** → **Moderate** → **ESMP**; **PMP/IPM addendum only if pesticides are financed or promoted** (aligned with WHO and WBG EHS guidance); **building/occupancy permit** and (where storage/occupancy applies) **FSCD** fire-safety; **ECC** if **screened-in**; **CESMP** before mobilization.
- **SDF — Community-level livelihood support activity with no civil works** (e.g., beneficiary training/organization, input distribution/operations support) → **Low** → **ESCAP/Checklist** (OHS, community safety, basic crowd/traffic management for events); **local permission** only if a public venue is used; **record the screening outcome** and attach to the ESMP/CESMP.
- **Hypothetical High** – Embankment realignment through ecologically sensitive reach with displacement and cofferdam works → **High** → **Consult WB immediately**; full **ESIA**, robust RAP, Biodiversity/Critical Habitat assessment; potential redesign or exclusion; **no procurement** until WB decision.

### 4.3 Escalation if a High-Risk Subproject is Identified

If screening or scoping indicates High risk, the PIU must promptly consult the World Bank before issuing ToR or any procurement. The Bank will advise on: (i) ESIA scope/associated studies; (ii) whether the overall project risk must be elevated to High; and (iii) whether redesign, alternative siting, exclusion, or restructuring is required. Procurement for that subproject is paused until a pathway is agreed.

### 4.4 Documentation, Review, and Gates

- Screening Form (signed by PIU E&S Specialist) stating final subproject risk category and indicative instruments.
- Scoping Note (1–3 pages) confirming risk category, instruments, and ToR; attach WB email/minutes for Substantial/High.
- Required instruments (ESIA/ESMP/ESCAP + topic plans), national approvals (e.g., DoE ECC, FSCD NOC, local permits), and evidence of disclosure; contract clauses/BoQ reflect instrument requirements and permit conditions.
- CESMP (Contractor) approved before mobilization; monthly E&S reports against the CESMP; non-conformance and corrective actions tracked.

Table 4.2 Environmental and Social Risks and Mitigation Measures

| Project Activities according to WB ESS                                                                                                                                                                                       | Risks and Impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ESS1 - Assessment and Management of Environmental and Social Risks and Impacts</b>                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>LGED Activities:</b><br>- Construction and rehabilitation of disaster shelters, roads, bridges, culverts<br>- Slope protection works<br>- Installation of lightning protection systems<br>- Supply of emergency equipment | ✓ Drainage congestion and waterlogging during construction<br>✓ Temporary surface and groundwater pollution<br>✓ Construction-related dust, air, and noise pollution<br>✓ Community health and safety risks near construction sites, especially schools<br>✓ GHG emissions from equipment and machinery<br>✓ Waste generation from construction<br>✓ Exclusion of vulnerable and disadvantaged groups from consultation and benefits<br>✓ Traffic disruption during rehabilitation works<br>✓ Worker OHS and accident risks<br>✓ Interruption of local access, especially for emergency services | ✓ Gender-sensitive, climate-resilient shelter design compliant with BNBC including universal accessibility<br>✓ Construction scheduling outside school hours<br>✓ Integrated waste management on government land without additional acquisition<br>✓ Use of energy-efficient construction practices and low-emission machinery<br>✓ Inclusive and accessible community consultations targeting vulnerable groups<br>✓ Traffic and safety management with proper signage and diversion plans<br>✓ Site-specific OHS management; regular safety training; mandatory PPE; worker GRM<br>✓ Advance community notification; temporary alternative access arrangements |
| <b>BWDB Activities:</b><br>- Flood protection embankment re-sectioning and repair<br>- Canal re-excavation works<br>- Flood control hydraulic structure repairs<br>- Riverbank and slope protection                          | ✓ Water quality degradation from sediment disturbance during excavation<br>✓ Temporary disruption of water flow, navigation, and community access<br>✓ Increased turbidity impacting aquatic life                                                                                                                                                                                                                                                                                                                                                                                                | ✓ Water quality monitoring during excavation and construction<br>✓ Phased construction to maintain essential water flow and community access<br>✓ Sediment and erosion control measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>- Flood forecasting system improvement</p>                                                                                                                                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>✓ Large-scale sediment disposal challenges</li> <li>✓ GHG emissions from heavy machinery</li> <li>✓ Temporary flooding risks during construction</li> <li>✓ Alteration of existing drainage patterns affecting ecosystems and livelihoods</li> <li>✓ Disturbance/loss of riparian and wetland biodiversity</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>✓ Community notification and alternative access arrangements</li> <li>✓ Use of energy-efficient, low-emission heavy machinery</li> <li>✓ Environmental screening to avoid work in sensitive biodiversity areas</li> <li>✓ Emergency response planning for construction-related flooding</li> <li>✓ Environmental screening to avoid critical/sensitive areas</li> <li>✓ Wetland/habitat restoration post-works; fish rescue/relocation during works if required</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>SDF Activities:</b></p> <ul style="list-style-type: none"> <li>- Cash transfer programs</li> <li>- Institutional capacity building</li> <li>- Seed, fertilizer, and tools distribution</li> <li>- Climate-smart irrigation systems</li> <li>-Fingerling and fish feed distribution</li> <li>- Livestock (cattle) distribution</li> </ul> | <ul style="list-style-type: none"> <li>✓Exclusion or marginalization of vulnerable groups (from benefits, participation, or decision-making)</li> <li>✓Barriers to accessing the grievance mechanism</li> <li>✓Environmental contamination and health risks from agro-chemicals (pesticides/fertilizers), including resistance development and impacts of non-local seeds</li> <li>✓Pesticide use and occupational health and safety (OHS) risks</li> <li>✓Water pollution from fertilizer and livestock waste</li> <li>✓Improper use of veterinary chemicals (antibiotics, wormers)</li> <li>✓Disproportionate health and safety risks to vulnerable groups</li> <li>✓Economic disadvantages limiting access to livelihood benefits</li> </ul> | <ul style="list-style-type: none"> <li>✓ Conduct targeted outreach and registration of vulnerable groups</li> <li>✓ Ensure clear, accessible communication in local languages</li> <li>✓ Provide mobile registration units for remote and immobile households</li> <li>✓ Make grievance mechanisms accessible through multiple channels</li> <li>✓ Promote culturally sensitive and inclusive consultations and participation</li> <li>✓ Reserve quotas for women, youth, and marginalized groups in capacity building</li> <li>✓ Provide childcare, transport, and flexible scheduling support</li> <li>✓ Deliver targeted health and safety training with protective equipment</li> <li>✓ Offer tailored financial support and access to credit</li> <li>✓ Develop and implement GBV Action Plans with confidential reporting</li> <li>✓ Establish quotas and leadership training for vulnerable groups in decision-making bodies</li> </ul> |

|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>✓ Increased risk of gender-based violence (GBV)</li> <li>✓ Inefficient or unsustainable irrigation (waterlogging, salinization, aquifer depletion)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>✓ Integrated Pest Management (IPM), mandatory training on pesticide/chemical use, only non-invasive/local seeds</li> <li>✓ Veterinary supervision, safe carcass disposal, training in zoonotic prevention, restricted use of hazardous drugs</li> <li>✓ Water use monitoring, technical support for irrigation efficiency, participatory water management</li> </ul>                                                                                                                                                                                                                                                                                                                                  |
| <b>DDM Activities:</b> <ul style="list-style-type: none"> <li>- Coordination and facilitation of EGPP+ for temporary employment of flood-affected vulnerable groups</li> <li>- Supply of rescue boats and equipment</li> <li>- Training, exercises, and drills programs</li> </ul>                                                          | <ul style="list-style-type: none"> <li>✓ Exclusion of vulnerable groups from employment opportunities</li> <li>✓ Limited environmental awareness among temporary workers and local implementers</li> <li>✓ Safety risks during training, drills, and rescue operations</li> </ul>                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>✓ Inclusive employment targeting prioritizing flood-affected vulnerable groups</li> <li>✓ Integration of environmental considerations in emergency training</li> <li>✓ Comprehensive safety protocols for training and rescue activities</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>DAE/BADC Activities:</b> <ul style="list-style-type: none"> <li>- Agricultural inputs and technology support</li> <li>- Agricultural machinery distribution</li> <li>- Irrigation infrastructure rehabilitation</li> <li>- Construction of storage facilities</li> <li>- Establishment of seed villages and processing plants</li> </ul> | <ul style="list-style-type: none"> <li>✓ Environmental impacts from intensive agriculture</li> <li>✓ Barriers to technology adoption by vulnerable farmers</li> <li>✓ Fumigation and pest control risks in storage facilities</li> <li>✓ Chemical exposure from fertilizers and pesticides</li> <li>✓ Water use inefficiency in irrigation</li> <li>✓ Air quality impacts from storage operations</li> <li>✓ Occupational health risks during construction</li> <li>✓ Spills/leaks from agri-chemical storage/use</li> <li>✓ EHS incidents from fumigation/pest control (chemical exposure, residue)</li> </ul> | <ul style="list-style-type: none"> <li>✓ Promotion of sustainable agriculture and crop diversification</li> <li>✓ Inclusive technology transfer programs with special support for vulnerable farmers</li> <li>✓ Integrated pest management protocols in storage and field</li> <li>✓ Fumigation safety procedures and chemical exposure prevention</li> <li>✓ Training on water-efficient irrigation technologies</li> <li>✓ Air quality monitoring in storage facilities</li> <li>✓ Construction safety protocols and worker protection measures</li> <li>✓ Emergency spill response, safe chemical storage/handling</li> <li>✓ EHS-compliant pest control (approved chemicals, PPE, residue monitoring, community notification)</li> </ul> |

|                                                                                                                                                       |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                       | ✓ Introduction of GM/exotic crops affecting local biodiversity                                                                                                                                                                                                                                        | ✓ Sourcing policies to avoid GM/exotics unless screened for biodiversity impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>ESS2 - Labor and Working Conditions</b>                                                                                                            |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>All Agencies:</b><br>- Construction activities<br>- Infrastructure rehabilitation<br>- Public works employment<br>- Training and capacity building | ✓ Risk of child labor and forced labor<br>✓ Gender-based violence (GBV) issues<br>✓ Occupational health and safety (OHS) risks<br>✓ Labor influx (expected to be minimal)<br>✓ Inadequate working conditions<br>✓ Discrimination against vulnerable workers                                           | ✓ Local labor prioritization to minimize labor influx<br>✓ Non-discrimination provisions and procurement procedures excluding suppliers associated with labor abuse<br>✓ Substantial job creation opportunities during rehabilitation activities<br>✓ Labor site plans and facilities included in ESMPs<br>✓ Worker-specific Grievance Redress Mechanism for workplace safety concerns<br>✓ Occupational Health and Safety Plans (OHSP) following World Bank Group EHS Guidelines<br>✓ Contractors required to prepare and implement Labor Influx Management Plans<br>✓ Emergency Response Plans for construction accidents and emergencies<br>✓ Regular OHS audits and compliance monitoring |
| <b>ESS3 - Resource Efficiency and Pollution Prevention and Management</b>                                                                             |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>All Agencies:</b><br>- Construction and rehabilitation<br>- Material transportation<br>- Agricultural activities<br>- Storage facility operations  | ✓ Air emissions from vehicles and machinery<br>✓ Fugitive dust during construction<br>✓ Water pollution from construction waste and agricultural runoff<br>✓ GHG emissions from transportation and operations<br>✓ Solid waste generation<br>✓ Chemical contamination from pesticides and fertilizers | ✓ Air and water pollution to be minimized through dust suppression, vehicle maintenance, and waste management<br>✓ Energy-efficient construction practices and equipment to reduce GHG emissions<br>✓ Preference for locally sourced materials to minimize transportation emissions<br>✓ Integrated waste management plans for all project activities<br>✓ Use of solar energy systems following Bank health and safety guidelines where applicable                                                                                                                                                                                                                                           |

|                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>✓ Fumigation and pest control chemical exposure in storage facilities</li> <li>✓ Spills/leaks, soil contamination</li> </ul>                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>✓ Site-specific ESIs and ESMPs addressing resource efficiency and pollution control</li> <li>✓ Chemical handling protocols and exposure prevention measures for storage operations</li> <li>✓ Community notification for hazardous operations</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ESS4 - Community Health and Safety</b>                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>All Agencies:</b> <ul style="list-style-type: none"> <li>- Construction near communities</li> <li>- Material transportation</li> <li>- Emergency response activities</li> <li>- Agricultural chemical use</li> </ul> | <ul style="list-style-type: none"> <li>✓ Community health and safety risks from construction</li> <li>✓ Fire safety risks, particularly in disaster shelters</li> <li>✓ Increased traffic and accident risks</li> <li>✓ Disease transmission risks</li> <li>✓ Chemical exposure from agricultural inputs</li> <li>✓ Safety risks during emergency training and operations</li> <li>✓ Waste and wastewater management hazards</li> <li>✓ Public nuisance from dust, noise, vibration</li> </ul> | <ul style="list-style-type: none"> <li>✓ Fire Safety Plans to be prepared and implemented for all facilities</li> <li>✓ Disaster shelter design to comply with BNBC including universal accessibility</li> <li>✓ Gender-friendly facilities with separate toilets and adequate WASH facilities</li> <li>✓ Gender and SEA/SH Action Plan development and implementation</li> <li>✓ Traffic management measures with adequate warning signs during construction</li> <li>✓ Emergency response mechanisms for accidents with immediate Bank/PIU reporting</li> <li>✓ World Bank EHS Guidelines compliance in all ESIs and ESMPs</li> <li>✓ Public interaction protocols and hygiene measures to prevent disease transmission</li> <li>✓ Proper waste and wastewater management to avoid community health hazards</li> <li>✓ Community awareness campaigns and grievance hotline</li> </ul> |
| <b>ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b>                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>LGED BWDB, DAE/BADC:</b> <ul style="list-style-type: none"> <li>- Construction of shelters and facilities</li> <li>- Infrastructure development</li> <li>- Community infrastructure</li> </ul>                       | <ul style="list-style-type: none"> <li>✓ Risk of involuntary acquisition of private lands</li> <li>✓ Physical displacement of communities</li> <li>✓ Temporary displacement during construction</li> </ul>                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>✓ No private land acquisition allowed under the project</li> <li>✓ Screening procedures to exclude involuntary acquisition and physical displacement</li> <li>✓ Consultation with communities and joint site visits for facility location</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>✓ Impacts on existing land use and access</li> <li>✓ Construction impacts on informal land users</li> <li>✓ Disruption of local economic/livelihood activities</li> </ul>                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>✓ Maintaining social networks and community structures during any necessary relocations</li> <li>✓ Grievance Redress Mechanism available for land-related complaints</li> <li>✓ Bridge and culvert reconstruction respecting existing land boundaries</li> <li>✓ Livelihood restoration support if minor economic displacement occurs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>BWDB, SDF, DAE/BADC:</b> <ul style="list-style-type: none"> <li>- Canal re-excavation</li> <li>- Agricultural intensification</li> <li>- Irrigation infrastructure</li> <li>- Livestock and fisheries activities</li> </ul> | <ul style="list-style-type: none"> <li>✓ Modification of natural habitats</li> <li>✓ Impacts on wildlife habitats and ecologically sensitive areas</li> <li>✓ Aquatic ecosystem disturbance from canal works</li> <li>✓ Biodiversity loss from agricultural intensification</li> <li>✓ Introduction of invasive species through agricultural inputs</li> <li>✓ Fish migration disruption</li> <li>✓ Impacts on pollinator species from pesticide use</li> </ul> | <ul style="list-style-type: none"> <li>✓ Environmental screening with priority exclusion of sensitive biodiversity areas</li> <li>✓ Screening procedures following ESMF guidelines to exclude subprojects impacting Key Biodiversity Areas (KBA) and Important Bird Areas (IBA)</li> <li>✓ Timing restrictions during fish breeding seasons for canal works</li> <li>✓ Fish rescue and relocation protocols during excavation</li> <li>✓ Crop diversification promotion and integrated pest management</li> <li>✓ Native seed variety conservation and promotion</li> <li>✓ Wetland restoration post-construction for canal works</li> <li>✓ Pollinator protection measures in agricultural areas</li> <li>✓ Regular biodiversity monitoring and adaptive management</li> </ul> |
| <b>ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities</b>                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>All Agencies:</b> <ul style="list-style-type: none"> <li>- All project activities across rural districts</li> </ul>                                                                                                         | <ul style="list-style-type: none"> <li>✓ The project is unlikely to adversely impact Small Ethnic Communities (SECs)</li> <li>✓ Potential exclusion of SECs from project benefits</li> <li>✓ Cultural appropriateness of interventions for ethnic minorities</li> </ul>                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>✓ Screening mechanisms to assess impacts on Small Ethnic Communities</li> <li>✓ Small Ethnic Community Development Plans (SECDPs) preparation if deemed necessary during implementation</li> <li>✓ Full access to project-level Grievance Redress Mechanism for SECs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>✓ Loss of traditional land uses/resources</li> </ul>                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>✓ Culturally appropriate program design and implementation</li> <li>✓ SEC-specific outreach and consultation processes</li> <li>✓ Monitoring of inclusion and benefit-sharing</li> </ul>                                                                                                                                                                                           |
| <b>ESS8 - Cultural Heritage</b>                                                                                                                                                      |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>LGED, BWDB, DAE/BADC:</b> <ul style="list-style-type: none"> <li>- Excavation during construction</li> <li>- Infrastructure development</li> <li>- Canal re-excavation</li> </ul> | <ul style="list-style-type: none"> <li>✓ Project locations are not expected to be in areas of rich cultural heritage</li> <li>✓ Chance findings of archaeological or cultural heritage items during excavation</li> <li>✓ Potential impacts on local cultural sites during construction</li> </ul> | <ul style="list-style-type: none"> <li>✓ Chance Find Procedure implementation as a precautionary measure for all construction activities</li> <li>✓ Immediate reporting to authorities and work suspension if any cultural heritage items are discovered</li> <li>✓ Cultural heritage impact screening during site selection</li> <li>✓ Community consultation on local cultural significance of project sites</li> </ul> |

*Table 4.3 Summary of Key Environmental and Social Risks, Mitigation Measures, and Responsible Agencies*

| <b>Risk Category</b>                          | <b>Key Risks</b>                                                                                                | <b>Main Mitigation Measures</b>                                                                                              | <b>Responsible Agencies</b> |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>Construction and Infrastructure</b>        | Drainage congestion, waterlogging, dust, noise, air pollution, waste generation, community safety risks         | Gender-sensitive design; energy-efficient construction; waste management; traffic and safety plans; inclusive consultations  | LGED, BWDB, DAE/BADC        |
| <b>Water Resource and Ecosystem Impacts</b>   | Water pollution, sedimentation, aquatic ecosystem disturbance, alteration of drainage patterns                  | Water quality monitoring; sediment and erosion control; phased construction; environmental screening; habitat restoration    | BWDB, SDF, DAE/BADC         |
| <b>Agricultural Inputs and Livestock</b>      | Pesticide and fertilizer misuse; invasive species; livestock waste management; disease risks; chemical exposure | Integrated Pest Management (IPM); training on chemical and livestock handling; veterinary support; biodiversity promotion    | SDF, DAE/BADC               |
| <b>Climate-Smart Irrigation Systems</b>       | Water overuse, ecosystem stress, inequitable access                                                             | Training on water-efficient irrigation; inclusive decision-making; promotion of water-saving technologies                    | SDF, DAE/BADC               |
| <b>Labor and Working Conditions</b>           | Child and forced labor; occupational health and safety (OHS) risks; gender-based violence (GBV); labor influx   | Local labor prioritization; OHSP aligned with WB guidelines; labor grievance mechanisms; GBV Action Plan; emergency response | All agencies                |
| <b>Community Health and Safety</b>            | Fire risks, traffic accidents, disease transmission, chemical exposure, waste management                        | Fire safety plans; BNBC-compliant facilities; SEA/SH Action Plan; traffic management; hygiene promotion; emergency response  | All agencies                |
| <b>Land Acquisition and Resettlement</b>      | Involuntary land acquisition; displacement; access loss                                                         | No private land acquisition; use of public lands; screening and consultations; grievance redress mechanisms                  | LGED, BWDB, DAE/BADC        |
| <b>Biodiversity and Natural Resources</b>     | Habitat loss and fragmentation; fish migration disruption; invasive species; pollinator decline                 | Environmental screening; timing restrictions; fish rescue protocols; native species promotion; wetland restoration           | BWDB, SDF, DAE/BADC         |
| <b>Indigenous Peoples / Vulnerable Groups</b> | Exclusion from benefits; cultural insensitivity; limited participation                                          | Screening for Small Ethnic Communities; culturally appropriate consultations; inclusive benefit access; grievance mechanisms | All agencies                |

|                          |                                                                 |                                                                                                             |                      |
|--------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------|
| <b>Cultural Heritage</b> | Chance finds of archaeological/cultural items; site disturbance | Chance Find Procedure; immediate reporting and work suspension; pre-construction screening; worker training | LGED, BWDB, DAE/BADC |
|--------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------|

## 4.5 Planning and Design Considerations for Avoidance of Environmental and Social Risks and Impacts

The early stages of subproject planning and design are crucial for identifying and implementing measures to avoid or minimize potential environmental and social risks. Key considerations include:

### 1. Site Selection

- **Avoid environmentally sensitive areas** such as wetlands, forests, or habitats of endangered species by conducting environmental screening and surveys.
- **Select alternative sites** that minimize displacement or disruption to local communities and avoid cultural or heritage sites.
- Conduct consultations with local stakeholders to ensure the chosen site aligns with community needs and preferences.

### 2. Technology and Methodology Selection

- Adopt **climate-smart and energy-efficient technologies**, such as solar-powered irrigation systems or bio-safe waste treatment methods, to reduce environmental footprints.
- Use methodologies that require minimal resource use and promote sustainability, such as drip irrigation for water conservation or organic farming techniques.
- Avoid technologies with high emissions or that generate hazardous byproducts unless appropriate mitigation measures are feasible.

### 3. Design of Waste Management Systems

- Plan for **proper waste disposal and treatment**, including the segregation of solid, liquid, and hazardous wastes during construction and operation phases.
- Incorporate systems for **recycling and reuse** of materials where possible, such as composting organic waste or reusing treated water for irrigation.
- Design storage and disposal facilities to ensure that chemicals and hazardous materials are managed to prevent contamination of soil and water.

### 4. Emergency Preparedness and Risk Reduction

- Develop and integrate **emergency response plans** for potential environmental and social risks, such as floods, fires, or hazardous material spills.
- Equip project sites with necessary safety infrastructure, such as fire extinguishers, first aid kits, and emergency evacuation routes.
- Conduct training for workers and community members on disaster response and risk reduction.

### 5. Inclusion of Vulnerable Groups

- Involve disadvantaged and vulnerable groups in planning and decision-making processes to ensure their needs are addressed.
- Design facilities to be accessible to individuals with disabilities and other vulnerable populations.
- Provide targeted measures, such as livelihood assistance or capacity building, to support these groups during and after project implementation.

## 6. Mitigation of Pollution and Resource Use

- Incorporate **pollution control measures**, such as dust suppression techniques, noise barriers, and wastewater treatment systems, into subproject designs.
- Use resource-efficient construction materials and methods to minimize consumption of water, energy, and raw materials.
- Avoid practices that may lead to air, water, or soil pollution, such as unregulated burning or improper dumping of construction debris.

## 7. Biodiversity Conservation

- Avoid activities that involve cutting down trees or harming natural habitats and ensure adequate compensation measures like replantation or habitat restoration if unavoidable.
- Design infrastructure to minimize impacts on wildlife corridors and breeding grounds of birds or animals.
- Conduct biodiversity assessments and integrate findings into the design to reduce ecological impacts.

## 8. Community Engagement

- Conduct **inclusive consultations** with community members, local leaders, and other stakeholders during planning stages to identify potential risks and concerns.
- Ensure that subprojects are aligned with the priorities of the local community to build trust and minimize resistance.
- Provide clear and transparent information about the project's potential risks, benefits, and mitigation measures.

Table 4.4 Summary of Potential Environmental and Social Impacts and their Significance (ESS Risk)

| Potential Impacts                                     | Duration of Impact          | Spatial Extent | Reversible or not | Likelihood | Magnitude       | Sensitivity | Significance Prior to Mitigation | Significance After Mitigation |
|-------------------------------------------------------|-----------------------------|----------------|-------------------|------------|-----------------|-------------|----------------------------------|-------------------------------|
| <b>Impacts related to project preparation</b>         |                             |                |                   |            |                 |             |                                  |                               |
| <b>Land cover and land use changes</b>                | Short to Medium             | Localized      | Yes               | Moderate   | Low to Moderate | Medium      | Moderate                         | Low                           |
| <b>Loss of natural vegetation and trees/mangroves</b> | Medium                      | Localized      | Yes               | Moderate   | Moderate        | High        | Substantial                      | Low to Moderate               |
| <b>Loss of aquatic habitat</b>                        | Short to Medium             | Localized      | Yes               | Low        | Low             | High        | Moderate                         | Low                           |
| <b>Loss of terrestrial habitats</b>                   | Short to Medium             | Localized      | Yes               | Low        | Low             | Medium      | Moderate                         | Low                           |
| <b>Drainage congestion and water logging</b>          | Short (During Construction) | Localized      | Yes               | High       | Moderate        | High        | Substantial                      | Low                           |
| <b>Loss of agricultural land</b>                      | Long                        | Localized      | Partially         | Low        | Moderate        | High        | Moderate                         | Low                           |
| <b>Impacts on vulnerable and disadvantaged groups</b> | Medium to Long              | Widespread     | Partially         | High       | Moderate        | High        | Substantial                      | Low to Moderate               |
| <b>Impacts during project construction phase</b>      |                             |                |                   |            |                 |             |                                  |                               |
| <b>Air pollution</b>                                  | Short                       | Localized      | Yes               | High       | Low to Moderate | Medium      | Moderate                         | Low                           |
| <b>Noise</b>                                          | Short                       | Localized      | Yes               | High       | Low             | Medium      | Moderate                         | Low                           |
| <b>Water pollution</b>                                | Short to Medium             | Localized      | Yes               | Moderate   | Moderate        | High        | Substantial                      | Low to Moderate               |
| <b>Soil contamination</b>                             | Medium                      | Localized      | Yes               | Moderate   | Moderate        | High        | Substantial                      | Low to Moderate               |
| <b>Solid and hazardous waste generation</b>           | Short to Medium             | Localized      | Yes               | High       | Moderate        | Medium      | Substantial                      | Low                           |

|                                                                    |        |           |           |          |                 |        |             |     |
|--------------------------------------------------------------------|--------|-----------|-----------|----------|-----------------|--------|-------------|-----|
| <b>Fire and safety risks</b>                                       | Short  | Localized | Yes       | Moderate | Low to Moderate | Medium | Moderate    | Low |
| <b>Impacts on aquatic habitat (from irrigation/drainage works)</b> | Medium | Localized | Partially | Moderate | Moderate        | High   | Substantial | Low |
| <b>Site clearance and restoration</b>                              | Short  | Localized | Yes       | High     | Low             | Medium | Moderate    | Low |

## 5 Environmental and Social Management Procedures

This project will use a structured approach to environmental and social management to allow the project development process following the newly developed 10 ESSs, follow the mitigation hierarchy of avoidance, minimization, mitigation and compensation/offset for negative impacts and enhancement of positive impacts where practically feasible. Following sections describe what needs to be done at each stage of the overall project life –implementation of the project activities and reporting on progress.

### 5.1 Sub-project Assessment and Analysis-Environmental and Social Screening

Environmental and Social screening is essential to gather information on existing baseline status and to assess potential environmental and social impacts of the project activities. 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 and social impacts obtained from the screening, the decision for further environment and social assessment will be taken.

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. The environmental screening form addresses issues under ESS1, ESS3 and ESS4. The social screening form addresses issues under ESS1, ESS2, ESS4 and ESS10. PIUs must confirm the findings of the screening carried out by the consultants.

As a first step, all proposed activities should be screened to ensure that they are within the boundaries of the Project's eligible activities, and they are not considered as activities listed on the E&S Exclusion List is attached with the Annex 13.

As a second step, the PIUs will use the E&S Screening Form in Annex 15 to identify and assess relevant environmental and social risks specific to the activities and identify the appropriate mitigation measures. The Screening Form lists the various mitigation measures and plans that may be relevant for the specific activities (such as the Environmental and Social Codes of Practice, the Environmental and Social Management Plan, the Labor Management Procedures, Chance Find Procedures, etc.)

The PIUs will also identify the documentation, permits, and clearances required under the government's Environmental Regulation.

### 5.2 Environmental and Social Impact Assessment (ESIA)

The purpose of ESIA is to give the environment and people its due importance in the decision-making process by clearly evaluating the environmental and social consequences of the proposed interventions before implementation. Early identification and characterization of critical environmental and social impacts allows the public and the government to review about the environmental viability and social acceptability of a proposed development project and what conditions should apply to mitigate or

minimize those risks and impacts. The ESIA 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. Project will undertake a survey for identification of the persons and their families likely to be affected by the project.

Since the project will be implemented in 10 District areas, activities requiring ESIA may be implemented at different times. Therefore, multiple ESIA's may be necessary, clustering similar activities before the actual intervention begins. In the preparation phase, the ESIA shall achieve the following objectives:

- To establish the environmental and social baseline in the project area, and to identify any significant environmental and social issues.
- To assess these impacts and provide for measures to address the adverse impacts by the provision of the requisite avoidance, mitigation and compensation measures.
- To integrate the environmental and social issues in the project planning and design.
- To develop appropriate management plans for implementing, monitoring, and reporting of the environmental and social mitigation and enhancement measures suggested.

**ESIA Implementation Triggers:** The requirement for an ESIA is triggered based on the nature, scale, location, and potential environmental and social impacts of the proposed activities. Under this project, an ESIA will be required when any of the following criteria are met:

- Activities classified as Category 'Red' or 'Orange-A' under the Environmental Conservation Rules (ECR) 2023 of Bangladesh, involving significant infrastructure works (e.g., large-scale disaster shelters, flood embankments, major road and bridge rehabilitation).
- Activities classified as High or Substantial risk under the World Bank Environmental and Social Framework (ESF), based on Environmental and Social Screening outcomes.
- Any activities involving:
  - Significant conversion or degradation of natural habitats protected areas, wetlands, forests, or ecologically sensitive zones.
  - Large-scale land acquisition, displacement, or involuntary resettlement.
  - Potential impacts on vulnerable groups, including Indigenous Peoples or Small Ethnic Communities.
  - Generation of hazardous waste, extensive pesticide use, fumigation practices, or significant occupational health and safety (OHS) risks.
  - Construction or major rehabilitation of agricultural storage or processing facilities involving hazardous materials handling.

A preliminary Environmental and Social Screening will be carried out for each sub-project to confirm if these thresholds or conditions are met, determining the need for an ESIA.

The impact assessment will be conducted using the 04 major steps as follows:

- Planning
- Scoping
- Environmental and Social Impact Assessment
- Public Consultation

## 5.3 Environmental and Social Assessment Process

### Specific Activities and Responsibilities in the Environmental and Social Assessment Process:

In Bangladesh, the environmental and social assessment procedure will pass through three major tiers in order to optimize the sources required for conduction of environmental assessment studies, these three tiers are:

1. **Screening**
2. **Initial Environmental Examination (IEE)**
3. **Detailed Environmental and Social Impact Assessment (ESIA)**

Screening is the first step to determine whether further assessment is required and to identify the appropriate level of study. Depending on the scale and nature of impacts, either an IEE or full ESIA will be undertaken. The major activities and responsibilities at each stage are outlined below:

*Table 5.1 Major activities and responsibilities during different project stages*

| Project Stage                                                                         | Steps/<br>Activities | Description                                                                                                                                                                                                                                                           | Responsibility                                                                          | Timeline                            |
|---------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------|
| <b>Step-1: Screening</b>                                                              |                      |                                                                                                                                                                                                                                                                       |                                                                                         |                                     |
| <b>Planning and Pre-feasibility</b>                                                   | Undertake Screening  | Prepare a document containing environmental and social information covering potential environmental and social impacts, mitigation measures, evidence of public consultation etc. Take no further action for projects, which do not require environmental assessment. | BWDB, LGED, DAE/BADC, SDF and DDM as proponent or qualified professionals/ Consultants. | 1-2 weeks after site identification |
| <b>Step-2: Scoping to Identify Types of Environmental and Social Assessment Study</b> |                      |                                                                                                                                                                                                                                                                       |                                                                                         |                                     |
| <b>Pre-feasibility/ planning</b>                                                      | Scoping Exercise     | Identify, by using checklists and based on preliminary field examination the necessity to conduct an IEE or an ESIA.<br>Produce environment related document to competent authority for approval.                                                                     | BWDB, LGED, SDF, DAE/BADC and DDM as proponent or qualified professionals/ Consultants. | 2-3 weeks after screening           |
| <b>Step-3: Terms of Reference (ToR) for Environmental and Social Assessment Study</b> |                      |                                                                                                                                                                                                                                                                       |                                                                                         |                                     |

|                                                                        |                                                    |                                                                                                                                                                     |                                                                                         |                                  |
|------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------|
| Pre-feasibility/<br>planning                                           | Preparation of ToR                                 | Define the main environmental and social concerns and issues related to any Infrastructure program, which must be addressed by environmental and social assessment. | BWDB, LGED, DAE/BADC, SDF and DDM as proponent or qualified professionals/ Consultants. | 1-2 weeks after scoping approval |
|                                                                        | Approval of ToR                                    | Review, comment and approve ToR.                                                                                                                                    | DoE, Bangladesh                                                                         | 2-3 weeks after submission       |
| Step-4: Preparatory Work for Environmental and Social Assessment Study |                                                    |                                                                                                                                                                     |                                                                                         |                                  |
| Pre-feasibility and planning                                           | Assigning the work                                 | Determine whether to conduct environment and social assessment using in-house staff or whether to outsource it.                                                     | BWDB, LGED, DAE/BADC, SDF and DDM as proponent or qualified professionals/ Consultants. | 1 week after ToR approval        |
|                                                                        | Environmental and social Assessment team formation | Form team as per approved ToR.                                                                                                                                      | Environmental and Social Assessment Team                                                | 1 week                           |
|                                                                        | Prepare Work Plan                                  | Establish a workplan that gives appropriate weight to all activities.                                                                                               |                                                                                         | 1 week                           |
| Step-5: Undertake environmental and social assessment study            |                                                    |                                                                                                                                                                     |                                                                                         |                                  |
| Step-5.1: Desk Studies                                                 |                                                    |                                                                                                                                                                     |                                                                                         |                                  |
| Planning and design                                                    | Secondary data                                     | Collect and review relevant and appropriate published data, such as maps, reports etc.                                                                              | Environmental and Social Assessment Team                                                | 2-3 weeks                        |
|                                                                        | Initiation, interaction and consultation           | Discuss the proposed infrastructure and its potential environmental impacts with knowledgeable persons and concerned stakeholders.                                  |                                                                                         |                                  |
|                                                                        | Preparation of information summary                 | Draft a summary of the information that is relevant to the project and its possible environmental effects.                                                          |                                                                                         |                                  |

|                                            |                                                     |                                                                                                                                                                                                          |                                          |           |
|--------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------|
|                                            | Methods and Techniques                              | Determine the methods by which the fieldwork for Environmental and social Assessment will be conducted.                                                                                                  |                                          |           |
|                                            | Work Plan                                           | Revise the work plan based on desk studies                                                                                                                                                               |                                          |           |
| Step-5.2: Field Work                       |                                                     |                                                                                                                                                                                                          |                                          |           |
| Planning and design                        | Field equipment                                     | Collect and arrange field equipment required for Environmental and Social Assessment Studies                                                                                                             | Environmental and Social Assessment Team | 2 weeks   |
|                                            | Field survey for collection of baseline information | Survey at project location, interaction with the local community and investigate the issues identified during desk study; collect baseline (physical, biological and socio-economic aspects) information |                                          |           |
| Step-5.3: Data Analysis and Interpretation |                                                     |                                                                                                                                                                                                          |                                          |           |
| Planning and design                        | Impacts Identification                              | Establish what environmental impacts will be taken place as result of interaction of environmental settings and infrastructure construction, rehabilitation, and maintenance activities.                 | Environmental and Social Assessment Team | 2-3 weeks |
|                                            | Impact Prediction                                   | Establish the extent of environmental consequences of the proposed infrastructure construction and operation.                                                                                            |                                          | 3-4 weeks |
|                                            | Impact assessment                                   | Judge whether the consequences are significant enough to require action to be                                                                                                                            |                                          | 2-3 weeks |

|                                       |                                                                 |                                                                                                                                                                               |                                                                                                  |                         |
|---------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------|
|                                       |                                                                 | taken.                                                                                                                                                                        |                                                                                                  |                         |
|                                       | Mitigation Measures                                             | Design mitigation measures to avoid, reduce, minimize & compensate for adverse impacts & maximize beneficial impacts.                                                         |                                                                                                  | 2-3 weeks               |
|                                       | Environmental and social Management Plan                        | Prepare ESMP covering monitoring and project management to ensure the implementation of mitigation measures.                                                                  |                                                                                                  | 2-3 weeks               |
|                                       | Stakeholder/Public Consultation                                 | Carry out at various stages in the assessment process to ensure quality, comprehensiveness and effectiveness and make sure that stakeholders' views are adequately addressed. | Environmental and social Assessment Team/Implementing Agency                                     | Throughout assessment   |
| <b>Review and Approval</b>            | Review & approval of environmental and social assessment report | Check completeness, adequacy, credibility, facilitate the decision-making process; decide if project should proceed or if further alternatives must be examined.              | BWDB, LGED, DAE/BADC, SDF and DDM will review and forward to DoE for approval of IEE/ESIA report | 2 weeks                 |
|                                       |                                                                 | Approval of environmental and social assessment report or rejection.                                                                                                          | DoE, Bangladesh                                                                                  | 4-6 weeks               |
| <b>Design Implementation</b>          | Implementation of ESMP, Monitoring                              | Determines compliance with ESMP.                                                                                                                                              | BWDB, LGED, DAE/BADC, SDF and DDM as proponent or qualified professionals/Consultants.           | Throughout construction |
| <b>Step-6: Undertake Audit</b>        |                                                                 |                                                                                                                                                                               |                                                                                                  |                         |
| <b>Environmental and social Audit</b> | Auditing                                                        | Environmental and social audit: Annually during Construction                                                                                                                  | BWDB, LGED, DAE/BADC, SDF and DDM as                                                             | As scheduled            |

|  |  |                                         |                                                    |  |
|--|--|-----------------------------------------|----------------------------------------------------|--|
|  |  | and two years after project completion. | proponent or qualified professionals/ Consultants. |  |
|--|--|-----------------------------------------|----------------------------------------------------|--|

**Environmental and social impacts screening process:** The ESMF also describes the mitigation approach that should be considered to reduce significant impacts of sub-project activities to acceptable levels and also to enhance benefits where possible. The last sub-section describes the different roles and responsibilities of Contractors in relation to environmental and social issues. The steps in the screening process are provided in the table below.

*Table 5.2 Screening Process*

| Screening Step                                                                                                                                                  | Responsibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timing                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Identification of Sub-Project</b>                                                                                                                            | Implementing Agency PIUs and E&S Support firm to complete the form.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | After identification of Potential location(s) for implementing sub-project                                                                         |
| <b>E &amp; S Screening of Sub Projects</b>                                                                                                                      | Environmental and Social Support firm and PIUs to conduct environmental and social screening based on site visits and initial consultations with local community as well as other agencies working in/near the proposed location(s).                                                                                                                                                                                                                                                                                                                            | Within 2 weeks of identifying potential location(s) for implementing sub-project                                                                   |
| <b>Preparation of mitigation measures for the sub-project where further detailed environmental and social assessment or ESMP is not required</b>                | Environmental and Social Support firm and PIUs to evaluate feasible mitigation measures for the sub-project where further detailed environmental and social assessment or ESMP is not required. World Bank E&S team will review the samples of the proposed mitigation measures.                                                                                                                                                                                                                                                                                | Within 1 weeks of impact screening                                                                                                                 |
| <b>Preparation of specific plans and instruments (ESIA, ESMP, RAP) for the sub- project where further detailed environmental and social studies is required</b> | Environmental and Social Support firm, M&E firm and PIU to decide whether further assessment such as full-fledged ESIA and ESMP and related studies (Vulnerability Assessment for gender and GBV, elderly, children and orphans, persons with disabilities, other identified vulnerabilities); impact assessment or studies on ecological impacts and human-elephant conflict would be required. Specific E&S plans/instruments will be prepared according to the ToRs attached to the ESMF and RPF. World Bank E&S team will review and clear E&S instruments. | Within 1 week of determining mitigation measures and before any bidding documents are issued, contracts signed, or construction activities started |

|                                                                                              |                                                                                                                                                                                                                                                                                                                                 |                                                 |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <b>Inclusion of relevant environmental specifications and ESMPs in the bidding documents</b> | PIU                                                                                                                                                                                                                                                                                                                             | Before finalization of tender/bidding documents |
| <b>Implementation of mitigation measures and plans</b>                                       | The contractors will carry out the E&S mitigation measures/management plans/instruments according to the screening form/other E&S instruments which will become part of the legal agreement between PIUs and the contractor. World Bank E&S team will review the status of mitigation/ESMPs implementation through supervision. | During construction and operation               |
| <b>Monitoring, Supervision and Reporting</b>                                                 | The PIUs with assistance from environmental and social support firm will supervise and monitor the implementation of mitigation measures/management plans/instruments. PIUs will prepare a monthly monitoring report. World Bank E&S team will review monitoring reports.                                                       | Regularly during construction and operations    |

The sub-projects with physical works/interventions require screening. The environmental and social screening will occur during the project preparation stage as a soon as fairly accurate site location(s) is (are) known for the sub-project.

### 5.3.1 Environmental and Social Risk Management Procedures (Applicable for SDF)

The environmental and social risk management procedures will be implemented through the Project's subproject selection process. In summary, the procedures aim to do the following:

*Table 5.3 Project Cycle and E&S Management Procedures*

| <b>Project Stage</b>                                         | <b>E&amp;S Stage</b> | <b>E&amp;S Management Procedures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>a. Assessment and Analysis: Subproject identification</b> | Screening            | <ul style="list-style-type: none"> <li>- During subproject identification, ensure subproject eligibility by referring to the <b>Exclusion List in table 5.4</b> below.</li> <li>- For all activities, use the <b>Screening Form in Annex 1</b> to identify and assess potential environmental and social risks and impacts, and identify the appropriate mitigation measures for the subproject.</li> <li>- Identify the documentation, permits, and clearances required under the government's Environmental Regulation.</li> </ul> |

|                                                                                                                                         |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>b. Formulation and Planning: Planning for subproject activities, including human and budgetary resources and monitoring measures</b> | Planning       | <ul style="list-style-type: none"> <li>- Based on <b>Screening Form</b> adopt and/or prepare relevant environmental and social procedures and plans.</li> <li>- For activities requiring Environmental and Social Management Plans (ESMPs), submit the first 5 for prior review and no objection by the World Bank prior to initiating bidding processes (for subprojects involving bidding processes) and/or launching activities (for subproject activities not subject to bidding).</li> <li>- Ensure that the contents of the ESMPs are shared with relevant stakeholders in an accessible manner and consultations are held with the affected communities in accordance with the SEP.</li> <li>- Complete all documentation, permits, and clearances required under the government's Environmental Regulation.</li> <li>- Train staff responsible for implementation and monitoring of plans.</li> <li>- Incorporate relevant environmental and social procedures and plans into contractor bidding documents, train contractors on relevant procedures and plans.</li> </ul> |
| <b>c. Implementation and Monitoring: Implementation support and continuous monitoring for projects</b>                                  | Implementation | <ul style="list-style-type: none"> <li>- Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring.</li> <li>- Track grievances/beneficiary feedback.</li> <li>- Continue awareness raising and/or training for relevant staff, volunteers, contractors, communities.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>d. Review and Evaluation: Qualitative, quantitative, and/or participatory data collection on a sample basis</b>                      | Completion     | <ul style="list-style-type: none"> <li>- Assess whether plans have been effectively implemented.</li> <li>- Ensure that physical sites are properly restored.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

More detail for each stage is provided below.

#### **a. Subproject Assessment and Analysis – E&S Screening**

As a first step, all proposed activities should be screened to ensure that they are within the boundaries of the Project's eligible activities, and they are not considered as activities listed on the E&S Exclusion List in the table below.

*Table 5.4 Exclusion List*

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Support of production of any hazardous good, including alcohol, tobacco, and controlled substances</li> <li>• Any construction in protected areas or priority areas for biodiversity conservation, as defined in national law</li> <li>• Activities that have the potential to cause any significant loss or degradation of critical natural habitats, whether directly or indirectly, or which would lead to adverse impacts on natural habitats</li> <li>• Activities involving changing forestland into agricultural land or logging activities in primary forest</li> <li>• Purchase or use of banned/restricted pesticides, insecticides, herbicides, and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides)</li> <li>• Activities that involve the use of international waterways</li> <li>• Any activity affecting physical cultural heritage such as graves, temples, churches, historical relics, archeological sites, or other cultural structures</li> <li>• Activities that may cause or lead to forced labor or child abuse, child labor exploitation or human trafficking, or subprojects that employ or engage children, over the minimum age of 14 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral, or social development</li> <li>• Any activity on land that has disputed ownership or tenure rights</li> <li>• Any activity that will cause physical relocation of households or will require the use of eminent domain</li> <li>• Any activity with significant environmental and social risks and impacts that require an Environmental and Social Impact Assessment (ESIA)</li> </ul> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

As a second step, Social Development Foundation (SDF) will use the **E&S Screening Form in Annex 1** to identify and assess relevant environmental and social risks specific to the activities and identify the appropriate mitigation measures. The Screening Form lists the various mitigation measures and plans that may be relevant for the specific activities (such as the Environmental and Social Codes of Practice, the Environmental and Social Management Plan, the Labor Management Procedures, Chance Find Procedures, etc.)

Social Development Foundation (SDF) will also identify the documentation, permits, and clearances required under the government's Environmental Regulation.

#### **b. Subproject Formulation and Planning – E&S Planning**

Based on the process above and the Screening Form, Social Development Foundation (SDF) will adopt the necessary environmental and social management measures already included in the Annexes of this ESMF

(such as the ESCOPs, the LMP, etc.) or develop relevant site-specific environmental and social management plans. If site-specific ESMPs are necessary, Social Development Foundation (SDF) will prepare these ESMPs, and other applicable documents as needed. Social Development Foundation (SDF) will provide approval and compile ESMPs and other applicable forms. The contents of the ESMPs will be shared with relevant stakeholders in an accessible manner, and consultations will be held with the affected communities on the environmental and social risks and mitigation measures. If certain subprojects or contracts are being initiated at the same time or within a certain location, an overall ESMP covering multiple subprojects or contracts can be prepared. Some moderate risk subprojects may also benefit from the preparation of a site-specific environmental and social assessment prior to the preparation of an ESMP.

The first 5 ESMPs will also be submitted to the World Bank for prior review and no objection. After this first 5, the World Bank and Social Development Foundation (SDF) will reassess whether prior review is needed for further ESMPs or a certain category of ESMPs (for example, for activities exceeding a certain budget, for certain types of activities).

Social Development Foundation (SDF) will also complete the documentation, permits and clearances required under the government's Environmental Regulation before any project activities begin. At this stage, staff who will be working on the various subproject activities should be trained in the environmental and social management plans relevant to the activities they work on. Social Development Foundation (SDF) should provide such training to field staff.

Social Development Foundation (SDF) should also ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as standard operating procedures for civil works. Social Development Foundation (SDF) should provide training to selected contractors to ensure that they understand and incorporate environmental and social mitigation measures; and plan for cascading training to be delivered by contractors to subcontractors and vendors. Social Development Foundation (SDF) should further ensure that the entities or communities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

### **c. Implementation and Monitoring – E&S Implementation**

During implementation, Social Development Foundation (SDF) will conduct regular monitoring visits. Describe the mechanisms, responsible parties, and the frequency for project supervision. Consider whether mobile devices can be used for monitoring of projects with numerous subproject locations. If there are contractors implementing subproject activities, the contractors will be responsible for implementing the mitigation measures in the E&S risk management documents, with Social Development Foundation (SDF) oversight.

Social Development Foundation (SDF) working to implement the project will ensure that monitoring practices include the environmental and social risks identified in the ESMF and will monitor the implementation of E&S risk management mitigation plans as part of regular project monitoring.

At a minimum, the reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the local levels will be submitted to Social Development Foundation (SDF) at the national level, where they will be aggregated and submitted to the World Bank on a quarterly or biannual basis.

Throughout the Project implementation stage, Social Development Foundation (SDF) will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures. An initial list of training needs is proposed below, in Section 6.3. Social Development Foundation (SDF) will also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

Last, if Social Development Foundation (SDF) becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, or kidnappings.

#### **d. Review and Evaluation – E&S Completion**

Upon completion of Project activities, Social Development Foundation (SDF) will review and evaluate progress and completion of project activities, and all required environmental and social mitigation measures. Especially for civil works, Social Development Foundation (SDF) will monitor activities with regard to site restoration and landscaping in the affected areas to ensure that the activities are done to an appropriate and acceptable standard before closing the contracts, in accordance with measures identified in the ESMPs and other plans. The sites must be restored to at least the same condition and standard that existed prior to commencement of works. Any pending issues must be resolved before a subproject is considered fully completed. Social Development Foundation (SDF) will prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

### **5.4 Technical Assistance Activities (SDF)**

Social Development Foundation (SDF) will ensure that the consultancies, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance activities under the

Project are carried out in accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs. They will also ensure that the outputs of such activities comply with the Terms of Reference.

## 5.5 Environment and Social Management Plan (ESMP)

This section presents the outline environmental and social management plan (ESMP). The basic objective of the ESMP is to manage adverse impacts of program interventions in a way that minimizes the possible adverse impact on the environment and people of the program influence area. The specific objectives of the ESMP are to:

- ✓ Identify the mitigation measures during preparation of the RAP. ESIA and different plans based on the outcomes of the screening;
- ✓ Maximize and sustain potential program benefits and control negative impacts;
- ✓ Draw responsibilities for program proponent, contractors, consultants, and other members of the program team for the environmental and social management of the program;
- ✓ Define a monitoring mechanism and identify monitoring parameters to:
  - Ensure the complete implementation of all mitigation measures,
  - Ensure the effectiveness of the mitigation measures,
  - Maintain essential ecological process, preserving biodiversity and where possible restoring degraded natural resources and habitats; and
  - Assess environmental training requirements for different stakeholders at various levels.

The ESMP will be managed through several tasks and activities and site-specific management plans. One purpose of the ESMP is to record the procedure and methodology for management of mitigation measures identified for each negative impacts of the program. The management will clearly delineate the responsibility of various participants and stakeholders involved in planning, implementation, and operation of the program.

### 5.5.1 Required Site Specific Environmental and Social Management Plans (ESS 1-10)

**Pollution Prevention Plan:** will be prepared and implemented by the contractors based on the ECoPs and WBG EHS Guidelines (2007) that will be part of the bidding documents. The Plan will be submitted to the PIUs for their review and approval before contractor mobilization.

**Waste Disposal and Effluent Management Plan:** will be prepared and implemented by the Contractor based on the ESMP, ECoP, and WBG EHS Guidelines (2007), which will be part of the bidding documents. The Plan will be submitted to the PIUs for their review and approval before contractor mobilization.

**Drinking Water Supply and Sanitation Plan:** Separate water supply and sanitation provisions will be needed for the temporary facilities including offices, labor camps and workshops in order not to cause shortages and/or contamination of existing drinking water sources. A Plan will be prepared by the contractors on basis of the ESMP and ECoPs, which are part of the bidding documents. The Plan will be submitted to the PIUs for their review and approval before contractor mobilization.

**Occupational Health and Safety (OHS) Plan:** It will be prepared and implemented by each contractor based on the WBG EHS Guidelines (2007), ECoPs, mitigation plan, and other relevant standards. The Plan will be submitted to the PIUs for their review and approval before contractor mobilization.

**Traffic Management Plan:** will be prepared by each contractor after discussion with LGED, BWDB and authorities responsible for roads and traffic. The Plan will be submitted to the DSM for their review and approval before contractor mobilization. The Plan will identify the routes to be used by the contractors, procedures for the safety of the local community particularly pedestrians, and monitoring mechanism to avoid traffic congestion.

**Resettlement Action Plan (RAP):** A standalone RPF has been prepared for this project to prepare RAP (if required)

**Fuel and Hazardous Substances Management Plan:** will be prepared by each contractor in accordance with the standard operating procedures, relevant guidelines, and where applicable, material safety data sheets (MSDS). The Plan will include the procedures for handling the oils and chemical spills. The Plan will be submitted to the DSM for their review and approval before contractor mobilization.

**Emergency Preparedness Plan:** will be prepared by each contractor after assessing potential risks and hazards that could be encountered during construction. The Plan will be submitted to the PIUs for their review and approval before contractor mobilization.

**Environmental Management of Resettlement Sites plan:** will be prepared by the Contractor in compliance with the stand-alone ESMP prepared for Resettlement Sites and presented in the main ESIA.

**Health, Safety and Environment Plan:** will be prepared by PIUs/Contractor to address 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.

**Stakeholder Engagement Plan (SEP):** One standalone SEP has been prepared.

**Labor Management Plan (LMP):** A separate LMP has been prepared for this project.

**GAP and SEA/SH Prevention Plan:** A separate GAP/SEA/SH Prevention Plan has been prepared for this project.

**Communication Strategy:** A formal communication strategy will be prepared for the project laying out various communication needs and outreach tools and explaining the responsibility of PIC to convey the B-STRONG- ESMF project impacts and its implications for various stakeholders. A key aspect of this strategy shall be the communication of any project related impacts.

**Biodiversity Conservation and Monitoring:** Detailed ecological studies will be carried out, during ESIA study in the project impact area, to broaden the existing baseline data. The ESIA of the project should identify potential sites of sensitive ecological area, mangrove area, fish conservation area, locations of dolphin conservation, habitat for coastal birds, sea turtle, etc. in the project area. The proposed study will confirm these locations, identify additional locations and islands/chars of conservation significance and prepare detailed conservation plans and implement these plans. A consulting firm will be hired to carry out the studies and to conduct biodiversity monitoring during the construction and post construction periods.

## 5.5.2 Site-Specific ESMP Preparation, Review, Consultation, Clearance, and Disclosure

**Applicability:** This procedure applies whenever screening indicates a site-specific ESMP is required (e.g., Moderate-risk subprojects, or proportionate plans for micro-works; for **Substantial-risk** subprojects an ESIA+ESMP may be required).

**Minimum ESMP contents:** Executive summary; subproject description; policy/regulatory context (incl. DoE Environmental Clearance Certificate (ECC) and relevant NOCs/permits); baseline; risk/impact analysis; Mitigation Plan (who/what/where/when/how; KPIs; budget); Monitoring Plan (parameters/frequency/locations/responsibilities; budget); roles/responsibilities; topic plans/addenda as triggered (Traffic, OHS, CHS incl. SEA/SH actions, Waste/Resource Efficiency, Biodiversity/seasonal timing, Cultural Heritage Chance-Finds, RAP/ARAP link); Stakeholder Engagement & GRM; emergency/incident reporting; schedule/costs; annexes (drawings, permits, Consultation & Disclosure Report, ESMP–BoQ crosswalk).

### Roles & responsibilities:

- **PIU E&S Specialists (Accountable):** scope ESMP; review drafts; integrate ECC/NOC conditions; clear Moderate-risk ESMPs; send Substantial-risk ESIA/ESMPs to the World Bank for prior review; ensure draft/final disclosure and integration into procurement.
- **Design/ E&S Support/ Supervision Consultant (Responsible):** prepare ESMP; run consultations; revise; support CESMP approval; monitor/report during works.
- **World Bank (Consulted/Approver):** prior review for Substantial (and as otherwise agreed); post-review for Moderate as applicable; consultation required if any High-risk screen.
- **Contractor (Implements):** prepare CESMP aligned to the cleared ESMP; obtain local permissions; implement; submit monthly E&S reports.
- **Local authorities/Permitting bodies:** issue ECC/NOCs/permits
- **Stakeholders/communities:** consulted per SEP; access disclosed ESMPs; use the Project GRM.

*Table 5.5 Time-bound workflow.*

| Step | What                                           | Who leads                      | Standard time limit                         |
|------|------------------------------------------------|--------------------------------|---------------------------------------------|
| 1    | Screening completed; risk fixed; ESMP required | PIU E&S                        | Day 0                                       |
| 2    | Scoping note & ESMP ToR (incl. permits list)   | PIU + Supervision              | Day 0–5                                     |
| 3    | Draft ESMP v1                                  | Supervision/Design/E&S Support | By Day 20 (Moderate) / Day 30 (Substantial) |
| 4    | PIU technical review                           | PIU E&S                        | 10 working days                             |
| 5a   | WB prior review (Substantial)                  | WB                             | 10–15 working days                          |
| 5b   | PIU clearance (Moderate)                       | PIU E&S                        | Within Step 4                               |
| 6    | Draft disclosure & consultations (per SEP)     | PIU + Supervision              | ≥14 working days comment window             |
| 7    | Revise to Final ESMP                           | Supervision                    | 5–10 working days                           |
| 8    | Final clearance (PIU; WB if prior review)      | PIU / WB                       | 5 working days                              |

|    |                                                                 |                      |                  |
|----|-----------------------------------------------------------------|----------------------|------------------|
| 9  | Final disclosure (web + local) & contractualization (specs/BoQ) | PIU + Procurement    | Before bidding   |
| 10 | CESMP approval (no works before this gate)                      | Engineer/Supervision | Pre-mobilization |

**ESCP gates:** (i) ESMP finalized and cleared before any physical works and embedded in bidding/contract documents (where required), and no physical works before ESMP finalization/clearance; (ii) Contractors submit monthly E&S reports; PIUs submit quarterly E&S performance reports to the WB within 15 days after each quarter; (iii) serious incidents reported within 48 hours with a Corrective Action Plan.

#### **Consultation & disclosure (draft and final):**

- **Draft ESMP:** Announce meetings ≥7 days in advance; ensure inclusive formats per SEP (women, elderly, persons with disabilities, SECs where relevant); provide Bangla non-technical summary and maps; record minutes/attendance/photos and written comments; attach a Consultation & Disclosure Report to the ESMP annex.
- **Draft disclosure:** Upload on IA/PIU website; place hard copies at PIU and local offices (Union Parishad/Pourashava/ULB) and site notice board; maintain a ≥14 working days public comment window (justify shorter only for micro-works if needed).
- **Final clearance & disclosure:** After PIU/WB clearance, upload the Final ESMP and a one-page Consultation Summary (issues raised → how addressed). Maintain evidence in the ESMP annex.

**Incident reporting:** Notify the World Bank within 48 hours of any serious incident (e.g., fatality, SEA/SH allegation, forced/child labor, violent protest, major spill); investigate and implement corrective actions.

## **5.6 Environmental Codes of Practice (ECoPs)**

The environmental codes of practice (ECoPs) are generic, non-site-specific guidelines. The ECoPs consist of environmental management guidelines and practices to be followed by the contractors/implementation organizations for sustainable management of all environmental issues. The contractor will be required to follow ECoPs and also use them to prepare the site-specific management plans.

**ECoP 1:** Waste Management

**ECoP 2:** Fuels and Hazardous Substances Management

**ECoP 3:** Water Resources Management

**ECoP 4:** Drainage Management

**ECoP 5:** Soil Quality Management

**ECoP 6:** Erosion and Sediment Control

**ECoP 7:** Topsoil Management

**ECoP 8:** Topography and Landscaping

**ECoP 9:** Borrow Areas Management

**ECoP 10:** Air Quality Management

**ECoP 11:** Noise and Vibration Management

**ECoP 12:** Protection of Flora

**ECoP 13:** Protection of Fauna

**ECoP 14:** Protection of Fisheries

**ECoP 15:** Road Transport and Road Traffic Management

**ECoP16:** Construction Camp Management

## 6 Implementation Arrangements

The Government of Bangladesh (GoB) will be responsible for the overall management and coordination of the B-STRONG. This section outlines the implementation arrangements for all agencies. This structure aligns with the mandates of respective government institutions, ensures compliance with the government’s rules of business concerning disaster and agricultural recovery, and facilitates efficient decision-making in line with internal fiduciary procedures. Although the project is now at preparation stage, the most likely institutions those would be involved are as follows:

### 6.1 The Implementing Agencies (IAs) and Project Implementation Units (PIUs)

Each IA will implement the Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), Environmental and Social Commitment Plan (ESCP), Gender and SEA/SH Prevention Plan, and Resettlement Policy Framework (RPF), among other instruments, through their respective Project Implementation Units (PIUs).

- **LGED** will be responsible for **Component 1.1**, which focuses on rehabilitating and constructing resilient infrastructure, including roads, bridges, and multipurpose disaster shelters, across the affected districts.
- **BWDB** will be responsible for **Component 1.2**, which involves flood protection rehabilitation activities such as embankment repairs, canal re-excavation, and the restoration of flood protection infrastructure.
- **SDF** will be responsible for **Component 2**, delivering livelihood restoration, community mobilization, and capacity building activities in targeted vulnerable communities, including Small Ethnic Communities (SECs), if present.
- **DDM** will be responsible for **Component 3**, focused on temporary employment through the EGPP+ framework and strengthening flood resilience and emergency response capacity in the affected districts.
- **DAE** will be responsible for **Component 4.1**, focusing on restoring sustainable agricultural production systems through technology dissemination, climate-resilient farming practices, seedling production, and support for farm mechanization.
- **BADC**, operating under a grant agreement with DAE, will implement **Component 4.2**, targeting irrigation and drainage infrastructure rehabilitation, seed storage, and water management systems.

Each IA will establish a dedicated Project Implementation Unit (PIU), headed by a Project Director, and staffed with:

| Implementing Agency | Safeguard Staff in PIU |
|---------------------|------------------------|
|---------------------|------------------------|

|                 |                                                                                                          |
|-----------------|----------------------------------------------------------------------------------------------------------|
| <b>LGED</b>     | Environmental Specialist (1), Social Specialist (1), Gender/GBV Specialist (1), Communication Expert (1) |
| <b>BWDB</b>     | Environmental Specialist (1), Social Specialist (1), Gender/GBV Specialist (1)                           |
| <b>DAE-BADC</b> | Environmental Specialist (1), Social Specialist (1), Gender/GBV Specialist (1)                           |
| <b>SDF</b>      | Environmental & Social Specialist (1), Community Specialist (1)                                          |
| <b>DDM</b>      | Environmental & Social Specialist (1)                                                                    |

All specialists are full-time, project-financed positions within each PIU. The PIUs will be supported by specialized consultants and design/supervision firms, where applicable. These firms will assist with environmental and social risk management, stakeholder engagement, gender integration, monitoring and reporting, and training. Additionally, a dedicated M&E firm will be hired (as needed) to support cross-cutting monitoring across agencies.

**Project Steering Committee (PSC):** In line with the Government's Rules of Business, each PIU will report to a dedicated Ministerial Project Steering Committee (PSC).

- LGED will report to the PSC chaired by the Secretary of the Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C).
- BWDB will report to the PSC chaired by the Secretary of the Ministry of Water Resources (MoWR).
- SDF will report to the PSC chaired by the Secretary, Financial Institutions Division, Ministry of Finance (MoF).
- DAE and BADC will report to the PSC chaired by the Secretary of the Ministry of Agriculture (MoA).
- DDM will report to the PSC chaired by the Secretary of the Ministry of Disaster Management and Relief (MoDMR).

The PSC will include representatives from relevant ministries, divisions, and departments involved in project coordination and strategic guidance. The PSC will:

1. Provide strategic and operational guidance;
2. Review financial and physical progress;
3. Resolve implementation bottlenecks and escalate unresolved issues;
4. Offer directions to ensure effective and timely project implementation

**Project Implementation Committee (PIC):** Each implementing agency will have a Project Implementation Committee (PIC), chaired by the respective head of agency:

- Chief Engineer of LGED
- Director General of BWDB
- Director General of DAE
- Chairman of BADC
- Director General of DDM
- Managing Director of SDF

The PIC is expected to include relevant representatives from ministries, division, departments/agencies. The PIC will ensure that implementation follows both Government and Bank rules and regulations. Specifically, the PIC will be responsible for:

1. Supervise and review implementation progress;
2. Monitor compliance with government and World Bank policies;
3. Address operational issues and delays;
4. Ensure cross-sectoral coordination;
5. Report key issues and progress to the respective PSC

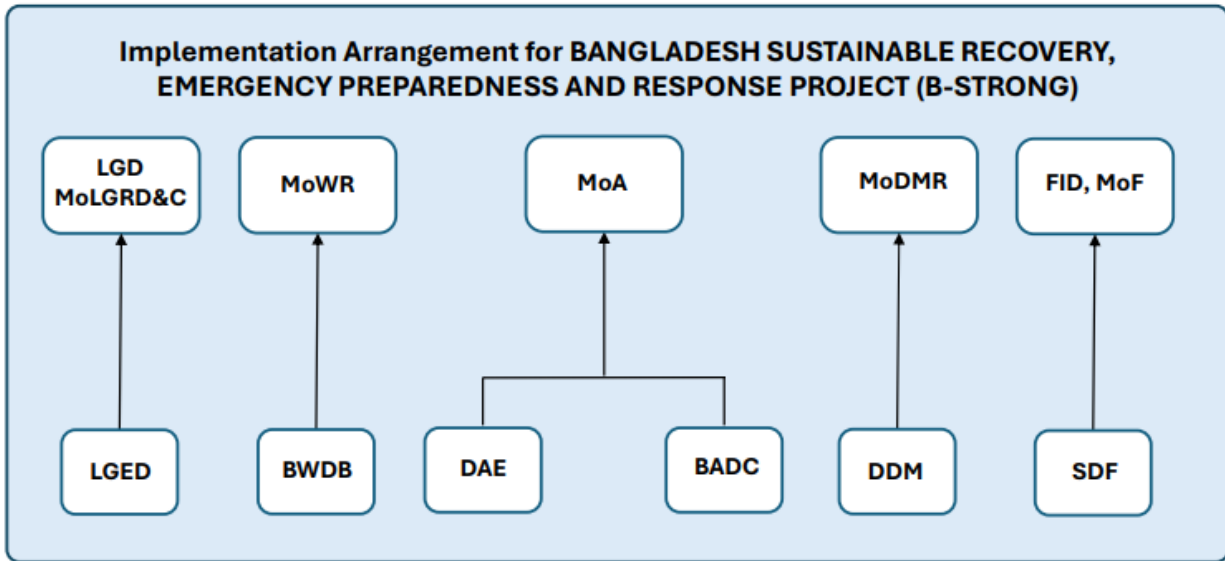


Figure 6-1 Implementation Arrangement for B-STRONG

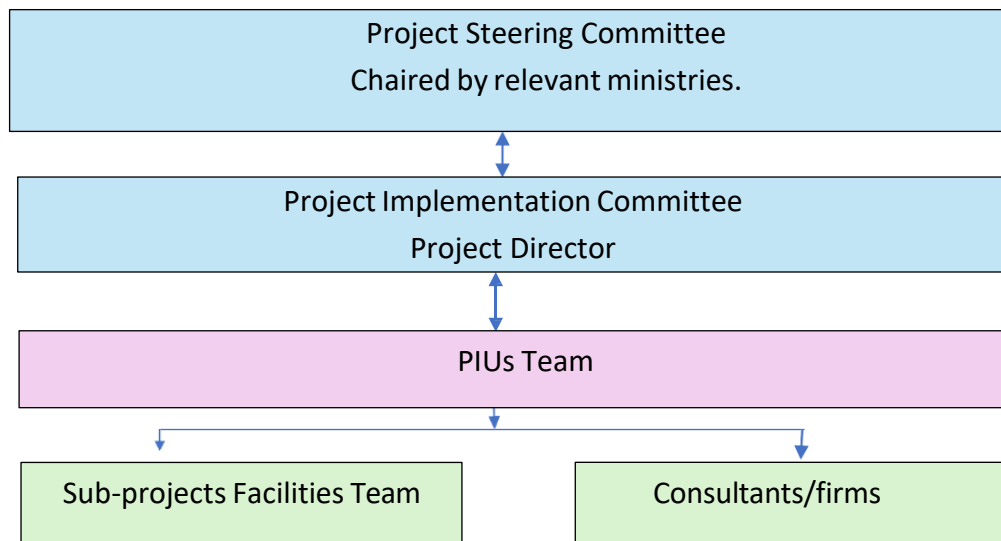
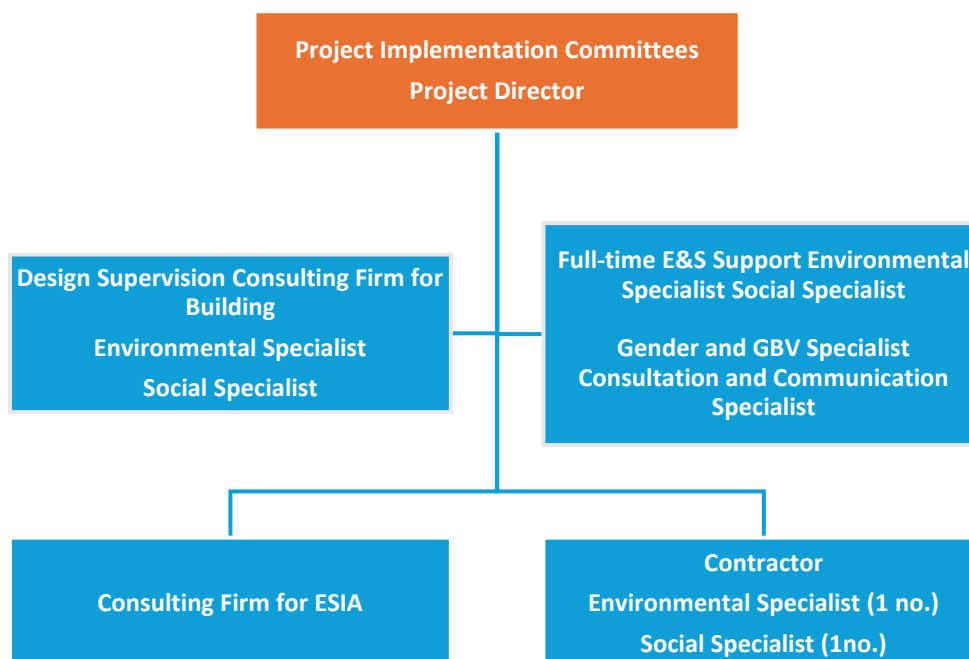


Figure 6-2 Overall Institutional Arrangements

The Project will use existing arrangements of the GoB for all implementation coordinated through the existing government mechanism (Figure 6.2). The existing Development Partner Agencies coordination

mechanism in the field will be through the Inter Sector Coordination Group (ISCG) and coordinated in Dhaka by the Strategic Executive Group (SEG). There will be inter- agency field level coordination on project activities with the RRRC, the ISCG, and the implementing agencies.

To ensure the proper management of environmental and social aspects under the Project, field level officers will be responsible for other entities which may be sub- contracted, and ensuring that the Bank’s policies are adhered to, similar arrangements will have to be established at every layer of contracting. The PIUs may be strengthened with additional staff as required and as agreed with the Bank. IAs will prepare separate monitoring reports and will share with World Bank quarterly.



*Figure 6-3 PIUs Institutional Arrangements*

**Note:** The “Consulting Firm for ESIA” is only engaged by LGED, BWDB, and DAE/BADC for sub-projects requiring a stand-alone ESIA.

**Roles and responsibility of Contractors:** Contractors will need to follow the LMP, which has been prepared as a stand-alone document, to cover all requirements of ESS2. The LMP includes the assessment of risks and impacts and required mitigation measure to ensure health and safety of the contractor’s workers that may be exposed to health risks. The LMP directs contractors to localize the economic benefits with minimal opportunities for outside labor to service work that require specialized/skilled labor that is not present in project localities. Beside this the Contractor will be required to write, adopt and implement a written Labor Influx Management Plan as part of the bidding document and contract before employing any labor in the work. Although Labor influx is expected to be minimal as most labor will be recruited locally for flood affected areas.

Contractors need to address issues such as child labor, forced labor, gender and GBV issues, occupational health and safety specified in the bidding and contract documents as well as ensuring required training and awareness program. Adequate OHS protections in accordance with EHSs and GIIP will also be

required to be implemented by contractors. To ensure the health and safety of workers during the construction contractors will be required to prepare and implement Occupational Health and Safety Plan (OHSP) following the World Bank Group Environment, Health and Safety Guidelines and local legislations. Contractors will also need to prepare and implement site specific Environmental and Social Management Plans (ESMPs). A specific Grievance Redress Mechanism (GRM) for the workers need to be implemented by the contractors.

### 6.1.1 Compliance, Non-Compliance and Escalation (CAP)

**Purpose:** Establish clear, time-bound procedures to manage non-compliance with ESMP/CESMP, permit/ECC conditions, or contract E&S clauses, and to resolve E&S disputes efficiently. **Scope:** all IAs/PIUs, Supervision/Engineer, Contractors, and any E&S Support/M&E/External Monitoring firms across all components and packages.

#### Definitions:

- **Observation:** Minor deviation with no material risk — correct within 48 hours.
- **Non-Conformance Report (NCR):** Documented breach of the ESMP/CESMP, ECC/NOC, or a contract clause — Corrective Action Plan (CAP) required.
- **Serious Incident:** Fatality; SEA/SH; forced/child labor; major spill/significant pollution; violent protest/serious security event; or any event likely to have significant adverse effects on communities, workers, cultural heritage/biodiversity, or the environment.

#### Roles (single-point accountability):

- **Contractor:** Implements ESMP via approved CESMP; maintains site E&S records; reports incidents immediately; prepares/implements CAPs; staffs the site-based posts listed.
- **Supervision/Engineer (may be combined with Implementation Support):** Day-to-day E&S oversight; issues Observations and Non-Conformance Reports (NCRs); reviews/endorsees CESMP; verifies CAP closure; recommends contractual remedies (withholds/stop-work).
- **PIU E&S Specialists:** Own the package E&S compliance register; approve CAPs for Majors/Critical; issue agency-level directives (stop-work); notify the World Bank on serious incidents; compile quarterly E&S reports.
- **Project Director / PIC:** Resolve escalated issues; endorse sanctions (e.g., LDs, removal/replacement of non-performing key personnel); elevate to PSC as needed.
- **World Bank:** Recipient of 48-hour notifications on serious incidents; prior review for Substantial-risk ESIA/ESMPs; agrees remedial path where required.

#### Escalation ladder and standard timelines:

1. **Contractor → Supervision/Engineer (site level)**
  - **Observation:** Correct and close within 48 hours.
  - **Minor Non-Compliance:** Close in 7–14 days via a Corrective Action Plan (CAP) agreed on site (short form acceptable).
2. **Supervision/Engineer → PIU E&S (package level)**

- **Major Non-Compliance:** Engineer issues NCR. Contractor submits a CAP within 10 working days (root cause, corrective/preventive actions, responsible persons, resources, deadlines, verification method). **Target closure:** within 30 days.
- **Contractual remedies (as applicable):** withhold E&S-linked line-item payments; require additional E&S staff/equipment; mandatory toolbox trainings.
- 3. **PIU E&S → Project Director/PIC (agency level)**
  - **Persistent/uncured Major or any Critical:** Issue stop-work order (partial/full) until risks are controlled; Contractor updates CAP within 48 hours; weekly reviews until closure. Consider liquidated damages, drawing on performance security, or replacement of key personnel, per contract.
- 4. **PD/PSC → World Bank**
  - **Serious incidents** (fatality; SEA/SH; forced/child labor; violent protest; major spill): notify the World Bank within 48 hours of becoming aware; submit the incident investigation report and Immediate/Long-Term CAP within 10 days (or per a Bank-agreed timeline); track in the quarterly E&S report.
  - **Material ESMP changes** that affect risks/mitigation → re-disclose per section 5.5.2 before resuming affected works.

#### Verification & closure:

- **Verification:** Supervision/Engineer verifies CAP implementation on site and documents evidence (photos, logs, permits, trainings, monitoring results).
- **Closure:** PIU E&S issues a closure memo (referencing the NCR/CAP ID), archives evidence in the package E&S register, and reflects status in the next quarterly E&S report. Recurrent issues trigger a Preventive Action Plan (systemic fixes).

#### Dispute resolution:

- **Site-level disagreements** (Contractor vs Supervision) escalate to PIU E&S within 2 working days.
- If unresolved, an agency review (PIU E&S + legal/procurement) is convened within 7 days.
- If still unresolved, refer to the PSC or the contractual dispute mechanism (Engineer's determination → Dispute Board/Adjudicator → Arbitration).
- **Community complaints** follow the Project GRM; SEA/SH allegations follow survivor-centered pathways per the LMP and SEA/SH Action Plan and are not handled in public forums.

**Records & reporting:** All Observations, NCRs, CAPs, verification evidence, and decisions are archived; summaries appear in the Contractor's monthly E&S report and the PIU's quarterly E&S performance report to the World Bank (submitted within 15 days after each quarter).

### 6.1.2 Clarity of Roles and Single-Point Accountability (RACI)

**Objective:** Define who does what for key E&S processes, with single-point accountability to avoid duplication and gaps.

**Legend:** **R** = Responsible (does the work) · **A** = Accountable (owns the result/decision) · **C** = Consulted (gives input) · **P** = Prior review (World Bank)

*Table 6.1 RACI — Roles and Accountability for Key E&S Processes*

| Process                                                                       | Contractor | Supervision / E&S Support | PIU E&S                   | Project Director | M&E Firm           | External Monitor | World Bank    |
|-------------------------------------------------------------------------------|------------|---------------------------|---------------------------|------------------|--------------------|------------------|---------------|
| Screening / ESMP requirement                                                  | C          | R                         | A                         | C                | C                  | –                | C             |
| ESMP preparation/up dates                                                     | C          | R                         | A                         | C                | C                  | –                | C/P*          |
| CESMP preparation/app roval                                                   | R          | A (recommend)             | C                         | C                | –                  | –                | –             |
| Site supervision & monthly E&S reporting                                      | R          | A                         | C                         | C                | –                  | –                | –             |
| Quarterly E&S report (to WB; annex contractors' monthly reports)              | C (data)   | C (compile)               | A                         | C                | R (indep. checks ) | C (annual audit) | C (recipient) |
| GRM incl. SEA/SH pathways                                                     | R          | C                         | A                         | C                | C                  | –                | –             |
| Incidents & 48-hour notification / 10-day CAP (or per a Bank-agreed timeline) | R (notify) | C (validate)              | A (notify WB; submit CAP) | C                | C                  | –                | C (recipient) |

\*WB prior review for Substantial-risk ESIA/ESMPs; selective post-review for Moderates as agreed.

For Serious Incidents, immediate stabilization actions are agreed with the World Bank within the 48-hour notification; full CAP timeline is agreed case-by-case.

### 6.1.3 Coordination of Multiple Firms

Where feasible, PIUs will rationalize firm roles; E&S Support Firm functions may be embedded within the Supervision/Engineer. If separate firms are engaged, a Coordination Protocol will be signed covering: joint monthly planning, a shared field calendar, common checklists/templates, one E&S data repository, and one consolidated Monthly E&S Report per contract package issued by the Supervision/Engineer (with Contractor inputs).

- The Supervision/Engineer is the sole issuer of NCRs and stop-work orders; the E&S Support Firm provides technical input but does not duplicate compliance notices.

- M&E uses the same repository and conducts sample-based verification (no parallel routine inspections).
- The consolidated Monthly E&S Report feeds into the PIU's quarterly submission to the Bank.

## 6.2 Specialist Responsibility

**Environmental Specialist:** PIUs will have a dedicated Environmental Specialist to ensure implementation of ESIA's, site based ESMPs and ESMF and other environmental responsibilities, including occupational health and safety issues. (S)He will maintain liaison with IAs and others during the Project implementation. (S)He will organize training activities for stakeholders. (S)He will also monitor project activities to ensure that environmental mitigation measures are properly implemented (especially environmental risks management issues). (S)He will prepare monitoring reports as directed by the Project Director.

**Social Specialist:** The PIUs will have a dedicated Social Specialists to ensure implementation of ESMP and other social management responsibilities. They will maintain liaison with WB E&S team, regulatory agencies, and other stakeholders during the Project implementation. The Specialists will also monitor construction activities to ensure that social mitigation measures are properly implemented.

**Gender and GBV Specialist:** The PIUs will have a dedicated Gender Specialist to ensure implementation gender responsibilities. They will maintain liaison with WB E&S team, regulatory agencies, and other stakeholders during the Project implementation. The Specialist will also monitor gender aspects associated with construction activities are properly implemented.

**Consultation and Communication Specialist:** A consultation and communication specialist will be hired at PIUs as applicable to implement SEP.

**Labor and OHS Specialist:** A labor and OHS specialist will be hired by the firms to ensure implementation of Labor Management Plans prepared by the contractors following the guidelines of LMP.

**Contractor's Environmental Specialist:** The construction contractors shall assign a dedicated, properly qualified and experienced, site-based Environmental Specialist at the construction site. The CES will be responsible to implement various aspects of the ESMP, particularly the mitigation measures to ensure that the environmental impacts as well as the health and safety issues of the construction works remain within acceptable limits. The CES will also be responsible to conduct environmental training for the construction crew. The CES needs to be a graduate preferably in environmental science/engineering with at least 3 years' experience in environmental management and health and safety.

**Contractor's Social Specialist:** The contractor shall have a site-based Social Specialist who will be responsible to implement all social, gender and labor issues with the guidance of the PIU/Social firm E&S team. PIUs with support of the Social Specialist and social firm will ensure that all contractor workers and counterparts involved in project implementation receive both initial and ongoing social and gender awareness and training sufficient to ensure they are familiar with their social responsibilities under the ESMP.

**Environmental and Social Support Firms:** These firms shall support the PIU (and their consultants) by independently supervising environmental and social related activities in the field. Firm will provide all necessary training to the contractors.

**Supervision Consultant:** This consultant shall ensure that design of all physical works consider of environmental and social considerations.

**Monitoring and Evaluation Consultant:** This consultant shall carry out independent monitoring and evaluation of monitoring items. In particular, the consultant shall evaluate the training records, GRM register and ESMP monitoring documents.

**Department of Environment (DoE):** Where relevant, DoE is responsible for issuing Site Clearance and Environmental Clearance Certificates (ECC).

## 6.3 Capacity Building

Environmental and social training will help ensure that the requirements of the ESS and subsequent social issues are clearly understood and followed by all project personnel throughout the project period. The PIUs will ensure, in collaboration with the PSC that these training are provided to all Project personnel. The social and environmental training program will be finalized before the commencement of the project. The training will be provided to the relevant ministry's representatives, staffs, contractors, NGOs and other staffs engaged in the Project. Training will cover all staff levels, ranging from the management and supervisory to the skilled and unskilled categories. The scope of the training will cover general environmental and social awareness, key environmental and social impacts of the program, ESMP requirement, OHS aspects and GBV. Different training programs will be initiated which can be realigned based on the needs. A tentative training programs for the project is shown in Table below.

*Table 6.2 Proposed Training and Capacity Building Approach*

| Contents                                                                                                   | Participants                                                 | Responsibility                              | Schedule                                                  |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------|-----------------------------------------------------------|
| Introduction to World Bank ESF                                                                             | PIUs implementing agency and contractors                     | World Bank and line Ministries              | Prior to the start of the Project activities.             |
| ESF guidelines and ESMF                                                                                    | PIUs implementing agency and contractors/ NGOs               | Line ministries with the support of WB team | Prior to the start of the Project activities.             |
| Screening method, social survey procedures, ESMP preparation                                               | Representative of line ministries; PIUs, Consulting firm/NGO | PIUs E&S specialist                         | Prior to the start of the Project activities.             |
| Training on ESS2, ESS10 and ESS5 (labor and working conditions, resettlement; stakeholder engagement etc.) | PIUs. Selected contractors' crew                             | PIUs                                        | Prior to the start of the field activities.               |
| Preparation and review of ESMF, SEP, LMP, RPF                                                              | PIUs. Design, Monitoring and supervision consultant          | PIUs                                        | Prior to the start of the field activities.               |
| Grievance Mechanism and handling procedures                                                                | Contractors, PIUs, consulting firms/NGO, Contractor          | PIUs                                        | Prior to the start of the construction activities. (To be |

|                                                                                                                                                                                                                                                                            |                                                                                                        |      |                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                            |                                                                                                        |      | repeated as needed)                                                       |
| Internal and External Monitoring procedures and reporting                                                                                                                                                                                                                  | PIUs and INGO/consulting firms, contractors                                                            | PIUs | Before and during the construction activities. (To be repeated as needed) |
| Occupational Health & Safety: ESMP implementation; GBV/SEA/SHA; Workplace risk management; Prevention of accidents at work sites; Health and safety rules; Solid and liquid waste management; Traffic and Road Safety; Preparedness and response to emergency situations   | Officials of IAs, locally active NGOs, Civil Work Contractors, Workers                                 | PIUs | Prior to mobilization of project staff and workers/ contractors           |
| GBV Risk Module<br>Raising awareness and measures to prevent and mitigate GBV/SEA risks. The topics and activities will be developed and included in the Project GRM.                                                                                                      | IA Local officials, Contractors Health Safety Officer, Labor Sardars (Leaders), Local NGOs, OCC Staffs | PIUs | Within six months of Project effectiveness and thereafter yearly          |
| Waste Sub-projects management crew will be trained for operation and maintenance, with a special focus on safe disposal of wastewater, hazardous wastes (e.g., solid wastes, liquid wastes) including necessary training and awareness on sanitation technology management | Waste Management Team of the HCFs' staff                                                               | PIUs | Upon assignment of waste management crew/ firm                            |

## 6.4 Guidelines for Bid Documents

Bid documents for ESMF related documents will be prepared by interested firms need to incorporate relevant items from the ESMF and ESMPs. All the ESMF related documents will be inserted with the bid documents and external monitor. Therefore, during preparation of tender documents, the PIUs need to ensure that:

- All relevant E&S documents including RPF, LMP, SEP, ESMF and ESMP items relevant for

contractors and firms are included in tender documents (specifications and BOQs)

- Provide clear information to potential bidders regarding social considerations for the work package(s)
- Submission of supporting documentation/materials of previous experience and track record on social requirements and implementation should be mentioned in the instructions to bidders.
- Evaluation of submitted bids should include criteria for adequacy of social documents preparation and implementation responses and costing.
- No works shall commence before CESMP approval (and disclosure where applicable), and contracts include remedies for non-adherence (payment holds, penalties, key-staff replacement, suspension/termination).

## 6.5 Budget for ESMF implementation

**Clarification on scope:** The full-time E&S staff listed in Section 6.1 are financed within each IA's PIU budgets. To avoid double-counting, the table below captures shared/central ESMF costs (specialists/firms, outreach, capacity building, external monitoring, GRM) applicable across agencies.

*Table 6.3 Tentative ESMF Implementation Budget*

| Items                                                                         | Man-month | Total (in USD) |
|-------------------------------------------------------------------------------|-----------|----------------|
| Social Development Specialist                                                 | 36        | 90,000         |
| Environmental Specialist                                                      | 36        | 90,000         |
| Communication Specialist                                                      | 24        | 60,000         |
| Gender and GBV Specialist                                                     | 24        | 60,000         |
| Consultations & Disclosure Logistics (venues, materials, translation, travel) | Lump-sum  | 180,000        |
| Consulting firm for ESIA/ESMP and RAP etc. preparation and implementation     | Lump-sum  | 160,000        |
| External Monitor                                                              | 24        | 100,000        |
| Capacity Building for PIU, NGO/consulting firm, Contractors                   | Lump-sum  | 100,000        |
| Grievance handling cost                                                       | Lump-sum  | 40,000         |
| <b>Subtotal</b>                                                               |           | <b>890,000</b> |
| <b>Contingency (10%)</b>                                                      |           | <b>89,000</b>  |
| <b>Total</b>                                                                  |           | <b>979,000</b> |

## 6.6 Monitoring

PIUs will conduct regular monitoring and evaluation of the updating and implementation of the ESMF. Monitoring and evaluation are intended to help ensure that the resettlement action plan is prepared and implemented according to the resettlement policy framework. The objective of the monitoring framework is to ensure that the mitigation measures designed to prevent, reduce and where possible offset any significant adverse on environmental and social impacts throughout the Project lifecycle.

Moreover, external monitor of the project will review all the E&S documents prepared for this project. External monitor will establish dialogue with the affected communities and ensure that their concerns and suggestions are incorporated and implemented in the project. External monitor will work closely with

the PIUs and internal monitoring team to implement the ESMP and other plans. He or she will prepare training programs and workshops for the staff of the PIUs and contractors.

In addition to internal monitoring, external (or independent) monitor will be engaged to provide an independent periodic assessment of ESIA and other plans implementation and impacts, to verify internal reporting and monitoring, and to suggest adjustment of delivery mechanisms and procedures as required. To function effectively, the organization responsible for external monitoring should be independent of the governmental agencies involved in resettlement implementation. Regular external monitoring should begin along with implementation activities and continue until the end of the project. The following activities are the standard functions of the external monitors:

Verification of internal reports, by field check

- Interview a random sample of PAPs in open-ended discussions to assess their knowledge and concerns.
- Participate as an observer in public consultations for PAPs at the project level. (Organizing these meetings is the responsibility of the implementing agency)
- To assess effectiveness and compliance with the ESMF.
- Check the type of grievance issues and the functioning of grievance redress mechanisms by reviewing processing of appeals at all levels and interviewing aggrieved PAPs.
- Advise project management unit regarding possible improvements in the implementation of the ESMF.

PIUs will establish procedures to monitor and evaluate the implementation of the plan and will take corrective action as necessary during implementation to achieve the objectives of the ESS. The extent of monitoring activities will be proportionate to the project's risks and impacts. For this project PIUs will ensure competent professionals to monitor the implementation of ESMF, design corrective actions as necessary, and NGO/consulting firms on compliance with ESS and periodic monitoring reports will be prepared and affected persons will be informed about monitoring results in a timely manner.

*Table 6.4 Monitoring Process of Key Indicators*

| <b>Monitoring Aspects &amp; Relevant ESS</b> | <b>Potential Indicators</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Consultation ESS1, ESS5, ESS10</b>        | <ul style="list-style-type: none"> <li>• Strategy for consultation and information disclosure is prepared.</li> <li>• Consultations organized as scheduled.</li> <li>• Project information's are disclosed.</li> <li>• Affected, interested, disadvantage and vulnerable groups are identified.</li> <li>• Views of disadvantage and vulnerable groups are considered during designing the entitlement and special measures are taken.</li> <li>• Schedules are planned for the various stakeholder engagement activities.</li> <li>• Knowledge of entitlements by the relevant stakeholders including project affected people</li> </ul> |
| <b>Grievances ESS2, ESS4, ESS5, ESS10</b>    | <ul style="list-style-type: none"> <li>• Operationalization of the grievance redress mechanism proposed with ESMF.</li> <li>• Operationalization of the GRM for labor and GBV</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                  | <ul style="list-style-type: none"> <li>• Information on the resolution of the grievances</li> <li>• Process by which people affected by the project can voice their grievances and concerns.</li> <li>• Process to document complaints and concerns</li> <li>• Grievance recording (e.g., MIS, grievance logbook)</li> <li>• Stipulated timeframes for acknowledgement and resolution of complaints</li> <li>• Awareness raising, to inform stakeholders about the GRM and appeals process.</li> <li>• Grievance reports published and frequency</li> </ul>                                                                                                                         |
| <b>Communications and Participation ESS10</b>                                    | <ul style="list-style-type: none"> <li>• Number of general meetings (for both men and women).</li> <li>• Percentage of women out of total participants.</li> <li>• Number of meetings exclusively with women.</li> <li>• Number of meetings exclusively with vulnerable groups.</li> <li>• Number of meetings at new sites.</li> <li>• Number of meetings between hosts communities and the DRPs.</li> <li>• Level of participation in meetings (of women, men, and vulnerable groups).</li> <li>• Level of information communicated—adequate or inadequate.</li> <li>• Information disclosure.</li> <li>• Translation of information disclosure in the local languages.</li> </ul> |
| <b>Budget and Time Frame ESS1, ESS5</b>                                          | <ul style="list-style-type: none"> <li>• Social Specialist/expert appointed and mobilized on schedule for the field and office work.</li> <li>• Capacity building and training activities completed on schedule.</li> <li>• Achieving resettlement implementation activities against the agreed implementation plan.</li> <li>• Funds allocation for resettlement to implementing agencies on time.</li> <li>• Receipt of scheduled funds by resettlement offices.</li> <li>• Funds disbursement according to the resettlement action plan.</li> <li>• Social preparation phase as per schedule.</li> </ul>                                                                         |
| <b>Contractors and sub-contractors ESS2</b>                                      | <ul style="list-style-type: none"> <li>• Setting a special score board approach based on the activities accomplished during project interval.</li> <li>• Project parties and laborers as well based on the set criteria.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Implementation of mitigation measures ESS1, ESS2, ESS4, ESS3, ESS5, ESS10</b> | <ul style="list-style-type: none"> <li>• Environmental and social monitoring parameters as per approved ESMPs based on subproject screenings and/or ESIAs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

ESMF monitoring will be carried out to ensure that the mitigation measures and plans are regularly and effectively implemented (Table 6.4). The PIUs environment and social specialists will carry out ESMF monitoring to ensure that the mitigation plans are being effectively implemented and will conduct field visits on a regular basis.

*Table 6.5 ESMF Monitoring Plan*

| What | When | Who | How |
|------|------|-----|-----|
|------|------|-----|-----|

| <b>Preparation Phase</b>                                                                            |                                                    |                                              |                                                    |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------|----------------------------------------------------|
| Training and capacity building activities                                                           | Before preparation of tender documents             | Project Director (PD) with E&S Support Firms | Review training records; conduct training sessions |
| Ensure environmental and social screening of locations and alignments                               | After locations and alignments are confirmed by PD | PIUs with E&S Support Firms                  | Review completed screening sheets                  |
| <b>Construction Phase</b>                                                                           |                                                    |                                              |                                                    |
| Training and capacity building activities                                                           | Monthly                                            | PD with E&S Support Firms                    | Review training records; conduct training sessions |
| Grievance redress management                                                                        | Monthly                                            | PD with E&S Support Firms                    | Review GRM register                                |
| Implementation and monitoring of ESMP mitigation/enhancement measures (including health and safety) | Monthly                                            | PD with E&S Support Firms                    | Review monitoring documents; check ESMP compliance |
| <b>Operation and Maintenance Phase</b>                                                              |                                                    |                                              |                                                    |
| Grievance redress management                                                                        | Monthly                                            | PIUs                                         | Review GRM register                                |
| Monitoring of ESMP mitigation/enhancement measures (including health and safety)                    | Monthly                                            | PIUs                                         | Review monitoring documents; check ESMP compliance |

## 6.7 Reporting

The PIUs will prepare a monthly report will summarize the following:

- ✓ Progress in implementing this ESMP and subsequent other E&S documents, etc.;
- ✓ Findings of the monitoring programs, with emphasis on any breaches of the control standards, action levels or standards of general site management.
- ✓ Summary of any complaints by external bodies and actions taken / to be taken; and
- ✓ Relevant changes or possible changes in legislation, regulations and international practices.

*Table 6.6 Reporting Requirements*

| <b>Report/Document</b>  | <b>Description</b>                                                                     | <b>Prepared By</b>   | <b>Submitted To</b> | <b>When</b>                                               |
|-------------------------|----------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------------------------------------------|
| <b>Training Records</b> | Register of all Trainings and Capacity Building activities conducted under the project | PIUs;<br>Consultants | PD                  | Within 3 weeks of any training/capacity building activity |

|                                          |                                                      |                                                                                                       |            |                        |
|------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------|------------------------|
| <b>Completed E&amp;S Screening Forms</b> | Identifies Potential Environmental and Social Issues | PIUs; Consultants                                                                                     | PD         | After completing forms |
| <b>GRM Records</b>                       | Register of grievances received and actions taken    | GRC or Consultants during construction phase and then relevant Implementing Agency officer thereafter | PD         | Monthly                |
| <b>Internal Monitoring</b>               | Monitoring data as defined in the ESMF               | PIUs and/or Consultants                                                                               | PD         | Monthly                |
| <b>External Monitor</b>                  | Monitoring data as defined in the ESMF               | External monitor                                                                                      | World Bank | Every quarter          |

## 7 Stakeholder Engagement, Disclosure, and Consultations

### 7.1 Introduction

Stakeholders refer to individuals or groups who are affected or likely to be affected by the project or other interested parties who have an interest in the project. “Stakeholder engagement” refers to the process of engaging with these stakeholders to support project implementation. It can involve a range of approaches such as public consultations, FGDs, information dissemination, grievance resolution, and participatory planning.

For this project, a common Stakeholder Engagement Plan (SEP) has been prepared for all implementing agencies. The SEP identifies key stakeholders, their interests and potential impacts, methods of engagement, and outlines strategies to ensure meaningful consultation and inclusive participation. Special attention has been given to the inclusion of vulnerable and disadvantaged groups, such as women, elderly persons, and people with disabilities.

As part of SEP preparation, consultations were held at various levels in proposed project locations. These engagements provided opportunities for potential project-affected persons (PAPs) and other interested parties to provide input into the project design and identify environmental and social risks and opportunities. The consultations were conducted in Bengali and local dialects with the support of local officials.

This chapter provides a summary of the stakeholder engagement process, key findings from the consultations, the grievance mechanism to be adopted, and the information disclosure strategy under the components of the project.

## 7.2 Stakeholder Consultations and Disclosure

### 7.2.1 Objective of the Consultations

The World Bank's Environmental and Social Framework (ESF) underscores the importance of open and transparent engagement between the borrower and project stakeholders as an important pillar of good practice. Effective stakeholder engagement through a robust consultation and disclosure mechanism promotes environmental and social sustainability of the project, enhances its acceptance and makes important contributions to design and aids in smooth implementation of the project. Stakeholder engagement is an inclusive process and is carried out throughout the life cycle of the project. ESS10 refers to Stakeholder Engagement and Information disclosure requirements of the ESF. The following are the objectives of ESS10:

- Establishment of a systematic approach to stakeholder engagement that will enable borrowers to identify and form constructive relationships with the relevant stakeholders, including Project Affected People (PAP).
- To assess the level of stakeholder interest and support for the project and ensure that through this mechanism, the views of the stakeholders are incorporated into the project design.
- Encourage and facilitate methods of effective, meaningful consultation and engagement with PAPs throughout the project cycle on issues that could potentially have an impact on them
- Ensure that project information related to environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.
- To provide accessible means for project-affected persons to submit grievances and receive prompt responses

Consultations with flood-affected communities, local government representatives, vulnerable groups, and other stakeholders informed the development of project designs and risk mitigation strategies.

### 7.2.2 SEP formulation and implementation arrangement

Each implementing agency has prepared a standalone Stakeholder Engagement Plan (SEP).

- **LGED:** Focuses on resilient rural and local infrastructure recovery, including the rehabilitation of rural roads, bridges, culverts, and the construction and capacity enhancement of multipurpose disaster shelters. Key stakeholders include flood-affected communities, local government officials, small business owners, transport users, and vulnerable groups such as women, elderly persons, people with disabilities, and small ethnic communities
- **BWDB:** Focuses on flood protection rehabilitation, including embankment resectioning and repair, canal re-excavation, flood control hydraulic structure repair, slope protection works, and enhancement of the flood forecasting system. Key stakeholders include communities residing near embankments and flood-prone areas, farmers, water-dependent households, local government representatives, and vulnerable and disadvantaged groups.

- **DAE and BADC:** These agencies are responsible for restoring sustainable agricultural systems. Stakeholder engagement focuses on promoting climate-resilient agricultural technologies, rehabilitating irrigation systems, and improving seed and fertilizer storage facilities. Key stakeholders include farmers, water user groups, small ethnic communities, women-headed households, people with disabilities, local entrepreneurs, local government officials, environmental and health authorities, and flood-affected communities.
- **DDM:** DDM's stakeholder engagement centers on community recovery and disaster resilience, with special emphasis on short-term employment under EGPP+, supply of rescue boats, and community disaster preparedness training. Key stakeholders include flood-affected communities, youth, women, laborers, and community leaders
- **SDF:** Focuses on restoring and strengthening community institutions and livelihoods through participatory planning and delivery of support packages. Stakeholder engagement follows a community-driven development (CDD) approach, emphasizing inclusive consultations and local ownership. Key stakeholders include poor and vulnerable households, community-based institutions such as Community Coordination Committees (CCCs) and Rural Coordination Structures (RCSs), youth, women's groups, self-help groups, producer alliances, and local civil society organizations.

The PIUs have appointed Environmental, Social, and Gender Specialists—either directly or through their Design, Supervision, or Implementation Support Firms—to manage and oversee stakeholder engagement activities. The SEPs outline consultation approaches such as public meetings, focus group discussions (FGDs), information disclosure through written materials and local media, as well as the establishment and operation of Grievance Redress Mechanisms (GRM).

#### **Monitoring and Adaptation:**

- The PIUs will monitor SEP implementation through both qualitative (e.g., feedback from consultations) and quantitative indicators (e.g., number of consultations, grievance resolution rates).
- Adjustments will be made based on field realities to ensure that the process remains adaptive and inclusive.
- Reports summarizing stakeholder engagement activities and grievance trends will be submitted quarterly to the World Bank

### **7.2.3 Summary of Stakeholder Consultation Process, Key Concerns, and Influence on ES Activities**

**Summary of Stakeholder Consultation:** All implementing agencies (LGED, BWDB, DAE, BADC, DDM, and SDF) undertook comprehensive, inclusive stakeholder consultations, as outlined in their respective Stakeholder Engagement Plans (SEPs). The process engaged a wide range of groups: flood-affected communities, farmers, women's groups, youth, small ethnic communities, people with disabilities, vulnerable households, local leaders, water user groups, government representatives, NGOs, community organizations, and the private sector.

Consultations were conducted across key flood-affected districts using public meetings, focus group discussions (including sessions specifically for women and marginalized groups), community workshops, and key informant interviews.

**Key Stakeholder Concerns:** Stakeholders identified several recurring priorities and concerns:

- **Livelihood Restoration:** Loss of agricultural income and requests for input support (such as seeds, tools), credit, and cash-for-work opportunities.
- **Damaged Infrastructure:** Urgent need for rehabilitation of rural roads, embankments, irrigation, and WASH facilities.
- **Inclusion of Vulnerable Groups:** Ensuring project benefits reach women, the elderly, people with disabilities, and small ethnic communities.
- **Disaster Preparedness:** Need for better early warning systems, community rescue training, and multipurpose shelters equipped with safe water and sanitation.
- **Environmental and Health Risks:** Concerns about pollution, debris, and dust from construction, as well as waterborne diseases.
- **Information and Grievance Mechanisms:** Need for clear project information and accessible, confidential grievance redress, especially for SEA/SH and labor issues.

**How Stakeholder Concerns Informed the ES Activities:** Stakeholder feedback was actively used to shape the project's ES framework and activities:

- **Livelihood Support:** The project includes village development funds, micro-credit, skills training, and cash-for-work for affected households, with progress tracked through specific indicators.
- **Infrastructure Rehabilitation:** Restoration of roads, embankments, and irrigation systems is prioritized in subproject selection and Environmental and Social Management Plans (ESMPs), with standards for resilience and accessibility.
- **Inclusive Project Design:** The SEPs, SECPF, and RPF require targeted outreach, separate consultations for women and small ethnic communities, and accessible infrastructure features in all new or upgraded facilities.
- **Strengthened Disaster Preparedness:** The design includes rescue boats, early warning equipment, community drills, and multipurpose shelters serving as emergency operation centers, all incorporating features requested by communities.
- **Environmental and Health Safeguards:** Contractors follow site-specific ESMPs for managing waste, dust, noise, and traffic, with monitoring by Design & Supervision firms and environmental awareness activities for workers and communities.
- **Information Sharing and Grievance Redress:** A three-tier, multi-channel grievance mechanism is in place (hotline, web, drop-boxes, PIU desks), with survivor-centered protocols for SEA/SH and labor complaints, and regular updates shared via notice boards, SMS, and meetings.

## 7.2.4 Stakeholder Consultation in Project Districts

Between October 2024 and January 2025, a total of stakeholder consultation meetings was held across five flood-affected districts—Brahmanbaria, Noakhali, Lakshmipur, Feni, and Cumilla—under the leadership of various implementing agencies. These meetings aimed to inform key stakeholders about the project objectives and to gather feedback on proposed interventions.

Discussions covered component-specific scopes, the Grievance Redress Mechanism (GRM), and inclusive strategies for vulnerable groups. In several cases, consultations were specifically held with women and vulnerable communities to ensure inclusive participation. Below is the summary of stakeholder consultations held during the project preparation phase.

Below is the summary of stakeholder consultations held during the project preparation phase-

*Table 7.1 Summary of Consultation Meetings*

| <b>Sl No</b> | <b>Date</b> | <b>Venue</b> | <b>Main Participant Groups</b>                                                         | <b>No. of Participants</b> | <b>Key Issues Discussed</b>                                                                             |
|--------------|-------------|--------------|----------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------|
| 01           | 25 Oct 2024 | Brahmanbaria | Flood-affected farmers, water user groups, communities, and government representatives | Male: 22, Female: 6        | Discussion on project scope, community benefits, environmental concerns, and feedback for design        |
| 02           | 25 Oct 2024 | Brahmanbaria | Community groups including farmers and local institutions                              | Male: 20, Female: 5        | Project objectives, social and environmental risks, GRM, and stakeholder roles in implementation        |
| 03           | 2 Nov 2024  | Feni         | Flood-affected communities                                                             | Male: 8, Female: 4         | Potential locations for project activities, environmental and social (E&S) impacts, mitigation measures |
| 04           | 2 Nov 2024  | Feni         | Government officials at local level                                                    | Male: 30, Female: 3        | Scopes of LGED and BWDB activities, potential E&S impacts, and mitigation measures                      |
| 05           | 3 Nov 2024  | Cumilla      | Flood-affected households and local leaders                                            | Male: 18, Female: 4        | Project scopes, expected benefits, E&S risks, grievance redress mechanism (GRM), and future engagements |
| 06           | 3 Nov 2024  | Cumilla      | Vulnerable groups, including women, ethnic minorities, and water user groups           | Male: 28, Female: 9        | Project scopes, benefits, GRM awareness, E&S risks, and inclusion measures                              |
| 07           | 11 Nov 2024 | Noakhali     | Flood-affected farmers, water user groups, and local community leaders                 | Male: 21, Female: 5        | Potential locations for project activities, environmental impacts, and mitigation options               |

|    |             |            |                                                                                          |                     |                                                                                                    |
|----|-------------|------------|------------------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------|
| 08 | 11 Nov 2024 | Noakhali   | Water-dependent households, vulnerable groups, and local representatives                 | Male: 24, Female: 4 | Site selection for interventions, risk communication, and community inclusion in design            |
| 09 | 24 Dec 2024 | Lakshmipur | Flood-affected communities and water user groups                                         | Male: 10, Female: 4 | E&S risks, infrastructure restoration needs, flood protection priorities, and mitigation plans     |
| 10 | 25 Dec 2024 | Feni       | Local government stakeholders                                                            | Male: 20, Female: 7 | Component scopes under DAE, DDM, and BADC, potential project risks, and response strategies        |
| 11 | 2 Jan 2025  | Cumilla    | Flood-affected households and community members                                          | Male: 17, Female: 6 | Information on project benefits, community roles, E&S risks, and available grievance mechanisms    |
| 12 | 2 Jan 2025  | Cumilla    | Vulnerable populations, including persons with disabilities and small ethnic communities | Male: 25, Female: 8 | Community priorities, project scope, GRM procedures, and inclusive participation in implementation |

### 7.2.5 Outcomes of Consultation Meetings

The stakeholder consultations conducted across the project districts revealed several critical community concerns, which directly shaped the technical design and implementation strategies. Each of the key issues raised during the consultation process has been carefully reviewed and considered by the implementing agencies. The resulting interventions ensure that project designs are responsive to local needs, promote inclusivity, and enhance climate resilience.

The table below summarizes the major consultation outcomes and how they were integrated into the final project design:

*Table 7.2 Outcomes of Consultation Meetings*

| Issues                                               | Discussion                                                                                                                                                                                                                                                                                                   | How the inputs of consultations are taken into consideration during the designing phase of the project                                                                                                                                                                             |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental and Social Risks and Management</b> | <ul style="list-style-type: none"> <li>- Key objectives of the project and potential E&amp;S impact.</li> <li>- Grievance mechanism at different levels.</li> <li>- Vulnerable communities will be consulted through the project, and they will be able to access the project information easily.</li> </ul> | <ul style="list-style-type: none"> <li>- Based on the consultation, project confirms that there will be no widening of the existing roads.</li> <li>- Consultation also aided in understanding of local context and development of ES risk profile mitigation measures.</li> </ul> |

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                  |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>- Involvement of UN agencies and other partners and their scope of work.</li> </ul>                                                                                       |
| <b>Planning and Operational Management</b> | <ul style="list-style-type: none"> <li>- During project implementation, there will be temporary arrangements for many issues like labor sheds, service reinstallation, etc.</li> <li>- It needs to ensure that the temporary operational issues are smooth and not interrupting daily activities.</li> <li>- Monitoring and Evaluation: Efficient reporting systems may be developed by using the existing MIS systems.</li> <li>- Sustainability of the present modalities of service delivery through NGOs.</li> </ul> | <ul style="list-style-type: none"> <li>- Issues of medical waste management.</li> <li>- Facility refurbishment.</li> <li>- Labor engagement.</li> <li>- ES Risk management and community involvement.</li> </ul> |
| <b>Operational Arrangement</b>             | <ul style="list-style-type: none"> <li>- Proper institutional arrangements for improved effectiveness of the project interventions.</li> <li>- Clarity in the scope and the work items.</li> <li>- Environmental and Social Documents like LMP, SEP, ESCP, ESMF, RPF, SEA/SH Action Plan.</li> <li>- Mid-term evaluation.</li> </ul>                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>- The DPP will clearly define the scope, working modalities, and the project activities.</li> </ul>                                                                       |

## 7.2.6 Stakeholder Engagement During the Implementation Period

During the implementation phase, implementing agencies will continue proactive stakeholder engagement in line with the project's environmental and social management system. As outlined in the SEP, quarterly consultations will be held with project-affected persons, including vulnerable groups such as women, the elderly, persons with disabilities, and small ethnic communities. Additional consultations will be conducted as needed.

Engagement activities will include public meetings, focus group discussions, site visits, and targeted sessions for disadvantaged groups. Communication methods will encompass social and mass media, printed materials, and information boards at construction sites. These activities will be led by the PIUs, with support from supervision consultants, contractors, and monitoring and evaluation (M&E) teams.

Stakeholder engagement will promote transparency around sub-project activities, environmental and social risks, job opportunities, and the grievance redress mechanism (GRM). Feedback from consultations will inform project adjustments to ensure inclusive and responsive implementation.

## 7.2.7 SEP Revision and Updating

Recognizing that project contexts can evolve during implementation, agencies have built flexibility into the SEP for periodic review and updating. Changes in the local environment, stakeholder landscape, institutional arrangements, or the emergence of new social or environmental risks may necessitate a revision of the engagement strategy to remain effective and inclusive. The need for SEP updates may also

arise if previously unidentified stakeholders—such as informal community leaders, additional vulnerable groups, or local institutions—become relevant to the project and need to be engaged. Similarly, if the methods and tools currently outlined in the SEP prove to be inadequate or obsolete for emerging conditions, appropriate revisions will be made to enhance their effectiveness. SEP revisions will be carried out by the Social Development Specialists in close consultation with the Communication Specialists within each PIU, based on implementation experience, stakeholder feedback, and field-level insights. The M&E consultants supporting the project will also provide feedback and recommendations for enhancing the SEP, especially based on observed gaps or emerging needs in the field. Any significant changes to project activities or stakeholder engagement approaches—such as expanded geographic coverage, new stakeholder groups, or updated grievance protocols—will be incorporated into the revised SEP. All major revisions will be subject to review and concurrence by the World Bank’s environmental and social safeguards team, and the updated SEP will be disclosed through appropriate channels to ensure public awareness and transparency.

## 7.3 Grievance Redress Mechanism (ESS10)

As the implementing agencies, respective agencies have established a comprehensive Grievance Redress Mechanism (GRM) aligned with the World Bank’s Environmental and Social Framework (ESF), specifically ESS10 on stakeholder engagement. The GRM provides a formal, inclusive, and accessible channel for project-affected persons and stakeholders to submit grievances related to environmental and social performance, exclusion from benefits, labor and employment issues, contractor behavior, or any other project-related concerns.

The GRM is operational across all phases of the project and is proportionate to its scale and risks. It is designed to resolve grievances in a timely, transparent, and confidential manner without fear of retaliation. Complainants may submit grievances anonymously, and no costs are imposed on them. Special efforts are made to ensure that vulnerable and disadvantaged groups—such as women, the elderly, persons with disabilities, and small ethnic communities—have equitable access to the grievance mechanism.

### 7.3.1 Structure and Operationalization of the GRM:

The project will implement a **three-tier** grievance redress structure, and a separate mechanism for labor-related complaints as described in the Labor Management Procedures (LMP). Each tier corresponds to a level of project administration—local, PIU, and central—ensuring that unresolved grievances can be escalated for further review and action.

#### Tier 1: Local Level GRC

At the local level, Grievance Redress Committees (GRCs) will be formed at the Upazila or community level, depending on the agency. These committees will serve as the first point of contact for project-affected persons or any stakeholder wishing to lodge a complaint. The structure of the GRC may vary slightly by agency, but will generally include:

- **Convener:** Upazila Engineer or Sub-Divisional Engineer (LGED/BWDB), Agriculture Extension Officer (DAE), Assistant Engineer (BADC), or Cluster/Community Facilitator (SDF)
- **Member-Secretary:** Environmental and/or Social Specialist from the PIU

- **Members:** Union Parishad Representative (preferably female if the complainant is female), Community Representative, and Social Specialist from the Supervision or Implementation Support Firm

At this level, complaints can be submitted in a variety of ways, including through suggestion boxes, grievance forms, emails, or SMS. Local project officials will also engage directly with communities during site visits to collect complaints or suggestions. This level ensures immediate attention to grievances and provides a simple, accessible mechanism for local communities to voice concerns.

## **Tier 2: PIU Level GRC**

If a grievance is not resolved at the local level, it will be escalated to the **PIU-level GRC**. This committee will be chaired by the **Project Director** and will include:

- **Social and Environmental Specialists** from the PIU
- **Local Government Representative** (as required)
- **Community Nominee** (preferably the same person who was involved in the local GRC)

The PIU-level GRC will review unresolved complaints and ensure that appropriate measures are taken to address them. This committee is responsible for ensuring that grievances are handled effectively, and that feedback is given in a transparent manner. In cases where grievances involve complex environmental or social impacts, the PIU will liaise with the relevant specialists to ensure a comprehensive resolution.

## **Tier 3: Project Steering Committee Level GRC**

If a grievance remains unresolved at the PIU level, it will be referred to the PSC-level GRC. This high-level committee will be convened at the project level and chaired by a senior representative from the relevant ministry, such as the Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C) for LGED, Ministry of Water Resources (MoWR) for BWDB, Ministry of Agriculture (MoA) for DAE and BADC, Ministry of Disaster Management and Relief (MoDMR) for DDM, and Financial Institutions Division (FID) of the Ministry of Finance (MoF) for SDF.

In cases where grievances involve **Sexual Exploitation and Abuse (SEA)** or **Sexual Harassment (SH)**, a specialized process is in place to handle these sensitive issues with confidentiality and a survivor-centered approach. Gender and GBV specialists will be assigned to oversee the handling of SEA/SH complaints, ensuring that the process prioritizes the needs and wishes of the survivor and facilitates referrals to appropriate service providers.

### **7.3.2 Labor GM (for Worker-related Complaints)**

In addition to the general GRM, a **Labor Grievance Mechanism (GM)** is established specifically for grievances related to workers employed under contractors and subcontractors. Workers will be informed about the GRM process, including their right to raise complaints regarding their working conditions, violations of the Labor Code of Conduct (CoC), or any incidents of SEA/SH. A dedicated **Labor GRC** will be available at the construction sites to receive, process, and address grievances related to labor conditions.

The **Labor GRC** will be supported by Site Managers appointed by contractors, who will serve as focal points for handling worker grievances. This ensures that worker-related issues, including those linked to health and safety, work conditions, or harassment, are dealt with promptly and in accordance with the Labor Management Procedures (LMP).

## 7.4 Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH)

The B-STRONG project acknowledges the substantial risks of **Sexual Exploitation and Abuse (SEA)** and **Sexual Harassment (SH)**, particularly in the context of labor force management, project implementation, and community interactions. These risks have been identified across various project activities, including construction works and community-level interventions. The project is committed to ensuring that appropriate safeguards are in place to address and prevent SEA/SH issues, in line with the **World Bank's Good Practice Note** on the subject.

A robust **Grievance Redress Mechanism (GRM)** will be utilized to receive complaints related to SEA/SH, ensuring a **survivor-centered approach** that prioritizes confidentiality, sensitivity, and support for survivors. This system will be linked with **GBV (Gender-Based Violence) service providers** within the project area and broader network, which will assist in responding to SEA/SH-related cases.

**SEA/SH GRM Process:** The following steps outline the process for handling SEA/SH grievances under the GRM:

*Table 7.3 SEA/SH GRM process*

| Step                         | Function                                              | Detail                                                                                                                                                                                                                       |
|------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uptake                       | Receive SEA/SH allegation                             | SEA/SH allegations will be reported via the GRM. Survivors will be informed that their wishes regarding the continuation of the case will be respected. The allegation will be immediately referred to the PIU-level GRC.    |
| Sort and process             | Document and register the allegation                  | The SEA/SH Coordinator at PIU will document the allegation. This can be done via phone, in person, or videoconferencing. The coordinator will visit the survivor if consent is given.                                        |
| Acknowledge and Follow-up    | Refer survivor to relevant GBV service providers      | The survivor will be referred to appropriate GBV service providers (medical, psychosocial, legal). Survivor consent for referral must be documented.                                                                         |
| Verify, Investigate, and Act | Provide support services to survivors and investigate | GBV service providers will support the survivor until they decide to stop availing services. The allegation will be investigated and, if related to the project, appropriate measures will be taken against the perpetrator. |
| Resolve and Close Cases      | Close the case once resolved                          | If the survivor has received the necessary support and the perpetrator has been appropriately sanctioned (if needed), the case will be closed, and the survivor will be informed of the outcome.                             |
| Monitor and evaluate         | Track and report on progress                          | The SEA/SH Coordinator will provide monthly or quarterly reports to the PIU, including data on allegations, support provided, and resolution status.                                                                         |

|                  |                             |                                                                                                                                                           |
|------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide Feedback | Inform survivor of progress | Throughout the process, the survivor will receive updates regarding the progress and outcome of their case. Feedback will also be given after resolution. |
|------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|

## List of Annexes

### Annex 1: Screening Form

(For use by SDF only)

The E&S Screening procedure comprises of two stages-process: (1) Initial screening by using the **Exclusion List** in Table 6 of the ESMF; and (2) Screening the proposed activities to identify the approach for E&S risk management. This Screening Form is the second stage of screening process and is to be used for all subproject activities. The completed forms will be signed and kept in the Project ESF file. The World Bank may review a sample of the forms during implementation support visits.

#### 1. Subproject Information:

|                                        |  |
|----------------------------------------|--|
| <b>Subproject Title</b>                |  |
| <b>Subproject Location</b>             |  |
| <b>Regional Unit in Charge</b>         |  |
| <b>Estimated Cost</b>                  |  |
| <b>Start/Completion Date</b>           |  |
| <b>Brief Description of Subproject</b> |  |

#### 2. Environmental and Social Screening Questionnaires

| Questions                                                                                                                                                                                                                   | Answer |    | Next Steps                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                             | Yes    | No |                                                                                                                                                                                                    |
| <b>ESS1</b>                                                                                                                                                                                                                 |        |    |                                                                                                                                                                                                    |
| 1. Is the subproject likely to have significant adverse environmental impacts that are sensitive and unprecedented that trigger the 'Ineligible Activities' or other exclusion criteria?                                    |        |    | If "Yes": Exclude from project.                                                                                                                                                                    |
| 2. Does the subproject involve <u>new construction</u> or <u>significant expansion</u> of ponds, solid waste management systems, shelters, roads (including access roads), community centers, schools, bridges and jetties? |        |    | If "Yes":<br>1. Prepare a site-specific E&S Assessment and/or ESMP for the proposed subproject, based on the template in Annex 3.<br>2. Include E&S risk management measures in bidding documents. |
| 3. Does the subproject involve <u>renovation or rehabilitation</u> of any small-scale infrastructure,                                                                                                                       |        |    | If "Yes":<br>1. Apply relevant measures based on the ESCOPs in Annex 2 (unless                                                                                                                     |

|                                                                                                                                                                                                                         |  |  |                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| such as groundwater wells, latrines, showers/washing facilities, or shelters?                                                                                                                                           |  |  | one of the questions below raises specific environmental risks and requires a site-specific ESMP).<br>2. Include E&S risk management measures in bidding documents.          |
| 4. Will construction or renovation works require new borrow pits or quarries to be opened?                                                                                                                              |  |  | If "Yes":<br>1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3.<br>2. Include E&S risk management measures in bidding documents. |
| 5. Does the project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable.                                                         |  |  | If "Yes": Apply relevant measures described in the ESMF and SEP.                                                                                                             |
| <b>ESS2</b>                                                                                                                                                                                                             |  |  |                                                                                                                                                                              |
| 6. Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?                                                                        |  |  | If "Yes": Exclude from project.                                                                                                                                              |
| 7. Does the subproject involve recruitment of workforce including direct, contracted, primary supply, and/or community workers?                                                                                         |  |  | If "Yes": Apply LMP in Annex 4.                                                                                                                                              |
| 8. Will the workers be exposed to workplace hazards that needs to be managed in accordance with local regulations and EHSs? Do workers need PPE relative to the potential risks and hazards associated with their work? |  |  | If "Yes": Apply LMP in Annex 4.                                                                                                                                              |
| 9. Is there a risk that women may be underpaid when compared to men when working on the project construction?                                                                                                           |  |  | If "Yes": Apply LMP in Annex 4.                                                                                                                                              |
| <b>ESS3</b>                                                                                                                                                                                                             |  |  |                                                                                                                                                                              |
| 10. Is the project likely to generate solid or liquid waste that could adversely impact soils, vegetation, rivers, streams or groundwater, or nearby communities?                                                       |  |  | If "Yes":<br>1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3.<br>2. Include E&S risk management measures in bidding documents. |
| 11. Do any of the construction works involve the removal of asbestos or other hazardous materials?                                                                                                                      |  |  | If "Yes": Apply asbestos guidance provide in the ESCOP in Annex 2.                                                                                                           |

|                                                                                                                                                                                                                                                                                                                        |  |  |                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12. Are works likely to cause significant negative impacts to air and / or water quality?                                                                                                                                                                                                                              |  |  | <p>If “Yes”:</p> <ol style="list-style-type: none"> <li>1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3.</li> <li>2. Include E&amp;S risk management measures in bidding documents.</li> </ol> |
| 13. Does the activity rely on existing infrastructure (such as discharge points) that is inadequate to prevent environmental impacts?                                                                                                                                                                                  |  |  | <p>If “Yes”:</p> <ol style="list-style-type: none"> <li>1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3.</li> <li>2. Include E&amp;S risk management measures in bidding documents.</li> </ol> |
| 14. Is there any potential to have impact on soil or water bodies due to agro-chemicals (e.g., pesticides) used in farmlands due to the consequences of the subproject activities (e.g., development of irrigation system, agriculture related activities, seed and fertilizer assistance, procurement of pesticides)? |  |  | <p>If “Yes”: Apply Fertilizer and Pest Management Plan in Annex 5.</p>                                                                                                                                                                       |
| <b>ESS4</b>                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                                                                                                                                              |
| 15. Is there a risk of increased community exposure to communicable disease (such as COVID-19, HIV/AIDS, Malaria), or increase in the risk of traffic related accidents?                                                                                                                                               |  |  | <p>If “Yes”: Apply LMP in Annex 4 and relevant measures in SEP.</p>                                                                                                                                                                          |
| 16. Is an influx of workers, from outside the community, expected? Would workers be expected to use health services of the community? Would they create pressures on existing community services (water, electricity, health, recreation, others?)                                                                     |  |  | <p>If “Yes”: Apply LMP in Annex 4.</p>                                                                                                                                                                                                       |
| 17. Is there a risk that SEA/SH may increase as a result of project works?                                                                                                                                                                                                                                             |  |  | <p>If “Yes”: Apply LMP in Annex 4.</p>                                                                                                                                                                                                       |
| 18. Would any public facilities, such as schools, health clinic, church be negatively affected by construction?                                                                                                                                                                                                        |  |  | <p>If “Yes”: Apply relevant measures based on the ESCOPs in Annex 2 (unless one of the other questions in the screening form raises specific environmental and social risks and requires a site-specific ESMP).</p>                          |
| 19. Will the subproject require the government to retain workers to provide security to safeguard the subproject?                                                                                                                                                                                                      |  |  | <p>If “Yes”: Prepare a site-specific ESMP for the proposed subproject, including an assessment of</p>                                                                                                                                        |

|                                                                                                                                                                                                                              |  |  |                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                              |  |  | potential risks and mitigation measures of using security personnel.                                                                                                         |
| <b>ESS5</b>                                                                                                                                                                                                                  |  |  |                                                                                                                                                                              |
| 20. Will the subproject require the involuntary acquisition of new land (will the government use eminent domain powers to acquire the land)?                                                                                 |  |  | If "Yes": Refer to and apply the project Resettlement Framework (RF).                                                                                                        |
| 21. Will the subproject lead to temporary or permanent physical displacement (including people without legal claims to land)?                                                                                                |  |  | If "Yes": Refer to and apply the project RF.                                                                                                                                 |
| 22. Will the subproject lead to economic displacement (such as loss of assets or livelihoods, or access to resources due to land acquisition or access restrictions)?                                                        |  |  | If "Yes": Refer to and apply the project RF.                                                                                                                                 |
| 23. Has the site of the subproject been acquired through eminent domain in the past 5 years, in anticipation of the subproject?                                                                                              |  |  | If "Yes": Refer to and apply the project RF.                                                                                                                                 |
| 24. Are there any associated facilities needed for the subproject (such as access roads or electricity transmission lines) that will require the involuntary acquisition of new land?                                        |  |  | If "Yes": Refer to and apply the project RF.                                                                                                                                 |
| 25. Is private land required for the subproject activity being voluntarily donated to the project?                                                                                                                           |  |  | If "Yes": Refer to and apply the project RF.                                                                                                                                 |
| <b>ESS6</b>                                                                                                                                                                                                                  |  |  |                                                                                                                                                                              |
| 26. Does the subproject involve activities that have potential to cause any significant loss or degradation of critical habitats whether directly or indirectly, or which would lead to adverse impacts on natural habitats? |  |  | If "Yes": Exclude from project.                                                                                                                                              |
| 27. Will the project involve the conversion or degradation of non-critical natural habitats?                                                                                                                                 |  |  | If "Yes":<br>1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3.<br>2. Include E&S risk management measures in bidding documents. |
| 28. Will this activity require clearance of mangroves?                                                                                                                                                                       |  |  | If "Yes": Exclude from project.                                                                                                                                              |
| 29. Will this activity require clearance of trees, including inland natural vegetation?                                                                                                                                      |  |  | If "Yes":<br>1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3.                                                                  |

|                                                                                                                                                                       |  |  |                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                       |  |  | 2. Exclude from project if more than 1 hectares of tree and vegetation cutting is expected.<br>2. Include E&S risk management measures in bidding documents. |
| 30. Will there be any significant impact on any ecosystems of importance (especially those supporting rare, threatened or endangered species of flora and fauna)?     |  |  | If "Yes": Exclude from project.                                                                                                                              |
| <b>ESS8</b>                                                                                                                                                           |  |  |                                                                                                                                                              |
| 31. Is the subproject to be located adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?                           |  |  | If "Yes": Apply Chance Find Procedures in Annex 5.                                                                                                           |
| 32. Locate near buildings, sacred trees or objects having spiritual values to local communities (e.g., memorials, graves or stones) or require excavation near there? |  |  | If "Yes": Apply Chance Find Procedures in Annex 5.                                                                                                           |

### 3. Conclusion

Based on the result from the screening above, please list the E&S risk management instruments to be prepared / adopt and implemented:

- a)
- b)

**Name and title of person who conducted screening:**

**Date of screening:**

## Annex 2: Environmental and Social Codes of Practice (ESCoPs)

(For use by SDF only)

To manage and mitigate potential negative environmental impacts, the project applies Environmental Codes of Practice (ESCOPs); outlined in this document. The ESCOPs contain specific, detailed and tangible measures that would mitigate the potential impacts of each type of eligible subproject activity under the project. They are marked as relevant for the planning phase, the implementation phase, or the post-implementation phase of activities. They are intended to be simple risk mitigation and management measures, readily usable to the Borrower and contractors.

The ESCOPs in this section are divided into:

- a. ESCOPs for infrastructure subprojects (general guidelines and technical guidelines)
- b. ESCOPs for livelihood support subprojects
- c. ESCOPs for delivery of food and non-food items

### a. ESCOPs for Infrastructure Subprojects

#### General ESCOP for Infrastructure Subprojects

| Issue                               | Environmental Prevention/Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Responsible Party                       |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1. <b>Noise during construction</b> | <ol style="list-style-type: none"> <li>a) Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance. (Planning phase)</li> <li>b) Use when needed and feasible noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees). (Implementation phase)</li> <li>c) Minimize project transportation through community areas. Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the project site and residential areas to lessen the impact of noise to the living quarters. (Implementation phase)</li> </ol> | SDF and Community (Project Beneficiary) |
| 2. <b>Soil erosion</b>              | <ol style="list-style-type: none"> <li>a) Schedule construction during dry season. (Planning phase)</li> <li>b) Contour and minimize length and steepness of slopes. (Implementation phase)</li> <li>c) Use mulch, grasses or compacted soil to stabilize exposed areas. (Implementation phase)</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                               | SDF and Community (Project Beneficiary) |

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|                                          | <ul style="list-style-type: none"> <li>d) Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed. (Post-Implementation phase)</li> <li>e) Design channels and ditches for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.). (Post-Implementation phase)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |
| 3. <b>Air quality</b>                    | <ul style="list-style-type: none"> <li>a) Minimize dust from exposed work sites by applying water on the ground regularly during dry season. (Implementation phase)</li> <li>b) Avoid burn site clearance debris (trees, undergrowth) or construction waste materials. (Implementation phase)</li> <li>c) Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. . (Implementation phase)</li> <li>d) Reduce the operation hours of generators /machines /equipment /vehicles. (Implementation phase)</li> <li>e) Control vehicle speed when driving through community areas is unavoidable so that dust dispersion from vehicle transport is minimized. (Implementation phase)</li> </ul>                                                                                            | SDF and Community (Project Beneficiary) |
| 4. <b>Water quality and availability</b> | <ul style="list-style-type: none"> <li>a) Activities should not affect the availability of water for drinking and hygienic purposes. (Implementation phase)</li> <li>b) No soiled materials, solid wastes, toxic or hazardous materials should be stored in, poured into or thrown into water bodies for dilution or disposal. (Implementation phase)</li> <li>c) Avoid the use of waste water pools particularly without impermeable liners.</li> <li>d) Provision of toilets with temporary septic tank. (Implementation phase)</li> <li>e) The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of river beds or flooding of settlements. (Implementation phase)</li> <li>f) Separate concrete works in waterways and keep concrete mixing separate from drainage leading to waterways. (Implementation phase)</li> </ul> | SDF and Community (Project Beneficiary) |
| 5. <b>Solid and hazardous waste</b>      | <ul style="list-style-type: none"> <li>a) Segregate construction waste as recyclable, hazardous and non-hazardous waste. (Implementation phase)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SDF and Community (Project Beneficiary) |

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                         |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|                             | <p>b) Collect, store and transport construction waste to appropriately designated/ controlled dump sites. (Implementation phase)</p> <p>c) On-site storage of wastes prior to final disposal (including earth dug for foundations) should be at least 300 metres from rivers, streams, lakes and wetlands. (Implementation phase)</p> <p>d) Use secured area for refuelling and transfer of other toxic fluids distant from settlement area (and at least 50 metres from drainage structures and 100 metres from important water bodies); ideally on a hard/non-porous surface. (Implementation phase)</p> <p>e) Train workers on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials. (Implementation phase)</p> <p>f) Collect and properly dispose of small amount of maintenance materials such as oily rags, oil filters, used oil, etc. Never dispose spent oils on the ground and in water courses as it can contaminate soil and groundwater (including drinking water aquifer). (Implementation phase)</p> <p>g) After each construction site is decommissioned, all debris and waste shall be cleared. (Post-Implementation phase)</p> |                                         |
| <b>7. Health and Safety</b> | <p>a) When planning activities of each subproject, discuss steps to avoid people getting hurt. (Planning phase)</p> <p>It is useful to consider:</p> <ul style="list-style-type: none"> <li>• Construction place: Are there any hazards that could be removed or should warn people about?</li> <li>• The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their works safely?</li> <li>• The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely?</li> <li>• Electricity Safety: Do any electricity good practices such as use of safe extension cords, voltage regulators and circuit breakers, labels on electrical wiring for safety measure, aware on identifying</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          | SDF and Community (Project Beneficiary) |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>burning smell from wires, etc. apply at site? Is the worksite stocked with voltage detectors, clamp meters and receptacle testers?</p> <p>b) Mandate the use of personal protective equipment for workers as necessary (gloves, dust masks, hard hats, boots, goggles). (Implementation phase)</p> <p>c) Follow the below measures for construction involve work at height (e.g. 2 meters above ground (Implementation phase):</p> <ul style="list-style-type: none"> <li>• Do as much work as possible from the ground.</li> <li>• Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem; certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson’s disease; certain medications – sleeping pills, tranquillisers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc.</li> <li>• Only allow people with sufficient skills, knowledge and experience to perform the task.</li> <li>• Check that the place (eg a roof) where work at height is to be undertaken is safe.</li> <li>• Take precautions when working on or near fragile surfaces.</li> <li>• Clean up oil, grease, paint, and dirt immediately to prevent slipping; and</li> <li>• Provide fall protection measures e.g. safety harness, simple scaffolding/guard rail for works over 4 meters from ground.</li> </ul> <p>d) Keep worksite clean and free of debris on daily basis. (Implementation phase)</p> <p>e) Provision of first aid kit with bandages, antibiotic cream, etc. or health care facilities and enough drinking water. (Implementation phase)</p> <p>f) Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas. (Implementation phase)</p> <p>g) Ensure adequate toilet facilities for workers from outside of the community. (Implementation phase)</p> <p>h) Rope off construction area and secure materials stockpiles/ storage areas from the public and display</p> |  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                         |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|                 | <p>warning signs including at unsafe locations. Do not allow children to play in construction areas. (Implementation phase)</p> <p>i) Ensure structural openings are covered/protected adequately. (Implementation phase)</p> <p>j) Secure loose or light material that is stored on roofs or open floors. (Implementation phase)</p> <p>k) Keep hoses, power cords, welding leads, etc. from laying in heavily travelled walkways or areas. (Implementation phase)</p> <p>l) If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours, if needed. (Implementation phase)</p> <p>m) Control driving speed of vehicles particularly when passing through community or nearby school, health centre or other sensitive areas. (Implementation phase)</p> <p>n) During heavy rains or emergencies of any kind, suspend all work. (Implementation phase)</p> <p>o) Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning. (Post-Implementation phase)</p> |                                         |
| <b>8. Other</b> | <p>a) No cutting of trees or destruction of vegetation other than on construction site. Social Development Foundation (SDF) will procure locally sourced materials consistent with traditional construction practices in the communities. (Planning phase)</p> <p>b) No hunting, fishing, capture of wildlife or collection of plants. (Implementation phase)</p> <p>c) No use of unapproved toxic materials including lead-based paints, un-bonded asbestos, etc. (Implementation phase)</p> <p>d) No disturbance of cultural or historic sites. (Planning and implementation phases)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | SDF and Community (Project Beneficiary) |

#### Specific ESCOPs for Infrastructure Subprojects

| Subproject Type  | Environmental Prevention/Mitigation Measures | Responsible Party |
|------------------|----------------------------------------------|-------------------|
| <b>Buildings</b> |                                              |                   |

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>In general</b>                                                 | <ul style="list-style-type: none"> <li>a) Provide adequate drainage in the building's immediate surroundings to avoid standing water, insect related diseases (malaria, etc.) and unsanitary conditions. (Implementation phase)</li> <li>b) Include sanitary facilities such as toilets and basins for hand-washing. (Implementation phase)</li> <li>c) Restrict use of asbestos cement tiles as roofing. (Implementation phase)</li> <li>d) Tiled floors are preferred for easier cleaning and more hygienic. (Planning and implementation phases)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Shelters, community centres, schools, kindergartens.</b>       | <ul style="list-style-type: none"> <li>a) Design of schools, community centres, markets should follow relevant requirements on life and fire safety required by National Building Codes and relevant guidelines from the concerned Ministries. (Planning phase)</li> <li>b) Schools: Maximise natural light and ventilation systems to minimise needs for artificial light and air conditioning; use large windows for bright and well-ventilated rooms. (Planning phase)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Roads, Bridges and Jetties</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |
| <b>Roads connecting villages, between villages and townships.</b> | <p>General Considerations:</p> <ul style="list-style-type: none"> <li>a) Control placement of all construction waste (including earth cuts) to approved disposal sites (at &gt;300 m from rivers, streams, lakes, or wetlands). If we do have to dispose spent oil unexpectedly, we should use safe disposal method capable by rural community. For example- burning spend oil as fuel. (Implementation phase)</li> <li>b) Erosion control measures should be applied before the rainy season begins, preferably immediately following construction. Maintain, and reapply the measures until vegetation is successfully established. (Implementation and post-implementation phases)</li> <li>c) Sediment control structures should be applied where needed to slow or redirect runoff and trap sediment until vegetation is established. (Implementation and post-implementation phases)</li> <li>d) Avoid road construction in unstable soils, steep slopes and nearby river banks. Additional measures (see the section below) need to be applied should there be no alternatives for road alignments. (Planning phase)</li> </ul> | SDF and Community (Project Beneficiary), Local Contractor |
|                                                                   | Protect slopes from erosion and landslides by the following measures (Implementation phase):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SDF and Community (Project                                |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                          |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                  | <p>a) Indigenous Species, fast-growing grass on slopes prone to erosion. These grasses help stabilise the slope and protect soil from erosion by rain and runoff. Locally available species possessing the properties of good growth, dense ground cover and deep root shall be used for stabilisation.</p> <p>b) Provide interceptor ditch, particularly effective in the areas of high intensity rainfall and where slopes are exposed. This type of ditch intercepts and carries surface run-off away from erodible areas and slopes before reaching the steeper slopes, thus reducing the potential surface erosion.</p> <p>c) For steep slopes, a stepped embankment (terracing) is needed for greater stability.</p> <p>d) Place a retaining wall at the lower part of the unstable slope. The wall needs to have weeping holes for drainage of the road sub-base, thus reducing pressure on the wall.</p> <p>e) Rocks (riprap) can be used in addition to protect the slope.</p> <p>f) Prevent uncontrolled water discharge from the road surface by sufficiently large drainage ditches and to drain water away from the down slope.</p>                                                                      | Beneficiary),<br>Local<br>Contractor                                     |
| <b>Bridges (less than 20 meters) and Jetties</b> | <p>Erosion protection (Planning and implementation phases):</p> <p>a) The main method of slope and erosion protection is the construction of gabions (gravity walls that support jetties bankment or slopes which have a potential to slip) and ordinary stone pitching.</p> <ul style="list-style-type: none"> <li>• The slope of gabions should be in the ratio of at least 1 vertical: 2 horizontals. Flatter slopes may be adopted depending on the site terrain.</li> <li>• The filling of the gabions should be from strong and competent rock which is laid very closely packed to maximize the weight.</li> <li>• Bracing wire should be used to prevent the gabion bulging out. The bracing wire should be placed at each third of the gabion height.</li> <li>• The gabions should be firmly anchored into the ground by founding the gabions below the expected scour depth level.</li> <li>• In cases where stone pitching is not provided, the top layer should be covered by soil to encourage the growth of grass and the stabilization of the slopes.</li> </ul> <p>b) Stone pitching may be provided as the only erosion protection measure in those cases where the erosion potential is deemed</p> | SDF and<br>Community<br>(Project<br>Beneficiary),<br>Local<br>Contractor |

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                           |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|                                  | minimal. Stone pitching is not very resistant to strong water current and is mainly used as the top finish on gabion walls.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
|                                  | <p>Water Quality and Fauna (Implementation phase):</p> <ul style="list-style-type: none"> <li>a) Restrict duration and timing of in-stream activities to lower flow periods (dry season) and avoid periods critical to biological cycles of valued flora and fauna (e.g., spawning)</li> <li>b) Water flow diversion should be avoided; if it is impossible to avoid, impacts should be assessed and mitigation proposed.</li> <li>c) Establish clear separation of concrete mixing and works from drainage areas and waterways</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Water Supply</b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                           |
| <b>Shallow Groundwater Wells</b> | <ul style="list-style-type: none"> <li>a) Site wells so that appropriate zone of sanitary protection can be established. (Planning phase)</li> <li>b) Equip with slab around the well for easy drainage, a crossbeam and a pulley to support the use of only one rope and bucket for collecting water. One rope and bucket is more hygienic for the well and water. (Implementation phase)</li> <li>c) Install steel steps/rungs (inside wall of a deep well) for maintenance and in case of emergency. (Implementation phase)</li> <li>d) A groundwater well usually has a wide open water area. It is necessary to provide a cover/roof/wire mesh on top to protect this area from falling leaves or debris. (Implementation phase)</li> <li>e) Wells should always be located upstream of the septic tank soak-away. Build the soak-away as far away as possible from the well (minimum 15 m/50 feet) as it can influence the quality of the drinking water when it is too close.-(Planning and implementation phases)</li> <li>f) Before using a new water source, test water quality and when intended for potable purposes ensure water meets the national drinking water standard. Water quality should also be monitored in the case of all well rehabilitation. (Post implementation phase).</li> </ul> | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Spring</b>                    | <ul style="list-style-type: none"> <li>a) Every spring capture should be equipped with a filter and a sand trap. Add a wall between the inflow and the outlet pipe to create chamber for settling out sand; build the wall with a notch (lowered section) for controlled flow. Sand must be cleaned out periodically (operation and maintenance). (Implementation and post-implementation phases)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SDF and Community (Project Beneficiary), Local Contractor |

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                           |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|                                                   | <ul style="list-style-type: none"> <li>b) Collection basin for spring capture needs to have a perforated PVC pipe (holes diameter 2mm) to be used as a screen for the water intake. Alternatively, a short pipe with wire mesh (screen) around the open end should be provided. (Implementation phase)</li> <li>c) Collection basin needs to have a fence to protect the spring from public access and risk of contamination; and a roof/cover over the spring to prevent leaves or other debris from entering the basin. (Implementation phase)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |
| <b>Rainwater harvesting</b>                       | <ul style="list-style-type: none"> <li>a) Rainwater storage reservoir should be intact, connected to roof gutter system, with all faucets and piping intact. (Implementation phase)</li> <li>b) If distribution pipes are attached into the storage reservoir, install the distribution pipes 10cm above the storage/tank bottom for better use of the storage capacity. (Implementation phase)</li> <li>c) Cover must be fitted tightly onto the top of the storage reservoir to avoid overheating and growth of algae (from direct sunlight), and to prevent insects, solid debris and leaves from entering the storage tank. (Implementation phase)</li> <li>d) A ventilation pipe with fly screen should be placed in the cover to help aerate the tank/reservoir which is necessary for good water quality. (Implementation phase)</li> <li>e) Roof gutters need to be cleared regularly, as bird and animal feces and leaf litter on roofs or guttering can pose a health risk if they are washed into the reservoir tank. (Post-implementation phase)</li> <li>f) Reservoir tanks need an overflow so that in time of really heavy rain, the excess water can drain away. The overflow should be designed to prevent backflow and stop vermin/rodents/insects entering the system. A good design will allow the main storage tank to overflow at least twice a year to remove built up of floating sediment on the top of the stored water and maintain good water quality. (Planning and implementation phases)</li> </ul> | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Installation / Rehabilitation of pipelines</b> | <p>Preventing contamination at water sources:</p> <ul style="list-style-type: none"> <li>a) Build a structure with roof over the water source to prevent leaves or other debris from entering into the basin. (Implementation phase)</li> <li>b) A fence is needed to protect the water sources (springs particularly) from public access and risk of contamination.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SDF and Community (Project Beneficiary), Local Contractor |

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                           |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|                             | <p>(Implementation phase)</p> <p>c) The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance. (Implementation and post-implementation phases)</p> <p>Pipe Laying:</p> <p>a) PVC water transmission and distribution piping need to be buried underground (coverage 50cm minimum) to prevent pipe against external damage (e.g. passing vehicles, solar UV radiation, etc.). Exposing PVC pipe to UV radiation causes the plasticiser in the PVC pipe to evaporate causing loss of integrity and brittleness. (Implementation phase)</p> <p>b) Pipe shall be laid in a straight line, over a constantly falling slope. (Implementation phase)</p> <p>c) When conditions do not allow piping to be buried (i.e. pipe is used above ground), then metal pipe must be used, and supported/braced as excessive movement may lead to leaks and breaks. (Implementation phase)</p> <p>d) Outlet pipes and fittings from water storage/basin shall not be PVC pipe due to exposure to solar UV/sunlight. Metal piping and fittings are preferred. (Implementation phase)</p> <p>e) When the distribution pipes are laying via forest area, the following considerations are needed (Planning and implementation phases):</p> <ul style="list-style-type: none"> <li>• The route must be considered with minimum effects of changing the existing situations of the forest as well as the least habitats area of the animals</li> <li>• Setbacks distances from important natural features (e.g. mineral licks, wildlife features such as nest, leks, dens, staging areas, lambing areas, calving areas) to conserve wildlife values should be kept, if necessary.</li> </ul> |                                                           |
| <b>Electrification</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                           |
| <b>Solar power supply</b>   | <p>a) Tidy wiring for easy maintenance and reduces the risk of accidents. (Implementation phase)</p> <p>b) Need to raise community awareness on electrical hazards and health and safety concerns, as well as proper maintenance of solar panels (Implementation and post-implementation phases)</p> <p>c) Need to raise community awareness on proper disposal of solar panels, specifically avoiding disposal of panels near water bodies (post-implementation phase)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Access to Sanitation</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                           |

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                           |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>Public latrines/toilets</b>           | <ul style="list-style-type: none"> <li>a) All toilets must have a septic tank made from non-permeable material such as concrete, plastic or fiberglass to provide primary treatment of fecal waste. (Implementation phase)</li> <li>b) PVC pipe used to connect pour-flush toilet to a septic tank must be buried underground or covered over (with cement) for protection and to prevent exposure to sunlight. (Implementation phase)</li> <li>c) Metal pipe is a preferred choice to be used as the gas vent pipe on septic tanks. Never use PVC pipe as it is unable to withstand long-term exposure to sunlight. (Implementation phase)</li> <li>d) A toilet should be at least 20 meters from water sources (well, spring, river). (Planning and implementation phases)</li> </ul>                                                                                                                                                                                                                                                                                                                                                             | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Wastewater Systems</b>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                           |
| <b>Wastewater sewerage and treatment</b> | <ul style="list-style-type: none"> <li>a) Septic tanks must have a vent pipe to prevent the build-up of gas inside the chamber and shall have a 'manhole' that provides access inside the tank if needed. (Implementation phase)</li> <li>b) Ensure that the septic tanks have two chambers: first chamber is for settling of sludge, and the second chamber is for aerobic treatment. These chambers will generally treat wastewater better. Partially treated septic tank effluent can pollute groundwater and surface water. (Implementation phase)</li> <li>c) Do not discharge septic tank effluent to an open drain or other surface water. The effluents need to be treated before final disposal. This may be achieved through: (i) an underground leach field, (ii) a vegetated leach field, or (iii) a pit for soaking away. (Implementation phase)</li> <li>d) Community awareness should be raised so that the community inspects the septic tanks periodically and ensures that the septic tanks are emptied every few years for the tank to continue to function properly. (Implementation and post-implementation phases)</li> </ul> | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Solid Waste Management</b>            | <ul style="list-style-type: none"> <li>a) Solid waste depots/disposal need to be located on hard-standing areas that prevent waste entering surface or groundwater. (Implementation phase)</li> <li>b) Waste depots/storage/disposal should be contained, sealed and/or roofed/covered to prevent storm water contamination. Wastes need to be emptied regularly. (Implementation phase)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SDF and Community (Project Beneficiary), Local Contractor |

#### b. ESCOPs for Livelihood Support Subprojects

#### ESCOPs for Livelihood Support Subprojects

| Risk/Concern                         | Environmental Prevention/Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Responsible Party                                         |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>General</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                           |
| <b>To minimize water pollution</b>   | <ul style="list-style-type: none"> <li>a) Avoid any activity causing excessive erosion and turbidity. (Planning phase)</li> <li>b) Keep waste and hazardous materials away from surface water bodies, drinking water sources and do not dispose of waste in creeks or rivers. (Implementation phase)</li> <li>c) Properly dispose contaminated wastewater and hazardous materials, if any, passing through conventional treatment process such as screening, settling, oil-water separation, etc. (Implementation phase)</li> <li>d) Avoid contamination of drinking water source (e.g. well) from inflow of waste materials and pollutants. -(Implementation phase)</li> <li>e) Avoid-large-scale animal farming and aquaculture activities in water catchment area. (Planning and implementation phases)</li> </ul> | SDF and Community (Project Beneficiary), Local Contractor |
| <b>To minimize air pollution</b>     | <ul style="list-style-type: none"> <li>a) Limit burning post-harvest waste material in close proximity to village; choose days with limited wind for burning; limit number and size of areas for burning per day; do not burn non-agricultural waste such as garbage, plastics or animal waste. Rather than burning post-harvest waste, consider alternative good practices such as composting to produce organic fertilizer or utilization as fuel for bioenergy production. (Planning and implementation phases)</li> <li>b) Reduce dust generation through application of water where practical. (Implementation phase)</li> <li>c) Limit idling of vehicles, machineries equipment. (Implementation phase)</li> </ul>                                                                                             | SDF and Community (Project Beneficiary), Local Contractor |
| <b>To minimize noise disturbance</b> | <ul style="list-style-type: none"> <li>a) Repair and maintain machineries for safe and quiet operation. (Implementation phase)</li> <li>b) Avoid emission of continuous/noisy sounds during working. (Implementation phase)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SDF and Community (Project Beneficiary), Local Contractor |
| <b>To minimize soil pollution</b>    | <ul style="list-style-type: none"> <li>a) Store petrol / diesel on impermeable floor (e.g. compacted clay, concrete floor) and surrounded by an embankment or berm. (Implementation phase)</li> <li>b) Storage for hazardous materials including petroleum should be above ground and isolated. (Implementation phase)</li> <li>c) Establishing an appropriate disposal area for hazardous materials</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                       | SDF and Community (Project Beneficiary), Local Contractor |

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                           |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|                                                                  | <p>and waste where prevents hazardous material from leaching into the soil and surface water. (Implementation phase)</p> <p>d) Do not dispose hazardous wastes anywhere except in areas designated by pollution control agencies. (Implementation phase)</p>                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| <b>To minimize impact from non-agricultural waste generation</b> | <p>a) Collect waste systematically, store and dispose at appropriately designated dump sites, far away from households. (Implementation phase)</p> <p>b) Reuse and recycle appropriate and viable materials. (Implementation phase)</p> <p>c) Segregate hazardous and non-hazardous wastes. (Implementation phase)</p>                                                                                                                                                                                                                                                                                                                                                            | SDF and Community (Project Beneficiary), Local Contractor |
| <b>To minimize emergency risks</b>                               | <p>a) Build appropriately designed infrastructure safe from natural hazards. (Planning and implementation phases)</p> <p>b) Avoid areas prone to natural hazard events (flooding, spring tides, etc.), steep slopes and vulnerable to erosion and landslides, etc. (Planning and implementation phases)</p>                                                                                                                                                                                                                                                                                                                                                                       | SDF and Community (Project Beneficiary), Local Contractor |
| <b>To secure the safety</b>                                      | <p>a) Proper use and management of hazardous materials and waste. (Implementation phase)</p> <p>b) Awareness of dangers on working area, occupation, health and safety equipment through signage where applicable. (Implementation phase)</p> <p>c) Lock storage of fuels, paints, and chemicals. (Implementation phase)</p>                                                                                                                                                                                                                                                                                                                                                      | SDF and Community (Project Beneficiary), Local Contractor |
| <b>Agriculture Support to Farmers</b>                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                           |
|                                                                  | <p>a) Use sustainable agricultural practices / approaches / technologies. (e.g., Agroforestry Practices, Polycultures and Crop rotation, Integrated Pest Management (encouraging the predators of crop-eating pest insects such as birds and bats), etc.) (Planning and implementation phases)</p> <p>b) Reduce top-soil losses from erosion and the reduction in soil fertility. (Cover Crops and Mulches (Establishing leguminous ground cover and applying plant residues), Grass Barriers (planting grass in strips along the contour lines), etc.) (Implementation phase)</p> <p>c) Induce conservation and efficient use of water. (Planning and implementation phases)</p> | SDF and Community (Project Beneficiary), Local Contractor |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>d) Reduce misuse of agrochemicals, contributing to a reduction of toxic substances in soil and water. (Planning and implementation phases)</p> <p>e) Reduce usage of pesticides and promote integrated pest management approaches recommended by DOA. (Planning and implementation phases)</p> <p>f) Reduce, recycle and reuse the agricultural waste (natural, animal, plant waste). (Implementation phase)</p> |  |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

### c. ESCOPs for Delivery of Food and Non-food Items

#### ESCOPs for Delivery of Food and Non-food Items

| Risk/Concern       | Environmental Prevention/Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Responsible Party                                         |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>Food Safety</b> | <p>- Conduct due diligence during the procurement process and the vendor selection that the food commodities to be received will be delivered in good condition and quality control is performed during intake. (Planning phase)</p> <p>- For storage, select storage facilities and locations based on surveying the relevant characteristics, considering factors such as quality of construction, state of repairs, road access, and sustainability. Regularly inspect these warehouse storage facilities for perimeter fencing, cleanliness, ventilation, lighting and fire prevention. (Implementation phase)</p> <p>- Assess the effects of moisture, humidity and temperature in food storage warehouses and for transportation, and take appropriate mitigation and management measures to ensure that food quality and safety are not impacted by these factors. Regularly monitor warehouse storage facilities for temperature, moisture and humidity given the particular inventory of food items stored and regularly inspect warehouses for food quality. Similar minimum measures for food safety should be included in the contracts of transportation services providers and inspected regularly. (Implementation phase)</p> <p>- For pest management, for each warehouse, conduct a site-specific pest (insect and rodent) assessment, prepare a pest control plan, procure and utilize relevant insect and rodent control equipment, as well as procure and apply relevant pest</p> | SDF and Community (Project Beneficiary), Local Contractor |

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|                               | management measures. Regular food storage warehouse inspections should include inspection of the implementation of the pest control regime. (Implementation phase)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                           |
| <b>Solid waste management</b> | <ul style="list-style-type: none"> <li>- Procure food aid commodities with an aim to minimize packaging; minimize the potential for unmanaged waste; and minimize the type of packaging materials that may have adverse impacts on the environment, and on community health and safety, to the extent technically and financially feasible. (Planning phase)</li> <li>- During transportation, storage and distribution processes, collect all solid waste generated, establish a short term covered storage area on site, and store all solid waste, including food packaging, at these storage area sites. Upon completion of distribution in communities and with relevant frequency in storage warehouses, remove waste from the storage area sites and dispose of waste in relevant off-site facilities designated by local township authorities. (Implementation phase)</li> <li>- For possible solid waste generated after distribution (food packaging that will be discarded later), raise community awareness on where and how to dispose of such packaging, in designated covered storage areas in communities or in IDP camps. (Implementation and post-implementation phases)</li> </ul> | SDF and Community (Project Beneficiary), Local Contractor |

## Annex 3: Guideline for Preparing Environmental and Social Management Plan (ESMP)

### (For use by all IAs)

The Consultant is required to develop an Environmental and Social Management Plan (ESMP) consisting of a set of feasible and cost-effective mitigation measures and monitoring and institutional plan to prevent or reduce significant negative impacts to acceptable levels. This will include measures for emergency response to accidental events (e.g., fires, explosions), as appropriate. The Consultant will provide an estimation of the impacts and costs of the mitigation measures, and of the institutional and training requirements to implement them. In particular, this would include:

- **Environmental and Social Mitigation & Enhancement Measures:** Recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels. Apart from mitigation of the potential adverse impacts on the environmental components, the ESMP shall identify opportunities that exist for the enhancement of the environmental quality along the surrounding area. Residual impacts from the environmental measures shall also be clearly identified. The ESMP shall include detailed specification, bill of quantities, execution drawings and contracting procedures for execution of the environmental mitigation and enhancement measures suggested, separate for pre-construction, construction and operation periods. In addition, the ESMP shall include good practice guides related to construction and upkeep of plant and machinery. Responsibilities for execution and supervision of each of the mitigation and enhancement measures shall be specified in the ESMP. Meaningful consultation with potential stakeholders including vulnerable groups will be conducted before finalizing the design and EMSPs, as per SEP. A plan for continued consultation to be conducted during implementation stage of the project shall also be appended.
- **Institutional Arrangements, Capacity Building and Trainings:** The ESMPs shall describe the implementation arrangement needed for the project, implementation of ESMP, especially the capacity building proposals including the staffing of the environment unit (as and when recommended) adequate to implement the environmental mitigation and enhancement measures. For each staff position recommended to be created, detailed job responsibilities shall be defined. Equipment and resources required for the environment unit shall be specified, and bill of quantities prepared. A training plan and schedule shall be prepared specifying the target groups for individual training project, the content and mode of training. Training plans shall normally be made for the client agency (including the environmental unit), the supervision consultants and the contractors.
- **Supervision and Monitoring:** Environmental monitoring plan will be an integral part of the ESMP, which outlines the specific information to be collected for ensuring the environmental quality at different stages of project implementation. The parameters and their frequency of monitoring should be provided along with cost of the monitoring plan and institutional arrangements for conducting monitoring and supervision. Reporting formats should be provided along with a clear arrangement for reporting and taking corrective action. The ESMP shall list all mandatory government clearance conditions, and the status of procuring clearances.

- **Reporting:** The ESMP will specify the documentation and reporting requirements, specifically, complete record will be maintained for monitoring, trainings, grievances, accidents, incidents, resource usage, and waste disposal quantities.
- **Grievance Redress Mechanism:** The ESMP will describe the grievance redress mechanism (GRM) to address the project-related grievances and complaints particularly from the local communities.
- **ESMP Implementation Cost:** The ESMP will also include the cost of its implementation including personnel costs, costs on trainings, effects monitoring, additional studies, and others.

## Annex 4: Environmental and Social Management Plan (ESMP) Template

(For use by SDF only)

This EMP is applicable for small scale community infrastructure development, community office (if any). Environmental and social risks and impacts are strongly linked to subproject location and scope of activities. This ESMP will be customized for each specific subproject location and activities.

### FORM –A

#### ENVIRONMENTAL AND SOCIAL SCREENING FORM

(Applicable for sanitary latrine, tube-well, rainwater harvesting, tree plantation, nursery and other livelihood program)

|                                                                                                                                                    |                                                                                               |                                 |                                |                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------|--------------------------------|--------------------------------------------|--|
| <b>Directives:</b> This form has to be filled up by SPC at village level at the time of preparation of sub-project proposal                        |                                                                                               |                                 |                                |                                            |  |
| <b>1. General Information</b>                                                                                                                      | 1. Name of village                                                                            |                                 |                                |                                            |  |
|                                                                                                                                                    | 2. Name of Union                                                                              |                                 |                                |                                            |  |
|                                                                                                                                                    | 3. Name of Upazila                                                                            |                                 |                                |                                            |  |
|                                                                                                                                                    | 4. Name of District                                                                           |                                 |                                |                                            |  |
|                                                                                                                                                    | 5. Name of Proposed Scheme                                                                    |                                 |                                |                                            |  |
|                                                                                                                                                    | 6. Location of Scheme                                                                         |                                 |                                |                                            |  |
|                                                                                                                                                    | 7. Type of Scheme (✓ mark)                                                                    | New Construction                |                                | Reconstruction                             |  |
|                                                                                                                                                    |                                                                                               | Rehabilitation/Maintenance      |                                | Others (please specify)                    |  |
|                                                                                                                                                    | 8. Objective of the proposed scheme and brief description                                     |                                 |                                |                                            |  |
|                                                                                                                                                    |                                                                                               |                                 |                                |                                            |  |
|                                                                                                                                                    |                                                                                               | Please Tick mark (✓)            |                                |                                            |  |
| 9. Does the proposed scheme involve all types and classes of people in the locality?                                                               |                                                                                               | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> | Not applicable<br><input type="checkbox"/> |  |
| <b>2. Environmental Checklist</b><br>(Please tick mark in the right place) [If the answer to question # 5 is “No” out of question # 1-9 and if the | 1. Will the scheme’s implementation interrupt the natural flow of river, canal or any stream? | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> | Not applicable<br><input type="checkbox"/> |  |
|                                                                                                                                                    | 2. Will the scheme’s implementation increase the possibility of groundwater pollution?        | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>                   |  |
|                                                                                                                                                    | 3. Will the scheme’s implementation increase the possibility of surface water pollution?      | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>                   |  |
|                                                                                                                                                    | 4. Will the scheme generate any waste?                                                        | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>                   |  |

|                                                                                                                                                       |                                                                                                                                                  |                                 |                                |                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------|--------------------------------|
| <b>answer to any one of the remaining questions is “yes”, the Sub-project proposal will be cancelled]</b>                                             | 5. Is there any waste management plan for the scheme if it generates waste?<br>(Please include the waste management plan)                        | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 6. Is there any chance of increasing public health problem by throwing waste into open water bodies?                                             | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 7. For constructing irrigation canal, is there any chance to create any problem to water bodies that are used for irrigation?                    | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 8. For sanitary latrine construction: Is there any drinking water source in 30 ft of the latrine?                                                | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 9. Whether there would be any water logging in case of road construction activities?                                                             | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 10. Is there any chance of tree cutting due to the implementation of the scheme? (If yes then please specify the number of trees to be cut down) | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 11. Is there any chance of destruction of biodiversity (fish, birds and animals) habitat because of the implementation of the scheme?            | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 12. Mitigation measures                                                                                                                          |                                 |                                |                                |
| <b>3. Social Impact Part (Please tick mark in the right place) [If the answer to any question is yes, the Sub-project proposal will be cancelled]</b> | 1. Is there any chance of resettlement of people living in the land for the implementation of the scheme?                                        | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 2. Is there any chance of land acquisition from the public for the implementation of the scheme?                                                 | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 3. Is there any chance of destruction of homestead land?                                                                                         | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 4. Is there any chance of resettlement of people living on government land for the implementation of the scheme?                                 | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 5. Is there any chance of destruction of religious and cultural place?                                                                           | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 6. Is there any chance of loss of employment of people or downgrade the living standard because of implementation of the scheme?                 | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 7. Is there any chance of destruction of cultural tradition of people?                                                                           | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 8. Mitigation measures                                                                                                                           |                                 |                                |                                |
| <b>4. Indigenous people Part (Please tick mark in the right place)</b>                                                                                | 1. Is the scheme located in an area where majority indigenous people live?                                                                       | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> | NA<br><input type="checkbox"/> |
|                                                                                                                                                       | <b>N.B. If yes, please answer the following question</b>                                                                                         |                                 |                                |                                |
|                                                                                                                                                       | 2. Are the indigenous people involved in the planning and implementation of the scheme?                                                          | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 3. Is there any chance of indigenous people to be affected?                                                                                      | <input type="checkbox"/>        | <input type="checkbox"/>       | <input type="checkbox"/>       |
|                                                                                                                                                       | 4. What are the feelings of indigenous people about the schemes?                                                                                 |                                 |                                |                                |

|                                   |                                                                                                                    |                          |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                   | Positive                                                                                                           | <input type="checkbox"/> |
|                                   | Negative                                                                                                           | <input type="checkbox"/> |
|                                   | Not any one                                                                                                        | <input type="checkbox"/> |
|                                   | 5. If the answer of the question number 3 is negative, please briefly describe the reason and mitigation measures: |                          |
| <b>Other Information (if any)</b> |                                                                                                                    |                          |

|                                                                                            |             |                              |                             |             |
|--------------------------------------------------------------------------------------------|-------------|------------------------------|-----------------------------|-------------|
| <b>Signature of the SPC member:</b>                                                        |             |                              |                             |             |
| <b>Sl No.</b>                                                                              | <b>Name</b> | <b>Designation</b>           | <b>Signature</b>            | <b>Date</b> |
| 1.                                                                                         |             |                              |                             |             |
| 2.                                                                                         |             |                              |                             |             |
| 3.                                                                                         |             |                              |                             |             |
| 4.                                                                                         |             |                              |                             |             |
| 5.                                                                                         |             |                              |                             |             |
| <b>Social Audit Committee Recommendation:</b>                                              |             |                              |                             |             |
| The form is filled in correctly or not (Please tick v mark)                                |             | Yes <input type="checkbox"/> | NO <input type="checkbox"/> |             |
| Mitigation measures are satisfactory or not (Please tick v mark)                           |             | Yes <input type="checkbox"/> | NO <input type="checkbox"/> |             |
| If the mitigation is not satisfactory, then please specify your opinion (where necessary): |             |                              |                             |             |
| <b>Signature of the member of the Social Audit Committee:</b>                              |             |                              |                             |             |
| <b>SL</b>                                                                                  | <b>Name</b> | <b>Designation</b>           | <b>Signature</b>            | <b>Date</b> |
|                                                                                            |             |                              |                             |             |
|                                                                                            |             |                              |                             |             |
|                                                                                            |             |                              |                             |             |
|                                                                                            |             |                              |                             |             |
| <b>Environmental Category of the Scheme</b> (Please tick V mark in the right place)        |             | Red                          | Orange-B                    | Orange-A    |
|                                                                                            |             | Green                        |                             |             |
| The form is filled in correctly or not (Please tick v mark)                                |             | Yes <input type="checkbox"/> | NO <input type="checkbox"/> |             |
| Mitigation measures are satisfactory or not (Please tick v mark)                           |             | Yes <input type="checkbox"/> | NO <input type="checkbox"/> |             |
| If the mitigation is not satisfactory, then please specify your opinion (where necessary): |             |                              |                             |             |
| <b>Designation</b>                                                                         |             |                              | <b>Signature</b>            | <b>Date</b> |
| <b>Officer, Technical &amp; Environment</b>                                                |             |                              |                             |             |

|                             |  |  |
|-----------------------------|--|--|
| RO, (Technical/ Livelihood) |  |  |
| RC                          |  |  |

**FORM-B**

**Initial Environmental Examination (IEE) of the Sub-Projects**

**(Applicable for construction/repairing of earthen roads, construction of culvert, re-excavation of canal, raising school field, repairing embankment, construction of office building for VS/multipurpose community resource center.)**

|                                                                                                                    |                                                                   |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---|---|-------------------|-------------------------|---|-----------------|---------------------------|---|-----------|-------------------|-------------------------|--------|---|---------|
| <b>Instruction: Officer, Technical &amp; Environment Team will conduct the study in the field before appraisal</b> |                                                                   |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
| <b>General Information</b>                                                                                         | Village                                                           |   |   | Union             |                         |   | Upazila         |                           |   | District  |                   |                         |        |   |         |
|                                                                                                                    | Name of the Scheme:                                               |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
|                                                                                                                    | Place of the Scheme:                                              |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
|                                                                                                                    | Types of the Scheme (put v):                                      |   |   | New construction  |                         |   | Re-construction |                           |   | Repairing |                   |                         | Others |   |         |
|                                                                                                                    | Purpose of the Sub-project & brief description of the sub-project |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
|                                                                                                                    | How many HHs will be benefited if it is implemented               |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
| <b>Parameters</b>                                                                                                  | <b>Initial Environmental Examination</b>                          |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
| <b>1. Physical Environmental effect</b>                                                                            | <b>During Construction</b>                                        |   |   |                   |                         |   |                 | <b>After Construction</b> |   |           |                   |                         |        |   |         |
|                                                                                                                    | Positive Impact (put v)                                           |   |   | No Impact (put v) | Negative Impact (put v) |   |                 | Positive Impact (put v)   |   |           | No Impact (put v) | Negative Impact (put v) |        |   | Remarks |
|                                                                                                                    | L                                                                 | M | H |                   | L                       | M | H               | L                         | M | H         |                   | L                       | M      | H |         |
| 1.1 Water logging and drainage congestion                                                                          |                                                                   |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
| 1.2 Erosion and siltation                                                                                          |                                                                   |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |
| 1.3 Obstruction to wastewater/sewerage flow                                                                        |                                                                   |   |   |                   |                         |   |                 |                           |   |           |                   |                         |        |   |         |

|                                                                 |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
|-----------------------------------------------------------------|----------------------------|----------------------|----------------------------|--|--|--|------------------------------------|-------------------------|----------------------------|--|--|--|----------------|--|--|
| 1.4 Air and dust pollution                                      |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 1.5 Surface water quality                                       |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 1.6 Groundwater quality                                         |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 1.7 Impact on noise level                                       |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 1.8 Flooding                                                    |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 1.9 Impact on soil quality, its stability and compactness       |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 1.10 Loss of existing buildings and property                    |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| <b>Mitigation measures (if the area is affected)</b>            |                            |                      |                            |  |  |  | <b>Alternative considerations:</b> |                         |                            |  |  |  |                |  |  |
| <b>2. Biological Environment</b>                                |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.1 Removal of trees (mention how many)                         |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.2 Wetland/PA                                                  |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.3 Fish migration                                              |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.4 Wildlife/wildlife habitat                                   |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.5 Forests/PA                                                  |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.6 Rare endangered species (i.e., wildlife, fish, plant, bird) |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.7 Aquatic plants/macro-phytes                                 |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| 2.8 Eutrophication                                              |                            |                      |                            |  |  |  |                                    |                         |                            |  |  |  |                |  |  |
| <b>Mitigation measures (if the area is affected)</b>            |                            |                      |                            |  |  |  | <b>Alternative considerations:</b> |                         |                            |  |  |  |                |  |  |
| <b>3. Socio-economic Environment</b>                            | <b>During Construction</b> |                      |                            |  |  |  | <b>After Construction</b>          |                         |                            |  |  |  | <b>Remarks</b> |  |  |
|                                                                 | Positive Impact<br>(put v) | No Impact<br>(put v) | Negative<br>Impact (put v) |  |  |  | Positive Impact<br>(put v)         | No<br>Impact<br>(put v) | Negative Impact (put<br>v) |  |  |  |                |  |  |

|                                                                                                     |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
|-----------------------------------------------------------------------------------------------------|---|---|---|--|---|---|---|------------------------------------|---|----------|--|-----------------------------|---|-------|--|
|                                                                                                     | L | M | H |  | L | M | H | L                                  | M | H        |  | L                           | M | H     |  |
| 3.1 Impact on irrigation                                                                            |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.2 Impact on navigation                                                                            |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.3 Impact on transportation                                                                        |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.4 Loss of agricultural land and top soil                                                          |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.5 Employment generation (mention how many)                                                        |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.6 Commercial activities                                                                           |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.7 Impact on local livelihood                                                                      |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.8 Impact on human life of the poor                                                                |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.9 Social conflicts                                                                                |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.10 Health risks to laborers involved in construction works                                        |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.11 Public health and safety                                                                       |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.12 Archaeological and cultural heritage                                                           |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| 3.13 Wetland / coastal/sea shore management for spawning ground                                     |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| <b>Mitigation measures (if the area is affected)</b>                                                |   |   |   |  |   |   |   | <b>Alternative considerations:</b> |   |          |  |                             |   |       |  |
| <b>Evaluation of, SDF</b>                                                                           |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| <b>Environmental Category of the Scheme</b> (Please tick ✓ mark in the right place)                 |   |   |   |  |   |   |   | Red                                |   | Orange-B |  | Orange-A                    |   | Green |  |
| Whether the form is filled in correctly or not (Please tick ✓ mark)                                 |   |   |   |  |   |   |   | Yes <input type="checkbox"/>       |   |          |  | No <input type="checkbox"/> |   |       |  |
| Mitigation measures are satisfactory or not (Please tick ✓ mark)                                    |   |   |   |  |   |   |   | Yes <input type="checkbox"/>       |   |          |  | No <input type="checkbox"/> |   |       |  |
| If the mitigation measures are not satisfactory then please specify your opinion (where necessary): |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| <b>Designation</b>                                                                                  |   |   |   |  |   |   |   | <b>Signature</b>                   |   |          |  | <b>Date</b>                 |   |       |  |
| <b>Officer, Technical &amp; Environment</b>                                                         |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| <b>RO (Technical/ Livelihood)</b>                                                                   |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |
| <b>RC</b>                                                                                           |   |   |   |  |   |   |   |                                    |   |          |  |                             |   |       |  |

## Annex 5: Simplified Labor Management Procedures

### (For use by SDF only)

In accordance with the requirements of World Bank's Environmental and Social Standard 2 (ESS2) on Labor and Working Conditions, a simplified LMP have been developed for the project. The LMP sets out the ways in which Social Development Foundation (SDF) will manage all project workers in relation to the associated risks and impacts. The objectives of the LMP are to: Identify the different types of project workers that are likely to be involved in the project; identify, analyze and evaluate the labor-related risks and impacts for project activities; provide procedures to meet the requirements of ESS 2 on Labor and Working Conditions, ESS 4 on Community Health and Safety, and applicable national legislation.

The Labor Management Procedures apply to all project workers, irrespective of contracts being full-time, part-time, temporary or casual. The types of workers that will be included in the project are listed below:

- **Contracted workers** – Work specific technical expert, expert mason, plumber, boring expert for tube well, electrician etc.
- **Community workers** – Work specific general labor for material carrying, site cleaning, security etc.

### Labor Risks

The following potential labor risks are identified under the project:

- Violation of worker's rights: Terms and conditions of employment of workers may not be consistent with national legislation or World Bank standards
- Violation of worker's rights: Non-discrimination and equal opportunity of workers may not be consistent with national legislation or World Bank standards
- Use of child labor or forced labor
- Unsafe work environment and poor working conditions
- Workplace injuries and accidents, particularly when operating construction equipment, when working at height on building construction, and when handling heavy equipment and materials
- Risks from exposure to hazardous substances (dust, cement, chemicals used in construction etc.)
- Sexual exploitation and abuse/sexual harassment (SEA/SH) risks for workers
- SEA/SH risks for community members, from workers from outside the project areas
- Conflicts between workers and communities

### Relevant National Labor Legislation

#### The Constitution of Bangladesh:

- Ensures the right to work, equitable wages, and reasonable working conditions under Article 15.
- Prohibits forced labor under Article 34 and guarantees freedom of association under Article 38.

#### Bangladesh Labor Act, 2006 (Amended 2013):

- Regulates employment conditions, wages, working hours, and leave policies.
- Ensures occupational health and safety standards and provides mechanisms for resolving labor disputes.

- Prohibits child labor under the age of 14 and hazardous work for workers under 18.

**The Bangladesh Labor Rules, 2015:**

- Complements the Labor Act by providing detailed guidance on labor practices, workplace safety, and welfare provisions.

**The Children's Act, 2013:**

- Strengthens child protection measures and prohibits child labor in hazardous environments.

**Prevention and Suppression of Human Trafficking Act, 2012:**

- Criminalizes forced labor and trafficking, ensuring protections for victims and penalizing offenders.

**The Trade Union Act, 1926:**

- Governs the formation, registration, and activities of workers' associations and trade unions.

**The Industrial Relations Ordinance, 1969:**

- Facilitates collective bargaining and protects workers' rights to form unions and negotiate disputes.

**The Occupational Health and Safety Policy, 2013:**

- Establishes standards for workplace safety and employer responsibility for minimizing occupational hazards.

**The Arbitration Act, 2001:**

- Provides mechanisms for resolving labor disputes through arbitration and mutual agreement.

**The Penal Code, 1860:**

- Addresses offenses such as bonded labor and trafficking, ensuring punitive measures for violations.

**General Applicable Procedures**

Social Development Foundation (SDF) and Community will apply the following guidelines when dealing with workers:

- There will be no discrimination with respect to any aspects of the employment relationship, such as: Recruitment and hiring; compensation (including wages and benefits; working conditions and terms of employment; access to training; job assignment; promotion; termination of employment or retirement; or disciplinary practices.
- Harassment, intimidation and/or exploitation will be prevented or addressed appropriately.
- Special measures of protection and assistance to remedy discrimination or selection for a particular job will not be deemed as discrimination.
- Vulnerable project workers will be provided with special protection.
- Social Development Foundation (SDF) and Community will provide job / employment contracts with clear terms and conditions including rights related to hours of work, wages, overtime, compensation and benefits, annual holiday and sick leave, maternity leave and family leave. Code of Conduct included in this LMP will be applicable for all project workers.
- Social Development Foundation (SDF) will ensure compliance with the Code of Conduct including providing briefings/awareness raising on the Code.

- Social Development Foundation (SDF) and Community will ensure compliance with occupational health and safety procedures and COVID-19 specific procedures (see below) including that the workers are properly trained in application of the standards that are relevant to the work.
- Social Development Foundation (SDF) and retained Community will ensure no person under the age of 18 shall be employed. Age verification of all workers will be conducted by the Community.
- Community will recruit Contractor and labor locally to the extent that they are available.
- Workers shall be recruited voluntarily, and no worker is forced or coerced into work.
- Social Development Foundation (SDF) will supervise and monitor to ensure compliance with the above requirements.
- All workers will be made aware of the Worker's Grievance Mechanism (see below) to raise work related grievances, including any sensitive and serious grievances on SEA/SH.

### Occupational Health and Safety (OHS) Procedures

The objective of the procedure is to achieve and maintain a healthy and safe work environment for all project workers (contracted workers and community workers) and the host community.

- On procurement for Contractor, Social Development Foundation (SDF) will facilitate the community to avail the ESMF to the aspiring contractor so that contractor includes the budgetary requirements for OHS measures in their respective bids.
- The contractor will develop and maintain an OHS management system that is consistent with the scope of work, which must include measures and procedures to address all the following topics listed below and in accordance with local legislation and GIIP (as defined by World Bank Group EHSs). The management system must be consistent with the duration of contract and this LMP.
- Contractor will conduct workplace hazards identification and adopt all applicable E&S risk mitigation measures in accordance with local legislation requirements and WBG EHSs.
- Contractor designates a responsible person to oversee OHS related issues at the project site and define OHS roles and responsibilities for task leaders and contract managers.
- Contractor should put in place processes for workers to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health, without fear of retaliation.
- Contractor provides preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances informed by assessment and plan. Whenever PPEs are required for the work, it must be provided at no cost for the workers.
- Contractor should assess workers' exposure to hazardous agents (noise, vibration, heat, cold, vapors, chemicals, airborne contaminants etc.) and adopt adequate control measures in accordance with local regulations and WB EHSs.
- Contractor provides facilities appropriate to the circumstances of the work, including access to canteens, hygiene facilities, and appropriate areas for rest. Where accommodation services are provided to project workers, policies will be put in place and implemented on the management and quality of accommodation to protect and promote the health, safety, and well-being of the

project workers, and to provide access to or provision of services that accommodate their physical, social and cultural needs.

- Contractor provides for appropriate training/induction of project workers and maintenance of training records on OHS subjects.
- Contractor documents and reports on occupational incidents, diseases and incidents as per ESMF guidance.
- Contractor provides emergency prevention and preparedness and response arrangements to emergency situations including and not limited to workplace accidents, workplace illnesses, flooding, fire outbreak, disease outbreak, labor unrest and security.
- Contractor provides remedies for adverse impacts such as occupational injuries, deaths, disability and disease in accordance with local regulatory requirements and Good International Industry Practices.
- Contractor shall maintain all such record for activities related to the safety health and environmental management for inspection by Social Development Foundation (SDF) or the World Bank.

#### Contractor Management Procedures

The objective of this procedure is to ensure that Social Development Foundation (SDF) has contractual power to administer oversight and action against Contractor for non-compliance with the LMP.

- Social Development Foundation (SDF) will facilitate community to make available relevant documentation to inform the contractor about requirements for effective implementation of the LMP.
- Social Development Foundation (SDF) will include the provisions of the ESMF, LMP and other relevant documents into the specification section of the bidding documents. The Community will be required to comply with these specifications.
- Contractor will raise worker awareness on the Code and Conduct.
- Contractor will show evidence of OHS and Emergency Preparedness procedures.
- Social Development Foundation (SDF) will monitor contract's E&S performance during its regular site visits utilizing contractor reporting or external monitoring/supervision consultants where available. Where appropriate, Social Development Foundation (SDF) may withhold contractor's payment or apply other contractual remedies as appropriate until corrective action(s) is/are implemented on significant non-compliance with the LMP, such as failure to notify Social Development Foundation (SDF) of incidents and accidents.

#### Procedures for Primary Suppliers

The objective of the procedure is to ensure that labor-related risks, especially child and forced labor as well as serious safety issues to the project from primary supply workers are managed. Social Development Foundation (SDF) and all Community will undertake the following measures:

- Procure supplies from legally constituted suppliers.

- To the extent feasible, conduct due diligence to ensure that primary suppliers conduct age verifications, employ workers without any force or coercion, and maintain basic OHS systems.

#### Procedures for Community Workers

Community workers include people from the project beneficiary who will do manual labor works as food for work program to support temporary livelihood. The objective of this procedure is to ensure the community workers offer their labor voluntarily and that they agree to the terms and conditions of employment. Social Development Foundation (SDF) and Contractor using community workers will apply the following guidelines when dealing with community workers:

- Social Development Foundation (SDF) will develop standard working times, remuneration systems (depending on the type of work), methods of payment, timing of payment, and community worker Code of Conduct, which will apply to all project activities.
- Contractor should consult communities and document their community meetings where members agree to conditions of community worker recruitment. The agreement should include details on nature of work, working times, age restrictions (18 and above), remuneration amount, method of payment, timing of payment, individual signatory or representative signatory of meeting resolution
- Community will have the terms and conditions discussed, explained, negotiated and documented through joint community meetings, with each community employee showing consent through signing the attendance register of the meeting which made the employment resolutions.
- Social Development Foundation (SDF) will facilitate training community workers on key LMP issues, including SEA/SH, OHS, COVID-19, safe use of equipment and lifting techniques, and the relevant grievance mechanisms.

#### Worker Accommodation

If accommodations are provided for workers, Community will ensure that they are provided in good hygiene standards, with fresh drinking water, clean beds, restrooms and showers, clean bedrooms, good illumination, lockers, proper ventilation, safe electrical installation, fire and lightening protection, separate cooking and eating areas. There will be separate facilities provided for men and women. The Community will be liable to comply with "Workers' Accommodation: Processes and Standards: A guidance Note" by IFC and the EBRD.

#### Institutional Arrangement for Implementation of the LMP

Social Development Foundation (SDF) will carry the main responsibility for the implementation and monitoring of the LMP. Community will identify subproject activities, prepare subproject designs and bidding documents, as well as procure Community. Community will be responsible for contractor and site supervision, technical quality assurance, certification, and payment of works. With SDF's facilitation community will ensure that labor management procedures are integrated into the specification section of the bidding documents and the procurement contracts.

## Grievance Mechanism

There will be a specific Workers Grievance Mechanism (Worker GM) for project workers as per the process outlined below. This considers culturally appropriate ways of handling the concerns of direct and contracted workers. Processes for documenting complaints and concerns have been specified, including time commitments to resolve issues. Workers will be informed about the relevant Worker GM upon their recruitment and their right to redress, confidentiality and protection against any reprisals from the employer will be stated in the contract.

### Routine Grievances

The process for the Worker GM is as follows:

- Any worker may report their grievance in person, by phone, text message, mail or email (including anonymously if required) to the contractor as the initial focal point for information and raising grievances. For complaints that were satisfactorily resolved by the aggrieved worker or contractor within one week of receipt of complaint, the incident and resultant resolution will be logged and reported monthly to the community record book.
- If the grievance is not resolved within one week, the contractor (or the complainant directly) will refer the issue to the SDF field staff (Cluster officer). Field staff will work to address and resolve the complaint and inform the worker as promptly as possible, in particular if the complaint is related to something urgent that may cause harm or exposure to the person, such as lack of PPE needed to prevent COVID-19 transmission. For non-urgent complaints, Field staff will aim to resolve complaints within 2 weeks. For complaints that were satisfactorily resolved by Field staff, the incident and resultant resolution will be logged by Cluster officer and reported monthly to Monitoring team of Region and National as part of regular reporting. Where the complaint has not been resolved, the Field staff will refer to Regional Staff for further action or resolution. The workers will preserve all rights to refer matters to relevant judicial proceedings as provided under national labor law.

At National/Head office level, each grievance record should be allocated a unique number reflecting year, sequence and township of received complaint. Complaint records (letter, email, record of conversation) should be stored together, electronically or in hard copy. Social Development Foundation will appoint a Worker GM Focal Person, who will be responsible for undertaking a monthly review of all grievances to analyze and respond to any common issues arising. The Focal Person will also be responsible for oversight, monitoring and reporting on the Worker GM.

### Serious Grievances

In case a worker experiences serious mistreatment such as harassment, intimidation, abuse, violence, discrimination or injustice at the workplace, the worker may raise the case, verbally or in writing directly to the contractor or Social Development Foundation at different levels. The contractor will immediately refer the case to Social Development Foundation. The Social Development Foundation (SDF) will immediately investigate the case respecting confidentiality and anonymity of the worker.

Upon project effectiveness, the Social Development Foundation (SDF) will designate a Focal Person or Persons for Serious Grievances. These Focal Persons will receive training in investigating serious

grievances, relevant laws and regulations, and World Bank standards including the rights of people who file a grievance. Social Development Foundation (SDF) and the World Bank will jointly develop culturally-sensitive and locally appropriate roles and responsibilities, and procedures.

In case a direct worker or civil servant has a serious grievance, the staff may directly contact verbally or in writing the Focal Person for Serious Grievances.

All complaints received will be filed and kept confidential. For statistical purposes, cases will be anonymized and bundled to avoid identification of persons involved.

### Code of Conduct

- Treat women, children (persons under the age of 18), and men with respect regardless of ethnicity, language, religion, political or other opinion, national, social origin, citizenship status, property, disability, birth or other status.
- Do not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Do not participate in sexual activity with community members.
- Do not engage in sexual favors or other forms of humiliating, degrading or exploitative behavior.
- Do not engage in any activity that will constitute payment for sex with members of the communities surrounding the workplace.
- Report through the Worker GM suspected or actual gender-based violence against a person of any gender by a fellow worker or any breaches of this Code of Conduct.
- Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass women, children or a vulnerable person through these mediums.
- Comply with all relevant local legislation.
- Engaging in any of the prohibited activities above can be cause for termination of employment, criminal liability, and/or other sanctions.

## Annex 6: Fertilizer and Pest Management Plan

### (For use by SDF only)

Social Development Foundation (SDF) will facilitate the community to follow the guidelines in this Annex as applicable and provide training to farmers for proper use of fertilizers, pest and disease management in line with this Annex. The Social Development Foundation (SDF) will encourage the use of bio-pesticides and aim to minimize the use of chemical pesticides when possible.

The plan comprises the following three aspects: (i) application of government regulations on pesticide control, (ii) key impacts of pesticides and mitigation measures, and (iii) training on safe use of chemicals.

**Government Regulations related to Pesticides:** In Bangladesh, the use, import, sale, and regulation of pesticides are governed by the **Pesticides Act, 2018** and its corresponding rules. The law requires that no individual or organization can import, manufacture, sell, distribute, or stock pesticides without a valid license issued by the relevant authority. Additionally, all pesticides must be registered before they can be manufactured, imported, or used. The act prohibits activities such as selling adulterated or unregistered pesticides, using pesticides in ways harmful to human health, animals, or the environment, and distributing pesticides without proper labeling that includes toxicity levels and safe usage instructions.

To safeguard public health and the environment, the government maintains a list of banned pesticides, which includes highly toxic substances like DDT, Aldrin, Endrin, Heptachlor, Chlordane, Toxaphene, Methyl Parathion, and Monocrotophos. Enforcement mechanisms under the law empower inspectors to monitor compliance, confiscate illegal or harmful pesticides, and impose penalties such as fines, license revocation, or imprisonment for violations. The legislation also emphasizes the adoption of integrated pest management (IPM) practices and promotes the use of bio-pesticides and environmentally friendly alternatives, ensuring pesticide use aligns with safety standards while protecting human health, biodiversity, and agricultural sustainability.

**Compliance with international good practice:** SDF will also ensure that pesticide management follows the FAO International Code of Conduct on Pesticide Management and applicable international conventions (Stockholm, Rotterdam, Basel), as required by the WBG EHS Guidelines for Annual Crop Production.

**WHO Classification and WBG EHS alignment:** To align with the WBG EHS Guidelines for Annual Crop Production and the WHO Recommended Classification of Pesticides by Hazard, SDF will apply the following rules to all pesticide selection, procurement, storage, handling, application, and disposal under this project:

1. **Prohibited:** No procurement, storage, use, or trade of pesticides in WHO Class Ia (extremely hazardous) or Class Ib (highly hazardous).
2. **Restricted:** WHO Class II (moderately hazardous) may be used only where proper project controls are in place (IPM-first, trained applicators, PPE, label-compliant doses/PHI, supervised handling,

and suitable storage/disposal facilities). Preference is for WHO Class III (slightly hazardous), WHO U (unlikely to present acute hazard), and bio-pesticides.

3. **IPM-first:** Chemical control is considered only after prevention, cultural, mechanical/physical, and biological controls have been applied and documented.
4. **Application controls:** Establish and respect no-spray buffer zones around watercourses, residences, livestock and food storage areas; avoid application during high winds or unsuitable weather.
5. **Storage & stewardship:** Use lockable, banded, ventilated storage away from water sources and communities; keep labels/SDS accessible; train handlers; maintain stock records.
6. **Recordkeeping:** Record the WHO hazard class for each active ingredient used and maintain a project “negative list” reflecting prohibited actives (WHO Ia/Ib and POPs listed under Stockholm Annexes A and B), in addition to all national requirements.

**Key Impacts of Pesticides and Mitigation Measures.** Pesticides benefit the farmers for the crop production, nevertheless, they also impose a series of negative impacts on the environment. Pesticides may easily contaminate the air, ground water, surface water, and soil when they run off from fields, escape storage tanks, and not discarded properly.

Moreover, pesticides are hazardous to both pests and humans and they become toxic to humans and non-target animal species if suitable precautions are not undertaken during transport, storage, handling and disposal. Most pesticides will cause adverse effects if they are in contact with the skin for a long time or if intentionally or accidentally ingested. Pesticides may be inhaled with the air while they are being sprayed. An additional risk is the contamination of drinking-water, food or soil.

The following mitigation measures are recommended from different aspects at every stage in order to avoid the adverse impacts on both human and the environment due to pesticides.

| Stage                          | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Before using pesticides</b> | <ol style="list-style-type: none"> <li>1. Minimize the need for pesticides by practicing integrated management by control strategies such as cultural control, mechanical control, physical control, biological control and chemical control.</li> <li>2. Receive recommendations from FAO for proper management method for specific crop.</li> </ol>                                                                                                                                                                                                                                                                                       |
| <b>General precautions</b>     | <ol style="list-style-type: none"> <li>1. Only choose the pesticides labelled in the national language and do not use the pesticides without any label or with foreign language labels.</li> <li>2. Select the pesticide which is suitable for specific pests and target plants as described on the label.</li> <li>3. Do not mix any two or more pesticides at the same time.</li> <li>4. Follow the instructions for use and the pre-harvest interval (PHI) as prescribed on the label.</li> <li>5. Use appropriate and correct application techniques to ensure safety for the health of humans, animals and the environment.</li> </ol> |
| <b>Label Reading</b>           | <ol style="list-style-type: none"> <li>1. Check the pesticide registration number on your product.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ol style="list-style-type: none"> <li>2. Review the date of manufacture and date of expiry.</li> <li>3. Read the active ingredient and pesticide group on your product.</li> <li>4. Read the target pests, dosage of product.</li> <li>5. Read the pre-harvest interval (PHI).</li> <li>6. Read the storage and disposal procedure for the product.</li> <li>7. Read the first aid procedure.</li> <li>8. Follow the instructions and safety precautions precisely written on the label.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage and Transport</b>  | <ol style="list-style-type: none"> <li>1. Store pesticides in a certain place that can be locked and not accessible to unauthorized people or children.</li> <li>2. Never be kept in a place where they might be mistaken for food or drink.</li> <li>3. Keep them dry but away from fires and out of direct sunlight.</li> <li>4. Store away from water sources.</li> <li>5. Should be transported in well-sealed and labelled containers.</li> <li>6. Do not carry them in a vehicle that is also used to transport food.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Handling / Application</b> | <p><b>From Environmental Safety Aspect –</b></p> <ol style="list-style-type: none"> <li>1. Application rates must not exceed the manufacturer's recommendations.</li> <li>2. Avoid application of pesticides in wet and windy conditions.</li> <li>3. Pesticides must not be directly applied to streams, ponds, lakes, or other surface bodies.</li> <li>4. Maintain a buffer zone (area where pesticides will not be applied) around water bodies, residential areas, livestock housing areas and food storage areas.</li> </ol> <p><b>From Health and Safety of User Aspect –</b></p> <ol style="list-style-type: none"> <li>1. Use suitable equipment for measuring out, mixing and transferring pesticides.</li> <li>2. Do not stir liquids or scoop pesticides with bare hands.</li> <li>3. Do not spray pesticides at the down-stream direction and during the strong wind.</li> <li>4. Do not spray pesticides at the high temperature of the day (noon).</li> <li>5. Do not suck or blow the blocked nozzle.</li> <li>6. Do not assign pregnant women, lactating mother and children under 18 for handling and use of pesticides.</li> <li>7. Protective gloves, shoes, long-sleeved shirt and full trousers shall always be worn when mixing or applying pesticides.</li> <li>8. Respiratory devices (nose mask) shall be used to avoid accidental inhaling.</li> <li>9. In case if any exposure/body contact with the pesticide, wash-off and seek medical aid.</li> </ol> |
| <b>Disposal</b>               | <p><b>From Environmental Safety Aspect –</b></p> <ol style="list-style-type: none"> <li>1. Avoid generating leftovers by careful dose calculation and tank-mixing; if a small amount of tank mix remains, apply it to the treated field at the labeled rate. Do not discharge leftover pesticide to soil, drains, pit latrines, waterways, fishponds, creeks, or rivers.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | <p>2. Do not dispose of pesticides where they may enter water used for drinking or washing.</p> <p>3. Do not dispose any empty containers into river, creek, fishponds and water way.</p> <p>4. Do not burn any empty containers.</p> <p>5. Decontaminate containers by triple-rinsing (rinsate back to the spray tank), puncture, and return to an approved collection point or supplier where available.</p> <p>6. Where no approved collection exists, store rinsed, punctured containers securely for periodic take-back coordinated by SDF/PIU; if an authorized hazardous-waste option is arranged by the authorities, use that route.</p> <p>7. Do not reuse empty pesticide containers for any purposes.</p> <p>8. The hole / disposal site must be at least 100 meters (~300 ft) away from the streams, wells and houses if a temporary, officially approved burial solution is directed by the authorities (last resort for containers only, never for liquids).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Personal Hygiene</b>   | <p>1. Never eat, drink or smoke while handling pesticides.</p> <p>2. Change clothes immediately after spraying pesticides.</p> <p>3. Wash hands, face, body and clothes with plenty of water using soap after pesticides handling.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Emergency Measures</b> | <p><b>Indications of Pesticide Poisoning</b></p> <p><b>General:</b> extreme weakness and fatigue.</p> <p><b>Skin:</b> irritation, burning sensation, excessive sweating, staining.</p> <p><b>Eyes:</b> itching, burning sensation, watering, difficult or blurred vision, narrowed or widened pupils.</p> <p><b>Digestive system:</b> burning sensation in mouth and throat, excessive salivation, nausea, vomiting, abdominal pain, diarrhoea.</p> <p><b>Nervous system:</b> headaches, dizziness, confusion, restlessness, muscle twitching, staggering gait, slurred speech, fits, unconsciousness.</p> <p><b>Respiratory system:</b> cough, chest pain and tightness, difficulty with breathing, wheezing.</p> <p><b>Responsiveness</b></p> <p><b>General:</b></p> <p>If pesticide poisoning is suspected, first aid must be given immediately, and medical advice and help must be sought at the earliest opportunity. If possible, the patient should be taken to the nearest medical facility.</p> <p><b>First Aid Treatment</b></p> <p><b>If breathing has stopped:</b> Give artificial respiration (i.e. mouth to mouth resuscitation if no pesticide has been swallowed.)</p> <p><b>If there is pesticide on the skin:</b> Remove contaminated clothing from the patient and remove the patient from the contaminated area. Wash the body completely for at least 10 minutes, using soap if possible. If no water is available, wipe the</p> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                       |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>skin gently with cloths or paper to soak up the pesticide. Avoid harsh rubbing or scrubbing.</p> <p><b>If there is pesticide in the eyes:</b> Rinse the eyes with large quantities of clean water for at least five minutes.</p> <p><b>If there is ingestion:</b> Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons, seek medical advice immediately.</p> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Trainings.** Trainings on pesticide management should be provided to the farmers under relevant component of the project. The following trainings on pesticide management are recommended to be provided:

- Training on Policy, Laws and Regulations Regarding to Pesticides Use: To provide basic knowledge about the national laws, rules and regulations.
- Trainings for Pest Management: To provide trainings to clearly understand the technical aspect of pesticide and skill in using them such as what are the eligible and prohibited items of pesticide under national regulations, the level of negative impact of each eligible item, how to use them, how to protect and minimize the negative impact on the environment and human while using them, how to keep them before and after used etc.
- Storage, handling, usage and disposal of pesticide; To provide trainings about the procedures of storage, handling, usage of pesticide and disposal of pesticides residues or empty containers without affecting the health and safety of user, nearby community and the environment.

## Annex 7: Chance Find Procedures

(For use by SDF only)

Cultural heritage encompasses tangible and intangible heritage which may be recognized and valued at a local, regional, national or global level. Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water. Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith— that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

In the event that during construction, sites, resources or artifacts of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents. These procedures take into account requirements related to Chance Finding under national legislation including [list relevant cultural heritage legislation in country].

- Stop the construction activities in the area of chance find temporarily.
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a guard shall be arranged until the responsible local authorities take over. These authorities are [list the responsible authorities under national legislation].
- Notify the relevant Field (Cluster Officer) staff and the relevant Authorities/Ministry (In this case Department of Archaeology, Bangladesh) immediately. Cluster officer will inform the SDF management
- The relevant local authority from Ministry/ Department of Archaeology shall promptly carry out the necessities and inform the national level authorities from Ministry/ Department of Archaeology immediately from the date on which the information is received.
- The national level authorities from Ministry/ Department of Archaeology would be in charge of evaluation /inspection of the significance or importance of the chance finds and advise on appropriate subsequent procedures.
- If the national level authorities from Ministry/ Department of Archaeology determines that chance find is a non-cultural heritage chance find, the construction process can resume.
- If the national level authorities from Ministry/ Department of Archaeology determines chance find is an isolated chance find, [national level cultural heritage or archeology ministry] would provide technical supports/advice on chance find treatment with related expenditure on the treatment provided by the entity report the chance find.

## Annex 8: Sample ToR for Environmental Specialist

(For use by all IAs)

### Project Description

Bangladesh has been experiencing heavy rainfall since mid-August 2024, resulting in significant flooding and severely impacting 11 eastern districts: Noakhali, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Comilla, Feni, Lakshmipur, Khagrachari, Chattogram, and Cox's Bazar. At several rainfall stations, a peak daily rainfall of 200 to 300 millimeters was observed with a total rainfall of 600 – 800 millimeters within a week. This amount of rainfall is more than 2.5 times higher than the average conditions and exceeded 1,000 millimeters in one month. Based on the IDA 20 CRW, this crisis meets the criteria for accessing CRW resources. The floods destroyed a large amount of the affected region's buildings, infrastructure, critical facilities, and other livelihoods assets such as cropland, agriculture equipment, and livestock and fish farms. The proposed project- Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG) is intended to address short-term immediate needs, medium-term recovery, and longer-term resilient reconstruction following a "Build Back Better" approach. 1,662,109 number of people will be benefitted from climate resilient infrastructure. Construction of climate resilient multipurpose disaster shelters/primary schools is 25, 65.26 km embankment repair, 2560 meter of slope protection works, 21 hydraulic structures repair are notable infrastructural developments. The project services will enhance earning opportunities of beneficiaries to build their resilience to disaster.

### Major Responsibilities

Reporting to the Project Director and among others, perform the following roles and responsibilities.

- ✓ Lead the environmental and occupational health and safety related activities of the project.
- ✓ Develop, organize and deliver trainings and orientation of environmental pertinent to the project with the stakeholders which will include, but not limited to; line ministry/Project staff, Partner Organizations, and relevant stakeholders.
- ✓ Carry out environmental screening and assessment of relevant sub-projects to identify the potential impacts (especially waste management related issues) in the project areas.
- ✓ Based on the data/information of the above screening/assessment, prepare site specific ESMPs for the project.
- ✓ Carry out regular field visits to assess the quality and adequacy of screening and also supervision of environmental related activities.
- ✓ Prepare and submit regular environmental monitoring and implementation progress reports.  
Any other responsibility/activity asked by the project management.

### Qualifications

The Specialist will possess the following qualifications.

- ✓ Minimum 10 years' prior experience in the areas of environmental with any reputed national/international organizations
- ✓ Previous experience of working in the multi sector related development project will be considered an advantage
- ✓ Demonstrated capacity in delivering training/orientation and report writing both in English and Bengali
- ✓ Master's degree in any subject of environmental science

- ✓ Previous experience on environmental with World Bank/Bank/another donor funded project is highly desirable.

## Annex 9: Sample ToR for Social Specialist

(For use by all IAs)

### Project Description

Bangladesh has been experiencing heavy rainfall since mid-August 2024, resulting in significant flooding and severely impacting 11 eastern districts: Noakhali, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Comilla, Feni, Lakshmipur, Khagrachhari, Chattogram, and Cox's Bazar. At several rainfall stations, a peak daily rainfall of 200 to 300 millimeters was observed with a total rainfall of 600 – 800 millimeters within a week. This amount of rainfall is more than 2.5 times higher than the average conditions and exceeded 1,000 millimeters in one month. Based on the IDA 20 CRW, this crisis meets the criteria for accessing CRW resources. The floods destroyed a large amount of the affected region's buildings, infrastructure, critical facilities, and other livelihoods assets such as cropland, agriculture equipment, and livestock and fish farms. The proposed project- Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG) is intended to address short-term immediate needs, medium-term recovery, and longer-term resilient reconstruction following a "Build Back Better" approach. 1,662,109 number of people will be benefitted from climate resilient infrastructure. Construction of climate resilient multipurpose disaster shelters/primary schools is 25, 65.26 km embankment repair, 2560 meter of slope protection works, 21 hydraulic structures repair are notable infrastructural developments. The project services will enhance earning opportunities of beneficiaries to build their resilience to disaster.

### Major Responsibilities

Reporting to the Project Director the Social Specialist will assume, among others, the following roles and responsibilities.

- ✓ Lead the social related activities of the project.
- ✓ Develop, organize and deliver trainings and orientation of social pertinent to the project with the stakeholders which will include, but not limited to; line ministry, Project staff, Partner Organizations, and relevant stakeholders.
- ✓ Carry out social screening and assessment of relevant sub-projects to identify the presence of project stakeholders in the project areas.
- ✓ Based on the data/information of the above screening/assessment, prepare site specific RPF for the project.
- ✓ Carry out regular field visit to assess the quality and adequacy of screening and also supervision of social related activities.
- ✓ Prepare and submit regular social monitoring and implementation progress reports.
- ✓ Any other responsibility/activity asked by the project management.

### Qualifications

- ✓ The Social Specialist will possess the following qualifications.
- ✓ Minimum 8-10 years prior experience in the areas of social with any reputed national/international organizations
- ✓ Previous experience of working in the health relevant project will be considered an advantage.
- ✓ Demonstrated capacity in delivering training/orientation and report writing both in English and Bengali
- ✓ Master's degree in any subject of social science
- ✓ Previous experience on social with World Bank/Bank/another donor funded project is highly desirable.

## Annex 10: Sample ToR for Communication Specialist

(For use by all IAs)

### Project Description

Bangladesh has been experiencing heavy rainfall since mid-August 2024, resulting in significant flooding and severely impacting 11 eastern districts: Noakhali, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Comilla, Feni, Lakshmipur, Khagrachhari, Chattogram, and Cox's Bazar. At several rainfall stations, a peak daily rainfall of 200 to 300 millimeters was observed with a total rainfall of 600 – 800 millimeters within a week. This amount of rainfall is more than 2.5 times higher than the average conditions and exceeded 1,000 millimeters in one month. Based on the IDA 20 CRW, this crisis meets the criteria for accessing CRW resources. The floods destroyed a large amount of the affected region's buildings, infrastructure, critical facilities, and other livelihoods assets such as cropland, agriculture equipment, and livestock and fish farms. The proposed project- Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG) is intended to address short-term immediate needs, medium-term recovery, and longer-term resilient reconstruction following a "Build Back Better" approach. 1,662,109 number of people will be benefitted from climate resilient infrastructure. Construction of climate resilient multipurpose disaster shelters/primary schools is 25, 65.26 km embankment repair, 2560 meter of slope protection works, 21 hydraulic structures repair are notable infrastructural developments. The project services will enhance opportunities of beneficiaries to build their resilience to disaster.

### Scope of Work

The scope of these TORs is to ensure a systemic approach to stakeholder engagement by developing a Stakeholder Engagement Plan (SEP) for the project. The Specialist will prepare a SEP proportional to the scale and complexity of the project and its associated risks and impacts in close coordination with PIUs following a four-step approach:

- I. Stakeholder mapping and initial consultations: identify key stakeholders, classified into project-affected and other interested parties; and hold initial consultations.
- II. Preparation of a preliminary SEP based on initial consultations: Based on stakeholder feedback from the initial consultations, develop a draft SEP with detailed description of activities, roles and responsibilities, timeframe, and budget.
- III. Consultations on the preliminary SEP and feedback documentation for key stakeholders and stakeholder groups;
- IV. Preparation of the appraisal-stage SEP: revise and further develop the draft SEP based on stakeholder feedback.
- V. Implementation and monitoring: Monitor and lead in implementation of SEP.

The Stakeholder Engagement Plan will need to comply with the World Bank's ESS10 on Stakeholder Engagement and Information Disclosure, and will include the following key elements (see detailed outline in Annex I):

- Introduction / Project Description
- Brief Summary of Previous Stakeholder Engagement Activities
- Stakeholder Identification and Analysis
- Stakeholder Engagement Program
- Grievance Redress Mechanism
- Gender-Based Violence (GBV) at the Project sites and Addressing Them

- Roles, Responsibilities, and Resources for Stakeholder Engagement (including budget)
- Monitoring and Reporting
- Annexes

Annexes of the SEP may include: Sample minutes form/s from interviews and consultations conducted; Grievance Submission Form; Stakeholder Mapping or Diagram; documentation from correspondence or minutes of other consultations conducted, e.g., workshops, roundtables, regional events, etc.

### **Specific Tasks for the Specialist**

The Specialist will be required to undertake the following tasks:

- Stakeholder mapping and analysis and initial consultations: identify key stakeholders, classified into project affected and other interested parties, and support initial consultations.
- Initial stakeholder mapping and analysis based on desk review and initial consultations. The stakeholder identification should cover wider area than the project will affect if a location has not yet been identified.
- Identify key stakeholders and classify them into affected parties and other interested parties.
- Identify those project-affected parties (individuals or groups) who, because of their circumstances, may be disadvantaged or vulnerable, and due to their characteristics, may be more likely to be adversely affected by the project impacts or more limited than others in their ability to take advantage of the project's benefits. Ensure that the stakeholder mapping is both gender- and age-sensitive. Further, the consultant should keep the four corporate gender pillars in mind (Improving Gaps in Human Endowments (Health/Education); Removing Constraints for More and Better Jobs; Removing Barriers to Women's Ownership and Control of Assets; Enhancing Women's Voice & Agency and Engaging Men and Boys) while engaging with particularly female stakeholders so that any issues with gender parity and women participation are addressed and GBV analysis can be made following the GPN.

### **Deliverables**

The Project Preparation stage of this assignment is expected to be completed in about 12 weeks.

- a) Prepare an inception report which includes information on stakeholders and groups that need to be consulted and engaged. – 2 weeks
- b) Prepare and disclose a preliminary SEP ahead of the consultations. – 6 weeks
- c) Prepare a revised version of SEP based on consultations, other stakeholder engagement, and PIU/World Bank feedback – 2 weeks
- d) Submit and disclose the appraisal-stage SEP – 2 weeks

### **Required Skills and Qualification**

The Specialist must meet the following requirements:

- Masters' degree in Social Sciences, Development Studies, or a similar discipline.
- At least 5 years of experience in the field of social development, including extensive experience in stakeholder consultation, communication, mobilization, engagement, policy and advocacy work etc.
- Experience in conducting focus group discussions and participatory approaches of engagement such as PRA and in working with groups with low literacy levels.
- Sound knowledge of E&S requirements of international banks; knowledge of World Bank procedures will be a plus

- Ability to work independently and undertake the field assignments.
- Proven ability to work in a collaborative, team environment.
- Written and oral fluency in English required.

Demonstrated computer user skills (e.g., desktop application MS Office such as Word, Excel, and Power Point).

# Annex 11: Sample ToR for Gender Specialist

(For use by all IAs)

## Project Description

Bangladesh has been experiencing heavy rainfall since mid-August 2024, resulting in significant flooding and severely impacting 11 eastern districts: Noakhali, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Comilla, Feni, Lakshmipur, Khagrachhari, Chattogram, and Cox's Bazar. At several rainfall stations, a peak daily rainfall of 200 to 300 millimeters was observed with a total rainfall of 600 – 800 millimeters within a week. This amount of rainfall is more than 2.5 times higher than the average conditions and exceeded 1,000 millimeters in one month. Based on the IDA 20 CRW, this crisis meets the criteria for accessing CRW resources. The floods destroyed a large amount of the affected region's buildings, infrastructure, critical facilities, and other livelihoods assets such as cropland, agriculture equipment, and livestock and fish farms. The proposed project- Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG) is intended to address short-term immediate needs, medium-term recovery, and longer-term resilient reconstruction following a "Build Back Better" approach. 1,662,109 number of people will be benefitted from climate resilient infrastructure. Construction of climate resilient multipurpose disaster shelters/primary schools is 25, 65.26 km embankment repair, 2560 meter of slope protection works, 21 hydraulic structures repair are notable infrastructural developments. The project services will enhance earning opportunities of beneficiaries to build their resilience to disaster.

## Scope of Work and Key Activities

- Review and assess existing project documents including those regulating the work of the Contractor(s) (e.g. Operations Manual, environmental and social commitment plans - ESCP, environmental and social management frameworks/plans - ESMF/P, stakeholder commitment plans, labor management plans, codes of conduct, grievances redress mechanisms - GRM, bidding documents, etc.) and determine their effectiveness to address risks linked to sexual harassment and sexual exploitation and abuse, as well as the current measures being used to prevent and respond to any incidents. Meet with key staff in (locations) in order to review prevention and response processes, staff sensitization/training and effectiveness of existing GRM/ complaints mechanisms.
  - Assess quality, confidentiality and comprehensiveness of existing protocols being used if grievances related to SEA/SH are reported (linking survivors to services and avoiding re-victimization).
  - Assess quality, confidentiality and comprehensiveness of clear and confidential protocols for preventing SEA/SH.
- Make practical recommendations through the development a work plan with concrete measures to implement key recommendations to strengthen systems for SEA prevention and response in coordination with the Task Team), based on World Bank Good Practice Note for Addressing Gender Based Violence in Investment Project Financing Involving Major Civil Works and an assessment of the existing GBV risk management systems in place as part of the project implementation.
- Organize/facilitate initial training of project related staff on GBV drivers, risks and mitigation measures. Provide support for organizing trainings of PIU and project-related staff on SEA/SH risk mitigation, including codes of conduct and GRM.
- Support the task team/contractor with the implementation of the GBV Action Plan (and any further mitigation measures) in line with local labor legislation and a survivor-centred approach,

including i) an awareness raising strategy, describing how workers and local communities will be sensitized to GBV risks, and the worker's responsibilities under the CoC; ii) a response protocol, including GBV service providers to which GBV survivors will be referred, and the services which will be available; iii) a GRM and allegation procedures, including how the project will provide information to employees and the community on how to report cases of GBV CoC breaches to the GRM and; iv) and Accountability framework to hold accountable alleged perpetrators associated to the project.

- Assess the need and support implementation of community consultations with women to take place during upcoming implementation support missions, in order to understand potential risks and the best ways to make project benefits accessible to women.
- Support the development or adaptation of Codes of Conduct (CoC) for workers (and GBV clauses in contracts promoting the inclusion of women and girls in the project, if applicable) based on best practice. Support the task team and contractors in rolling out the CoC, including training and documentation the process of implementation (challenges and lessons learned).
- Develop or adapt a Standard Operating Procedures for a Gender Based Violence Grievance Redress Mechanism (GRM) based on best practices in order to effectively collect information on instances of SEA/SH in coordination with the project task team and implementation unit. Support rolling out the GBV GRM, including training project related staff, labor, community members, hospital management, waste workers or others as needed, and document the process of implementation including challenges and lessons learned.
- Support the development and costing of a survivor-centered protocol to respond to cases of GBV reported through the GRM as part of the overall project framework. This should include adding to or creating GBV service providers mapping of priority project areas.
- Provide recommendations and costing for the implementation of community awareness raising activities that include the risk of SEA related to the project, the code of conduct for workers, the GRM and the ways in which the community members can safely report concerns.
- Provide recommendations on integrating a gender lens into any ongoing impact evaluations or project-related research (if relevant), and to gather lessons learned in cases where project activities are already finished and can no longer be retrofitted

### **Scope of work and methodology**

- Desk review and analysis of relevant documents:
  - Project documents prepared by respective ministry, contractor and integrating gender and GBV implications where appropriate.
  - Systems put in place by the relevant operations - This will include Incident Reporting Procedures; Terms of Reference or existing Codes of Conduct for Contractors; instruments, including ESMF/P, stakeholder engagement plans, labor management plans, etc.; monitoring reports by contractors, GRM manual and reports as well as fact finding reports on most any previous allegations of SEA, etc. This could include examining processes for implementing and monitoring COCs, collecting and analyzing information on actual/potential risk factors for vulnerability to sexual exploitation and abuse and elaborating measures to address them.
  - Best practices for accountability measures, including CoCs, GRMs and SEA/SH risk mitigation and prevention measures relevant to the project.
- Key informant interviews
  - Semi-structured interviews with Government Counterparts/implementing agencies, NGO staff, relevant WB Program Leaders, Task Teams and Social specialists, other staff providing oversight

in terms of SEA/SH prevention/response. The primary purpose of these interviews is to fully understand the set of measures put in place to address SEA in key sectors and the extent to which they meet global best practice requirements, as well as to understand the feasibility of initially proposed retrofitting recommendations.

- Meet with the task team in order to review prevention and response processes, including staff training and monitoring, existence of complaints mechanisms, including community awareness raising re: making a complaint, and availability/provision of survivor-centered services for an alleged survivor.
- Assess comprehensiveness of clear and confidential protocols to be followed if cases of SEA/SH are reported (linking survivors to services and avoiding re-victimization). If gaps are identified make recommendation to, i) strengthen the reporting response framework outlining procedures and guidelines targeting government partners and contracting firms associated with the project; ii) develop recommendations to strengthen the referral pathway for survivors that should be implemented as soon as a case is reported, verified or not.
- Engage with counterparts directly involved in the project implementation regarding their intervention in any cases of SEA/SH, as well as to assess the extent of internal knowledge on this issue. The Specialist should meet in particular with the social and/or GRM focal points or the Operational Safety and Health team within the project to assess knowledge of appropriate and ethical measures to report and respond to cases of SEA/GBV. When meeting with those managing the GRM the Specialist should verify whether and how the grievance redress mechanism collects SEA/SH related complaints in a safe manner, without increasing risk to survivors and keeping anonymity if at all possible.
- Engage with secondary sources of information on the potential risks of GBV linked to the project and on the appropriate entry points for the development of a GBV-sensitive GRM. This will include women's organizations, GBV service providers active in the zone of implementation of the project, community leaders, and other community members with key information on the experiences of women and girls in communities affected by the project.
- Rolling out appropriate systems
  - Help Task Team set up GBV GRM, facilitate it running smoothly and monitor and record complaints received
  - Help in rolling out appropriate COCs, ensuring requirements in CoCs are clearly understood by those signing and signed by all workers present in project site.
  - Clearly define the GBV requirements and expectations in the bidding documents for contractor
  - Help Task team implement appropriate project related civil works for labor to reduce GBV risks. This can include separate, safe and easily accessible facilities for women and men working on the site like well-lit locker rooms and/or latrines located in separate areas, with the ability to be locked from the inside.
  - Help in setting up IEC campaigns. Ensure that display signs are visible around the project site that signal to workers and the community that the project site is an area where GBV is prohibited.
  - Monitoring all GBV related activities
- The assignment will include office-based work and travel to project sites in Bangladesh as identified by and coordinated with the Task Team. Key activities during field work may include:
  - Meeting with the project teams in order to review prevention and response processes linked to SEA/SH (staff training and monitoring, existence of complaints mechanisms, community awareness, and availability/provision of survivor-centered services for an alleged survivor);
  - Consultations with communities surrounding the project.

**Deliverables**

The Specialist will prepare the following outputs:

1. Assessment report and work plan with measures to strengthen SEA/SH prevention and response mechanisms under project,
2. Carry out tasks set in Gender and GBV Action Plan, and further enhance/strengthen risk prevention and mitigation methods.
3. Rolling out appropriate systems as outlined.
4. Relevant trainings to sensitize community and project related staff about GBV issues, methods of reporting grievances.
5. Revised E&S instruments to integrate GBV risk mitigation measures in line with risks identified and good practices, in the country and in other WB funded projects.
6. Completed monitoring tool with up-to-date progress for each sub- project.

**Reporting, Remuneration, Timing, and language of outputs**

The initial duration of this assignment will be for XXX days until XXX. The work will be supervised by The PD. The outputs outlined above will be produced in English and in Bangla (when required).

**Key skills, technical background and experience required**

- Minimum of 5 years relevant professional work experience at national and international levels in development or humanitarian field, with a focus on the prevention and response to gender- based violence.
- Operational experience on the ground in low- and/or middle-income countries in the implementation of programs related to violence against women and girls, sexual exploitation and abuse, gender, and child protection.
- Proven research skills and demonstrated expertise in analysis and development of technical papers and reports as well as programmatic guidance related to violence against women and children.
- Familiar and able to operationalize international standards, procedures for prevention and response to GBV, safe and ethical GBV data collection, and of key standards and resources on GBV in emergencies.
- Experience of collaborating with Government entities in GBV program implementation considered an asset.
- Direct experience in collecting, analyzing, and comparing data related to GBV.
- Knowledge and experience of World Bank policies and operations considered an asset.
- Excellent analytical, communication, writing, presentation/facilitation and editorial skills in English and Bangla.
- Willingness to travel regularly to engage with Task Teams on operational issues and advisory activities related to GBV.
- Commitment to a survivor-centered approach.

## Annex 12: World Bank GRM Checklist

(For use by all IAs)

### Checklist to accompany the Guidance Note for ESS10: Stakeholder Engagement and Information Disclosure

This Checklist provides guidance for the Borrower on the application of the Environmental and Social Standards (ESSs), which form part of the World Bank's 2016 Environmental and Social Framework. Checklists help to illustrate the requirements of the ESSs and propose sample approaches to implement some of the requirements of the ESSs; they are not Bank policy, nor are they mandatory. Checklists do not substitute for the need to exercise sound judgment in making project decisions. In case of any inconsistency or conflict between the Checklists and the ESSs, the provisions of the ESSs prevail.

#### Grievance Redress Mechanism Checklist

The appropriate level of complexity of a project's Grievance Redress Mechanism (GRM) depends on the risks and impacts of the project and the project context. The following checklist describes a complex GRM that adheres to good international practice, which may not be necessary for all projects. Nevertheless, this checklist helps to determine whether a grievance mechanism conforms to good international practice.

|                                                                                                                      |         |        |
|----------------------------------------------------------------------------------------------------------------------|---------|--------|
|                                                                                                                      |         |        |
| <b>A. System Issues</b>                                                                                              |         |        |
| 1. Does the project invite feedback/grievances?                                                                      | Yes____ | No____ |
| 2. Does the organization have a policy on grievance redress?                                                         | Yes____ | No____ |
| a) Is the policy available to all staff, beneficiaries, and potential users?                                         | Yes____ | No____ |
| b) Is the policy written in the local language(s)?                                                                   | Yes____ | No____ |
| 3. Does the grievance mechanism have the following features?                                                         | Yes____ | No____ |
| a) A clearly understood procedure for people to provide feedback and/or submit grievances.                           | Yes____ | No____ |
| b) A statement of who is responsible for dealing with feedback/ grievances.                                          | Yes____ | No____ |
| c) Procedures for resolving or mediating and investigating grievances depending on their seriousness and complexity. | Yes____ | No____ |
| d) A system for keeping complainants informed of status updates.                                                     | Yes____ | No____ |
| e) A system for recording feedback/grievances and outcomes.                                                          | Yes____ | No____ |
| f) Procedures for protecting confidentiality of complainants                                                         | Yes____ | No____ |

|                                                                                                       |          |         |
|-------------------------------------------------------------------------------------------------------|----------|---------|
|                                                                                                       |          |         |
| <b>B. Staff Management</b>                                                                            |          |         |
| 1. Is there a grievance manual for staff?                                                             | Yes_____ | No_____ |
| 2. Do the grievance policy and/or procedures provide guidance on:                                     | Yes_____ | No_____ |
| a) What is grievance/feedback?                                                                        | Yes_____ | No_____ |
| b) What information to collect from complainants?                                                     | Yes_____ | No_____ |
| c) What remedies can or should be used to resolve grievances?                                         | Yes_____ | No_____ |
| 3. Are the grievance policy and procedures communicated to all staff?                                 | Yes_____ | No_____ |
| 4. Are adequate resources allocated for the GM to function effectively?                               | Yes_____ | No_____ |
| 5. Does the organization provide training on grievance management to staff?                           | Yes_____ | No_____ |
| <b>C. Communication to grievance mechanism users</b>                                                  | Yes_____ | No_____ |
| 1. Are users told how to submit grievances/feedback?                                                  | Yes_____ | No_____ |
| a) Is an information brochure on the grievance mechanism available to users?                          | Yes_____ | No_____ |
| b) Are feedback/grievance forms available to users?                                                   | Yes_____ | No_____ |
| c) Are grievance forms or signs displayed prominently and readily accessible?                         | Yes_____ | No_____ |
| d) Are contact details of staff receiving feedback/grievance published and displayed in public areas? | Yes_____ | No_____ |
| e) Is information on grievance management available in local languages?                               | Yes_____ | No_____ |
| 2. Are users able to submit grievances/feedback                                                       | Yes_____ | No_____ |
| a) In writing                                                                                         | Yes_____ | No_____ |
| b) By email                                                                                           | Yes_____ | No_____ |
| c) By fax                                                                                             | Yes_____ | No_____ |
| d) By telephone                                                                                       | Yes_____ | No_____ |
| e) In person                                                                                          | Yes_____ | No_____ |
| 3. Are users provided with assistance to submit feedback/grievances where needed?                     | Yes_____ | No_____ |
| 4. Can the grievance mechanism be accessed free of charge?                                            | Yes_____ | No_____ |
| 5. Are users promised confidentiality?                                                                | Yes_____ | No_____ |
| 6. Are users informed about the appeals process?                                                      | Yes_____ | No_____ |
| <b>D. Feedback/grievance recording</b>                                                                |          |         |
| 1. Are all feedback/grievances recorded?                                                              | Yes_____ | No_____ |
| Are grievances/feedback logged and documented?                                                        | Yes_____ | No_____ |
| Are inquiries/suggestions and recommendations recorded?                                               | Yes_____ | No_____ |

|                                                                                                                    |          |         |
|--------------------------------------------------------------------------------------------------------------------|----------|---------|
|                                                                                                                    |          |         |
| Are the outcomes and responses to all grievances/feedback recorded?                                                | Yes_____ | No_____ |
| <b>E. Business standards</b>                                                                                       |          |         |
| 1. Are there business standards in place for the process and timing with which grievances/feedback are dealt with? | Yes_____ | No_____ |
| a) Is receipt acknowledged within a stipulated time frame?                                                         | Yes_____ | No_____ |
| b) Are the grievances supposed to be resolved within a stipulated time frame?                                      | Yes_____ | No_____ |
| 2. Is there a quality control system in place to:                                                                  | Yes_____ | No_____ |
| a) Check if all grievances have been dealt with or acted upon.                                                     | Yes_____ | No_____ |
| b) Check if all aspects of a grievance have been addressed.                                                        | Yes_____ | No_____ |
| c) Check if all necessary follow-up action has been taken.                                                         | Yes_____ | No_____ |
| <b>F. Analysis and feedback</b>                                                                                    |          |         |
| 1. Are regular internal reports on grievances/feedback produced for senior management?                             | Yes_____ | No_____ |
| 2. Grievances/feedback reports include data on                                                                     | Yes_____ | No_____ |
| a) Numbers of grievances/feedback received                                                                         | Yes_____ | No_____ |
| b) Compliance with business standards.                                                                             | Yes_____ | No_____ |
| c) Issues raised in grievances/feedback                                                                            | Yes_____ | No_____ |
| d) Trends in grievances/feedback over time.                                                                        | Yes_____ | No_____ |
| e) The causes of grievances/feedback.                                                                              | Yes_____ | No_____ |
| f) Whether remedial action was warranted                                                                           | Yes_____ | No_____ |
| g) What redress was actually provided?                                                                             | Yes_____ | No_____ |
| h) Recommendations/strategies to prevent or limit future recurrences                                               | Yes_____ | No_____ |
| 3. Are reports about grievances/feedback made public, periodically?                                                | Yes_____ | No_____ |

## Annex 13: ToR for External Monitor/M&E consultant

(For use by all IAs)

### Project Description

Bangladesh has been experiencing heavy rainfall since mid-August 2024, resulting in significant flooding and severely impacting 11 eastern districts: Noakhali, Sylhet, Maulvibazar, Habiganj, Brahmanbaria, Comilla, Feni, Lakshmipur, Khagrachhari, Chattogram, and Cox's Bazar. At several rainfall stations, a peak daily rainfall of 200 to 300 millimeters was observed with a total rainfall of 600 – 800 millimeters within a week. This amount of rainfall is more than 2.5 times higher than the average conditions and exceeded 1,000 millimeters in one month. Based on the IDA 20 CRW, this crisis meets the criteria for accessing CRW resources. The floods destroyed a large amount of the affected region's buildings, infrastructure, critical facilities, and other livelihoods assets such as cropland, agriculture equipment, and livestock and fish farms. The proposed project- Bangladesh Sustainable Recovery, Emergency Preparedness and Response Project (B-STRONG) is intended to address short-term immediate needs, medium-term recovery, and longer-term resilient reconstruction following a "Build Back Better" approach. 1,662,109 number of people will be benefitted from climate resilient infrastructure. Construction of climate resilient multipurpose disaster shelters/primary schools is 25, 65.26 km embankment repair, 2560 meter of slope protection works, 21 hydraulic structures repair are notable infrastructural developments. The project services will enhance earning opportunities of beneficiaries to build their resilience to disaster.

### Key Objective of External Monitoring

Monitoring is an integral part of the resettlement process. As part of this Project, a three-tier monitoring system has been designed to monitor and evaluate the progress of the Social Action Plan. These 3-levels comprise of: a) Internal monitoring at EA level involving the INGO, Contractor and PIUs offices; b) monitoring by project construction supervision consultant (CSC) and c) independent external monitoring. The primary objective for engaging an independent external monitor is to review the efficacy of internal monitoring, design and conduct periodic third-party monitoring and feedback and GoB on policy improvement and enhancement of implementation process. The External Monitoring Agency (EMA) will review implementation process as per set policies in the E&S documents and assess the achievement of resettlement objectives, the changes in living standards and livelihoods, restoration of the economic and social base of the affected people, the effectiveness, impact and sustainability of entitlements, the need for further mitigation measures if any, and to learn strategic lessons for future policy formulation and planning.

### Scope of Work

The scope of work of the External Monitoring Agency (EMA) will include the following tasks:

- i. To develop specific monitoring indicators for undertaking monitoring of all aspects of ESIA and other Plans
- ii. To review and verify the progress in plans implementation of the Project.
- iii. Identify the strengths and weaknesses of the plan's objectives and approaches, implementation strategies.
- iv. To analyze the pre-and post-project socio-economic conditions of the affected people. In the absence of baseline socio-economic data on income and living standards and given the difficulty of APs having accurate recollection of their pre-project income and living standards, develop some quality checks on the information to be obtained from the APs. Such quality checks could include verification by neighbors and local village leaders. The methodology for assessment should be very explicit, noting any qualifications.

- v. To monitor and evaluate the implementation of ESMP along with other plans of the project
- vi. Review results of internal monitoring and verify claims through sampling check at the field level to assess whether outputs/ objectives have been generally met.
- vii. To monitor and assess the adequacy and effectiveness of the consultative process with affected APs, particularly those vulnerable, including the adequacy and effectiveness of grievance procedures and legal redress available to the affected parties, and dissemination of information about these.
- viii. Identify, quantify, and qualify the types of conflicts and grievances reported and resolved and the consultation and participation procedures.
- ix. Verify expenditure & adequacy of budget for resettlement activities.
- x. Describe any lessons learned that might be useful in developing the new national level E&S related policy and legal/institutional framework for involuntary resettlement.

### **Methodology and Approach**

The monitoring should be supplement by focus group discussions (FGD) which would allow the monitors to consult a range of stakeholders (local government field staff, NGOs, community leaders, and, most importantly, APs) and community public meetings which are open public meetings at the sites to elicit information about performance of various resettlement activities.

### **Team Composition of The External Monitoring Agency**

The EMA should focus on field-based research on institutional arrangement, implementation strategy, policy objectives and the targets. In addition, data collection, processing and analysis should be performed to pinpoint problem areas and weaknesses and to highlight corrective measures, if needed, to achieve the objectives on schedule. Thus, there is a need for a dedicated monitoring team with adequate gender representation. Further, it is essential that the central team or field level coordinators responsible for monitoring, are skilled and trained in data base management, interview technique as well as social and economic/finance. Keeping in mind these criteria, the team should ideally include:

| <b>Position/expertise</b>                                             | <b>Qualification and experience</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.Team Leader/ Implementation Specialist/<br>Environmental Specialist | Masters in Environmental Science/Engineering with 15 years working background in planning, implementation and monitoring of E&S for infrastructure projects. Experience in institutional capacity analysis and implementation arrangement for preparation and implementation of ESIA/ ESMP, and knowledge in latest environment and social policies of the international development financing institutions in Bangladesh are preferred                                        |
| 2.Social Impact Specialist                                            | Master's in social science/science with 15 years working experience in social impact assessment including census and socioeconomic surveys, stakeholders' consultation, and analyzing social impacts to identify mitigation measures in compliance with social policies of the international development financing institutions and national legislations. Experience of preparing resettlement framework and action plans and implementation of plans for externally financed |

|                      |                                                                                                                                                                                                                                                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | projects is essential.                                                                                                                                                                                                                                                                                                                       |
| 3. Gender Specialist | Master's in social science with 15 years working experience in relevant field; Thorough knowledge of gender issues and their implications in development projects; research and work experience relating to gender issues; and knowledge of techniques and their applications in mobilizing community participation in development programs. |
| 4. Data Analyst      | Graduate with working experience and knowledge of software, those are most commonly used in Bangladesh; demonstrated ability to design and implement automated MIS(s) for monitoring progress, comparing targets with achieved progress and the procedural steps.                                                                            |

### **Time Frame and Reporting**

The EMA will be employed over a period of 5 years with intermittent inputs from the professional team to continue one year after completion of implementation period. Quarterly and annual monitoring reports should be submitted to the PSC with copies to the World Bank. An evaluation report at the end of the Project should be submitted to the PSC with critical analysis of the achievement of the projects and the performance of MoWR, MoLGRDC and other related Consultants etc.

### **Qualification of the External Monitoring Agency**

The EMA will have at least 10 years of experience in resettlement/ES policy analysis and implementation of resettlement plans/EMPS. Further, work experience and familiarity with all aspects of ES operations would be desirable. NGOs, Consulting Firms (consultant organization) having requisite capacity and experience as follows can qualify for services of and external monitor for the Project.

- i. NGOs registered with the Social Welfare Department of the GOB; Consulting Firms registered with the Joint Stock Company.
- ii. The applicant should have prior experience in social surveys in land-based infrastructure projects and preparation of ES related documents as per international standards/ as per guidelines of World Bank.
- iii. The applicant should have extensive experience in implementation and monitoring of different ES plans, preparation of implementation tools, and development and operation of automated MIS for monitoring.
- iv. The applicant should be able to produce evidence of monitoring using structured instruments and computerized MIS with set criteria for measuring achievement.
- v. The applicant should have adequate manpower with capacity and expertise in the field of planning, implementation and monitoring of involuntary resettlement projects as per donor's guidelines.

Interested agencies should submit proposal for the work with a brief statement of the approach, methodology, and relevant information concerning previous experience on monitoring of resettlement implementation and preparation of reports. The profile of consultant agency, along with full CVs of the team to be engaged, must be submitted along with the proposal.

### **Budget and Logistics**

The budget should include all expenses such as staff salary, office accommodation, training, computer / software, transport, field expenses and other logistics necessary for field activities, data collection, processing and analysis for monitoring and evaluation work. Additional expense claims whatsoever

outside the proposed and negotiated budget will not be entertained. VAT, Income Tax and other charges admissible will be deducted at source as per GOB laws.

## Annex 14: Exclusions List

(For use by all IAs)

- Noakhali, Feni, Cumilla and Chattogram are within the Ganges-Brahmaputra-Meghna Delta Key Biodiversity Area (KBA) and Important Bird Area (IBA). No new or rehabilitation activity will be supported which will adversely impact the species and biodiversity features for which these areas are designated. IBAT provides the following link to the IUCN KBA website: <https://www.keybiodiversityareas.org/site/factsheet/15230> and Birdlife IBA website: <https://datazone.birdlife.org/site/factsheet/ganges-brahmaputra-meghna-delta-iba-Bangladesh>
- Activities with potential to adversely impact Ganges River Dolphin or Irrawaddy Dolphin will not be supported.
- Construction and/or rehabilitation of large wastewater treatment plants, large surface water treatment plant, the desilting of surface waters, and large-scale water (surface and groundwater) resource infrastructure, including large dams or activities involving the allocation or conveyance of water, such as inter-basin water transfers or activities resulting in significant changes to water quality or availability.
- Construction of cross dam, large scale bridge, tidal basin water infrastructure
- Any activity resulting change in river-morphology, marine eco-system, flow diversion will be excluded.
- Activities resulting disposal of untreated wastes will be excluded.
- Activities requiring land acquisition and major displacement (minor temporary impacts will be managed under RPF).
- Any activities that may require relocating mosques, temples, graveyards, cremation grounds, and other places/objects that are of religious and cultural significance.
- Activities that may significantly restrict access to common property resources and livelihood activities of groups and communities.
- Activities with high E&S risks and impacts

Any displacement or adverse negative impacts on SECs like land, customary rights, livelihoods, culture requiring Free, Prior Informed Consent (FPIC)

## Annex 15: Chance Find Guidelines

**(For use by all IAs)**

Subproject activities could impact sites of social, sacred, religious, or heritage value. “Chance find” procedures would apply when those sites are identified during the design phase or during the actual construction/research period and the related activity will not be eligible for financing under the project.

(1) Cultural property includes monuments, structures, works of art, or sites of significant points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. This includes cemeteries, graveyards and graves.

(2) The list of negative attributes which would make a subproject ineligible for support includes any activity that would adversely impact cultural property.

(3) In the event of finding of properties of cultural value during construction/research, the following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed and included in standard bidding document.

(a) Stop the construction/research activities in the area of the chance find;

(b) Delineate the discovered site or area;

(c) Secure the site to prevent any damage or loss of removable objects.

(d) Notify the supervisory Engineer who in turn will notify the responsible local authorities;

(e) Responsible local authorities and the relevant Ministry would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures.

(f) Decisions on how to handle the finding shall be taken by the responsible authorities and the relevant Ministry. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance), conservation, restoration and salvage.

(g) Implementation of the authority decision concerning the management of the finding shall be communicated in writing by the relevant Ministry.

(h) Construction/research work could resume only after permission is given from the responsible local authorities and the relevant Ministry concerning safeguard of the heritage.

(4) These procedures must be referred to as standard provisions in construction/research contracts. During project supervision, the Environmental/Social Consultant shall monitor the above regulations relating to the treatment of any chance find encountered.

(5) Relevant findings will be recorded in World Bank Supervision Reports and Implementation Completion Reports will assess the overall effectiveness of the project’s cultural property mitigation, management, and activities, as appropriate.

# Annex 16: Environmental and Social Screening Form

(For use by LGED, BWDB, DDM and DAE/BADC)

## Section A: Sub-Project Overview

|                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description of sub-project/component interventions:                                                                                                                                                                                                                       |
| Sub-project Location:                                                                                                                                                                                                                                                     |
| Expected construction period:                                                                                                                                                                                                                                             |
| Description of project intervention area and project influence area with schematic diagram (where relevant, indicate distance to sensitive environmental areas and historical or cultural assets): Please also explain any analysis on alternative location was conducted |

## Section B: Environmental Screening

### B.1: Environmental feature of sub-project location

|                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description of cultural properties (if applicable, including distance from site):                                                                                                                                                                                |
| Location of environmentally important and sensitive areas:<br>(1) potential impacts on remaining forests in/around camps Yes/No<br>(2) Other issues:                                                                                                             |
| *This question needs to be answered by checking the elephant migration route map established by UNHCR/IUCN                                                                                                                                                       |
| Baseline air quality and noise levels:                                                                                                                                                                                                                           |
| Baseline soil quality:                                                                                                                                                                                                                                           |
| Landslide potential (high/medium/low, with explanation):                                                                                                                                                                                                         |
| Baseline surface water and groundwater quality (FE, TDS, fecal coliform, pH):                                                                                                                                                                                    |
| Status of wildlife movement:                                                                                                                                                                                                                                     |
| State of forestation:                                                                                                                                                                                                                                            |
| Summary of water balance analysis (For water supply scheme only):                                                                                                                                                                                                |
| Please consider (i) water requirements of newly forested areas for plants' total evapotranspiration, (ii) new settlements water supply requirement for drinking water, household use, bathing and sanitation, (iii) replenishment rate from annual rainfall etc. |

### B.2: Pre construction Phase

|                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------|
| Information on Ancillary Facilities (e.g., status of access road or any other facility required for sub-project to be viable):       |
| Requirement of accommodation or service amenities (toilet, water supply, electricity) to support the work force during construction: |
| Possible location of labor camps:                                                                                                    |
| Requirement and type of raw materials (e.g., sand, stone, wood, etc.):                                                               |
| Identification of access road for transportation (Yes/No):                                                                           |
| Location identification for raw material storage:                                                                                    |
| Possible composition and quantities of wastes (Solids wastes, demolition materials, sludge from old latrines, etc.):                 |

### B.3: Construction Phase

|                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type and quantity of waste generated (e.g., Solids wastes, liquid wastes, etc.):                                                                                        |
| Type and quantity of raw materials used (wood, bricks, cement, water, etc.):                                                                                            |
| Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:                                              |
| Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors:<br>(High/Medium/Low with explanation) |
| Disturbance or modification of existing drainage channels (rivers, canals) or surface waterbodies (wetlands, marshes):<br>(High/Medium/Low with description)            |
| Destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development:<br>(High/Medium/Low with description)              |
| Activities that can lead to landslides, slumps, slip sand other mass movements in roadcuts:                                                                             |
| Erosion of lands below the road bed receiving concentrated outflow carried by covered or open drains:<br>(High/Medium/Low with description)                             |
| Describe possible traffic movement impacts on (unwanted) light, noise and air pollution:                                                                                |

High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm)

### B.4: Operation Phase

|                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Activities leading to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles:                                           |
| Chance of long-term or semi-permanent destruction of soils: (High/Medium/Low with description)                                                                          |
| Possibility of odor and water, soil quality impacts from SWM and FSM disposal system: (High/Medium/Low with description)                                                |
| Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors:<br>(High/Medium/Low with explanation) |
| Likely direct and indirect impacts on economic development in the project areas by the sub-project:                                                                     |
| Extent of disturbance or modification of existing drainage channels (rivers, canals) or surface waterbodies (wetlands marshes):<br>(High/Medium/Low with description)   |
| Extent of destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development:<br>(High/Medium/Low with description)    |
| Activities leading to landslides, slumps, slips and other mass movements in roadcuts:                                                                                   |
| Erosion of lands below the road bed receiving concentrated outflow carried by covered or open drains:<br>(High/Medium/Low with explanation)                             |
| Describe possible traffic movement impacts on (unwanted) light, noise and air pollution:                                                                                |

High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm).

## Section C: Social Screening

### C.1 General Labor Influx Screening

| Key Screening questions                                                                                                                                                                                                                                 | Aspects to Consider                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Will the project potentially involve an influx of workers to the project location, and will the influx be considered significant for the local community?                                                                                               | <p>How many foreign and local workers will be needed for the remaining period of the project, with what skill set?</p> <p>Can the project hire workers from the local workforce?</p> <p>What is the size and skill level of the existing local workforce?</p> <p>If the skill level of the local workforce does not match the needs of the project, can they be trained within a reasonable timeframe to meet project requirements?</p> <p>How will the workers be accommodated? Will they commute or reside on site or outside of the camp? If so, what size of camp will be required?</p> |
| Is the project located in a rural or remote area?                                                                                                                                                                                                       | <p>What is the size of local population in the project area?</p> <p>Is the project located / being carried out in an area that is not usually frequented by outsiders?</p> <p>What is the frequency and extent of contact between the local community and outsiders?</p> <p>Are there sensitive environmental conditions that need to be considered?</p>                                                                                                                                                                                                                                    |
| Based on the socioeconomic, cultural, religious and demographic qualities of the local community, population and the incoming workers, is there a possibility that their presence or interaction with the local community could create adverse impacts? | <p>Is it likely that the incoming workers and the local community come from a shared socio-economic, cultural, religious or demographic background?</p> <p>What is the level of existing resources, and will the incoming workers use or create competition for these resources?</p> <p>What is the expected duration of the incoming workers' presence in the community?</p> <p>Given the characteristics of the local community, are there any specific adverse impacts that may be anticipated?</p>                                                                                      |
| Consultation with Community People                                                                                                                                                                                                                      | <p>Has the project authority and contractors conducted any consultation meetings with the community people?</p> <p>Are local people aware about the labors?</p> <p>Has the project authority involved the local community with the project?</p>                                                                                                                                                                                                                                                                                                                                             |
| <b>Involuntary restrictions on land use or on access to legally designated parks and protected areas</b>                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Will people lose access to natural resources, communal facilities and services?                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| If land use is changed, will it have an adverse impact on social and economic activities?                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Will access to land and resources owned communally or by the state be restricted?                                                                                         |
| Any estimate of the likely number of persons that will be displaced by the Project? Yes [ ] No [ ]<br>If yes, approximately how many?                                     |
| Are any of them poor, female-heads of households, or vulnerable to poverty risks? Yes [ ] No [ ]                                                                          |
| Are any displaced persons from indigenous or ethnic minority groups? Yes [ ] No [ ]                                                                                       |
| <b>During Screening, project authority will conduct consultation with the primary and secondary stakeholders and provide their observations in the following sections</b> |
| Who are the stakeholders of the project?                                                                                                                                  |
| What social and cultural factors affect the ability of stakeholders to participate or benefit from the proposed policy or project?                                        |
| Are project objectives consistent with their needs, interests and capacity?                                                                                               |
| What will be the impact of the project or sub-project on the various stakeholders, especially women and vulnerable groups?                                                |
| What social risks might affect project or sub-project success?                                                                                                            |
| Has the project authority or any other organizations conducted any consultations with the affected community or people? If yes. Please provide a summary                  |

### C.3. Social Capital Format

The objective is to list various types of social institutes/bodies working in the camp, intended project influence areas to enlist them for the possible inclusion in the management, and monitoring of the projects. List the name of social institutes/ bodies under the given categorization along with the following information. Use separate sheet for each category of social institute/body.

| Type of Social Institutes/bodies                                                                                                               | Name of the Institution | Contact Person and Address and phone number | Primary areas of Work | Coverage areas (list name of the places) |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------|-----------------------|------------------------------------------|
| <b>Government Organizations</b>                                                                                                                |                         |                                             |                       |                                          |
| <b>UN Agencies</b>                                                                                                                             |                         |                                             |                       |                                          |
| <b>National Organizations</b>                                                                                                                  |                         |                                             |                       |                                          |
| <b>Community Based Volunteer Organizations</b><br>are those, which constitute the members of the community working towards social development. |                         |                                             |                       |                                          |

### **Section D: Environmental and Social Screening Summary**

Please summarize the results of environmental and social screening conducted above. Mitigation measures need to be proposed in referenced to ESMP Guidelines relevant to the type of the sub-

project, proposed in Section 8.2 of ESMF. This table needs to be completed by both environmental and social specialists. Please add rows to the table as necessary.

| Section                   | Main Environmental and Social Impacts | Impact Significance * | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions |           |
|---------------------------|---------------------------------------|-----------------------|-------------------------------|--------------------------------|------------------------|-----------|
|                           |                                       |                       |                               |                                | Indicators             | Frequency |
| 1: Sub-Project Location   |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
| 2: Pre-construction Phase |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
| 3: Construction Phase     |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
| 4: Operational Phase      |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |
|                           |                                       |                       |                               |                                |                        |           |

\* Overall Impact Score: High = Likely to cause long-term E&S impacts; Medium = Likely to cause temporary impacts; Low = Likely to cause little, short-term impacts

Recommendation for further environmental and social assessment and/or site specific environmental and social management plan: Yes/No

\*If yes, please specify what assessments/plans would be required.

From completed by: (Name, designation, mobile number, signature, date)

From checked by: (Name, designation, mobile number, signature, date)

Reviewed by: (Name, designation, mobile number, signature, date)

Project Director Signature & Date:

## Annex 17: Details of the Environmental and Social Code of Practices (ESCoPs)

(For use by LGED, BWDB, DDM, DAE/BADC)

The objective of preparation of the Environmental and Social Code of Practices (ESCoPs) is to address less significant environmental and social impacts and all general construction related impacts of the proposed project implementation. The ESCoPs will provide guidelines for the best operating practices and environmental management and social guidelines to be followed by the contractors for sustainable management of all environmental issues, irrespective of site conditions and surrounding environment.

**Note:** The Environmental and Social Codes of Practice (ESCoPs) below apply to all Implementing Agencies (IAs) responsible for infrastructure, flood protection, disaster management, and agricultural activities under this project—including LGED, BWDB, DDM, DAE, and BADC.

| ESCoP                      | Project Activity / Impact Source                                                                                                                                                                                                                | Impacts                                                                                                                | Expanded Mitigation Measures / Management Guidelines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Waste Management</b> | Construction, rehabilitation, demolition, earthworks, dredging, agricultural works, public works, labor camps, material storage, and repair activities generating solid, liquid, and hazardous wastes (including packaging and organic matter). | Soil and water pollution; health risks to workers/communities; blocked drainage; public nuisance; negative perception. | <ul style="list-style-type: none"> <li>• Prepare and implement site-specific Waste Management Plans covering all waste streams.</li> <li>• Segregate waste at source into recyclable, non-recyclable, biodegradable, and hazardous.</li> <li>• Promote 3R principles (Reduce, Reuse, Recycle) in all activities.</li> <li>• Reuse/recycle construction and demolition debris where feasible; store, collect, and dispose of other debris at approved sites.</li> <li>• Prohibit open burning or burying of any waste on-site.</li> <li>• Provide adequate bins, skips, and temporary storage for all waste types.</li> <li>• Ensure all hazardous waste is collected in sealed, labeled containers, stored in bunded, covered areas, and removed by licensed handlers.</li> <li>• Collect and safely dispose of agricultural chemical</li> </ul> |

|                                                     |                                                                                                                             |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     |                                                                                                                             |                                                                                                      | <p>containers and packaging; promote composting of organic waste.</p> <ul style="list-style-type: none"> <li>• Regularly remove waste from sites to prevent accumulation; ensure covered transport.</li> <li>• Train workers and contractors on waste minimization, segregation, and safe disposal.</li> <li>• Monitor waste management practices; correct any non-compliance promptly.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>2. Fuels and Hazardous Substances Management</b> | Storage, handling, use, and transport of fuels, oils, chemicals, lubricants, solvents, pesticides, and hazardous materials. | Soil and water contamination from leaks/spills; fire risk; toxic exposure to people and environment. | <ul style="list-style-type: none"> <li>• Prepare a site-specific Spill Prevention and Response Plan.</li> <li>• Store all hazardous substances in secure, bunded, covered areas with impermeable floors and adequate drainage.</li> <li>• Maintain MSDS for all chemicals on-site and ensure staff are trained on their use.</li> <li>• Provide appropriate PPE and spill response kits at all storage and handling locations.</li> <li>• Refuel vehicles and machinery only in designated bunded areas, away from water bodies.</li> <li>• Inspect tanks, drums, and storage containers regularly for leaks and deterioration.</li> <li>• Clean up any spills immediately and report as per national regulations.</li> <li>• Properly label all containers and restrict access to trained staff.</li> <li>• Safely dispose of empty containers through approved vendors; never reuse for other purposes.</li> <li>• Minimize on-site storage and prefer just-in-time delivery for hazardous materials.</li> </ul> |

|                                      |                                                                                                                                                              |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      |                                                                                                                                                              |                                                                                                   | <ul style="list-style-type: none"> <li>• For pesticide/fertilizer: Use integrated pest management and minimize chemical use.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>3. Water Resources Management</b> | Handling and storage of hazardous materials; site drainage; concrete and earthworks near water; irrigation and canal rehabilitation; washout from worksites. | Water pollution (surface and groundwater); siltation; altered flow patterns; public health risk.  | <ul style="list-style-type: none"> <li>• Store hazardous materials and waste at least 50 m from water bodies with bunded, covered protection.</li> <li>• Install and maintain drainage channels, sediment basins, and silt traps to control site runoff.</li> <li>• Divert stormwater away from exposed soil and material stockpiles.</li> <li>• Keep all materials and stockpiles clear of natural drainage and water bodies.</li> <li>• Prevent any waste (solid or liquid) from entering waterways or storm drains.</li> <li>• Provide designated wheel-washing and concrete washout areas; collect and treat wash water.</li> <li>• Monitor water quality during works and take corrective action as needed.</li> </ul> |
| <b>4. Drainage Management</b>        | Excavation, earthworks, stockpiling of materials, site regrading, temporary and permanent works.                                                             | Waterlogging; erosion; breeding of mosquitoes; siltation/blockage of drains; reduced site access. | <ul style="list-style-type: none"> <li>• Design and provide temporary and permanent drainage for all work areas.</li> <li>• Maintain all drainage lines and install silt traps/sediment basins as required.</li> <li>• Grade sites to avoid creation of stagnant water pools; ensure free flow to avoid water accumulation.</li> <li>• Locate all stockpiles away from drainage channels; provide toe bunds where needed.</li> <li>• Remove any sediment blocking drains promptly and restore natural drainage paths.</li> <li>• Regularly inspect drainage features and maintain them throughout works.</li> </ul>                                                                                                         |

|                                        |                                                                                                                                                              |                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>5. Soil Quality Management</b>      | Use of dredged spoil for site filling, storage and handling of chemicals, heavy machinery operation, material stockpiling, agricultural field interventions. | Soil contamination; reduced productivity; erosion; changes to soil structure.               | <ul style="list-style-type: none"> <li>• Test and confirm that dredged spoils and fill are free of contamination prior to use.</li> <li>• Compact filled areas and cover with clay and turf/vegetation to stabilize.</li> <li>• Contain any leachate from stockpiles; discharge to settling lagoons before release.</li> <li>• Build bunded areas for storage of all hazardous chemicals/fuels.</li> <li>• Maintain a register of hazardous materials and inspect for leaks or spills regularly.</li> <li>• Provide and enforce training for workers on spill management and safe soil practices.</li> <li>• Schedule works to minimize soil disturbance during wet weather.</li> </ul> |
| <b>6. Erosion and Sediment Control</b> | Site clearing, grading, excavation, and handling of loose materials and soil, especially during wet weather.                                                 | Loss of topsoil, increased erosion and runoff; sedimentation of water bodies; flood hazard. | <ul style="list-style-type: none"> <li>• Minimize site clearing; retain natural vegetation wherever feasible.</li> <li>• Stabilize all exposed soils quickly using mulch, grass, geotextiles, or cover.</li> <li>• Install silt fences, diversion drains, sediment traps at key runoff points.</li> <li>• Place stockpiles away from drainage lines and water bodies, bund if necessary.</li> <li>• Cover loose soil/material with tarpaulins during rain or wind events.</li> <li>• Maintain cut-off drains to direct runoff away from exposed soil areas.</li> <li>• Schedule earthworks in dry season whenever possible.</li> </ul>                                                  |
| <b>7. Topsoil Management</b>           | Excavation, grading, earthworks, landscaping, rehabilitation.                                                                                                | Loss of fertile soil layer; hindered site restoration/rehabilitation.                       | <ul style="list-style-type: none"> <li>• Strip top 150 mm (or specified) of soil prior to works; store separately from subsoil.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                                       |                                                                                                              |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       |                                                                                                              |                                                                                 | <ul style="list-style-type: none"> <li>• Stockpile topsoil in designated, clearly marked areas away from watercourses.</li> <li>• Protect topsoil piles from erosion by covering or planting fast-growing grasses.</li> <li>• Reuse stored topsoil in site rehabilitation and final landscaping.</li> <li>• Regularly inspect and maintain integrity of topsoil stockpiles.</li> </ul>                                                                                                                                                                                                                         |
| <b>8. Air Quality Management</b>      | Vehicle and machinery emissions, dust from unpaved roads, stockpiles, earthworks, demolition, waste burning. | Dust nuisance and health risk; air pollution affecting workers and communities. | <ul style="list-style-type: none"> <li>• Maintain all vehicles, machinery, and generators to meet emission standards.</li> <li>• Cover loose material during transport and at stockpiles.</li> <li>• Spray water on exposed soil, unpaved roads, and material piles during dry/windy conditions.</li> <li>• Restrict vehicle speed on unpaved surfaces to minimize dust.</li> <li>• Prohibit open burning of any waste on-site.</li> <li>• Provide temporary barriers/screens for dust-generating activities.</li> <li>• Monitor air quality as per national standards and take corrective actions.</li> </ul> |
| <b>9. Noise and Vibration Control</b> | Operation of construction equipment, piling, heavy transport, demolition, site clearing.                     | Nuisance/disturbance to communities; potential structural vibration damage.     | <ul style="list-style-type: none"> <li>• Use only well-maintained equipment fitted with effective silencers.</li> <li>• Restrict noisy and vibration-inducing activities to daytime working hours.</li> <li>• Provide temporary noise barriers or enclosures around high-noise activities near sensitive areas (schools, hospitals, etc.).</li> <li>• Monitor noise and vibration levels to ensure compliance with standards.</li> </ul>                                                                                                                                                                       |

|                                                |                                                                                                            |                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                |                                                                                                            |                                                                                      | <ul style="list-style-type: none"> <li>• Inform nearby communities in advance of high-vibration works.</li> <li>• Use low-vibration techniques and equipment wherever feasible.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>10. Flora and Fauna Protection</b>          | Vegetation clearing, tree cutting, site access, work near ecologically sensitive areas.                    | Loss of habitat and biodiversity; disturbance to wildlife; soil instability.         | <ul style="list-style-type: none"> <li>• Avoid unnecessary clearing; demarcate areas to be cleared prior to works.</li> <li>• Obtain approvals prior to any tree cutting.</li> <li>• Implement compensatory plantation (minimum 3 new saplings per tree removed); prefer native species.</li> <li>• Protect remaining trees/vegetation with physical barriers.</li> <li>• Schedule works outside critical wildlife breeding/nesting seasons.</li> <li>• Prohibit hunting, trapping, or harming wildlife by project staff.</li> <li>• Restore and replant disturbed areas promptly after construction.</li> </ul> |
| <b>11. Fish and Aquatic Habitat Protection</b> | In-stream works (bridges, culverts), pile driving, bank protection, fuel use/storage near water, dredging. | Increased turbidity; siltation; disruption of fish migration; aquatic contamination. | <ul style="list-style-type: none"> <li>• Schedule in-stream construction during low-flow or dry season.</li> <li>• Install silt curtains or cofferdams to limit sediment spread.</li> <li>• Do not block fish migration routes; provide bypass channels if necessary.</li> <li>• Prevent discharge of concrete slurry, hazardous substances, or untreated runoff into water bodies.</li> <li>• Use low-noise piling techniques; limit such works to daylight hours.</li> <li>• Store all fuels/lubricants away from water; provide spill kits at aquatic work sites.</li> </ul>                                  |

|                               |                                                                                                                             |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               |                                                                                                                             |                                                                                                      | <ul style="list-style-type: none"> <li>• Halt work if mass fish mortality is observed and investigate causes.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>12. Construction Camps</b> | Establishment/operation of worker camps, including temporary offices and storage.                                           | Waste generation, water/soil pollution, sanitation problems, vector-borne disease, social conflicts. | <ul style="list-style-type: none"> <li>• Site camps away from water bodies and sensitive sites.</li> <li>• Provide adequate sanitation (toilets with septic systems), clean drinking water, and waste disposal.</li> <li>• Develop and enforce a Camp Management Plan, including rules for hygiene, waste management, and health.</li> <li>• Prohibit open defecation or improper disposal of any waste.</li> <li>• Conduct regular inspections of cleanliness and health/safety.</li> <li>• Provide mosquito and pest control measures.</li> <li>• Ensure adequate lighting, ventilation, and fire safety.</li> <li>• If required, provide separate accommodations for male and female workers.</li> <li>• Engage with local communities to minimize conflicts.</li> </ul> |
| <b>13. Public Safety</b>      | Construction activities near communities, public roads, schools, markets; use of machinery, blasting, hazardous operations. | Accidents, injury or death to local people; traffic disruption; unsafe access.                       | <ul style="list-style-type: none"> <li>• Install clear warning signs, barricades, and fencing at all active sites.</li> <li>• Provide safe and well-marked pedestrian detours around works.</li> <li>• Implement and enforce traffic management plans (speed limits, flagmen, signage).</li> <li>• Limit vehicle speed near populated areas, schools, markets.</li> <li>• Inform communities in advance of blasting or hazardous works; restrict access to safety zones.</li> <li>• Conduct regular safety briefings and site supervision.</li> </ul>                                                                                                                                                                                                                       |

|                                           |                                                                                              |                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>14. Occupational Health and Safety</b> | All construction, repair, agricultural, and maintenance activities.                          | Worker injuries/fatalities; health hazards; unsafe conditions; disease transmission. | <ul style="list-style-type: none"> <li>• Comply with Bangladesh Labor Code and IFC EHS Guidelines.</li> <li>• Provide, maintain, and enforce use of PPE (helmets, gloves, masks, boots, harnesses as needed).</li> <li>• Provide first aid kits and trained personnel at all sites.</li> <li>• Conduct safety induction and regular OHS training.</li> <li>• Establish and communicate emergency response and accident reporting procedures.</li> <li>• Use proper scaffolding, guardrails, and harnesses for heights.</li> <li>• Implement confined space entry permits and ventilation.</li> <li>• Provide adequate hygiene and disease prevention (including for STIs and COVID-19).</li> <li>• Maintain good camp hygiene and access to medical care.</li> </ul> |
| <b>15. Cultural and Religious Issues</b>  | Works near cultural or religious sites; discovery of artifacts or remains during earthworks. | Disturbance, loss or damage to sensitive sites; community dissatisfaction.           | <ul style="list-style-type: none"> <li>• Identify and map all known cultural/religious sites during planning.</li> <li>• Avoid impacting such sites; reroute works if feasible.</li> <li>• Consult communities and religious leaders before starting.</li> <li>• Restrict noisy activities during prayer times or ceremonies.</li> <li>• If chance finds of archaeological/cultural significance occur, immediately stop work, protect the site, and notify authorities; train workers to recognize/report finds.</li> <li>• Resume work only after official clearance.</li> </ul>                                                                                                                                                                                   |
| <b>16. Community Consultation</b>         | Planning, design, and execution of all project activities with potential                     | Exclusion, opposition, delays, conflicts; impacts                                    | <ul style="list-style-type: none"> <li>• Identify all stakeholders early (including vulnerable groups).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|                                              |                                                                                |                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | social/environmental impact.                                                   | on vulnerable groups.                                                                     | <ul style="list-style-type: none"> <li>• Conduct meaningful consultations during all project phases.</li> <li>• Disclose information in local language and accessible formats.</li> <li>• Incorporate community feedback into design and mitigation.</li> <li>• Maintain transparent communication and regular updates.</li> <li>• Ensure gender-sensitive and inclusive methods; obtain FPIC with indigenous/tribal groups as required.</li> <li>• Involve local leaders/representatives in decision making.</li> </ul>                                                                                                                                         |
| <b>17. Grievance Redress Mechanism (GRM)</b> | Receipt of complaints or concerns from communities, workers, stakeholders.     | Unresolved grievances leading to disputes or project delays; loss of trust.               | <ul style="list-style-type: none"> <li>• Establish a functional GRM prior to starting work.</li> <li>• Provide multiple accessible channels for submitting complaints (verbal, written, hotline, anonymous).</li> <li>• Record all grievances in a register and assign unique IDs.</li> <li>• Resolve grievances promptly, document corrective actions.</li> <li>• Inform complainants of resolution steps and outcomes.</li> <li>• Ensure confidentiality and protection for sensitive or anonymous cases.</li> <li>• Assign trained staff for sensitive cases.</li> <li>• Regularly report grievance status to project management and stakeholders.</li> </ul> |
| <b>18. Monitoring and Reporting</b>          | Implementation of ESMP, ESMoPs, and all safeguard documents during all phases. | Unmitigated impacts, non-compliance, legal/financial risk, missed learning opportunities. | <ul style="list-style-type: none"> <li>• Develop a site-specific Environmental and Social Monitoring Plan.</li> <li>• Conduct regular inspections to verify implementation of all ESMoPs.</li> <li>• Monitor key parameters (air, noise, water, soil, biodiversity) as per EMP.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |

|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                         |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | <ul style="list-style-type: none"> <li>• Maintain detailed monitoring logs and records.</li> <li>• Engage third-party auditors if required.</li> <li>• Submit monthly and quarterly environmental and social monitoring reports to PIU and relevant authorities.</li> <li>• Apply and track corrective actions promptly.</li> <li>• Review and update EScOPs/ESMP as needed.</li> </ul> |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# Annex 18: Generic ToR for Environmental and Social Management Plan

(For use by LGED, BWDB, DDM, DAE/BADC)

## A. Scope of Work

The Consultant is required to prepare ESMP highlighting a set of mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate or reduce adverse environmental and social impacts to acceptable levels. The plan will also include the actions needed to implement these measures. To prepare a management plan, the Consultant will identify (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

An ESMP should include the following components:

- Description of Adverse Effects: The anticipated environmental and social effects are identified and summarized.
- Description of Mitigation Measures: Each measure is described with reference to the effect(s) it is intended to deal with. As needed, detailed plans, designs, equipment descriptions, and operating procedures are described. Measures to enhance positive impacts should also be proposed.
- Description of Monitoring Program: Monitoring provides information on the occurrence of environmental effects. It helps identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation.
- Institutional Arrangement: The people, groups, or organizations that will carry out the mitigation and monitoring activities are defined, as well as to whom they report and are responsible. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies. Reporting procedure including grievance redress mechanism should also be proposed.
- Implementation Schedule: The timing, frequency and duration of mitigation measures and monitoring are specified in an implementation schedule, and linked to the overall subproject schedule.
- Cost estimates and sources of funds: These are specified for the initial subproject investment and for the mitigation and monitoring activities as a subproject is implemented. Funds to implement the ESMP may come from the subproject grant, from the community, or both. Government agencies and NGOs may be able to assist with monitoring.

The ESMP will be required to be reviewed and cleared by the World Bank.

## B. Deliverables and Proposed/Indicative Structure of ESMP Report

The proposed structure of the ESMP report is as follows:

- Executive Summary: This should provide a general summary of the ESMP contents and key findings, in a vocabulary that is easily understood by the general public. It should be clear, concise ranging from 3 to 5 pages;
- Introduction: An introduction describing the ESMP purpose, objectives, principles and

methodology. This section should introduce the project proponents, the study team, and provide other relevant information. The layout of ESMP should also be described to facilitate its use;

- Sub-Project Description: A description of the subproject which will include background, purpose and different components. Also indicate any subproject specific resource requirements such as material, manpower, equipment.
- Environmental Baseline of Subproject Area: This section gives site specific overview of baseline covering physical and biological environment. It will include ambient air quality, noise, temperatures, rainfall.
- Socio-Economic Profile of Subproject Area: This section describes socio-economic profile of the subproject area. It will cover community structure, planned development activities, population, occupation and livelihoods, methods of communication and transport, cultural heritage sites, etc.
- Stakeholder consultation and Information Disclosure: This section will describe the objective, process, and outcome of the stakeholder consultations carried out during the ESMP preparation. This section should also list arrangements for disclosing subprojects information in order to comply with the Bank's Policy of Disclosure of Information.
- Impacts and Mitigation: This section will identify all positive as well as negative environmental and social impacts with cost effective and feasible measures to reduce adverse environmental impact to acceptable level. It will describe with technical details mitigation measures including the type of impact to which it relates to. It will also describe methodology for social impacts
- Environmental Management and Monitoring Plan: This section will provide specific description and technical details of monitoring measures including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions. The monitoring and reporting procedures will ensure early detection of conditions that necessitate particular mitigation measures and furnish information on the progress and results of mitigation.
- Institutional Arrangement: Detailed description of institutional arrangements, roles and responsibilities and reporting procedures should be presented. This section should also propose capacity building and training plan for implementing agencies responsible for this project.
- ESMP Implementation Budget: An ESMP implementation budget estimates are provided here. The budget will include funds for institutions development activities, training programs for implementation teams and local/national institutions, technical assistance to authorities, costs for preparations of EMPs and other E&S documents;
- Annexures: Technical annexes to support ESMP implementation.

### **C. Qualifications and Skills Required**

The Consultant needs to demonstrate that the proposed ESMP preparation team has the expertise required to fully appreciate the requirements of all the E&S Policies to be addressed in the ESMP, and to complete all required sections of the ESMP. The team should include appropriate number of specialists from different disciplines including but not limited to environmental sciences, social sciences and GIS expert. The team should have complete understanding of the national legislative requirements as well as WB ESF policies.