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INVESTMENT PROMOTION AND FINANCING FACILITY (IPFF) BANGLADESH BANK

Environemental and Social Risk Management

ENVIRONMENTAL AND SOCIAL POLICY AND PROCEDURES

DRAFT

[DATE]

Investment Promotion and Financing Facility (IPFF-II) Bangladesh Bank

Environemental and Social Risk Management

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1 INTRODUCTION

1.1 Project Description

The People's Republic of Government of Bangladesh (GoB) with support from the World Bank (WB) is undertaking the Investment Promotion and Financing Facility II (IPFF II) Project to help alleviate constraints in infrastructure financing. Development of infrastructure financing, which is by nature long term, is constrained in Bangladesh by the country's underdeveloped financial sector as well as the limited number of "bankable" infrastructure projects prepared/developed. IPFF II follows the successful implementation of IPFF I, which was created in 2006 as a wholesale instrument providing liquidity required by primary lenders to extend long-term infrastructure loans.

The core objective of IPFF II is to increase the provision for long-term financing for infrastructure, build capacity for infrastructure finance to promote private sector-led infrastructure development in Bangladesh. Broadly, IPFF II will achieve this through: (i) expansion of long term financing for infrastructure sectors in Bangladesh, including development of innovative financial products; (ii) contributions to scaling up private sector infrastructure development, including Public-Private Partnerships (PPPs); (iii) capacity building of government agencies, financial sector, project sponsors, and other stakeholders.

More specifically, the two core components are as follows:

Component 1 (financing) will provide long-term funds in support of the long-term infrastructure investments by private companies. The component consists of two main subcomponents:

- 1.1. The long-term on-lending facility where government will on-lend the borrowed WB funds to the PFIs. The IPFF II will make available partial debt financing through private sector Financial Intermediaries (FIs) for eligible, government-endorsed infrastructure projects to be developed by the private sector. The government will on-lend the borrowed WB funds to the participating financial institutions (PFIs) to back (refinance) long-term loans extended by the PFIs to the infrastructure investors.
- 1.2. Support to development of more innovative forms of infrastructure financing, with infrastructure investors as ultimate beneficiaries. The instruments can include mezzanine financing, equity and quasi equity, credit insurance and guarantees, credit enhancement/risk sharing facilities, take-out financing facilities and specialized project/infrastructure bond investments.

Component 2 (technical assistance) will focus on strengthening the ecosystem of the long term infrastructure financing in Bangladesh, in particular:

- 2.1. Development of the infrastructure project pipeline, including PPPs. Assistance would be provided to the PPP Office and other government statutory agencies, e.g., the Bangladesh Power Development Board, to support them in developing economically, financially, environmentally, and socially feasible infrastructure projects prior to the issuance of project bids to the investor community.
- 2.2. Strengthening capacity of project stakeholders in the area of environmental & social (E&S) risk management in infrastructure project financing. Technical assistance and

capacity building would be provided to all key stakeholder groups (government agencies, PFIs, project sponsors, and specialized E&S assessment, audit, and monitoring firms and experts) involved in the process of identifying and managing E&S risks in infrastructure projects for which IPFF II financing is sought. A specific emphasis will be made on enhancing capacity of the PFIs for developing and implementing Environmental and Social Management Systems – integrated in their credit risk management – that would allow them to play a more prominent role in ensuring adequate E&S standards are applied by project sponsors and monitoring project's performance against agreed action plans. In this context, and considering overall weak E&S technical capacity in Bangladesh, creation of an "Centre of Excellence" for E&S issues within the infrastructure finance ecosystem could be considered, with a view of such centre serving as a one-stop shop for all E&S related advisory and capacity building matters, serving all infrastructure development stakeholders.

- 2.3. Development of new long term infrastructure finance instruments. Assistance would be provided to PFIs and government agencies as needed, in the form of external advisory assistance, study tours, and staff training.
- 2.4. Support for the project implementation. The sub-component support the functioning of the implementing agency.

1.2 Infrastructure Sub-projects

A *sub-project* is defined as an activity, or grouping of like activities that are within the primary sectors covered by the project, as per the indicative list below.

IPFF II funding is available for financing infrastructure sub-projects developed by private sponsors or through public-private partnerships. The sub-projects may be funded and implemented nationwide and have varying scope, nature, and magnitude of environmental and social risks and impacts.

Depending on the IPFF II eligibility criteria listed in [IPFF II Operations Manual?], these infrastructure projects may include, among others, the following sectors or sub-sectors: (i) power generation, transmission, distribution, renewable energy and services; (ii) port development (sea, river and land) including inland container terminals, inland container depot and other services; (iii) environmental, industrial and solid waste management projects; (iv) highways and expressways including mass-transit, bridges, tunnels, flyovers, interchanges, city roads, bus terminals, commercial car parking, etc.; (v) airports, terminals and related aviation facilities; (vi) water supply and distribution, sewerage and drainage; (vii) industrial estates and parks development; (viii) information and Communications Technology (ICT); (ix) social sector including health and education.

1.3 Overview of Implementation Arrangements and Institutions

The implementation arrangement of IPFF II is proposed to be geared towards maximizing strengths of various stakeholders in the infrastructure finance area and successful implementation of each component and sub-component. Core stakeholders in the project organizational structure are as follows:

(a) **Project implementing agency.** IPFF II will be mainly implemented by the original project implementing agency for the predecessor project (IPFF I) - Bangladesh Bank (BB). Core responsibilities of the implementing agency are to perform overall project coordination, designated accounting and record keeping, funds withdrawal and transaction arrangements, funds flow monitoring, reporting, and providing financial management, procurement, and environmental and social risk management (ESRM) oversight services and advice to other members of the implementation arrangements.

The two primary department to fulfil these functions will be:

- Bangladesh Bank IPFF Cell (primary coordination)
- Sustainable Finance Department (support and collaboration with IPFF Cell with regard to environmental and social risk management)

Generally, the IPFF II funds are allocated to PFIs for on-lending to private sector infrastructure projects selected by the government. While financing comes from the government, it will be administered by Bangladesh Bank as the core implementing agency. Under IPFF II, Bangladesh Bank will sign Master Facility Agreements with the selected PFI for extending such loans. To that extent, sub-loans to PFIs, for investment projects eligible for financing from IPFF II, are approved by the Bangladesh Bank as agent of GoB, following World Bank "Non Objection" / clearance of the IPFF II E&S Policy and Procedures, which represent the core document of the overall IPFF II Environmental and Social Management System, as described in section 2.1 of this document.

- (b) **Technical assistance implementing agency**. The technical assistance component will be managed by the Finance Division of the Ministry of Finance, which would play a central role in capturing the financing and capacity building needs of the infrastructure finance stakeholders.
- (c) **Participating financial institutions (PFIs).** For each sub-project, a request for financing through IPFF II must be made by a PFI on behalf of the private sector sponsor / entrepreneur. Privately owned commercial banks, including foreign banks duly licensed in Bangladesh, will be able participate. Furthermore, the two DFIs in Bangladesh focusing on infrastructure development finance BIFFL¹ and IDCOL² which are licensed non-bank financial institutions could also participate as PFIs.

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Bangladesh Infrastructure Finance Fund Limited (BIFFL), www.biffl.org.bd/

² Infrastructure Development Company Limited (IDCOL), <u>www.idcol.org/</u>

- (d) **Project sponsors.** Private project sponsors will have the ultimate responsibility of preparing and implementing the sub-projects, including through PPPs. With regard to ESRM, project sponsors will have the responsibility for conducting the necessary environmental and social (E&S) assessments, obtaining licences and permits, as well as ensuring compliance with applicable national laws and standards set by IPFF II during project construction and implementation.
- (e) **PPP Office of the Government.** The PPP Office of the government has been able to draw on IPFF I lessons in successfully developing a pipeline of private sector-led infrastructure proposals in the country that can be subsequently financed from various sources. The PPP Office will pay a role of potentially contributing to generating a pipeline of projects for IPFF II.

More details on implementation arrangements, as well as roles and responsibilities of various institutions with regard to ESRM are provided in section 10.

2 PURPOSE OF THIS DOCUMENT

2.1 IPFF II Environmental and Social Management System

In the context of IPFF II, the specific details about multiple sub-projects located across the country, the nature and magnitude of environmental and social risks and impacts will be known and assessed separately for each sub-project, as and when financing proposals will be submitted by the PFIs and/ or identified earlier in the process of sub-project preparation by private project sponsors, PPP Office of the Government, or other sources where possible and applicable.

Sub-projects are located with varying geographical and socio-economic conditions and will be implemented by different project sponsors. In addition, multiple stakeholders identified in section 1.3 above will play various roles in the overall process of environmental and social risk management (ESRM) for the project. Therefore, there is a need to ensure harmonized project implementation, with adequate guidance on applicable standards, processes, and roles and responsibilities for all stakeholders. This need can be addressed by developing a comprehensive *Environmental and Social Management System (ESMS)* for IPFF II (see Box 2.1 for a general definition of an ESMS).

IPFF II Environmental and Social Management System consists of the following key components:

- (a) The IPFF II Environmental and Social Policy and Procedures document that details key elements of the ESMS (applicable standards, project-level processes procedures for assessing risks and impacts, organizational capacity, roles and responsibilities of various stakeholders). This document will also serve as the basis for the PFIs to prepare their internal ESMSs, once they apply for financing during project implementation. This document will help ensure harmonized project implementation through adequate overarching guidance.
- (b) ESMSs prepared by PFIs to identify, manage, and monitor risks and impacts of subprojects. These ESMSs will be prepared based on the IPFF II Environmental and Social Policy and Procedures document, as well as in compliance with the mandatory Bangladesh Bank Environmental Risk Management Guidelines.³ The PFIs will internalize the IPFF II requirements and processes, as described in this IPFF II Policy and Procedures document, and will make them an integral part of their overall institutional ESMS.⁴
- (c) Environmental and Social Assessment and Management Systems prepared by project sponsors in accordance with the relevant regulations of Bangladesh and applicable standards for IPFF II.

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³ Bangladesh Bank has also been a member of the Sustainable Banking Network (SBN) since 2012. SBN is a community of financial sector regulatory agencies and banking associations from emerging markets committed to advancing sustainable finance in line with international good practice. SBN is facilitated by IFC with support from several donors. As part of this effort, Environmental Risk Management Guidelines were introduced in January 2011 by Bangladesh Bank, in collaboration with local banks and other stakeholders.

⁴ Per the Bangladesh Bank Environmental Risk Management Guidelines, FIs in Bangladesh must develop and implement an ESMS that covers all their business activities.

Box 2.1. Environmental and Social Management System for Financial Institutions

In general, Environmental and Social Management System for the financial sector is defined as is a systematic process to assess the environmental and social risks and impacts arising from their project sponsors' business activities, manage the financial institutions' exposure to them, and improve operating efficiency and effectiveness.

This system ensures that environmental and social risk management plays a role in all of the investment decision-making processes, including credit risk assessments. It enables financial institutions to consider environmental and socioeconomic issues comprehensively, and by so doing, move beyond simply complying with regulations to taking advantage of increased sustainability of their operations.

An ESMS for financial institutions is normally anchored in the E&S policy, corresponding procedures, and underlying guidance and tools, supplemented by the capacity to identify, manage, and monitor E&S risks in the activities financed.

2.2 IPFF II Policy and Procedures: Objectives

IPFF II Environmental and Social Policy and Procedures document is a project-wide framework summarizing objectives, applicable environmental and social policies, procedures, institutional and implementation arrangements for identifying, managing, and monitoring/ supervising potential environmental and social impacts of sub-projects.

IPFF II Environmental and Social Policy and Procedures document aims to:

- (a) Clearly articulate applicable E&S policies, i.e. laws and regulations of Government of Bangladesh (GoB) and applicable World Bank (WB) standards to be followed by the sub-projects and the PFIs requesting IPFF II funding.
- (b) Establish clear procedures and methodologies for the social and environmental screening, review, approval and implementation of sub-projects to be financed under IPFF II.
- (c) Provide working guidelines for assessing E&S risks and impacts of sub-projects and activities and preparation of management plans to be complied with for avoiding, minimizing, mitigating, or compensating for/ offsetting for E&S risks and impacts.⁵
- (d) Outline indicative management measures required to effectively address key E&S issues that have been identified in sub-projects.
- (e) To specify appropriate roles and responsibilities of various stakeholders and outline the necessary reporting procedures.
- (f) Address mechanisms for public consultation and disclosure of project documents as well as the process for addressing of possible grievances in accordance with applicable standards.
- (g) Determine the training, capacity building and technical assistance needs and plans to successfully implement the project, including funding requirements.

⁵ This sequence is often defined as "mitigation hierarchy".

2.3 IPFF II Policy and Procedures: Structure

IPFF II Environmental and Social Policy and Procedures include the following core elements:

- (a) IPFF II Environmental and Social Policy Statement, including applicable requirements for the project;
- (b) Information on relevant GoB's environmental and social laws and regulations;
- (c) Applicable World Bank environmental and social requirements and general guidance on their application in the country context;
- (d) Procedures to be followed by all project stakeholders in the course of investment project cycle with the following objectives:
 - Outline the overall for environmental and social screening and due diligence process, including key decision-making milestones and roles and responsibilities of each stakeholder group;
 - Guide decision-making by Bangladesh Bank on the capacity and commitment of the PFIs for environmental and social management;
 - Assist PFIs with developing internal policies and procedures for screening, assessing, managing, and monitoring environmental and social risks and impacts of sub-projects financed through IPFF II integrated within the overall credit risk management;
 - Specify steps to be taken by project sponsors to fulfill E&S requirements under IPFF II.
- (e) Guidance for conducting Environmental and Social Impact Assessments (ESIAs), Environmental and Social Audits (when applicable), and Environmental and Social Management Plans in accordance with the laws and regulation of Bangladesh, as well as applicable World Bank requirements.
- (f) Arrangements for disclosure and reporting at all levels of project implementation structure.
- (g) Key tools to support implementation of the IPFF II ESMS.

2.4 Applicability Conditions

IPFF II Environmental and Social Policy and Procedures must be integrated into the preparation, as feasible, and implementation stages of the various project components. It is an essential document aligned with the project activities and is to be followed through the entire project cycle to attain purpose and objectives outlined above.

2.5 Intended Users

As a core policy and procedural document for the IPFF II project, the Environmental and Social Policy and Procedures document is designed for use by the following stakeholder groups:

IPFF II project implementing agency Staff: As a document enshrining operating principles and guidelines to ensure that project is adequately assessing environmental and social aspects and is in compliance with applicable environmental and social standards.

Private sector project sponsors and PFIs: As a document that spells out requirements with respect to environmental and social issues that need to be met for obtaining finance for IPFF and as a guidance for preparing their own policies and procedures.

Executing Agencies: As a document for executing agencies, the public agencies that are sponsoring PPPs in to use a reference guide for ensuring E&S compliance prior to their award, for PPP projects that are likely to receive IPFF II funding.

Project Associates: Stakeholders, consultants, other lenders, etc. as a document that explains the compliance requirements for environmental and social requirements for projects that receive financing for IPFF II sub-projects.

Other relevant government agencies, including DoE, for reference.

2.6 Revisions/Modifications

IPFF II Environmental and Social Policy and Procedures will be a 'live document' subject to revision, when and where necessary and feasible based on lessons learned from project implementation. As a rule, revisions of this document can be done annually, if necessary. However, unexpected situations and/or changes in the project or its sub-components design would also be assessed and appropriate management measures will be incorporated by updating the document.

Such revisions will also cover and update any changes/modifications introduced in the legal/regulatory regime of the country. Also, based on the experience of application and implementation of this document, the provisions and procedures would be updated, as appropriate

The project implementing agency will be responsible for updating the document in consultation with the World Bank, other implementing agencies/ departments, PFIs, and other stakeholders.

3 IPFF II ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT POLICY

Bangladesh Bank, acting in its role as the project implementing agency for the Investment Promotion and Financing Facility II (IPFF II) Project with support from the World Bank, is committed to promoting infrastructure development in the country in an environmentally and socially sustainable manner. This Policy outlines the approach, scope, applicable requirements and standards, as well as due diligence and monitoring processes, put in place by the Bangladesh Bank in order to fulfil its obligations for providing environmental and social risk management (ESRM) oversight for IPFF II.

IPFF II project will finance a wide range of infrastructure sub-projects across sectors. Bangladesh Bank risks will assume the primary responsibility within the overall project structure for ensuring that risks and impacts are adequately mitigated for all sub-projects financed under the IPFF II facility through adequate environmental and social assessment and management activities. Bangladesh Bank aims to achieve this objective working in collaboration with various project stakeholders – participating financial institutions (PFIs), project sponsors (private sector entities), PPP Office of the Government, Department of Environment, Department of Labor (under the Ministry of Labor and Employment), and other relevant government authorities.

Additionally, in 2012, Bangladesh Bank launched mandatory Environmental Risk Management Guidelines⁶ to enable financial institutions to consider environmental issues in a structured way in their overall credit appraisal processes. In line with the Guidelines, financial institutions in Bangladesh are required to have an environmental and social risk management function fully integrated into their credit risk management. IPFF II will aim to leverage these Guidelines and internal supervisory capacity within Bangladesh Bank to achieve the objectives of this Policy.

3.1 Policy Approach

This Policy puts in practice commitment by Bangladesh Bank to integrate environmental and social (E&S) risk considerations into decision-making processes in relation to sub-projects financed though IPFF II in order to follow a proper mitigation hierarchy to avoid, minimize or reduce, or, where residual impacts remain, compensate for / offset risks and negative impacts.

Bangladesh Bank believes that an important component of achieving positive development outcomes under IPFF II is the environmental and social sustainability of these activities, which Bangladesh Bank expects to achieve through the application of this Policy.

IPFF II will, through Participating Financial Institutions (PFIs), finance a range of infrastructure projects in Bangladesh, across sub-sections including:

- Power generation, transmission, distribution, renewable energy and services (with the exception of coal-fired power plants);
- Port development (sea, river and land) including inland container terminals, inland container depot and other services;

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⁶ The Guidelines are being updated and a new version is envisioned to be launched in early 2017.

- Environmental, industrial and solid waste management projects;
- Highways and expressways including mass-transit, bridges, tunnels, flyovers, interchanges, city roads, bus terminals, commercial car parking, etc.;
- Airports, terminals and related aviation facilities;
- Water supply and distribution, sewerage and drainage;
- Industrial estates and parks development;
- Social infrastructure sector, including health and education;
- Information and Communication Technology (ICT).

3.2 Environmental and Social Management System

Bangladesh Bank recognizes that the delivery of its lending through the PFIs may be associated with a number of environmental and social risks resulting from construction and operation of sub-projects⁷ by project sponsors. Managing such risks means that Bangladesh Bank, the PFIs, and project sponsors must develop and maintain adequate systems, procedures, and capacity for identifying, managing, and monitoring risks and impacts of sub- projects commensurate with the types, scope, and nature of investment project financing provided.

Bangladesh Bank, therefore, is committed to developing and maintaining a robust process for carefully identifying, assessing, and managing these risks and impacts at all levels of the project structure and by all key project stakeholders (the project's overall Environmental and Social Management System, or ESMS). In its oversight capacity, Bangladesh Bank will ensure that the project's ESMS is adequately developed, implemented, and maintained at every level.

Bangladesh Bank also recognizes that given an important role of PFIs in this process, enhancing their internal systems and capacity to manage environmental and social risks in sub-projects they finance under IPFF II is critical for successful implementation of the project in an environmentally and socially sustainable manner. This is achieved primarily through the development and implementation of an Environmental and Social Management Systems (ESMS) at the level of PFIs, as described in section 3.5 of this Policy.

Additionally, capacity of project sponsors who are ultimately responsible for identifying and managing environmental and social risks and impacts at the sub-project level in line with international good practices and standard is an important element of project success. Therefore, Bangladesh Bank is committed to integrating specific steps into the overall project ESMS, in close collaboration with the PFIs, that is aimed at supporting project sponsors and enhancing

⁷ A sub-project is defined as an activity, or grouping of like activities that are within the primary sectors covered by the project within the sectors eligible for IPFF II financing.

⁸ Project sponsor is defined as an entity or a group of entities that are responsible for design, preparation, construction, and/or operation of a sub-project. Sometimes, a project sponsor can be part of a Public-Private Partnership.

their capacity in preparing high quality environmental and social assessments (ESIAs) and corresponding environmental and social management plans (ESMPs).

3.3 Objectives

Specific objectives of the Policy are:

- Fully integrate ESRM considerations into the investment decision-making processes with regard to IPFF II financing of the Bangladesh Bank and PFIs.
- Fully implement and comply with national requirements for E&S risk management in Bangladesh, as well applicable requirements outlined in section 3.5 of this Policy.
- Set out requirements for the PFIs for assessment and management of environmental and social risks and impacts associated with IPFF II sub-projects they finance.
- Promote greater transparency and accountability on E&S issues internally and externally through disclosure and reporting.

3.4 Scope of Application

The requirements of this Policy apply to:

- Bangladesh Bank in its role of the implementation agency for IPFF II.
- Participating Financial Institutions with regard to IPFF II financing.
- All sub-projects financed through IPFF II.

3.5 Applicable Requirements

As a condition of eligibility to receive financing under IPFF II, PFIs must have in place and maintain an internal Environmental and Social Management System (ESMS) to identify, assess, manage, and monitor environmental and social risks and impacts associated with IPFF II subprojects they finance, as commensurate with the nature and magnitude of such risks and impacts.

The PFIs' ESMS will be in compliance with Bank of Bangladesh ESRM Guidelines and lender requirements and standards applicable to such systems. In order to be eligible for IPFF II financing, the PFIs' ESMS will also internalize the applicable requirements and procedures outlined in the IPFF II E&S Policy and Procedures.

In an effort to harmonize national regulatory requirements of the Bangladesh Bank Environmental Risk Management Guidelines with regard to ESMS described above with the lender-specific requirements for the PFIs' ESMS under this project, the PFIs' ESMS will, at a minimum, include the following:

(a) A policy statement endorsed by senior management clearly articulating adoption of the Bangladesh Bank Environmental Risk Management Guidelines, as well as applicable standards for E&S risk management for various lending activities the PFI

- may decide to cover by its ESMS in line with the Guidelines, including those required under IPFF II.
- (b) As part of the PFI's E&S policy, the following applicable requirements in relation to activities/ sub-projects financed through IPFF II:
 - Relevant environmental and social national and local laws and regulations;
 - Environmental and Social Exclusion List;
 - List of Environmentally and Socially Sensitive Activities;
 - Environmental and Social Performance Standards⁹, as commensurate with the risks and impacts of activities financed by PFIs through IPFF II.
- (c) Procedures for screening, assessing, managing, and monitoring environmental and social risks and impacts of sub-projects financed through IPFF II integrated within the overall PFIs ESMS, including clearly assigned roles and responsibilities and budget. Such procedures must include sub-project E&S categorization that, among other aspects, should inform the sub-project's overall credit risk rating. Sub-project categorization for sub-projects supported under IPFF II will follow the provisions outlined in section 3.8 of this Policy. The PFIs will incorporate in their E&S procedures and rely on guidance provided in the IPFF II E&S Policy and Procedures in conducting their E&S due diligence for these sub-projects.
- (d) Clearly articulated institutional arrangements for organizational capacity and competency to identify and manage risks associated with IPFF II sub-projects financed.
- (e) Provisions for monitoring E&S performance of the PFI's portfolio of IPFF II-supported sub-projects and periodic performance reports to the PFI's senior management and Bangladesh Bank, as appropriate.

Environmental and Social Exclusion List

Environmental and Social Exclusion List defines activities that cannot be financed under IPFF II. Further details on the content of the E&S Exclusion List and application of this requirement to IPFF II-financed projects is presented in section 6.2.

List of Environmentally and Socially Sensitive Activities

PFIs will not be permitted to finance sub-projects associated with activities listed in (a)-(d) below where they, following an assessment process of the PFI's systems and capacity for E&S risk management conducted by Bangladesh Bank, have been found to lack adequate capacity to

⁹ Environmental and Social Performance Standards refer to the "World Bank Performance Standards", which are IFC Performance Standards on Environmental and Social Sustainability adopted as the "World Bank Performance Standards" in 2013 pursuant WB Operational Policy 4.03. IFC Performance Standards were first introduced in 2006 and updated in 2012.

assess, manage, and monitor E&S risks associated with IPFF II-supported sub-projects. The assessment process will result in assigning an E&S risk category, as described in section 3.9of this Policy, to PFIs based on a clearly defined set of performance-based indicators (Annex 11).

Decisions to exclude such sub-projects from financing by a PFI will be made based on subproject ESIA or initial screening and feasibility assessment, where a full or partial ESIA is not yet available. However, at a later stage Bangladesh Bank may determine that a PFI has developed requisite capacity, resulting in a change of the PFI's risk rating. In this case the PFI may be permitted to engage in financing of such sub-projects.

- (a) Activities involving large-scale physical and/ or economic displacement 10 resulting from land-related transactions¹¹
- (b) Activities in or near critical habitats¹² and /or legally protected areas.
- (c) Activities involving adverse impacts on tribal peoples and/ or small ethnic communities. 13
- (d) Activities involving significant adverse impacts on critical cultural heritage 14 areas.

Performance Standards

Environmental and Social Performance Standards, as applied to IPFF II, define responsibilities of project sponsors for managing environmental and social risks and impacts in sub-projects. The eight Performance Standards are:

Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts

¹⁰ In the context of this project, activities involving large-scale physical and/or economic displacement are those that are expected to affect 200 people or more.

¹¹ As defined in the Performance Standard 5 (paragraph 5).

¹² Critical habitat is a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value that meet the criteria of the World Conservation Union (IUCN) classification, including habitats of significant importance for required for critically endangered or endangered species as defined by the IUCN Red List of Threatened Species; habitats of significant importance for endemic or restricted-range species; habitats supporting globally significant concentrations of migratory species and /or congregatory species; areas with unique assemblages of species or which are associated with key evolutionary processes. Primary Forests or forests of High Conservation Value shall be considered Critical Habitats.

The term "tribal peoples and/ or small ethnic communities" is used in a generic sense to refer to a distinct social and cultural group possessing the following characteristics in varying degrees:

Self-identification as members of a distinct cultural group and recognition of this identity by others:

Collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;

Customary cultural, economic, social, or political institutions that are separate from those of the mainstream society or culture; or

A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

¹⁴ Critical cultural heritage consists of (i) the internationally recognized heritage of communities who use, or have used within living memory the cultural heritage for long-standing cultural purposes; and (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation.

- **Performance Standard 2:** Labor and Working Conditions
- **Performance Standard 3:** Resource Efficiency and Pollution Prevention
- Performance Standard 4: Community Health, Safety, and Security
- **Performance Standard 5:** Land Acquisition and Involuntary Resettlement
- **Performance Standard 6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources
- **Performance Standard 7:** Indigenous Peoples
- **Performance Standard 8:** Cultural Heritage

3.6 Key Roles and Responsibilities

Bangladesh Bank

Bangladesh Bank will have the primary oversight responsibility for ESRM under IPFF II. In particular, Bangladesh Bank will ensure that (i) all activities/ sub-projects financed under IPFF II meet the applicable Government of Bangladesh and applicable requirements outlined in section 3.5 of this Policy; (ii) all PFIs fulfill their respective obligations with regard to E&S due diligence and monitoring for sub-projects, as described below; (iii) the overall IPFF II Environmental and Social System (ESMS), described in section 3.2 of this Policy is adequately developed and implemented at all levels of the project (including PFIs and project sponsors); (iv) consolidated E&S performance reporting for all sub-projects and all PFIs.

Participating Financial Institutions

PFIs will have the ultimate responsibility for E&S risk management for Bank-supported subprojects financed through IPFF II. PFIs' key responsibilities will include: (i) ensuring that ESIAs have been conducted in line with the requirements of the Government of Bangladesh and the Performance Standards and all clearances are obtained in a timely manner; (ii) ensuring that adequate E&S covenants are incorporated in the loan agreements with project sponsors / implementing entities and other relevant sub-project documentation; (iii) monitoring E&S performance of sub-projects according to Environmental and Social Action Plans (ESAPs) agreed with project sponsors and included in financing agreements; (iv) engaging consultants and third parties in this process, as appropriate; (v) providing periodic reporting to the Bangladesh Bank, including prompt reporting of any E&S-related incidents or accidents associated with sub-projects.

Project Sponsors

The project sponsors shall be responsible for conducting adequate Environmental and Social Assessments (ESIAs) to meet the requirements of both GoB and IPFF II as outlined in this Policy, preparing and implementing robust Environmental and Social Management Plans (ESMPs), and monitoring compliance during project implementation. Project sponsors shall also

carry out regular monitoring and periodic evaluation of sub-project E&S performance with agreed milestones and performance levels, as per the ESMPs, as well as any E&S Action Plans included by PFIs in financing agreements. Project sponsors shall prepare periodic performance reports to PFI, including prompt reporting of any E&S-related incidents or accidents associated with sub-projects.

3.7 Environmental and Social Due Diligence

Environmental and social due diligence is integrated into Bangladesh Bank overall due diligence of IPFF II sub-projects under consideration, including the review of financial and reputational risks. Bangladesh Bank will only finance sub-projects that are expected to meet the applicable E&S requirements, as stipulated in this Policy, within a reasonable period of time. Environmental and Social Action Plans prepared based on the outcomes of risks and impacts identification process will determine timeframes for achieving defined levels of performance against the agreed actions. These timeframes may be set as either conditions of disbursement or other deadlines within the maturity period of any IPFF II loan extended to the PFI. Persistent delays in meeting these requirements can lead to loss / withdrawal of financial support from Bangladesh Bank for IPFF II supported sub-projects.

At times, the PFI's and project sponsor's ability to achieve environmental or social outcomes consistent with the requirements of this Policy will be dependent on third party actions. A third party may be a government agency in a regulator capacity or contract party, a contractor or primary supplier with whom sub-projects have substantial involvement, or an operator of an associated facility (as defined in Performance Standard 1). Bangladesh Bank, as part of its own due diligence process, will review PFIs' and projects sponsors' identification of third party risks, and will determine whether such risks are manageable, and if so under what conditions, so as to create outcomes consistent with the requirements of this Policy.

Environmental and Social Due Diligence of PFIs by Bangladesh Bank

Environmental and Social Due Diligence (ESDD) for PFIs will be conducted by Bangladesh Bank with the purpose of assessing PFIs' ability, systems, and capacity to identify and manage E&S risks associated with financing of IPFF II sub-projects. Bangladesh Bank will conduct periodic assessments of the PFIs' E&S systems and capacity and assign an appropriated E&S risk rating as described in section 3.8.

PFI's systems and capacity assessment will include the following broad categories: (i) Formal Environmental and Social Management system consistent with the Bangladesh Bank ESRM Guidelines, and incorporating IPFF II related requirements; (ii) E&S internal staffing and capacity; (iii) management commitment to effective implementation of the ESMS, including dedicated resources and budget; (iv) compliance with applicable requirements of the IPFF or other similar projects already financed by the PFI, if any; (v) compliance with the requirements of PS2 for the PFI's own workforce; (vi) internal and external stakeholder communications.

Environmental and Social Due Diligence for Sub-projects

Environmental and Social Due Diligence (ESDD) for sub-projects is the primary responsibility of the project sponsor, with supervision from the PFIs, and further oversight by Bangladesh Bank.

ESDD for sub-projects has the following broad objectives:

- (a) To identify and evaluate environmental and social risks and impacts of the sub-projects.
- (b) To ensure sub-projects manage risks and impacts according to the mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/ offset for risks and impacts to workers, Affected Communities, and the environment.
- (c) To promote improved environmental and social performance of sub-projects through effective use of management systems.
- (d) To ensure that grievances from Affected Communities (in case of project sponsors) and external communications from stakeholders (in case of PFIs) are managed appropriately.
- (e) To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.

ESDD typically includes the following key components: (i) reviewing all available information, records, and documentation related to the environmental and social risks and impacts of the proposed sub-project; (ii) conducting site inspections and interviews, where appropriate; (iii) analyzing environmental and social aspects in relation to the requirements of this Policy; and (iv) identifying any gaps therewith, and corresponding additional measures and actions beyond those identified by the client's in-place management practices.

ESDD on sub-projects proposed for IPFF II financing will include the following key stages:

- (a) Initial E&S screening of sub-projects, as the first step in the ESDD process. The results/findings from this exercise are/will be used to determine primarily the environmental and social category of the sub-project, the extent and type of Environmental and Social Impact Assessment requirement, and applicability of E&S requirements.
- (b) Detailed screening/ scoping will involve detailed review and assessment of the available information about the sub-project and the sub-project area. The screening should use available information and field visits to understand the general overview in context of the scope of the proposed operation. The results will be used to confirm environmental and social category for sub-projects and the required E&S assessment and management documents, such as full or partial Environmental and Social Impact Assessment (ESIA) and other documents required under the national legislation and Bangladesh Bank requirements under these IPFF II Policy and procedures.

- (c) Assessment and preparation of E&S documents that involves establishing and maintaining a process for identifying the environmental and social risks and impacts of the sub-project. The type, scale, and location of the project guide the scope and level of effort devoted to the risks and impacts identification process. The scope of the risks and impacts identification process will be consistent with good international industry practice, and will determine the appropriate and relevant methods and assessment tools. Detailed information and guidance on conducting ESDD on sub-projects is contained in IPFF II E&S Procedures.
- (d) As a result of the E&S assessment process, a corrective Environmental and Social Action Plan (ESAP) will be developed if the ESDD finds that negative but manageable impacts may occur as a result of continuing implementation of on-going activities and / or implementation of new activities under the proposed sub-project. The ESAP may call for preparation and implementation of an ESMP and other specific management plans to address the identified. The ESAP, if required, should also include measures to inform potentially affected people of the nature of transactions, potential impacts, mitigations measures and grievance mechanisms. The ESAP should be included in the loan proposal (and later to the loan agreement).

3.8 Environmental and Social Categorization of Sub-projects

PFIs will put in place an E&S categorization system as part of its overall ESMS. E&S categorization system will comply with Bangladesh Bank ESRM Guidelines and, as such, will cover the PFI's entire scope of investment activities. Accordingly, PFIs will categorize activities it finances into four categories (*High*, *Substantial*, *Moderate or Low*). Guidance on categorization is provided in section 10.7 of the Procedures.

Within the PFI's overall categorization system, ¹⁶ IPFF II supported sub-projects will normally be categorized as High or Substantial risk due to the type of financing (project finance on a relatively large scale) and inherent risks and impacts associated with infrastructure sub-sectors eligible for financing under the project. As part of their categorization system, PFIs will always categorize the projects that may potentially involve activities in the List of E&S Sensitive Activities as High risk. ¹⁷

¹⁵ PFIs may use a different categorization scale as part of their overall ESMS. In this case, the PFI's categorization scale will be assessed for compatibility with the provisions of this Policy.

¹⁶ PFIs' ESMS shall be prepared in accordance with Bangladesh Bank Environmental Risk Management Guidelines and cover all of the PFIs' business activities, including E&S categorization. Since IPFF II sub-projects fall into the category of project finance, they would generally represent higher risk as compared to other parts of the PFI's business activities, such as SME finance.

¹⁷ In addition to sub-projects involving activities on the List of E&S Sensitive Activities, there may be other situations that may result in categorization of a sub-project as High risk. Typically, this will represent a confluence of various project-specific environmental and social factors that would normally require application a professional judgment that can be reasonably expected of a qualified professional.

In exceptional circumstances, IPFF II supported sub-projects may be categorized as Moderate risk. In these cases, a formal clearance must be obtained from Bangladesh Bank and No Objection must be obtained from the World Bank.

Once a PFIs proposes a category for the sub-project to be financed through IPFF, the PFI will submit its proposed categorization decision to Bangladesh Bank along with supporting documentation, for no Objection or formal clearance by Bangladesh Bank respectively depending on the proposed E&S category. Following confirmation by Bangladesh Bank, the PFI will communicate the E&S category to the project sponsor along with the associated requirements for E&S assessment, consultation, disclosure, and development of mitigation measures.

3.9 PFI Environmental and Social Risk Rating

Recognizing that PFIs' ability to manage E&S risks and impacts in sub-project is critical for achieving the objectives of this Policy, Bangladesh Bank will undertake regular assessment of PFIs' systems and capacity to manage E&S risks associated with IPFF II sub-projects. As a result of the PFIs' systems and capacity assessment, the following performance-based risk rating will be assigned to a PFI: RR-1 (High risk); RR-2 (Substantial risk); RR-3 (Moderate risk); RR-4 (Low risk). Further guidance and criteria for PFIs risk rating is provided in section 10.3 of the Procedures.

PFIs with performance-based risk ratings of RR-3 and higher will be permitted to finance projects involving activities on the List of E&S Sensitive Activities. For PFIs with risk rating RR-2 and lower, sub-projects involving such activities will be excluded from financing. In addition, PFIs with risk ratings RR-1 and RR-2 will not be permitted to finance sub-projects categorized as High risk, regardless of whether such sub-projects involve activities on the List of E&S Sensitive Activities.

PFIs' E&S systems and capacity assessment and risk rating will be carried out by Bangladesh Bank on a yearly basis or at the time of the PFI's request for financing under IPFF II, whichever is sooner.

3.10 Review and Clearance of E&S Assessment and Management Documents

Once project sponsors prepare the necessary documents as described in section 3.8 above, the review and clearance of such documents will be conducted at the PFIs and Bangladesh Bank levels. The following process will take place, depending on sub-project category:

- For sub-projects categorized High or Substantial risk, PFIs will conduct a first-level review for quality and completeness, with formal clearance required by Bangladesh Bank.
- For sub-projects categorized Moderate risk, PFIs will conduct a first-level review for quality and completeness, with No Objection required by Bangladesh Bank.

3.11 Supervision, Monitoring, and Reporting

Project sponsors will establish procedures to monitor and measure the effectiveness of the management program, as well as compliance with any related legal and/or contractual obligations and regulatory requirements. Project sponsor should use dynamic mechanisms, such as internal inspections and audits, where relevant, to verify compliance and progress toward the desired outcomes. Monitoring will normally include recording information to track performance and comparing this against the previously established benchmarks or requirements in the management program.

PFI will put in place a system to monitor E&S performance of sub-projects they systematic procedures and processed for regular monitoring of sub-project performance in order to measure and evaluate the effectiveness of mitigation measures. PFIs will require project sponsors to submit periodic E&S performance reports, as well as promptly notify the PFI of any incidents or accidents that may affect project sponsor's ability to meet the requirements of this Policy.

Bangladesh Bank will put in place an oversight and monitoring arrangements, as contained in IPFF II E&S Procedures in order to ensure proper implementation of the projects' ESMS, including all provisions contained in the IPFF II E&S Policy and Procedures. For this purpose, Bangladesh Bank may engage a qualified external monitoring partner who will conduct monitoring activities and prepare regular performance reports to Bangladesh Bank. In addition, Bangladesh Bank will require PFIs to submit regular E&S performance reports on the implementation of their ESMS, as well as E&S performance of IPFF II- supported sub-projects they finance.

3.12 Communications and Disclosure

Bangladesh Bank will communicate the IPFF II E&S Policy and Procedures internally, as and where relevant. Bangladesh Bank will also maintain a process for external communications to deal with public inquiries and concerns related to E&S matters as they relate to IPFF II.

Bangladesh Bank will also publicly disclose IPFF II Environmental and Social Policy and Procedures. In addition, Bangladesh Bank shall cause PFIs to publicly disclose elements of their ESMS. Each PFI will disclose the summary of the ESIA that is required for any sub-project considered High risk in accordance with the risk categorization used for IPFF II sub-projects. In addition, the PFIs shall cause project sponsors to disclose full E&S assessment and management documentation in a manner consistent with the relevant requirements of the Performance Standards and as part of the stakeholder engagement process described in section 8 of this document.

Disclosure and public consultations, with the emphasis on potentially Affected Communities, at the sub-project level will be undertaken by the project sponsor(s) which will prepare and implement the sub-projects, in accordance with the national and local laws and regulations, IPFF II Environmental and Social Policy and Procedures, and specific relevant provisions contained in the Performance Standards. To that extent, sub-project requirements may, as appropriate, include Stakeholder Engagement Plans and project-level grievance mechanisms.

4 BANGLADESH LEGAL FRAMEWORK

4.1 Overview of Bangladesh Legal Framework

The requirements for compliance with environmental regulations are laid down by the policy, legal and regulatory framework in Bangladesh. There are a number of laws that contain provisions regarding conservation of environment, improvement of standards and control of environmental pollution from various sources, labor, land acquisition, cultural heritage.

Key environmental and social regulatory instruments are ¹⁸:

- (a) Bangladesh Environmental Conservation Act (ECA), 1995
- (b) Environment Conservation Rules (ECR), 1997
- (c) National Environmental Policy, 1992
- (d) Environmental Court Act, 2010
- (e) National Environmental Management Action Plan, 1995
- (f) Bangladesh Labor Act, 2006,
- (g) Bangladesh Factories Act (1965)
- (h) National Water Policy, 2000
- (i) National Water Management Plan, 2001
- (j) Building Construction Act, 1952
- (k) Acquisition and Requisition Ordinance, 1982
- (l) National Conservation Strategy, 1992
- (m) Antiquities Act, 1968

Of these, the Bangladesh Environmental Conservation Act (ECA) 1995 is the umbrella Act. To make operational the ECA 1995 and in exercise of the power conferred under it, the Environment Conservation Rules (ECR) 1997 were issued by the Government of Bangladesh. Together – ECA 1995 and ECR 1997 – provide the framework of environmental regulations relevant to industries.

The Environmental Conservation Act established the Department of Environment (DOE), and empowers it to take measures considered necessary which includes conducting inquiries, preventing probable accidents, advising the Government, coordinating with other authorities or agencies, and collecting and publishing information about environmental pollution. Department of Environment (DoE) is the primary institution for environmental regulation in Bangladesh, working under the Ministry of Environment and Forest (MoEF).

In procedural terms, no business activity (i.e. industrial unit or project) shall be established or undertaken without obtaining, in a manner prescribed by the accompanying Rules, an Environmental Clearance Certificate.

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¹⁸ Many of these laws are cross-sectoral and are only partially related to environmental issues.

4.2 National Environmental Classification

In accordance with the Environment Conservation Rules (1997), for the purpose of issuing the Environmental Clearance Certificate (ECC). The ECC is mandatory for the existing industries as per clause 7(3) of the ECA, 1995 and the ECR, 1997 and proposed projects as per Rule 7 and schedule 1 of ECR.

Depending on the extent of impact on the environment, industries and projects are classified in four different categories under the ECR 1997. The four categories are (more details on considerations for each category are provided in Annex 1):

- (a) Green
- (b) Orange (A)
- (c) Orange (B)
- (d) Red

This categorization indicate that green is least polluting and red is most polluting, with the two orange categories regarded as having medium-scale impacts. In its Schedule I, ECR 1997 includes a list of 22 industrial units or projects under Green, 26 types under Orange A, 69 types under Orange B and 69 types under Red (Annex 1).

4.3 DoE Environmental Clearance Process

For the each category of industries, there are different levels of documents to be provided at the time of seeking the Environmental Clearance Certificate (ECC). The ECC is mandatory for the existing industries as per clause 7(3) of the ECA-95 and the ECR-97 and proposed projects as per Rule 7 and schedule 1 of ECR-97. All existing industrial units and projects and proposed industrial units and projects, that are considered to be low polluting are categorized under "Green" and shall be granted Environmental Clearance. For proposed industrial units and projects falling in the Orange-A, Orange-B and Red Categories, firstly a site clearance certificate and thereafter an environmental clearance certificate will be required. However, the rules provide the Director General (DG, the head of DoE) a discretionary authority to grant 'Environmental Clearance' to an applicant, exempting the requirement of site/location clearance, provided the DG considers it to be appropriate. More details on the DoE environmental clearance process is illustrated in Annex 2.

4.4 Key National Standards and Requirements

ECR 1997 prescribes various standards that are both general and industry specific. The following are the prescribed standards:

- Water (Schedule 3)
- Sound (Schedule 4)
- Sewage discharge (Schedule 9)
- Waste from industries (Schedule 10)

- Gaseous emissions from industries (Schedule 11)
- Sector-specific industrial effluent or emissions (Schedule 12).

When operating the industries, these standards have to be met in order to ensure that there is no legal non-compliance.

4.5 Obligations under International Conventions and Treaties

Bangladesh is party to a number of international environmental Conventions, Treaties and Protocols. These have to be taken into account in the implementation of the projects and subprojects wherever applicable. It is to be noted that EIA only need these to address considering their implication for the subproject. These agreements are summarized for in the following:

- (a) International Plant Protection Convention, Rome, 1951 (Ratified 1978).
- (b) International Convention for the Prevention of Pollution of the Sea by Oil, London, 1954 (Ratified 1981).
- (c) Convention on Wetlands of International Importance, especially as Waterfowl Habitat, Ramsar, 1971, the Ramsar Convention (Ratified 1992).
- (d) Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris, 1972 (World Heritage Convention) (Ratified 1983).
- (e) Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973 (CITES Convention) (Ratified 1982).
- (f) Agreement on the network of Aquaculture Centers in Asia and Pacific (NACA), 1988.
- (g) Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 (Ratified 1990), (London Amendment, 1990) (Ratified 1994).
- (h) Convention on Biological Diversity, Rio de Janeiro, 1992 (Ratified 1994).
- (i) International Convention to Combat Desertification, 1994.
- (j) Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal, Basel, 1989 (Ratified 1993).

Additionally, the following fundamental ILO Conventions have been ratified by Bangladesh¹⁹:

- (a) ILO Convention 29 (Forced Labour).
- (b) ILO Convention 87 (Freedom of Association and Protection of the Right to Organize).
- (c) ILO Convention 98 (Right to Organize and Collective Bargaining).
- (d) ILO Convention 100 (Equal Remuneration).

¹⁹ Additionally, technical conventions ratified by Bangladesh can be found here: http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103500

- (e) ILO Convention 105 (Abolition of Forced Labour).
- (f) ILO Convention 111 (Discrimination in Employment and Occupation).
- (g) ILO Convention 182 (Elimination of the Worst Forms of Child Labour).

4.6 Environmental National Policies and Regulations

4.6.1 National Environmental Policy, 1992

The Bangladesh National Environmental Policy sets out the basic framework for environmental action together with a set of broad sectoral action guidelines. Key elements of the policy are:

- (a) Maintenance of the ecological balance and overall progress and development of the country through protection and improvement of the environment;
- (b) Protection of the country's assets, properties and resources against natural disasters;
- (c) Identification and regulation of all types of activities which pollute and degrade the environment;
- (d) Ensuring sustainable utilization of all natural resources;
- (e) Promoting active association with all environment related international initiatives.

The Environmental Policy requires the following specific actions with respect to the 'Industrial' sector:

- (a) To phase in corrective measures in polluting industries
- (b) To conduct Environmental Impact Assessment for all new public and private industrial developments (Red Category), or IEE for other categories.
- (c) To ban, or find environmentally sound alternatives for, the production of goods that cause environmental pollution and
- (d) To minimize waste and ensure sustainable use of resources by industry.

Under the National Environmental Policy, Department of Environment is directed to review and approve all Environmental Impact Assessments.

4.6.2 National Environmental Management Action Plan, 1995

The National Environmental Management Action plan (NEMAP) is a wide-ranging and multifaceted plan, which builds on and extends the statements set out in the National Environmental Policy. NEMAP was developed to address issues and management requirements and set out the framework within which the recommendations of the National Conservation Strategy are to be implemented. NEMAP has the following broad objectives:

- (a) Identification of key environmental issues affecting Bangladesh
- (b) Identification of actions necessary to halt or reduce the rate of environmental degradation

- (c) Improvement of the natural environment
- (d) Conservation of habitats and bio-diversity
- (e) Promotion of sustainable development and
- (f) Improvement of the quality of life of the people.

4.6.3 National Conservation Strategy, 1992

The National conservation strategy provides recommendations for sustainable development in the industrial sector as follows:

- (a) All industries (that are most pollutant and environmentally harmful) will be subject to EIA and adoption of pollution prevention/ control technologies
- (b) Hazardous or toxic materials/wastes will not be imported as raw materials for industry
- (c) Import of appropriate and environmentally sound technology will be ensured; and
- (d) Dependence on imported technology and machinery should gradually be reduced in favor of sustainable local skills and resources.

4.6.4 Environmental Court Act, 2010

The 2010 Environmental Court Act supports the Environmental Conservation Act (1995) and the Environmental Conservation Rules (1997) by providing for the establishment of environmental courts for the trial of offences relating to environmental pollution. It includes protocols for the establishment of the court, and defines the court's jurisdiction, appropriate penalties, powers of search and entry, and procedures for investigation, trial and appeal. With the enactment of 2010 law, the earlier Act of 2000 was repealed which proved ineffective due to various limitations. Of course, the efficacy of the present Act is still to be proven.

4.6.5 National Water Policy, 2000

The National Water Policy recognizes that continued development and management of the nation's water resources is essential. Specific provisions made under the Policy include: protection, restoration and enhancement of water resources; protection of water quality, including strengthening regulations concerning agro-chemicals and industrial effluent; sanitation and potable water; fish and fisheries; and, participation of local communities in all water sector development.

The Policy also includes provisions for protection, restoration and preservation of the environment and biodiversity including wetlands, mangrove and other natural forests, endangered species and water quality. It also states objectives for all agencies and departments entrusted with water management in regards to their responsibilities for regulation, planning, construction, operation and maintenance. Pollution of surface and ground water around various

industrial centres from untreated effluent discharge into water courses is a critical water management issue.

The Policy of the Government in this regard is that:

- (a) Zoning regulations will be established for location of new industries in consideration of safe water availability and suitable effluent discharge possibilities
- (b) Effluent disposal will be monitored by relevant government agencies to prevent water pollution
- (c) Standards of effluent disposal into common watercourses will be set by Water Resources Planning Organization (WARPO) of the Ministry of Water Resources in consultation with DoE and
- (d) Industrial polluters will be required by law to pay for remedial clean-up of water bodies polluted by them.

4.6.6 National Water Management Plan, 2001

The National Water Management Plan addresses options for water quality, considerations behind measures to clean up industrial pollution, where effluent discharge monitoring and zoning regulations for new industries are emphasized.

4.6.7 Nationally Designated Ecologically Critical Areas

Ecologically Critical Areas are those having significant value in their natural state, or having socio-cultural significance or sensitivity. Ecologically Critical Areas can be defined as areas that may contain unique features, cultural or historical sites, maintain key natural processes, support endangered, endemic or threatened plant or animal species and their habitats, or provide important breeding areas for wildlife.

If the Government is satisfied that the ecosystem of an area is in an environmentally critical situation or is threatened to be in such situation, the Government may, by notification in the official Gazette declare such area as an Ecologically Critical Area. Activities that may degrade the environment further are prohibited in the declared Ecologically Critical Areas by the Amendment of Environmental Conservation Act 1995 dated 5 October 2010. The list of Ecologically Critical Areas declared by the government is provided in Annex 3.

4.6.8 Terrestrial and Marine Protected Areas

Protected areas are the building blocks of virtually all national and international conservation strategies, supported by governments and international institutions. These areas protect the world's threatened species and are essential providers of ecosystem services and biological resources. There are currently 47 protected areas in Bangladesh designated under ECA 1995 (Amended 2002). There is a law Bangladesh Wild Life (Preservation) Act, 1974 under which wild life sanctuaries are protected.

The terrestrial protected areas are totally or partially protected areas of at least 1,000 hectares that are designated by national authorities as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes, and areas managed mainly for sustainable use.

Marine protected areas are areas of intertidal or subtidal terrain - and overlying water and associated flora and fauna and historical and cultural features - that have been reserved by law or other effective means to protect part or the entire enclosed environment. Some of the sites are owned and managed by governments, while others by managed private individuals, companies, communities and other groups.

4.7 National Policies and Regulations on Land Acquisition, Cultural Resources, and Labor Issues

4.7.1 Acquisition and Requisition Ordinance, 1982

In 1982, the Acquisition and Requisition of Immovable Property Ordinance came in force. This law is the major basis for all the present actions regarding acquisition, resettlement and rehabilitation issues. The relevant and salient features of the law include the matters to be considered in determining compensation include:

- (a) the market value of property
- (b) damage to standing crops or trees due to acquisition
- (c) damage due to severance of acquired property from other property at the time of actual taking of permission by concerned authorities
- (d) damage to other properties or earnings
- (e) expenses for relocation of residence
- (f) damage due to lowering of profit of the property to be acquired between the serving of acquisition notice and actual acquisition

The present laws, acts, regulations and rules are not very explicit regarding resettlement and rehabilitation of project-affected persons (PAPs). Entitlement here means the rights of the persons adversely affected by the project to receive certain benefits from the project authorities to compensate for their losses that may include land and other immovable property, income, standing crops, occupation etc. The compensation is often in terms of cash grants but also includes training and credit facilities and other necessary facilities in resettlement and rehabilitation.

4.7.2 Antiquities Act 1968

This legislation governs preservation of the national cultural heritage, protects and controls ancient monuments, regulates antiquities as well as the maintenance, conservation and restoration of protected sites and monuments, controls planning, exploration and excavation of archaeological sites.

4.7.3 Building Construction Act 1952

The Act provided regulations regarding setbacks, building heights etc. in urban areas. The act also provided for prevention of haphazard construction of buildings and excavation of tanks which are likely to interfere with the planning of certain areas in Bangladesh and enables government through Section 16 to make any substantial rules for carrying out the purposes of this Act.

Building Construction Rules 2008

These rules superseded the previous Building Construction (BC) rules of 1984. These rules seek to control development plot-by-plot and case-by-case. It controls development by imposing conditions on setbacks, site coverage, construction of garages, access to plot, provision of lift, land use of that particular plot and height of building. Restricting the height of a building in BC Rules 1996 helps to control the density of an area and manage the growth of the city in some way.

The Dhaka Metropolitan Building Construction Rules 2008 superseded the earlier set of rules issued in 1996 for the Dhaka Metropolitan Area and provided more authority to RAJUK in the following way;

- Clear-cut responsibility to monitor the development of the city,
- Spread out the responsibilities to various actors,
- Spelled out responsibilities of building designers, structural engineers, site supervisors and their penalties etc.

Bangladesh National Building Code (BNBC) 2014

Bangladesh National Building Code widely known as BNBC Code, is the ultimate code that is followed in Bangladesh to build safe houses and buildings. Earthquakes and wind effect of different building systems are incorporated in this code. Moreover, this code is almost similar to ACI code which is recognized as one of the most practiced building code of the world. However, there are some differences in that, it incorporates modifications by keeping in view the biological, environmental and geological factors in Bangladesh. Moreover socio-economic factors have also been taken into consideration while preparing this code. This code is very helpful to the related professionals like architects and town planners as it takes into account the conditions specific to Bangladesh.

4.7.4 Bangladesh Labour Act (2006)

Labor relation in Bangladesh is governed Bangladesh Labor Act of 2006 (Amended in 2013) and Labor Rules of 2015. The amendments to the 2006 Labor Act make it more in line with the International Labor Standards. The new labor law has 87 sections of amendments to strengthen

workers' rights, including better protections related to freedom of association (i.e., to form trade unions), and improving occupational health and safety conditions.

The Bangladesh Labor Act and the Labor Rules of 2015 (made under the Act) are generally consistent with ILO's core conventions ratified by Bangladesh, as listed in Section 4.4. The only core convention not ratified by Bangladesh is ILO 138 (Minimum Age Convention). However, consistently with ILO 138, the Bangladesh Labor Act provides that the minimum age to work is 14 (although a special clause states that children between the ages of 12 and 14 may be employed to do "light work" that does not endanger their health, development and education).²⁰

4.7.5 Bangladesh Factories Act (1965)

This Act pertains to the occupational rights and safety of factory workers and the provision of a comfortable work environment and reasonable working conditions. The Act provides for inspection of factories and regulates matters related to hygiene, ventilation, overcrowding, night work, safety, dangerous machinery, leave, overtime, canteens, and child care facilities.

The Act prohibits employment of children under the age of 14 years in factories. Children over the age of 14 shall be registered and subject to provisions regarding hours of work. Factories Act 1965 (originally East Pakistan Factories Act 1965) was adopted by Government of with the objective of regulating the appointment of workers, their wages and the working conditions in factories, including health and hygiene, safety, welfare, working hours, leave and holidays, and punishments and penalties for both the owners and workers for non-compliance of the requirements. The Act has 11 chapters and 116 main sections.

The Act defines and clarifies various terms included such as adolescent, adult, child, day, explosive substance, factory, machinery, manufacturing process, occupier, prime mover, shift in factory, transmission machinery, working hour, and wages. It incorporates the provisions for obtaining approval of factory plans, including the construction or extension, class or description of factories from the chief inspector. According to the Act, every factory is to be maintained clean and free from effluents arising from any drain, privy or other nuisance. Effective arrangements are to be made in every factory for the disposal of wastes and effluents, prevention of accumulation of dust and fume, and proper ventilation and maintenance of room temperature.

The Act requires that factory must ensure adequate fire safety measures, appropriate means of escaping in case of fire, and protection against dangerous and accident-prone parts of machinery, electric and mechanical devices, self-acting machines, etc. Workers are to be given proper training before they are employed on dangerous machines. Controlling appliances of cranes and other lifting machines, hoists and lifts must be of good construction, sound material and adequate strength. Other sources of dangers, such as pits, sumps, openings in floors, etc, should be securely covered or fenced and effective screens or suitable goggles should be provided to workers to protect their eyes. Every factory is to have adequate and suitable facilities for washing

²⁰ One of the most effective methods of ensuring that children do not start working too young is to set the age at which children can legally be employed or otherwise work. The main principles of the ILO's Convention concerning the minimum age of admission to employment and work can be found here: http://www.ilo.org/ipec/facts/ILOconventionsonchildlabour/lang--en/index.htm

and bathing and provide first-aid medicines and appliances.

5 REGULATORY ENVIRONMENT FOR ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT IN THE FINANCIAL SECTOR

5.1 Bangladesh Bank Environmental and Social Risk Management Regulations

Bangladesh Bank views the financial and economic development of Bangladesh to be closely linked to the country's vulnerability to environmental degradation. Bangladesh Bank's desire to increase awareness of these issues and their impact on financial institutions and business enterprises requires encouraging banks and financial institutions (FIs) to integrate environmental and social risk management (ESRM) policies into existing credit risk management procedures.

Bangladesh Bank, therefore, recognizes the need for banks and financial institutions to adopt ESRM practices in a formal and structured manner in line with global norms so as to protect their financing from the risks of a deteriorating environment and ensure sustainable banking practices. To the extent, Bangladesh Bank introduced mandatory Environmental Risk Management Guidelines January 2011, in collaboration with local banks and other stakeholders. The Guidelines enable banks and FIs to consider environmental issues in a structured way in their overall credit appraisal processes. With the ERM Guidelines, Bangladesh Bank aims to achieve a standardization of environmental risk management across the financial sector.

The Guidelines cover the incorporation of environmental risk management in credit management, in-house environmental management, green financing, climate risk fund, green marketing, online banking, training, research and development in green banking, sector-specific environmental policies, green strategic planning, green bank branches, bank-specific ERM plans, innovative products, and sustainability reporting.

The Guidelines set out the structure and method of how financial institutions approach environmental risk management. The document identifies the purpose of environmental risk management:

- Examine the environmental issues and concerns associated with potential business activities proposed for financing.
- Identify, evaluate and manage the environmental risks and the associated financial implications arising from these issues and concerns.
- Enhance the credit risk appraisal process.

The document details the different stages of environmental risk management, from identifying risks, rating them, mitigating them, and then monitoring and controlling risks. It links environmental risk with credit risk and illustrates how large environmental risks will lead to unavoidable increases in credit risk.

Development and implementation of these Guidelines falls under the responsibility of the Sustainable Finance Department (SFD) of Bangladesh Bank. SDF was established in 2010 had has staff of approximately 20 people, with a separate dedicated team within the department responsible for overseeing the implementation of the Guidelines. This includes collecting and analysing regular reporting from financial institutions, cross-cutting capacity building plans and other relevant supporting activities.

SFD is currently (as of the date of this document) in the process of updating the Guidelines with a target date of completion by the end of 2016. The updated ESRM Guidelines will strengthen coverage of social issues, include more compressive reporting requirements, quantitative approaches to environmental and social risk assessment, more systematic numerical E&S risk rating, as well as a comprehensive capacity building strategy for the Bangladesh financial sector.

This updated framework is envisioned to include ESRM Guidance Notes are expected to cover the following sectors:

- (a) Textile
- (b) Leather & Tannery
- (c) Cement
- (d) Power
- (e) Pharmaceuticals
- (f) Steel Re-Rolling
- (g) Ship Breaking/Recycling
- (h) Ceramic
- (i) Pulp & Paper
- (i) Fertilizer

In addition, the new ESRM will integrate the credit risk with Environment and Social risk in overall decision making process. In addition, they will spell out the organizational requirements to effectively follow the guidelines.

5.2 IPFF II Role in Supporting ESRM Regulations

In an effort to harmonize national regulatory requirements of the Bangladesh Bank Environmental Risk Management Guidelines described above with the World Bank requirements under OP/BP 4.03, requirements for participating financial institutions (PFIs) under IPFF II will include:

- (a) A requirement for a clear policy statement endorsed by PFIs' senior management clearly articulating adoption of the Bangladesh Bank Environmental Risk Management Guidelines, as well as applicable standards for E&S risk management for various lending activities the PFI may decide to cover by its ESMS in line with the Guidelines.
- (b) Environmental and social categorization in accordance with the ERM/ ESRM Guidelines in force at the time. ²¹

²¹ Environmental and Social Categorization and risk rating will form an integral part of the PFIs' ESMS, as described in this document. In case of differences in requirements/ guidance with regard to categorization and risk rating in this document and Bangladesh Bank ERM/ ESRM Guidelines in force, the latter will prevail.

(c) Environmental and social risk rating – either qualitative or quantitative – as prescribed in the ERM/ ESRM Guidelines in force at the time.

In addition, IPFF II may support the following actions:

- (a) Sustainable Finance Department of Bangladesh Bank will play a formal role in managing E&S risks under the project, in close coordination with the main project implementing department (IPFF Cell), as described in the IPFF II Procedures (Section 10).
- (b) PFIs will be required to provide consolidated E&S reporting to Bangladesh Bank on the implementation of their ESMS, which will include their performance against the obligations under IPFF II (no separate E&S reporting for IPFF II will be required, as long as the overall reports are submitted by PFIs in a timely manner to Bangladesh Bank in accordance with the ESRM Guidelines).
- (c) IPFF II may support development of additional sectoral guidelines under the program to cover various infrastructure sectors considered as a priority under the project.
- (d) IPFF II E&S arrangements will be incorporated in the overall training and capacity building as part of the rollout of the updated ESRM Guidelines.
- (e) Bangladesh Bank will take part in setting up and supporting the potential "E&S Centre of Excellence" in Bangladesh that will aim to promote good practices in risk management among stakeholders government agencies, PFIs, project sponsors, and E&S technical expertise providers, with a specific focus on complex projects in various infrastructure sectors. A separate plan will be prepared for the establishment and operationalization of such "Center of Excellence", in close collaboration and consultation with all key project stakeholders and other relevant parties.

6 APPLICABLE WORLD BANK ENVIRONMENTAL AND SOCIAL POLICIES AND REQUIREMENTS

6.1 Applicable World Bank' Environmental and Social Policies

Investment Project Financing (IPF) by the World Bank aims to promote poverty reduction and sustainable development of member countries; that promote broad-based economic growth, contribute to social and environmental sustainability, enhance the effectiveness of the public or private sectors, or otherwise contribute to the overall development of member states. The World Bank's environmental and social policies support these goals by promoting the sustainable use of natural resources and social inclusion.

The following World Bank policies and other requirements will be applicable to IPFF II project:

- (a) E&S Exclusion List.
- (b) List of E&S Sensitive Activities.
- (c) World Bank Operational Policy / Procedure (OP/BP) 4.03 World Bank Performance Standards for Private Sector Activities.²²
- (d) Under the provisions of OP/BP 4.03, the eight "World Bank Performance Standards" as applicable to sub-projects
- (e) Under the provisions of OP/BP 4.03, application of the relevant requirements of the World Bank Group Environmental, Health and Safety Guidelines (EHSGs).
- (f) World Bank Legal Policies, i.e. OP/BP 7.50, Projects on International Waterways, and those of OP/BP 7.60, Projects in Disputed Areas.
- (g) World Bank Policy on Access to Information.

6.2 Environmental and Social Exclusion List

The project will commit to applying the IFC Exclusion List²⁴, to the extent it may be applicable to infrastructure development activities. The full IFC Exclusion List is presented below in Table 6.1 that, for practical purposes, provides an analysis of potential applicability of each excluded item. This analysis is based on the associated Exclusion List provision to apply a "reasonableness test" to excluded activities in certain contexts.

Table 6.1. IFC Exclusion List in the Context of IPFF II

Excluded Item	Potential Applicability to IPFF II Activities
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²² https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=1566&ver=current

²³ OP/BP 4.03 adopts the eight IFC Performance Standards as the "World Bank Performance Standards". IFC Performance Standards were first introduced in 2006 and updated in 2012.

²⁴ Even though OP 4.03 does not include an explicit requirement for the use of an Exclusion List as a policy instrument, there are precedents of successfully using IFC Exclusion List by the World Bank for Financial Intermediary projects. IFC Exclusion List can be found at:

 $[\]frac{http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/ifc+projects+database/projects/aips+added+value/ifc_project_exclusion_list}$

Excluded Item	Potential Applicability to IPFF II Activities
Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCBs, wildlife or products regulated under CITES	The ESIA process and subsequent monitoring must adequately address and exclude exposure to such activities.
Production or trade in weapons and munitions ¹	As IPFF II is designed to support certain types of infrastructure sectors, this is not an eligible sector. However, it is likely that during the operational phase of IPFF II financed sub-projects, such as ports, there will be some exposure to such activities. In this case, a reasonableness test would be applied, as project sponsors are not likely to be substantially involved in these activities (per footnote 1).
Production or trade in alcoholic beverages (excluding beer and wine) ¹	As IPFF II is designed to support certain types of infrastructure sectors, this is not an eligible sector. See remarks above.
Production or trade in tobacco ¹	As IPFF II is designed to support certain types of infrastructure sectors, this is not an eligible sector. See remarks above.
Gambling, casinos and equivalent enterprises ¹	As IPFF II is designed to support certain types of infrastructure sectors, forestry is not an eligible sector. See remarks above.
Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where IFC considers the radioactive source to be trivial and/or adequately shielded	As IPFF II is designed to support certain types of infrastructure sectors, forestry is not an eligible activity. Nuclear power will not be financed under the project.
Production or trade in unbonded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%	The ESIA process and subsequent monitoring must adequately address and exclude the use of unbonded asbestos in IPFF II sub-projects during both construction and operation in accordance with Performance Standards 2, 3, and 4. More detailed information on managing these risks is provided in the relevant EHS Guidelines.
Drift net fishing in the marine environment using nets in excess of 2.5 km. in length	As IPFF II is designed to support certain types of infrastructure sectors, fisheries is not an eligible sector.
All financial intermediaries (FIs) must apply the follo	wing exclusions, in addition to IFC's Exclusion List
Production or activities involving harmful or exploitative forms of forced labor ² /harmful child labor ³	The ESIA process and subsequent monitoring must adequately address issues of forced and harmful child labor as part of the requirements of the WB Performance Standard 2. In-depth guidance on identifying and managing these issues in projects is provided in the IFC Guidance Note 2 accompanying Performance Standard 2.

Excluded Item	Potential Applicability to IPFF II Activities
Commercial logging operations for use in primary tropical moist forest	The ESIA process and subsequent monitoring must adequately address issues of biodiversity conservation of the requirements of the WB Performance Standard 6. Primary tropical moist forest may trigger the requirements for critical habitats and / or be identified as High Conservation Value (HCV) forest. Commercial logging activities that would impinge of such habitats would then be excluded if they are present in an IPFF II supported sub-projects. For example, this can be done by changing sub-project design or implementation approach such as procurement of materials to ensure they are not sourced from such areas (as per PS6 requirements for managing sustainability issues in supply chains). In-depth guidance on identifying and managing these issues in projects is provided in the IFC Guidance Note 6 accompanying Performance Standard 6.
Production or trade in wood or other forestry products other than from sustainably managed forests	Sustainable forest management may be demonstrated by the application of industry-specific good practices and available technologies. In some cases, it may be demonstrated by certification/verification or progress towards certification/verification under a credible standards system. As IPFF II is designed to support certain types of infrastructure sectors, forestry is not an eligible sector. However, IPFF II may encounter such issues when applying the requirements of PS6 requirements for managing sustainability issues in supply chains (see above). In-depth guidance on identifying and managing these issues in projects is provided in the IFC Guidance Note 6 accompanying Performance Standard 6.

Note:

6.3 List of E&S Sensitive Activities

Since the PFIs will have the ultimate responsibility for E&S risk management for Bank-supported sub-projects financed through IPFF II project, it is important that PFIs significantly strengthen their internal capacity to address E&S risk management in large project / infrastructure finance.

¹This does not apply to project sponsors who are not substantially involved in these activities. "Not substantially involved" means that the activity concerned is ancillary to a project sponsor's primary operations.

²Forced labor means all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

³Harmful child labor means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development.

Where sub-projects may involve complex requirements for managing E&S risks during ESIA stage, as well as during sub-project implementation, having sufficient capacity is especially critical. Therefore, PFIs will not be permitted to finance sub-projects associated with activities listed in (a)-(d) below where they, following a PFI assessment process conducted by Bangladesh Bank, have been found to lack adequate capacity to assess, manage, and monitor associated E&S risks. Such assessments will be done in close coordination with the SFD department and make use of the existing capacity assessment information.

- (a) Activities involving large-scale physical and/ or economic displacement²⁵ resulting from land-related transactions defined in WB Performance Standard 5 (paragraph 5).
- (b) Activities in or near critical habitats²⁶ and /or legally protected areas.²⁷
- (c) Activities involving adverse impacts on tribal peoples and/ or small ethnic communities. ²⁸
- (d) Activities involving significant adverse impacts on critical cultural heritage²⁹ areas.

Further, decisions to exclude such sub-projects from financing by a PFI will be made based on sub-project initial screening and feasibility assessment, where a full or partial ESIA is not yet available. However, at a later stage Bangladesh Bank may determine that a PFI has developed requisite capacity, in which case the PFI may be allowed to engage in financing of such sub-projects.

²⁵ In the context of this project, activities involving large-scale physical and/or economic displacement are those that are expected to affect 200 people or more.

²⁶ Critical habitat is a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value that meet the criteria of the World Conservation Union (IUCN) classification, including habitats of significant importance for required for critically endangered or endangered species as defined by the IUCN Red List of Threatened Species; habitats of significant importance for endemic or restricted-range species; habitats supporting globally significant concentrations of migratory species and /or congregatory species; areas with unique assemblages of species or which are associated with key evolutionary processes. Primary Forests or forests of High Conservation Value shall be considered Critical Habitats.

²⁷Legally protected areas are those that meet the IUCN definition: "A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." For the purposes of this Performance Standard, this includes areas proposed by governments for such designation.

²⁸ The term "tribal peoples and/ or small ethnic communities" is used in a generic sense to refer to a distinct social and cultural group possessing the following characteristics in varying degrees:

[•] Self-identification as members of a distinct cultural group and recognition of this identity by others;

[•] Collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;

[•] Customary cultural, economic, social, or political institutions that are separate from those of the mainstream society or culture; or

[•] A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

²⁹ Critical cultural heritage consists of (i) the internationally recognized heritage of communities who use, or have used within living memory the cultural heritage for long-standing cultural purposes; and (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation.

6.4 World Bank Operational Policy/Procedure (OP/BP) 4.03 – World Bank Performance Standards for Private Sector Activities

World Bank Operational Policy / Procedure (OP/BP) 4.03 – World Bank Performance Standards for Private Sector Activities governs the World Bank requirements applicable to IPFF II. The aim of this policy is to facilitate Bank financing for private sector led economic development projects by applying environmental and social standards that are better suited to the private sector, while enhancing greater policy coherence across the World Bank Group.

OP/BP 4.03, among its other provisions, stipulates the requirements for Bank-supported projects involving Financial Intermediaries (FIs), as follows:

If the Private Sector Activity involves a FI, the FI is required to:

- (a) develop and operate an Environmental and Social Management System (ESMS) that is commensurate with the level of social and environmental risks in its portfolio, and prospective business activities;
- (b) apply relevant aspects of WB Performance Standard 2 to its employees; and (c) ensure that all subprojects supported by the Bank comply with applicable national and local laws and regulations.

6.5 World Bank Performance Standards 1–8

As part of the technical requirements under OP/BP4.03, the eight IFC Performance Standards – adopted by the World Bank as the "World Bank Performance Standards" – are applicable to Bank support for sub-projects (or components thereof) that are designed, owned, constructed and/or operated by a Private Entity.

Under OP/BP 4.03, the Bank requires FIs whose portfolio and/or proposed business activities present moderate to high social or environmental risks to ensure that any such activities supported by the Bank are operated in a manner consistent with the World Bank Performance Standards.

The eight Performance Standards are:

- **Performance Standard 1:** Assessment and Management of Environmental and Social Risks and Impacts
- **Performance Standard 2:** Labor and Working Conditions
- **Performance Standard 3:** Resource Efficiency and Pollution Prevention
- **Performance Standard 4**: Community Health, Safety, and Security
- Performance Standard 5: Land Acquisition and Involuntary Resettlement
- **Performance Standard 6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources
- **Performance Standard 7:** Indigenous Peoples
- **Performance Standard 8:** Cultural Heritage

OP/BP4.03 sets forth the circumstances under which the WB Performance Standards may be applied, the roles and responsibilities of the Private Entity implementing the project, and of the Bank in supporting environmental and social sustainability aspects of the project.

The Performance Standards should be read together and cross-referenced as needed. A summary of the Performance Standards objectives is presented in Table 6.2.

Performance Standard 1 establishes the importance of (i) integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects; (ii) effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and (iii) the project sponsor's management of environmental and social performance throughout the life of the project.

Performance Standards 2 through 8 establish objectives and requirements to avoid, minimize, and where residual impacts remain, to compensate/offset for risks and impacts to workers, Affected Communities, and the environment. The applicability of Performance Standard 1-8 is established during the environmental and social risks and impacts identification process described in Performance Standard 1. While all relevant environmental and social risks and potential impacts should be considered as part of the assessment, Performance Standards 2 through 8 describe potential environmental and social risks and impacts that require particular attention. Where environmental or social risks and impacts are identified, the project sponsor is required to manage them through its Environmental and Social Management System (ESMS) consistent with Performance Standard 1.

Table 6.2. Objectives of the Performance Standards

PS	Title	Objectives
1	PS1: Assessment and Management of Environmental and Social Risks and Impacts	 To identify and evaluate environmental and social risks and impacts of the project. To adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, 30 and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment. To promote improved environmental and social performance of project sponsors through the effective use of management systems. To ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately. To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.
2	PS2: Labor and Working	To promote the fair treatment, nondiscrimination, and equal opportunity of workers.

³⁰ Acceptable options to minimize will vary and include: abate, rectify, repair, and/or restore impacts, as appropriate. The risk and impact mitigation hierarchy is further discussed and specified in the context of Performance Standards 2 through 8, where relevant.

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PS	Title	Objectives
	Conditions	 To establish, maintain, and improve the worker-management relationship. To promote compliance with national employment and labor laws.
		To protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the project sponsor's supply chain.
		To promote safe and healthy working conditions, and the health of workers.
		To avoid the use of forced labor.
3	PS3: Resource Efficiency and	To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
	Pollution Prevention	To promote more sustainable use of resources, including energy and water.
	110,01112011	To reduce project-related GHG emissions.
4	PS4: Community Health, Safety, and Security	To anticipate and avoid adverse impacts on the health and safety of the Affected Community during the project life from both routine and non-routine circumstances.
		To ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.
5	PS5: Land Acquisition and Involuntary	To avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs.
	Resettlement	To avoid forced eviction.
		• To anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost ³¹ and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
		To improve, or restore, the livelihoods and standards of living of displaced persons.
		• To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure ³² at resettlement sites.
6	PS6: Biodiversity Conservation and	To protect and conserve biodiversity.
	Sustainable	To maintain the benefits from ecosystem services.
	Management of Living Natural Resources	To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

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³¹ Replacement cost is defined as the market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow Affected Communities and persons to replace lost assets with assets of similar value. The valuation method for determining replacement cost should be documented and included in applicable Resettlement and/or Livelihood Restoration plans.

³² Security of tenure means that resettled individuals or communities are resettled to a site that they can legally occupy and where they are protected from the risk of eviction.

PS	Title	Objectives
7	PS7: Indigenous Peoples ³³	To ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples.
		To anticipate and avoid adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts.
		To promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner.
		To establish and maintain an ongoing relationship based on Informed Consultation and Participation (ICP) with the Indigenous Peoples affected by a project throughout the project's life-cycle.
		To ensure the Free, Prior, and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples when the circumstances described in this Performance Standard are present.
		To respect and preserve the culture, knowledge, and practices of Indigenous Peoples.
8	PS8: Cultural Heritage	To protect cultural heritage from the adverse impacts of project activities and support its preservation.
		• To promote the equitable sharing of benefits from the use of cultural heritage.

6.6 WBG Environmental, Health and Safety Guidelines

Besides DoE requirements, the World Bank Group's Environmental, Health and Safety Guidelines (also known as "EHS Guidelines")³⁴ are applicable. The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). These GIIP are considered to be achievable in new facilities at reasonable costs by existing technology. For existing facilities, achieving these may involve establishment of site-specific targets with an appropriate timetable to achieve these.

When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects will be required to achieve whichever is more stringent. If less stringent levels or measures than those provided in the EHS Guidelines are appropriate in view of specific project circumstances, a full and detailed justification must be provided for any proposed alternatives through the environmental and social risks and impacts identification and assessment process. This justification must demonstrate that the choice for any alternate performance levels is consistent with the objectives of the relevant Performance Standards (and more specifically, Performance Standard 3).

³³ In Bangladesh, the accepted terminology for such communities is "Tribal peoples and/ or small ethnic communities"

³⁴http://www.ifc.org/wps/wcm/connect/topics ext content/ifc external corporate site/ifc+sustainability/our+approa ch/risk+management/ehsguidelines. In 2013, IFC launched a consultative process to revise the EHS Guidelines. This process is still ongoing as of the date of this document.

The EHS Guidelines consist of guidelines for various industrial sectors, as well as General Environmental, Health & Safety Guidelines which covers a wide range of issues and is applicable to all industrial in addition to the sector-specific guidelines. The General EHS Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors. They are designed to be used together with the relevant industry sector guideline(s).

- Environmental (air emissions and ambient air quality, energy conservation, wastewater and ambient water quality, water conservation, hazardous materials management, waste management, noise, contaminated land).
- Occupational Health and Safety (general facility design & operation, communications & training, physical hazards, chemical hazards, biological hazards, radiological hazards, personal protective equipment, special hazard environments, monitoring, etc.).
- Community Health and Safety (water quality and availability, structural safety of project infrastructure, life and fire safety, traffic safety, transport of hazardous materials, disease prevention, emergency preparedness & response, etc.).
- Construction and Decommissioning (environment, occupational health & safety, community health & safety).

It should be noted that these Industry Sector EHS Guidelines and the General EHS Guideline are intended to identify recognized good practice, particularly in the absence of comparable national or local legislation. Moreover, they are designed to cover a wide range of topics, especially in the case of the General EHS Guideline, some or many of which specific topics may not be relevant or applicable to the project enterprise seeking a loan. The EHS Guidelines will be used by the financial institutions as useful tools in the screening and review process to determine whether environmental and social risks associated with the project enterprise have been appropriately identified and managed.

6.7 Applicable Legal Policies

In accordance with World Bank Operational Policy 4.03, the requirements of OP/BP 7.50, Projects on International Waterways, and those of OP/BP 7.60, Projects in Disputed Areas, apply to any Bank supported Private Sector Activity. These polices may be applicable to IPFF II funded sub-projects depending on their specific circumstances.

Operational Policy (OP)/Bank Procedure (BP) 7.50 (Projects on International Waterways)

Per OP/BP 4.03, the Bank ensures that the notification requirements under OP/BP 7.50, Projects on International Waterways, related to the activity are met; and the Bank may rely on any such

notification being undertaken by a WB Group Entity if such notification is found acceptable to the Bank.

Operational Policy (OP)/Bank Procedure (BP) 7.50: Projects on International Waterways may affect the relations between the World Bank and its borrowers, and between riparian states. Therefore, the Bank attaches great importance to the riparians making appropriate agreements or arrangements for the entire waterway, or parts thereof, and stands ready to assist in this regard.

In the absence of such agreements or arrangements, the Bank requires, as a general rule, that the prospective borrower notifies the other riparians of the project. The Policy lays down detailed procedures for the notification requirement, including the role of the Bank in affecting the notification, period of reply and the procedures in case there is an objection by one of the riparians to the project.

Operational Policy (OP)/Bank Procedure (BP) 7.60 (Projects in Disputed Areas)

Projects in disputed areas may raise a number of delicate problems affecting relations not only between the Bank and its member countries, but also between the country in which the project is carried out and one or more neighbouring countries. In order not to prejudice the position of either the Bank or the countries concerned, any dispute over an area in which a proposed project is located is dealt with at the earliest possible stage.

The Bank may support a project in a disputed area if the governments concerned agree that, pending the settlement of the dispute, the project proposed for country A should go forward without prejudice to the claims of country B.

6.8 World Bank Policy on Access to Information

All Bank projects are also required to comply with the Bank's requirements on Public Consultation and Information Disclosure. Therefore, in addition to the applicable World Bank environmental, social, and legal policies, the Access to Information Policy will apply. To promote transparency and facilitate accountability, the World Bank Access to Information Policy supports decision making by the Borrower and Bank by allowing the public access to information on environmental and social aspects of projects in an accessible place and understandable form and language to key stakeholders.

In view of these requirements, the draft IPFF II Environmental and Social Policy and Procedures document with Bangla version shall be disclosed both in the Bangladesh Bank website (www.bangladesh-bank.org) and the Bank's Infoshop for public comments. Such disclosure will take place 120 days prior to the anticipated approval of the project by the World Bank Board. Soft copies – on the websites, if websites exist – and hard copies of the document shall also be made available in Bangladesh Bank and potential PFIs. Further the disclosure notification shall be published in one Bangla and one English daily newspaper. A workshop on draft final IPFF II Environmental and Social Policy and Procedures shall also be planned prior to finalization and release of the document.

6.9 Good Practice Reference Documents and Tools

World Bank Group has developed a number of tools to support implementation of the World Bank Performance Standards. A range of knowledge products includes publications, multimedia resources, and project examples. These resources can assists IPFF II stakeholders in obtaining knowledge and practical guidance on managing E&S risks in specific project circumstances. A list of these technical resources is provided in Annex 4.

7 COMPARATIVE ANALYSIS OF WORLD BANK REQUIREMENTS AND BANGLADESH REGULATORY FRAMEWORK

After reviewing the laws of GoB and World Bank Performance Standards, it is necessary to identify the similarities and differences between those so that the more stringent requirements can be applied for the sub-projects.

Table 7.1 lists some key comparisons between GoB and World Bank policies and guidelines in terms of processes for Environmental and Social Impact Assessment (ESIA), categorization, stakeholder engagement, public consultation etc. based on the provisions of Performance Standard 1 (Assessment and Management of Environmental and Social Risks and Impacts).

A comparative analysis between technical requirements of the thematic World Bank Performance Standards 2-8 is presented in Annex 5.

Table 7.1. Comparison between GOB and World Bank Policies and Guidelines as Applicable to IPFF II Subprojects

Sl. No.	Criteria	Requirements as Per GoB Law	World Bank Requirements
1	Type of environmental and social analysis	Project specific	Project specific, regional, sectoral, strategic including impact from associated facilities and assessment of cumulative impacts. The scope of identification of risks and impacts will be consistent with good international industry practice.
2	Basis for Categorization	Categorizations of industrial projects are done according to the list in Schedule-1 of the ECR, 1997. As per rule-7(2) of ECR, these categorizations are based on consideration of their site and impact on the environment. Non–industrial projects are reviewed on a case by case basis by the DoE for clearance.	Categorization depends on the project/business activity being financed, magnitude of risks and impacts, context and also the type of investment, as follows: • Significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented. • Limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures. • Minimal or no adverse environmental or social risks and/or impacts.
3	EA /ESIA Scope and Outputs	Since detailed rules and regulations for EA have not been prescribed, EA outputs are not specified. However, the industrial sector guidelines, the water sector guidelines and the road sector guidelines have specific EA output requirements, such as: Baseline survey IEE/EIA Report Site clearance Risk analysis and	Establish and maintain a process for identifying the environmental and social risks and impacts of the project, covering the 8 thematic Performance Standards as relevant and applicable and depending on the type, scale, and location of the project. The tools used should be commensurate with the level of potential impact and risks. Environmental and Social Impact Assessment (ESIA) process may comprise of following: • A full-scale ESIA, a limited or focused ESIA, or straightforward application of environmental siting, pollution standards, design criteria, or construction standards.

Sl. No.	Criteria	Requirements as Per GoB Law	World Bank Requirements
		management • Analysis of alternatives	 Environmental and/or social audits or risk/hazard assessment when the project involves existing assets. Environmental and social due diligence if assets to be developed, acquired or financed have yet to be defined. Comprehensive ESIA, including an examination of alternatives for green-field developments or large expansions with specifically identified physical elements, aspects, and facilities that are likely to generate potential significant environmental or social impacts. Environmental and social risks and impacts to be identified in the context of the project's area of influence.
4	Mitigation hierarchy	Not comprehensively addressed	Mitigation hierarchy is one of the core underlying principles of the WB approach to identification, assessment, and management of E&S risks and impacts. It is required to adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, ³⁵ and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment.
5	Public Consultation	No special mention is made for public consultation in BECA. Sectoral guidelines mentioned above have prescribed consultation.	Extent and degree of engagement required by the consultation process to be commensurate with the project's risks and impacts to the affected communities. Consultation process: (i) to begin early in the process of identification of environmental and social risks and impacts and continue on an ongoing basis as risks and impacts arise; (ii) be based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful and easily accessible information in a language(s) and format understandable to Affected Communities; (iii) focus inclusive engagement on those directly affected as opposed to those not directly affected. • For projects with potentially significant adverse impacts on affected communities, it is required to conduct a process of informed consultation and participation by actively engaging with stakeholders throughout the lifecycle of the project • For projects with adverse impacts on Indigenous People the project sponsor is required to engage them in the ICP process and in certain circumstances required to obtain their Free, Prior, and Informed Consent (FPIC) -

³⁵ Acceptable options to minimize will vary and include: abate, rectify, repair, and/or restore impacts, as appropriate.

Criteria	Requirements as Per GoB Law	World Bank Requirements
		requirements related to Indigenous Peoples and the definition of the special circumstances requiring FPIC included in PS 7.
Disclosure of Information	BECA makes no reference to disclosure. The Sectoral guidelines prescribe some provisions for disclosure	Affected communities to be provided with access to relevant information on: (i) the purpose, nature, and scale of the project; (ii) the duration of proposed project activities; (iii) any risks to and potential impacts on such communities and relevant mitigation measures; (iv) the envisaged stakeholder engagement process; and (v) the grievance mechanism. Project to provide periodic and ongoing updates on status of implementation of the various plans developed as part of the ESA process. Disclosure of relevant information to affected communities to continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities and resettlement.
Environmental and Social Management System (for sub- projects)	Environmental Management requirements are established by ECA 95 and ECR 97 but there are no social equivalents.	Environmental and Social Management System will be established for sub-projects and will include the following core elements: - E&S Policy - System for identification of risks and impacts and, in particular, conducting ESIAs - Management programs
Management Programs and Action Plans	Not addressed	The sub-project will establish management programs that, in sum, will describe mitigation and performance improvement measures and actions that address the identified environmental and social risks and impacts of the project. The management programs will establish environmental and social Action Plans, ³⁶ which will define desired outcomes and actions to address the issues raised in the risks and impacts identification process, as measurable events to the extent possible, with elements such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods, and with estimates of the resources and responsibilities for implementation. As appropriate, the management program will recognize and incorporate the role of relevant actions and events controlled by third parties to address identified
	Disclosure of Information Environmental and Social Management System (for subprojects) Management Programs and	Disclosure of Information BECA makes no reference to disclosure. The Sectoral guidelines prescribe some provisions for disclosure Environmental and Social Management System (for subprojects) Environmental Management requirements are established by ECA 95 and ECR 97 but there are no social equivalents. Management Programs and Not addressed

³⁶ Action plans may include an overall Environmental and Social Action Plan necessary for carrying out a suite of mitigation measures or thematic action plans, such as Resettlement Action Plans or Biodiversity Action Plans. The "Action plan" terminology is understood by some communities of practice to mean Management plans, or Development plans. In this case, examples are numerous and include various types of environmental and social management plans.

8 MANAGING RISKS AND IMPACTS IN SPECIFIC TECHNICAL AREAS

This section presents key requirements and detailed guidance for specific project circumstances, with the emphasis on complex situations included in the List of E&S Sensitive Activities.

8.1 Stakeholder Engagement and Grievance Mechanisms

8.1.1 Stakeholder Engagement Requirement and Process

Requirements for sub-project level stakeholder engagement and grievance mechanisms are included in Performance Standard 1. Project's regular engagement with stakeholders about matters that directly affect them plays an important role in avoiding or minimizing environmental and social risks and impacts.

Stakeholder engagement is a cross-cutting issue addressed in several Performance Standards. Relevant requirements for stakeholder engagement are included in Performance Standards 1, 4, 5, 6, 7, and 8. In particular, Performance Standard 1 requires project sponsors to identify and engage with the range of stakeholders who may be interested in their actions, with an emphasis on Affected Communities. The nature, frequency, and level of effort of stakeholder engagement will be commensurate with the project's risks and impacts. The PFIs' role involves assessment, verification and supervision of the project sponsor's stakeholder engagement activities consistent with the requirements. Table 8.1 summarizes various stakeholder engagement requirements depending on project risks and impacts.

Where stakeholder engagement is the responsibility of the government, it may reserve the right to manage the stakeholder engagement process directly associated with a project, particularly when it involves consultation (e.g. in preparation of PPP projects). Project sponsors and PFIs will collaborate with the responsible government agencies, to the extent permitted, to achieve outcomes that are consistent with the objectives of this Performance Standard.

In addition, where government capacity is limited, the project sponsors, PFIs, and Bangladesh Bank will play an active role during the stakeholder engagement planning, implementation, and monitoring. If the process conducted by the government does not meet the relevant requirements of this Performance Standard, the project sponsor will conduct a complementary process and, where appropriate, identify supplemental actions. In all cases, regardless of government involvement, the project sponsor must have in place its own communications and grievance procedure.

Under certain circumstances, a government agency or other authority may have already conducted the consultation process directly linked to the project; in this case, the project sponsor should make a determination as to whether the process conducted and its outcomes are consistent with the requirements of Performance Standard 1 and, if not, determine if any corrective actions are feasible to address the situation. If corrective actions are feasible, the project sponsor should implement them as soon as possible. Such corrective actions could range from conducting additional engagement activities to facilitating access to and ensuring cultural appropriateness of relevant environmental and social information.

Table 8.1. Levels of Stakeholder Engagement and Responsibilities

Le	evel of Ri	sk/Impact	Stakeholders	Project Sponsor's Responsibilities*	PFIs Responsibilities	
	\triangle	High, Significant	Tribal peoples and/ or small ethnic communities under these circumstances: 1) Impact on Lands/Natural Resources; 2) Resettlement of IPs; 3) Impacts on critical cultural heritage, including commercial use of cultural heritage.	Free, Prior and Informed Consent (FPIC). Good Faith Negotiation whereby mutually accepted process and evidence of agreement are documented. Includes; disclosure; grievance mechanism; stakeholder Engagement Plan; ongoing reporting to communities on Action Plan.*	Verification	S Action Plan, as needed
Increasing Levels of Risk / Impact			Impacts on critical cultural heritage, including use for commercial purposes involving Affected Communities (other than on tribal peoples and/ or small ethnic communities)	ICP + Good Faith Negotiation (GFN): process that builds on ICP but also employs good faith negotiations resulting in a documented outcome. Includes: disclosure; grievance mechanism; stakeholder engagement plan; ongoing reporting to communities on Action Plan.*	Ascertain that communities broadly support the project**	gagement. Update of E&
			Adversely affected on tribal peoples and/ or small ethnic communities; Potentially significantly adversely affected communities.	Informed Consultation and Participation (ICP): More in-depth process leading to incorporating views of affected communities into decision-making and documenting process. Includes: disclosure; two way dialogue; grievance mechanism; stakeholder engagement plan; ongoing reporting to communities on Action Plan.*	Ascertain that communities broadly support the project**	Ongoing Supervision of Community Engagement. Update of E&S Action Plan, as needed
		Moderate	Adversely affected communities and stakeholders.	Consultation: Disclosure. Two way dialogue. Grievance Mechanism. Stakeholder Engagement Plan. Ongoing reporting to communities on project Action Plan.*	Verification	Ongoing Sur
		All Investment Activities	General Public	External communication: Project sponsor implements and maintains procedure to receive, register, screen and address communications from the public, document responses, and adjust management program.	Verification	

Notes:

^{*}It is expected that responsibilities regarding stakeholder engagement activities are additive at each stage from bottom to top.

^{**}Even if some individuals or groups object to the project, the project still may be broadly supported.

8.1.2 Grievance Mechanisms

Grievance mechanisms are an integral part of stakeholder engagement process. IPFF II will have a multi-level process for addressing grievances from project-affected communities.

Sub-project Level Grievance Mechanisms

Performance Standard 1 requires project sponsors to establish a grievance mechanism to receive and facilitate resolution of Affected Communities' concerns and grievances about the project sponsor's environmental and social performance. The grievance mechanism is an important part of stakeholder engagement process and should be scaled to risks and adverse impacts of the project, address concerns promptly, use an understandable and transparent process that is culturally appropriate and readily accessible to all segments of the affected communities, and do so at no cost to communities and without retribution. The mechanism should not impede access to judicial and administrative remedies. The project sponsor will inform the affected communities about the mechanism in the course of its community engagement process.

Grievance mechanisms will respond to project needs better if they are established early as a measure to pre-empt rather than react to escalation of tensions with surrounding communities. As with other pillars of stakeholder engagement, an adequate social and environmental impact assessment process for the project is essential to the success of a grievance mechanism, because it helps determine how project scale and impact, stakeholder composition, and other project factors will influence the design of the grievance mechanism and resources allocated for implementation.

Key principles and steps for establishing and maintaining an effective project-level grievance mechanism are illustrated in Figure 8.1.

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³⁷ Grievance mechanisms for workers are separate and are addressed under the requirements of Performance Standard 2.

Five Principles (Part I) 1. Proportionality: Scaled to risk and adverse impact on affected communities Develop/improve stake holder-engagement strategies to address concerns raised through the grievance 2. Cultural Appropriateness: Designed taking into account culturally appropriate ways of handling community concerns 3. Accessibility: Clear and understandable mechanism that is accessible to all segments of the affected communities at no cost 4. Transparency and Accountability: To all stakeholders Improve management plans to handle impacts and implement corrective actions 5. Appropriate Protection: A mechanism that prevents retribution and does not impede access to other remedles Stakeholder Identification and Analysis (including gender issues) Revise the sodal and environmental management system Assessment of Social and Environmental Impacts Project Impacts & Interaction with Communities: Stakeholder Consultation Five Process Steps of a Grievance Mechanism (Part II) Develop resolution Publicize options. Receive Review Monitor and respond to mechanism register investigate grievances, evaluate and close out Resources (Part III) People—trained staff or external resources experienced in social and environmental management and in dealing with community concerns and complaints Systems—systems be needed for receipt, recording, and tracking of the process (for example, grievance log, tracking cards) Processes—a written procedure for handling grievances exists and responsibilities are assigned for each step as well as for management oversight Budget —estimating, allocating, and tracking costs associated with grievance handing

Figure 8.1. Basic Design Elements of a Project-Level Grievance Mechanism³⁸

PFI's Procedures for External Communications

In addition to ensuring the effectiveness of the project sponsor's grievance mechanism, PFIs will establish, implement and maintain a procedure for external communications mechanism to receive external complaints from the public regarding any aspects of operations, including IPFF II related activities. This requires implementing a process for receiving and responding to concerns from third parties related to the PFI's investment activities. The process should provide publicly available and easily accessible channels (e.g., phone number, website, e-mail address, etc.) to receive communications and requests from the public for information regarding E&S issues. The PFIs will ensure that access to information about this communications mechanism is

³⁸ Source: Addressing Grievances from Project-Affected Communities. IFC (2009).

made available by project sponsors as part of the overall stakeholder engagement process. In addition, PFIs shall ensure that stakeholders are aware that they have the right to bring their complaints to staff in the country World Bank office.

The PFIs will assess the relevance of the external communication received and determine the level of response required, if any. The PFIs will maintain documentation regarding third party concerns, and prepare regular summary reports. Bangladesh Bank will ensure that all PFIs have an adequate and functioning mechanism in place, monitor implementation, as well as regularly assess performance based on summary reports and verifying the underlying documentation on a sample basis.

A grievance mechanism for PFI's workers is covered in the IPFF II E&S Policy Statement pertaining to the application of Performance Standard 2 requirements to PFI's staff.

Bangladesh Bank Grievance Redress Unit

Publicizing and making use of the Bangladesh Bank existing grievance redress mechanism is encouraged by the project. Bangladesh Bank has a Grievance Redressal Unit in the Financial Integrity &Customer Services Department (FICSD).

The PFIs will ensure that information about accessing this alternative mechanism is made available by project sponsors as part of the overall stakeholder engagement process.

8.2 Conservation of Biodiversity and Ecosystem Services

8.2.1 Conservation of Biodiversity

The requirements set out in Performance Standard 6 and the interpretation of those requirements is guided by the Convention on Biological Diversity (CBD) including the CBD's Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets.³⁹ As emphasized by the Biodiversity for Development Program of the CBD, biodiversity loss can result in critical reductions in the goods and services provided by the earth's ecosystems, all of which contribute to economic prosperity and human development. This is especially relevant in developing countries with rich natural resource base like Bangladesh. National Biodiversity Strategies and Action Plans (NBSAPs) are the principal instruments for implementing the Convention at the national level. As of September 2016, a total of 185 of 196 (94%) Parties have developed NBSAPs, and NBSAP was still in preparation for Bangladesh.⁴⁰

Currently, about 3.41 % of the land area is protected in Bangladesh compared to about a tenth of the world's land surface globally. There are 47 wildlife sanctuaries of Bangladesh. The list of terrestrial and marine protected areas is provided in Annex 3. Three of these protected areas in the list are also Ramsar sites (i.e., the Sundarbans Reserve Forest (42-44), Hakaluki Haor (18) and Tanguar Haor (45)) which cover an area of 611,200 hectares. Ramsar Convention (Ramsar sites) is concerned with Wetlands of International Importance and covers fresh water, estuarine

³⁹ https://www.cbd.int/sp/

⁴⁰ https://www.cbd.int/doc/meetings/mar/cbwsoi-seasi-01/other/cbwsoi-seasi-01-bangladesh-en.pdf

and coastal marine habitats. The convention was signed in Ramsar (Iran) in 1971 and came into force in December 1975. The convention entered into force in Bangladesh on 21 September 1992.

The application of Performance Standard 6 is established during the social and environmental risks and impacts identification process, and therefore a detailed assessment of relevant risks and impacts must be included in the ESIA, including alternative options for project design, and addressed through the ESMP. The key requirements that must be met during ESIA process are outlined in Table 8.2.

During the E&S due diligence process, PFIs will be responsible for:

- (a) Ascertaining that ESIAs for sub-projects include adequate analysis of risks and impacts on biodiversity and ecosystem services;
- (b) Verifying ESIA's determination of the habitat type of the area and, if cases critical habitats are found and/or for sub-projects in or near legally protected areas, providing this information to Bangladesh Bank in a timely manner;
- (c) Should Bangladesh Bank determine that a project involving activities in or near critical habitats and /or legally protected areas can be financed (based on PFI's internal E&S risk management capacity), ascertaining that adequate risks and impacts management measures are included in project sponsors' Action Plans and incorporated in legal documentation for project financing.
- (d) Monitoring implementation (with assistance from the IPFF II Monitoring Agency).

Table 8.2. Identification and Mitigation of Biodiversity-Related Risks and Impacts

Issue	Description
Scoping for biodiversity impacts	The risks and impacts identification process should include scoping of potential issues relating to biodiversity and ecosystem services. Scoping may take the form of an initial desktop analysis and literature review, including a review of regional studies and assessments, the use of global or regional screening tools, and field reconnaissance.
Scoping for impacts on ecosystem services	Scoping for ecosystem services may also take place through consultation with Affected Communities as part of stakeholder engagement.
Application of the mitigation hierarchy	As a matter of priority, impacts on biodiversity and ecosystem services should be avoided. When avoidance of impacts is not possible, measures to minimize impacts and restore biodiversity and ecosystem services should be implemented. For biodiversity, the mitigation hierarchy may include offsets (see below).

Issue	Description
Determination of habitat type	ESIA must clearly define habitat type of the sub-project area, and support it with adequate data and analysis. Habitat types may be natural/ modified and critical / non-critical. 41
	A map of areas likely to be considered critical habitats according to PS6 criteria is presented in Annex 3.
Legally protected and internationally	In circumstances where a proposed project is located within a legally protected area or an internationally recognized area, requirements of PS6 for either natural or critical habitat must be fulfilled, as applicable. In addition, project sponsor will:
recognized ⁴² areas ⁴³	 Demonstrate that the proposed development in such areas is legally permitted;
	 Act in a manner consistent with any government recognized management plans for such areas;
	 Consult protected area sponsors and managers, Affected Communities, tribal peoples and/ or small ethnic communities (if present), and other stakeholders on the proposed project, as appropriate; and
	- Implement additional programs, as appropriate, to promote and enhance the conservation aims and effective management of the area.
	The list and maps for terrestrial and marine protected areas and Ecologically Critical Areas is presented in Annex 3.
Biodiversity Offsets	When development of an offset is considered as part of sub-project design, as included in the mitigation hierarchy, external experts with knowledge of offset design and implementation must be involved.
	Biodiversity offsets may be considered only after appropriate avoidance, minimization and restoration measures have been applied. The decision to undertake a biodiversity offset therefore would never be a substitute for the implementation of good management practices on the actual project site.
	Biodiversity offsets are only to be undertaken if significant residual impacts remain after all prior steps in the mitigation hierarchy have been fully assessed and implemented.
Biodiversity Action Plan	For critical habitats, a Biodiversity Action Plan and /or Biodiversity Management Plan is required. Guidance on developing a BAP/BMP is provided in Annex 6.

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⁴¹ Both natural and modified habitats can be, at the same, time, critical habitats should they meet the criteria of Performance Standard 6.

⁴² Exclusively defined as UNESCO Natural World Heritage Sites, UNESCO Man and the Biosphere Reserves, Key Biodiversity Areas, and wetlands designated under the Convention on Wetlands of International Importance (the Ramsar Convention).

⁴³ Performance Standard 6 recognizes legally protected areas that meet the IUCN definition: "A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." For the purposes of Performance Standard 6, this includes areas proposed by governments for such designation.

8.2.2 Ecosystem Services

Ecosystem services are the benefits that people, including businesses, derive from ecosystems. Ecosystem services are organized into four types: (i) provisioning services, which are the products people obtain from ecosystems; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes; (iii) cultural services, which are the nonmaterial benefits people obtain from ecosystems; and (iv) supporting services, which are the natural processes that maintain the other services. Ecosystem services valued by humans are often underpinned by biodiversity. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services.

Where a sub-project is likely to adversely impact ecosystem services, as determined by the risks and impacts identification process, the project sponsor will conduct a systematic review to identify priority ecosystem services. Priority ecosystem services are two-fold: (i) those services on which project operations are most likely to have an impact and, therefore, which result in adverse impacts to Affected Communities; and/or (ii) those services on which the project is directly dependent for its operations (e.g., water). When Affected Communities are likely to be impacted, they should participate in the determination of priority ecosystem services in accordance with the stakeholder engagement process. A systematic review is required where project sponsor has "direct management control or significance influence" over such services. Therefore, ecosystem services whose beneficiaries are at the global scale, and sometimes the regional scale, ⁴⁵ are not covered.

A basic template for ecosystem services review template is presented in Annex 7.

8.3 Involuntary Resettlement and Livelihood Restoration

For any land acquisition, a Land Acquisition Plan (LAP) is needed. Preparation of the land acquisition plans will include locating each of the components; sorting out the ownership status of the lands in which project shall be established; and preparing the schedules of plots (with 'dag' or Plot numbers and other information required by the acquiring body) from which lands are to acquired. These are the documents the relevant project authority will submit to DC along with a request to start the acquisition process. LAPs will be prepared for proposed site and will ensure that the total amount of land in the individual acquisition packages does not exceed 50 standard big has, which the Divisional Commissioners can approve without referring to the Ministry of Land.

Basic categories of issues/impacts that need to be addressed under the entitlement framework are the following:

⁴⁴ Examples are as follows: (i) provisioning services may include food, freshwater, timber, fibers, medicinal plants; (ii) regulating services may include surface water purification, carbon storage and sequestration, climate regulation, protection from natural hazards; (iii) cultural services may include natural areas that are sacred sites and areas of importance for recreation and aesthetic enjoyment; and (iv) supporting services may include soil formation, nutrient cycling, primary production.

⁴⁵ The requirement could apply to ecosystem services whose beneficiaries are at the regional scale as projects with very large footprints could cause impacts on regional level ecosystem services (e.g., large wetlands or coastal areas required for natural hazard mitigation).

- Loss of land
- Loss of water source
- Loss of structure
- Loss of source of livelihood
- Loss of access to common resources and facilities
- Loss of standing crops, trees and perennial trees
- Loss of public infrastructure
- Loss of services (electricity, water, transport, etc)
- Loss of or imperilled access to any of the above

The World Bank, the financer of the IPFF II project, requires the project sponsors to identify, review and abide by all *laws of the host country* that are applicable to land acquisition and involuntary resettlement including:

- (a) The scope of the power of eminent domain and the nature of compensation associated with it, both the procedures for assessing compensation values and the schedule for making compensation payments.
- (b) The legal and administrative procedures applicable, including the appeals process and the normal time for such procedures.
- (c) Land titling and registration procedures.
- (d) Laws and regulations relating to agencies responsible for implementing resettlement and those related to land compensation, consolidation, land use, environment, water use and social welfare.

8.3.1 Definitions

Displaced persons may be classified as persons (i) who have formal legal rights to the land or assets they occupy or use; (ii) who do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; or (iii) who have no recognizable legal right or claim to the land or assets they occupy or use. The census will establish the status of the displaced persons.

Project-related land acquisition and/or restrictions on land use may result in the physical displacement of people as well as their economic displacement.

8.3.2 Purpose and Applicability of WB Requirements

World Bank recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss

of assets or access to assets that leads to loss of income sources or other means of livelihood⁴⁶) as a result of project-related land acquisition and/or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

World Bank requirements apply to physical and/or economic displacement resulting from the following types of land-related transactions:

- Land rights or land use rights acquired through expropriation or other compulsory procedures in accordance with the legal system of the host country;
- Land rights or land use rights acquired through negotiated settlements with property owners or those with legal rights to the land if failure to reach settlement would have resulted in expropriation or other compulsory procedures;
- Project situations where involuntary restrictions on land use and access to natural resources cause a community or groups within a community to lose access to resource usage where they have traditional or recognizable usage rights;
- Certain project situations requiring evictions of people occupying land without formal, traditional, or recognizable usage rights; or
- Restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, freshwater, medicinal plants, hunting and gathering grounds and grazing and cropping areas.

8.3.3 Key Requirement for Managing Physical and Economic Displacement

Key requirements for project sponsors are presented in Table 8.3.

During the E&S due diligence process, PFIs will be responsible for:

- (a) Ascertaining that ESIAs for sub-projects include adequate analysis of risks and impacts associated with land acquisition;
- (b) Notify Bangladesh Bank in a timely manner whether proposed project would involve physical or economic displacement;
- (c) Should Bangladesh Bank determine that a project involving physical or economic displacement can be financed (based on PFI's internal E&S risk management capacity), ascertaining that adequate risks and impacts management measures are

⁴⁶ The term "livelihood" refers to the full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering.

- included in project sponsors' Action Plans and incorporated in legal documentation for project financing.
- (d) Monitoring implementation (with assistance from the IPFF II Monitoring Agency). Resettlement modalities in various project types envisioned under IPFF II are presented in Annex 8.

Table 8.3. Key Requirements for Managing Risks and Impacts of Physical and Economic Displacement

Issue	Description
Project design	Consider feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.
Compensation and Benefits for Displaced Persons	When displacement cannot be avoided, the client will offer displaced communities and persons compensation for loss of assets at full replacement cost ⁴⁷ and other assistance to help them improve or restore their standards of living or livelihoods.
Stakeholder engagement	Engage with Affected Communities, including host communities, through the process of stakeholder engagement described in section 8.1. Decision-making processes related to resettlement and livelihood restoration should include options and alternatives, where applicable. Disclosure of relevant information and participation of Affected Communities and persons will continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement.
Grievance mechanism	The project sponsor will establish a grievance mechanism as described in section 8.1 as early as possible in the project development phase. This will allow the client to receive and address specific concerns about compensation and relocation raised by displaced persons or members of host communities in a timely fashion, including a recourse mechanism designed to resolve disputes in an impartial manner. Such grievance mechanisms should take into account the availability of judicial recourse and community and traditional dispute settlement mechanisms.
Resettlement Action Plan and/or Livelihood Restoration Action Plan	In the case of physical displacement, the project sponsor will develop a Resettlement Action Plan that covers, at a minimum, the applicable requirements of this Performance Standard regardless of the number of

⁴⁷ Replacement cost is defined as the market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow Affected Communities and persons to replace lost assets with assets of similar value. The valuation method for determining replacement cost should be documented and included in applicable Resettlement and/or Livelihood Restoration plans.

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Issue	Description
	people affected. This will include compensation at full replacement cost for land and other assets lost. Sample outline of a Resettlement Action Plan is presented in Annex 9.
	In the case of projects involving economic displacement only, the project sponsor will develop a Livelihood Restoration Plan to compensate affected persons and/or communities and offer other assistance that meet the objectives of Performance Standard 5.
	The Livelihood Restoration Plan will establish the entitlements of affected persons and/or communities and will ensure that these are provided in a transparent, consistent, and equitable manner. The mitigation of economic displacement will be considered complete when affected persons or communities have received compensation and other assistance according to the requirements of the Livelihood Restoration Plan and this Performance Standard, and are deemed to have been provided with adequate opportunity to reestablish their livelihoods.
	Implementation of a Resettlement Action Plan or Livelihood Restoration Plan will be considered completed when the adverse impacts of resettlement have been addressed in a manner that is consistent with the relevant plan as well as the objectives of this Performance Standard. It may be necessary for the project sponsor to commission an external completion audit of the Resettlement Action Plan or Livelihood Restoration Plan to assess whether the provisions have been met, depending on the scale and/or complexity of physical and economic displacement associated with a project.

8.3.4 Responsibilities of Project Sponsors and PFIs under Government-Managed Resettlement

Where land acquisition and resettlement are the responsibility of the government, the project sponsor will collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes that are consistent with Performance Standard 5. Government agencies follow national legal requirements, while project sponsors are required to ensure resettlement undertaken on their behalf meets the objectives of Performance Standard 5. Therefore, project sponsor will identify and describe government resettlement measures. If these measures do not meet the relevant requirements of Performance Standard 5, the project sponsor will prepare a Supplemental Resettlement Plan that, together with the documents prepared by the responsible government agency, will address the relevant requirements of Performance Standard 5, as follows:

- Under government-managed resettlement, the project sponsor should collaborate
 with the appropriate agencies to establish methods for determining and providing
 adequate compensation to the affected people in the Resettlement Action Plan or
 Framework.
- Under certain circumstances, a government agency or other authority may provide a project sponsor with an unoccupied project site, unencumbered of any current

claims, whose prior residents or land users were displaced. If resettlement from the site has occurred in anticipation of the project, but not immediately preceding project implementation, the project sponsor should make a determination as to whether those resettled were compensated in a manner consistent with the requirements of Performance Standard 5 and, if not, any corrective action is feasible to address the situation. Under such circumstances, the following factors should be considered: (i) the length of the intervening period between land acquisition and project implementation; (ii) the process, laws and actions by which the resettlement was carried out; (iii) the number of people affected and the significance of the impact of land acquisition; (iv) the relationship between the party that initiated the land acquisition and the project sponsor; and (v) the current status and location of the people affected. If corrective action is feasible and would improve the standard of living of the displaced people, the project sponsor should undertake corrective measures prior to the implementation of the project.

- Where national law or policy does not provide for compensation at full replacement cost, or where other gaps exist between national law or policy and the requirements with respect to displaced people detailed in Performance Standard 5, the project sponsor should apply alternative measures to achieve outcomes consistent with the objectives of Performance Standard 5. Such measures could range from making or arranging for the payment of supplementary allowances in cash or in kind, to arranging for the provision of dedicated support services. These gaps and measures should be addressed in a Supplemental Action Plan.
- The client should collaborate with local government authorities in the distribution of compensation payments. Those eligible for compensation should be given advance notice of the date, time and place of payments via public announcement. Receipts should be signed by all those receiving compensation payments and retained for auditing purposes.

8.3.5 Institutional Framework

The findings of an analysis of the institutional framework will cover:

- (a) the identification of agencies responsible for resettlement activities and NGOs that may have a role in project implementation;
- (b) an assessment of the institutional capacity of such agencies and NGOs;
- (c) any steps that are proposed to enhance the institutional capacity of agencies and NGOs responsible for resettlement implementation.
- a. **Organizational responsibilities:** The organizational framework for implementing resettlement, including identification of agencies responsible for delivery of resettlement measures and provision of services; arrangements to ensure appropriate coordination between agencies and jurisdictions involved in implementation; and any measures (including technical assistance) needed to strengthen the implementing agencies' capacity to design and carry out resettlement activities; provisions for the

transfer to local authorities or resettlers themselves of responsibility for managing facilities and services provided under the project and for transferring other such responsibilities from the resettlement implementing agencies, when appropriate.

- b. **Implementation schedule**: An implementation schedule covering all resettlement activities from preparation through implementation, including target dates for the achievement of expected benefits to resettled persons and hosts and terminating the various forms of assistance. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project.
- c. Costs and budget: Itemized cost estimates shall be given for all resettlement activities, including allowances for inflation, population growth, and other contingencies; timetables for expenditures; sources of funds; and arrangements for timely flow of funds, and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies.

8.3.6 Monitoring & Evaluation

Arrangements for monitoring of resettlement activities by the implementing agency, supplemented by independent monitors as considered appropriate by the Bank, to ensure complete and objective information; performance monitoring indicators to measure inputs, outputs, and outcomes for resettlement activities; involvement of the displaced persons in the monitoring process; evaluation of the impact of resettlement for a reasonable period after all resettlement and related development activities have been completed; using the results of resettlement monitoring to guide subsequent implementation.

8.4 Projects Involving Impacts on Tribal Peoples and/or Small Ethnic Communities

8.4.1 Definition

The category of "Indigenous Peoples" in Bangladesh is defined – in line with the definition in Performance Standard 7 - by a more country-specific term "tribal peoples and/ or small ethnic communities" is used in a generic sense to refer to a distinct social and cultural group possessing the following characteristics in varying degrees:

- Self-identification as members of a distinct cultural group and recognition of this identity by others;
- Collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- Customary cultural, economic, social, or political institutions that are separate from those of the mainstream society or culture; or
- A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

8.4.2 Main Tribal Peoples and Small Ethnic Communities in Bangladesh

In Bangladesh "tribal peoples and/ or small ethnic communities" (may also be referred to as "tribal people" in this section) describe native ethnic minorities in southeastern, northwestern, north-central and northeastern regions of the country. These regions include the Chittagong Hill Tracts, Sylhet Division, Rajshahi Division and Mymensingh District. The total population of indigenous ethnic minorities in Bangladesh was estimated to be over 2 million in 2010. They are diverse ethnic communities including Australoid, Tibeto-Burman and Sino-Tibetan races. Vast number of indigenous tribes of Bangladesh are Buddhists and Hindus by faith while the remaining few are Christians and animists.

In general, some of the key groups are:

- Khasi people
- The Jaintia
- The Chakmas
- The Marmas
- Santals
- Garos
- Manipuri
- The Tripuri
- The Tanchangya
- The Mros (Mrus or Moorangs)

The primary census report of 2011 gives the number of ethnic population groups of Bangladesh as 27. The first is Chakma, consisting of 444,748 people while the Marma, the second largest ethnic group compares with 202,974 persons. Different tribal groups differed in their social organization, marriage customs, foods, birth and death and other social customs from the people of the rest of the country. They have somehow managed to resist centuries of colonization and in the process have retained their own customs, traditions and life.

8.4.3 Key Requirement for Managing Impacts Tribal Peoples and/or Small Ethnic Communities

Private sector projects can create opportunities for these groups to participate in, and benefit from project-related activities that may help them fulfil their aspiration for economic and social development. Furthermore, these groups may play a role in sustainable development by promoting and managing activities and enterprises as partners in development. Government often plays a central role in the management of relevant issues, and project sponsors and PFIs should collaborate with the responsible authorities in managing the risks and impacts of their activities.

Project sponsors will have to meet key requirements presented in Table 8.4.

During E&S due diligence process, PFIs will be responsible for:

- (a) Verifying the conclusions of the ESIA on whether or not tribal peoples and/ or small ethnic communities are present in the proposed project area;
- (b) Promptly notifying Bangladesh Bank should these communities be present in the proposed sub-project area;
- (c) Should Bangladesh Bank determine that a project involving impacts on tribal peoples and/ or small ethnic communities can be financed (based on PFI's internal E&S risk management capacity), ascertaining that adequate risks and impacts management measures are included in project sponsors' Action Plans and incorporated in legal documentation for project financing. More specifically:
 - (i) Verifying broad community support of these groups to the project that should be the outcome of Good Faith Negotiations and Informed Consultation and Participation (ICP) as conducted by project sponsors and described in section 8.1.1 on stakeholder engagement.
 - (ii) In specific circumstances requiring Free, Prior, and Informed Consent (FPIC), verifying the due process and adequate outcome, as conducted/ achieved by the project sponsor and described in section 8.1.1 on stakeholder engagement.
- (iii) Monitoring implementation (with assistance from the IPFF II Monitoring Agency).

Table 8.4. Key Requirements for Managing Issues Related to Impacts on Tribal Peoples and/or Small Ethnic Communities

Issue	Description
Identification of relevant groups in sub-project area	Project sponsors may be required to seek inputs from competent professionals to ascertain whether a particular group is considered as tribal peoples and/ or small ethnic communities. In making this determination, the project sponsor may undertake a number of activities, including investigation of the applicable national laws and regulations (including laws reflecting the country's obligations under international law), archival research, ethnographic research (including documentation of culture, customs, institutions, customary laws, etc.), and participatory appraisal approaches
Free, Prior, and Informed Consent (FPIC): Definition	There is no universally accepted definition of FPIC. FPIC builds on and expands the process of informed consultation and participation described in Performance Standard 1 and will be established through good faith negotiation between the project sponsor and the these communities. The project sponsor will document: (i) the mutually accepted process, and (ii) evidence of agreement between the parties as the outcome of the negotiations. FPIC does not necessarily require unanimity and may be achieved even when individuals or groups within the community explicitly disagree.

Issue	Description
Participation	Project sponsor will undertake an engagement process with the Affected Communities of tribal peoples and/ or small ethnic communities per the requirements for stakeholder engagement and grievance mechanisms described in section 8.1. This engagement process includes stakeholder analysis and engagement planning, disclosure of information, consultation, and participation, in a culturally appropriate manner.
Free, Prior, and Informed	FPIC is required in the following three circumstances:
Consent (FPIC): Circumstances	 Impacts on Lands and Natural Resources Subject to Traditional Ownership or Under Customary Use
	 Relocation of Tribal Peoples from Lands and Natural Resources Subject to Traditional Ownership or Under Customary Use
	• Significant impact on critical cultural heritage ⁴⁸ that is essential to the identity and/or cultural, ceremonial, or spiritual aspects of Tribal Peoples lives.
Tribal Peoples Plan	The project sponsor's proposed actions will be developed with the informed consultation and participation of the Affected Communities of Tribal Peoples and contained in a time-bound plan, such as a Tribal Peoples Plan, or a broader community / stakeholder development plan with separate components for Tribal Peoples.
Development benefits	Project sponsor will opportunities for culturally appropriate and sustainable development benefits. The determination, delivery, and distribution of compensation and other benefit sharing measures to the Affected Communities of Indigenous Peoples will take account of the laws, institutions, and customs of these communities as well as their level of interaction with mainstream society.
Private Sector Responsibilities Where Government is Responsible for Managing Tribal Peoples Issues	Where the government has a defined role in the management of Tribal Peoples issues in relation to the project, the project sponsor will collaborate with the responsible government agency, to the extent feasible and permitted by the agency, to achieve outcomes that are consistent with the objectives of Performance Standard 7.
	The project sponsors will prepare a plan that, together with the documents prepared by the responsible government agency, will address the relevant requirements of this Performance Standard. The project sponsor may need to include (i) the plan, implementation, and documentation of the process of informed consultation and engagement and FPIC where relevant; (ii) a description of the government-provided entitlements of affected Indigenous Peoples; (iii) the measures proposed to bridge any

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 $^{^{48}}$ Includes natural areas with cultural and/or spiritual value such as sacred groves, sacred bodies of water and waterways, sacred trees, and sacred rocks. Natural areas with cultural value are equivalent to priority ecosystem cultural services as defined in Performance Standard 6

Issue	Description
	gaps between such entitlements, and the requirements of Performance Standard 7; and (iv) the financial and
	implementation responsibilities of the government agency and/or the project sponsor.

8.5 Projects Involving Impacts on Critical Cultural Heritage

8.5.1 Definition

Critical cultural heritage consists of (i) the internationally recognized heritage of communities who use, or have used within living memory the cultural heritage for long-standing cultural purposes; and (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation. Examples include world heritage sites and nationally protected areas.

8.5.2 World Heritage Sites in Bangladesh

The following is the list of UNESCO World Heritage Sites in Bangladesh. 49

- Properties inscribed on the World Heritage List
 - o Historic Mosque City of Bagerhat (1985)
 - o Ruins of the Buddhist Vihara at Paharpur (1985)
 - o The Sundarbans (1997)
- Properties submitted on the Tentative List
 - o Mahansthangarh and its Environs (1999)
 - o The Lalmai-Mainamati Group of monuments (1999)
 - o Lalbagh Fort (1999)
 - o Halud Vihara (1999)
 - o Jaggadala Vihara (1999)

Cultural heritage is considered critical when it is part of a legally-protected cultural heritage area. In addition, when internationally recognized cultural heritage is critical to a people who continue to use it for long-standing cultural purposes, such heritage may be considered critical, even if it is not legally protected. To be considered critical, the cultural heritage must be internationally recognized prior to the proposal of the project.

⁴⁹ http://whc.unesco.org/en/statesparties/bd

8.5.3 Key Requirements for Managing Impacts on Critical Cultural Heritage

In Bangladesh, impacts on cultural heritage are usually avoided when selecting project sites. Similarly, according to the applicable WB standards, the sub-projects should not be designed in a way that would envision to remove, significantly alter, or damage critical cultural heritage. In exceptional circumstances when impacts on critical cultural heritage are unavoidable, the project sponsor will meet key requirements presented in Table 8.5.

During E&S due diligence process, PFIs will be responsible for:

- (a) Verifying the conclusions of the ESIA on whether or not critical cultural heritage is present in the proposed project area and, if so, promptly notifying Bangladesh Bank;
- (b) Should Bangladesh Bank determine in exceptional circumstances that a project involving impacts on critical cultural heritage (based on PFI's internal E&S risk management capacity), ascertaining that adequate risks and impacts management measures are included in project sponsors' Action Plans and incorporated in legal documentation for project financing.
- (c) Monitoring implementation (with assistance from the IPFF II Monitoring Agency).

Table 8.5. Key Requirements for Critical Cultural Heritage

Issue	Description	
Consultation	Project sponsor will use a process of informed consultation and participation of the Affected Communities as described in section 8.1 and which uses a good faith negotiation process that results in a documented outcome.	
External expertise	The project sponsor will retain external experts to assist in the assessment and protection of critical cultural heritage.	
Legally protected areas	The project sponsor will retain external experts to assist in the	

9 CAPACITY BUILDING AND TRAINING APPROACH

This section presents a high-level assessment of existing capacity in Bangladesh as relevant to implementation to E&S risk management measures for IPFF II. A comprehensive multistakeholder capacity building plan will be developed prior to project implementation.

In order to support the capacity development process effectively requires identifying what key capacities already exist and what additional capacities may be needed to reach objectives. This is the purpose of a capacity assessment. A capacity assessment is an analysis of desired capacities against existing capacities which generates an understanding of capacity assets and needs that can serve as input for formulating a capacity development response that addresses those capacities that could be strengthened and optimizes existing capacities that are already strong and well founded. It can also set the baseline for continuous monitoring and evaluation of progress against relevant indicators and help create a solid foundation for long-term planning, implementation and sustainable results.

In the present requirement, it is necessary to assess the level of capacity to ensure environmental and social safeguards requirements of the participating actors in the IPFF project are adequate.

These are the four capacity issues that are most commonly encountered:

- institutional arrangements
- leadership
- knowledge and
- accountability

9.1 Understanding Institutional Needs

An understanding of the institutional needs includes a review of the authority and capability of all implementing actors at different levels and their capacity to manage and monitor ESMF implementation.

The capacity building assessment and the plan should include:

- (a) **Training Needs and Plans:** IPFF envisages capacity building to BB, PFIs and investment enterprises to ensure that the E&S risk management is effectively operationalised in IPFF II.
- (b) **Gap Assessment by the Sponsors:** Sponsors will assess their capacity gap in conducting environmental and social study complying with the ESMF. Accordingly, relevant environmental professionals will be hired for the study along with engaging their own staff as counterpart with a view to enhance their capacity.

PFIs that participated in IPFF I project have developed certain level of awareness of the World Bank environmental and social requirements (based on Safeguards policies) associated with subproject financing. However, in practice, key steps necessary to ensure proper E&S risk management have been carried out by the Bangladesh Bank IPFF Cell with the assistance of the

World Bank. This indicates that E&S issues are not sufficiently incorporated by PFIs in the overall project credit risk analysis. As the ultimate responsibility for ensuring project sponsors performance against the applicable requirements rests with the PFIs, as should be enforced by including appropriate clauses in the legal agreements and conditions of financing, capacity of the PFIs in this area must be considerably strengthened in order for them to effectively fulfil their responsibilities under IPFF II.

This capacity will be demonstrated by PFIs' development and implementation of adequate Environmental and Social Management Systems (ESMS), as required by IPFF II as well as specific sustainable banking regulations of the Bangladesh Bank.

To allow sufficient time for capacity building among the PFIs, the approach to mitigation of environmental and social risks and impacts in sub-projects under IPFF II will consist of a combination of (i) applying relevant E&S standards to identifying and managing specific risks and impacts in sub-projects during construction as well as at the implementation stage and (ii) excluding particularly high risk activities – based on a clearly defined exclusion / restriction list – from financing by specific PFIs based on these PFIs' and/or private sponsors' capacity to adequately address them until such capacity is built. A systematic process for assessment of PFIs' capacity with regard to E&S management will be built into IPFF II project design, including a formal collaboration arrangement between implementing agency(ies) and the Bangladesh Bank Sustainable Banking Department.

In order to design a more efficient system for managing risks and impacts in IPFF II, several opportunities exist to leverage relevant work of the Bangladesh Bank and other entities. In particular:

- (a) Bangladesh Bank has been a member of the Sustainable Banking Network (SBN) since 2012⁵⁰. As part of this effort, mandatory Environmental Risk Management Guidelines were introduced in 2011 by Bangladesh Bank. The core responsibility for this effort is with Bangladesh Bank Sustainable Banking Department. Through a cooperation agreement with IFC, the Bangladesh Bank plans to issue updated Guidelines in December 2016, which will include broader coverage of technical areas, specific sector guidance, performance monitoring / reporting tool for the financial institutions, and a structured training and capacity building program. The Guidelines are closely aligned with best international practice and standards, including the Performance Standards. Sustainable Banking Department shall be responsible for assessing PFIs' capacity and performance with regard to E&S risk management vis-à-vis IPFF II, as part of the overall process of implementation of the Guidelines. A structured collaboration with clearly defined responsibilities and data-sharing arrangements will be established between IPFF Cell and SFD as two internal departments within Bangladesh Bank.
- (b) Bangladesh PPP Authority has been applying IFC Performance Standards to

http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Partnerships/Sustainable+Banking+Network/

⁵⁰SBN is a community of financial sector regulatory agencies and banking associations from emerging markets committed to advancing sustainable finance in line with international good practice. SBN is facilitated by IFC with support from several donors.

assessment and management of risks and impacts in the pipeline of PPP projects it is developing. As these projects may become eligible for IPFF II financing, it is recommended to establish a formal collaboration arrangement with the PPP Authority on this matter. IPFF II will seek further opportunities to introduce World Bank E&S requirements early in the process of conceptualizing and developing infrastructure projects in Bangladesh.

9.2 Baseline ESRM Capacity Assessment of Bangladesh Financial Sector⁵¹

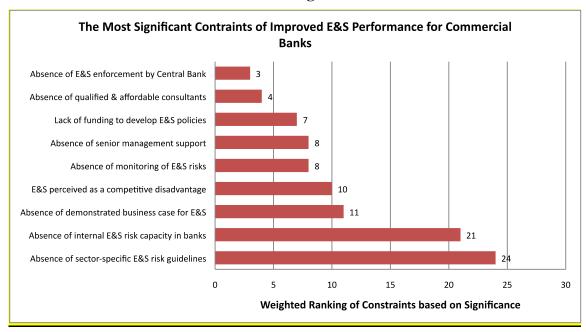
Although some banks in Bangladesh have made significant progress in their implementation of E&S policies, there remains much to be done. The following are key observations on the constraints and barriers faced by the banks, as summarized in the ESRM Baseline Survey for the Bangladesh Financial Sector (April 2013):

- There is no uniform understanding and interpretation of ESRM among financial institutions, which leads to different interpretation of their obligations and levels of compliance.
- Banks vary in the rigorousness of assessing the E&S risks of their project sponsors. Because of its subjective and qualitative nature, the banks lack a benchmark on how rigorous the E&S risk assessment should be. There are differences in the way banks assess the projects due to competition. The incentive mechanism (e.g., bonuses) for credit personnel to favour performance based on volume of loans could encourage cutting corners that could create compromises in the assessment of E&S risks. Moreover, there is no standard list of documents required from industries in the conduct of these assessments.
- Banks have difficulty in preparing sector-specific policies. Under Bangladesh Bank E&S regulations, each bank is required to prepare sector-specific policies for priority sectors. Many banks have indicated their lack of capacity and skill to prepare sector specific policies. Absence of sector-specific E&S risk guidelines has been identified as the most significant constraint to the improvement of E&S performance in the Financial Institutions (Figure 9.1). This requirement could be implemented more effectively if common sector-specific policies are prepared that could be utilized by all banks.

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⁵¹ Source: Environmental & Social Risk Management (ESRM) Baseline Survey for the Bangladesh Financial Sector. FINAL REPORT. 24th April 2013.

Figure 9.1. Constraints for Effective E&S Risk Management for Financial Institutions in Bangladesh



- Banks have difficulty in complying with internationally acceptable reporting standard. The challenge for banks is to comply to an internationally acceptable reporting standard such as the Global Reporting Initiative (GRI). Banks perceive that a standard reporting format that reflects minimum acceptable requirements would be a good start for compliance of all banks. Those who would prefer to follow an internationally acceptable reporting standard could follow such standard in addition to the minimum requirement.
- Lack of experts and trainers that could provide the necessary services to support the regulator, training institutes and banks. Currently, the regulator provides basic training to the banks in implementing the ERM Guidelines. However, with its lean team and huge requirement for building the capacities of banks, there is a need to enhance the capacity within Bangladesh Bank to support the training of FIs. The regulator also needs assistance to improve the guidance, develop and implement appropriate monitoring tools, and supervise implementation. Within the FIs, there is a need for continuous development of skills and capability due to improved processes and technologies and turnover of employees in the sector.

9.3 Key Components of the Capacity Building Program

Based on the assessment of current institutional capacity of various stakeholders to manage environmental and social risks in infrastructure project financing, the following key elements of enhancing E&S capacity are proposed:

(a) Strengthening direct oversight of E&S risk assessment and management process for IPFF II – financed sub-projects. This element would involve retaining qualified

- technical assistance partners to assist implementing agency(ies) with (i) assuring timely preparation of E&S risk assessment and management instruments by project sponsors and other parties (e.g. government agencies), as relevant, (ii) assisting with performance monitoring during project implementation, and (iii) assisting with preparation and implementation of ESMS by PFIs. TORs for a performance monitoring partner is presented in Annex 10.
- (b) Formalized support to Bangladesh Bank, through its Sustainable Banking Department, for building overall awareness and capacity of financial institutions in Bangladesh with regard to developing and implementing Environmental and Social Risk Management Systems (ESMS) integrated into their credit risk management process. This component may include joint training, development of technical guidance materials, and enhancing supervisory capacity of Bangladesh Bank in order to enforce compliance with mandatory Environmental and Social Risk Management (ESRM) Guidelines for financial institutions.
- (c) Establishing a "Center of Excellence" to support enhancement of technical E&S expertise within Bangladesh for conducting E&S risk assessments across industry sectors, with the initial focus on infrastructure sectors supported by IPFF II. This component will aim to develop sustainable capacity that can be relied upon by multiple stakeholders government, private sector, financial institutions.

10 IPFF II ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT PROCEDURES

These Procedures set out IPFF II institutional arrangements and processes that aim to support the implementation of IPFF II Environmental and Social Policy and Procedures. These procedures describe how various stakeholders of IPFF II conducts its due diligence on sub-projects under consideration, as well as its supervision on activities to which financing has been provided. The procedures identify the relevant functions involved in implementation.

These procedures are embedded in the overall sub-project screening and appraisal process, and form part of IPFF II investment decision-making. These Procedures are based on the principle of continuous improvement. These procedures allow for engagement with Participating Financial Institutions (PFIs) on the identified risks and impacts to improve their policies, systems, and processes for better E&S outcomes.

10.1 Project Implementation Structure with Regard to E&S Risk Management

High-level project implementation structure, including key stakeholders with defined roles and responsibilities is presented in Figure 10.1.

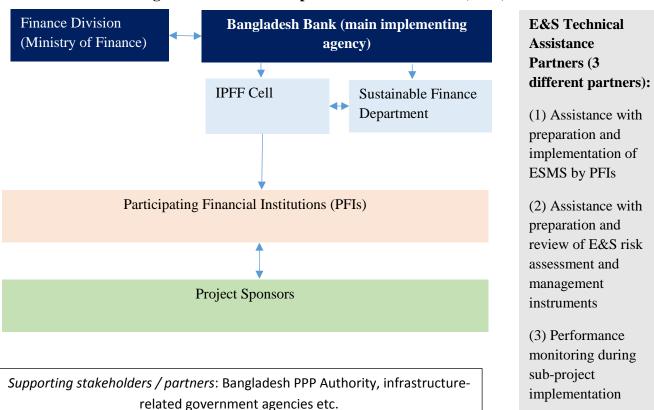


Figure 10.1. IPFF II Implementation Structure (E&S)

10.2 Roles and Responsibilities

Successful implementation of IPFF II will rely on concerted and harmonised efforts of key players like Bangladesh Bank, subproject sponsors and Participating Financial Institutions (PFI). The role of key players will be focused on ensuring effective risk management in sub-projects in line with national regulations and World Bank requirements. The capacity and roles of key players accountable to implement the ESMF are briefly described in the following sub-sections.

10.2.1 Bangladesh Bank

Bangladesh Bank, as the main project implementing agency, will have an oversight / monitoring responsibility for E&S risk management under IPFF II. In particular, BB will ensure that (i) all activities/ sub-projects financed under IPFF II meet the applicable Government of Bangladesh and World Bank requirements; (ii) all PFIs fulfil their respective obligations with regard to E&S due diligence and monitoring for sub-projects, as described below; (iii) consolidated E&S performance reporting for all sub-projects is provided to the World Bank.

IPFF Cell

Specifically, IPFF Cell will be the main implementing department in Bangladesh Bank, and will be responsible for putting IPFF II E&S Policy and Procedures into practice. In this regard, review of PFI E&S capacity, as well as ESIA reports of the subproject is particularly important.

At the stages of initial sub-project screening, PFIs will submit their decisions on sub-project E&S categorization, as described in section 10.8, along with documentation to support the categorization decision, to IPFF Cell. Following review of the documentation, Bangladesh Bank will provide No Objection to the categorization or propose changes.

Upon receiving ESIA report from PFI, it will be reviewed by an expert (to be engaged by Bangladesh Bank), who has in-depth experience in environmental and social issues as well as thorough understanding of national regulatory framework. The expert will also be responsible for drafting Terms of Reference (TOR) of ESIA along with supervising, communicating and coordinating the E&S Technical Assistance Partners listed in Figure 10.1. The Expert will also be responsible to prescribe a format for IE to submit Annual Environmental and Social Performance Monitoring Report.

In order to conduct environmental and social monitoring as well as environmental and social audit for the sub-projects, monitoring partner(s) will also be retained by Bangladesh Bank.

Sustainable Finance Department

Sustainable Finance Department of Bangladesh Bank will collaborate closely with the IPFF Cell, and:

- Conduct regular E&S capacity assessments of PFIs and assign performance-based E&S risk ratings (see section 10.3).
- Assist PFIs with developing and improvement of their ESMS.
- Lead on training and capacity building for PFIs in E&S risk management.

10.2.2 Participating Financial Institutions

PFIs will have the ultimate responsibility for E&S risk management for Bank-supported subprojects financed through IPFF II. PFIs' key responsibilities will include: (i) ensuring that ESIAs have been conducted in line with the requirements of the Government of Bangladesh and World Bank Performance Standards and all clearances are obtained in a timely manner; (ii) ensuring that adequate E&S covenants are incorporated in the loan / financing agreements with project sponsors / implementing entities and other relevant sub-project documentation; (iii) monitoring E&S performance of sub-projects and engaging consultants and third parties in this process, as appropriate; (iv) providing periodic reporting to the Bangladesh Bank, including prompt reporting of any E&S-related incidents or accidents associated with sub-projects.

In an effort to harmonize national regulatory requirements of the Bangladesh Bank Environmental Risk Management Guidelines described above with the World Bank requirements under OP/BP 4.03 for each PFI to develop and maintain an ESMS to manage risks and impacts of sub-projects, specific requirements for the PFIs' ESMS are expected to contain the following:

- (a) A policy statement endorsed by senior management clearly articulating adoption of the Bangladesh Bank Environmental Risk Management Guidelines, as well as applicable standards for E&S risk management for various lending activities the PFI may decide to cover by its ESMS in line with the Guidelines. In relation to activities/ sub-projects financed through IPFF II, these standards will include (i) relevant environmental and social national and local laws and regulations; (ii) IFC Exclusion List, and (iii) the World Bank Performance Standards, as commensurate with the risks and impacts of activities financed by PFIs through IPFF II.
- (b) Procedures for screening, assessing, managing, and monitoring environmental and social risks and impacts of sub-projects financed through IPFF II integrated within the overall credit risk management of the PFIs, including clearly assigned roles and responsibilities and budget. Such procedures must include sub-project E&S categorization that, among other aspects, should inform the sub-project's overall credit risk rating. More specifically, the PFIs will incorporate in their E&S procedures and rely on guidance provided in the BB's Environmental and Social Policy and Procedures for IPFF II in conducting their E&S due diligence for Bank-supported sub-projects.
- (c) Provisions for monitoring E&S performance of the PFI's portfolio of Banksupported sub-projects and periodic performance reports to the PFI's senior management and BB, as appropriate.

As part of the implementation of their ESMS, PFIs will form an E&S team comprising members having expertise in environment and social aspects and experience with the World Bank and DOE requirements. The suggested team composition is shown below.

Table 10.1. Suggested Team Composition of PFI E&S Team

Professional	Qualifications	

Professional	Qualifications
1. Environmental Expert	Experience in conducting ESIA and ESDD complying with the World Bank and DOE requirement and familiarity with IPFF II E&S Policy and Procedures
2. Legal & Policy experts, ESIA analyst	Experience on environmental issues, legislative bindings, legal and policy framework related to DOE and the World Bank/IFC
3. Socio-economist / social scientist	Experience on social baseline studies, social and community health impact studies/ assessments etc.

PFI's E&S team will conduct ESDD on the basis of the sub-project's E&S risk profile and potential impacts. The team also check the compliance status of legal covenants in terms of environmental and social aspects in the IPFF loan agreement.

In order to conduct an effective due diligence on ESIA the E&S team will:

- Collect key information regarding assets and management of E&S risks and impacts
- Assess the project against performance standards and EHS Guidelines
- Complete site familiarization / inspection visit
- Meet with local stakeholders and affected communities to discuss E&S compliance of the project
- Review the methods in preparing ESIA and identify the gap/ discrepancies
- Receive the revised ESIA report and other documents listed below and submit the same to Bangladesh Bank:
 - Environmental and Social Action Plan (normally part of the legal agreement between a PFIs and a project sponsor)
 - Environmental and Social Management Plan (ESMP)
 - Resettlement Action Plan (if applicable)
 - Tribal Peoples' Development Plan (if applicable) based on Social Impact Assessment and
 - All other mitigation measures and action to ensure compliance with all applicable World Bank and national requirements.

10.2.3 Project Sponsors

The project sponsor shall be responsible for conducting ESIA, as well as preparing and implementing a robust ESMP. They shall take advice from Bangladesh Bank to hire technical experts / firms with inclusive Terms of Reference. Project sponsors shall also carry out regular

monitoring and periodic evaluation of sub-project performance with agreed milestones and performance levels, as per the ESMP and any Action Plans included by PFIs in financing agreements. Project sponsors shall prepare periodic performance reports to PFIs.

Project sponsor's role is to implement the World Bank and DOE instruments such as:

- (a) Environmental and Social Action Plan (normally part of the legal agreement between a PFIs and a project sponsor)
- (b) Environmental and Social Management Plan (ESMP)
- (c) Resettlement Action Plan (if applicable)
- (d) Tribal Peoples' Development Plan (if applicable) based on Social Impact Assessment and
- (e) All other mitigation measures and action to ensure compliance with all applicable World Bank and national requirements.

10.2.4 E&S Technical Assistance Partners

IPFF II E&S technical assistance and capacity building will be implemented based on a collaborative approach where the responsibility for the implementation and monitoring of the environmental and social management measures is shared between the key players, to varying degrees. Relevant authorities and actors have to have their own specific expertise but are not always able to sustain the relationship between their activities and all cross-cutting themes of environmental and social management.

Moreover, key project counterparts responsible for E&S risk management require strengthening of their internal capacity to do so, which will be developed over time as described in section 9.

Therefore, in order to facilitate adequate E&S risk management for the project from the start of its implementation, a structured approach to technical assistance in key areas is proposed though engagement of three core E&S technical assistance partners is proposed for the project. While these partners will be engaged by and have ultimate accountability to Bangladesh Bank, it is intended that these partners will provide assistance to all key project stakeholders, namely Bangladesh Bank itself, PFIs, and project sponsors. Their respective roles are outlined in Table 10.2 below.

Table 10.2. Roles and Responsibilities of E&S E&S Technial Assistance Partners

E&S Technical Assistance Partner	Roles and Responsibilities	
Project and ESIA Preparation Partner	Assist BB in initial E&S screening, scoping, and categorization of proposed sub-projects	
	Assist BB with preparation of ToRs for Environmental and	

	Social Impact Assessments (ESIAs) Assist PFIs and project sponsors in identify and retaining qualified technical expertise to conduct ESIAs Review and assess quality of ESIAs and corresponding risk management instruments (ESMPs, RAPs, LRPs, BMPs etc.)	
Monitoring Partner	Conduct performance monitoring during sub-project implementation on behalf of PFIs Provide regular monitoring reports to BB Assist BB in preparation of annual performance reports for BB's senior management and the World Bank	
ESRM capacity building partner for PFIs	Assist BB in conducting regular PFI E&S capacity assessments Assist BB in assigning E&S risk rating to PFIs Provide qualified opinion on the ability of PFIs to manage E&S risks in projects on the E&S List of Sensitive Activities Assist PFIs in developing and strengthening their ESMS Participate in design and delivery of E&S training to PFIs (in collaboration with SFD and IFC)	

10.3 Environmental and Social Risk Rating of PFIs

In order to regularly assess systems and capacity of PFIs to manage E&S issues, especially in complex projects, Bangladesh Bank will assign a performance-based risk rating to each PFI. The risk rating will use a numeric 4-point scale (1-4) and will be based on a list of performance criteria listed in Annex 11. E&S risk rating will play a role in decision-making for allowing a PFI to finance sub-projects on the List of E&S Sensitive Activities.

Systems and capacity assessment and risk rating will be done on a yearly basis or at the time of PFI request for financing under IPFF II, whichever is sooner.

Table 10.3. PFI Performance-Based Risk Rating

Risk Rating	Basis for Rating	Implications for Financing Projects on the List of E&S Sensitive Activities
RR-1: High Risk	PFI meets only a few of the performance	Excluded
	criteria with limited evidence of practical	
	implementation	
RR-2: Substantial	PFI meets substantial number of the	Excluded
Risk	performance criteria, but with limited	
	evidence of practical implementation	
RR-3: Moderate	PFI meets most of the performance	Allowed, with close supervision
Risk	criteria with adequate evidence of	from Bangladesh Bank during

	practical implementation	ESIA preparation and
		implementation
RR-4: Low Risk	PFI meets all of the performance criteria	Allowed with limited
	with robust and consistent evidence of	supervision from Bangladesh
	practical implementation	Bank

10.4 Environmental and Social Risk Management Process for Sub-projects

Environmental and Social impact screening, mitigation and management measures development and implementation will follow the steps described in Table 10.4 below.

Table 10.4. Key Steps and Responsbilities in E&S Risk Management Process

Step	Detail	Responsibility
1	Identification of sub-projects according to the selection criteria	PFIs, in consultation with IPFF Cell, Bangladesh PPP Authority, responsible government agencies, World Bank, and other relevant parties
2	Screening for potential environmental and social impacts and determination of E&S documents required according to national regulations and World Bank policies	PFIs, in consultation with IPFF Cell
3	E&S Categorization	PFIs, with No Objection IPFF Cell (in case of Moderate risk, formal clearance from IPFF Cell)
4	Preparation of E&S documents	Project sponsor
5	Consultation and disclosure	Project sponsor
6	Submission of environmental documents and getting site and environmental clearance	Project sponsor
7	Review and clearance of the E&S documents for financing	PFIs, IPFF Cell. World Bank provides No Objection to High Risk projects for PFIs with RR-1 or RR-2
8	Implementation of agreed actions, monitoring & evaluation	Project sponsor
9	Renewal of annual environmental clearance (submission of relevant documents to relevant GoB authorities to review clearance under national law)	Project sponsor
10	Supervision and monitoring of implementation	PFIs with oversight from IPFF Cell

The overall environmental and social compliance processes and the steps involved in ECC by DoE for Red Category Projects are shown in Figure 10.2.

Project Proposal Submission Screening **Obtain SCC** Is the project on Yes No Exclusion List or List of **E&S Sensitive Activities** for PFIs with RR 1-2? Project Are WB/DOE E&S Rejection Policies Triggered? Categorize and Prepare ESIA Submit ESIA, Environmental and Social Audit, and or ESMP, RAP and TPDP as Applicable **Public** Consultation* Disclosure, Response & Action Plan Decision Marking Succeeds **Appeal** Issuance of ECC /Record Decision No Implementation of ESMP and other instruments **Project Dropped** Operation with PFI & BB Monitoring **Annual Renewal of ECC**

Figure 10.2. General Sub-Project Environmental and Social Review Process

^{*} Public consultation starts early in the ESIA process and continues throughout project implementation. Further guidance on good practices for public consultation is provided in section 8.1 (Stakeholder Engagement)

10.5 Initial Environmental and Social Screening of Sub-projects

The screening process is the first step in the E&S due diligence process. One of the objective of the screening process is to rapidly identify those sub-projects which have environmental and social issues so that they can move to implementation in accordance with pre-approved standards or codes of practices or other pre-approved guidelines for environmental and social management. The screening results will also be an important input for analyzing the feasibility of the project/sub-project along with engineering/economics and social criteria.

The major or key environmental and social issues to be identified will be determined by the type, location, sensitivity and scale of the sub-project. The results/findings from this exercise are/will be used to determine, primarily the environmental and social category of the project/sub-project, the extent and type of Environmental and Social Impact Assessment requirement, and applicability of World Bank requirements.

The screening parameters should be such that their identification and measurement are easy and do not involve detailed studies. The screening criteria, specified below, will also contain exclusion criteria, for sub-projects, which should not be taken up due to potential significant environmental impacts that cannot be mitigated (including, but not limited to, permanent obstruction to wildlife corridors or opening up increased access to threatened biodiversity resource hotspots or construction on top of eroded and vulnerable flood embankments).

Based on result of the environmental screening exercise, the type and scope of Environmental and Social Assessment that has to be undertaken by the subproject sponsor will be confirmed.

Every sub-project will be screened by the project sponsor for social impacts, including:

- (a) the need, if any, for land acquisition and involuntary resettlement (permanent or temporary);
- (b) the impacts on the population to be affected; and,
- (c) whether there is minority tribal community that would be affected by the sub-project (as determined through a review the demographic information in the sub-project areas).

In addition to any requirements to meet World Bank policies, the project sponsor will also screen the sub-projects for national laws and regulations regarding land acquisition and involuntary resettlement.

10.6 Detailed Screening/Scoping

This step will involve an initial desk review of the available information about the Project and the Sub-project area. A preliminary environment and social screening format would be filled-up by the project sponsor and their environmental and social consultants (as applicable) who in many cases will also prepare the ESIA or other required instruments as per World Bank requirements. For cases where the IPFF Cell's ESIA Consultant (Contracted by Bangladesh Bank) provides direct support to the sponsor for preparation of required ESIA documents, screening would also be carried out by the ESIA Consultant to confirm the appropriate scope of ESIA.

The screening should use available information and field visits to understand the general overview in context of the scope of the proposed operation. The exercise will help in identifying the key/significant potential environmental impacts and in determining the project specific context and the focus required for carrying out the detailed environmental screening exercise. The completed screening sheet should also be shared with IPFF Project Cell to confirm its appropriateness prior to commissioning of more detailed ESIA work.

The key sub-steps involved in the screening process are outlined below:

- (a) Ascertain presence of any environmentally and/or socially sensitive areas (as detailed in Screening Checklist) through primary/secondary information.
- (b) Confirm applicability of regulations and policies in context of sub-project interventions.
- (c) Conduct reconnaissance site visits for ground-truthing and incorporate required/additional information in the screening format.
- (d) Obtain details about land availability and status of ownership (forest/govt./private).
- (e) Preparation of a screening report.

To ensure well targeted field assessment during the screening process, a sample checklist is provided in Annex 12 for collecting information on environmental, natural, biological, and physical and socio economic conditions, without which it becomes cumbersome to determine the likely potential impacts that may result from the project interventions. The process enables proper targeting of issues requiring further technical research and in-depth assessments during the ESA preparation.

Key outputs of the detailed environmental and social screening would include:

- (a) Determination (with a degree of confidence), of all national and local regulations and policies that will apply to the sub-projects.
- (b) Preliminary judgment on the sub-project category.
- (c) Decision on the environmental categorization.
- (d) Determination of applicable E&S instruments to prepare process, timeframe and responsibilities for securing the requisite clearances and permissions.

The screening results will be cross-checked with national regulations, in order to determine the applicable ESIA instruments and other applicable documentation requirements.

10.7 Environmental and Social Categorization of Sub-projects

Following the screening as the first step in the environmental and social assessment process, as part of their overall ESMS developed in accordance with the Bangladesh Bank ESRM Guidelines, the PFIs will categorize the E&S risk of each proposed sub-project.

E&S categorization is a process that will assign the sub-project in question to one of the four categories (*High*, *Substantial*, *Moderate or Low* which is also consistent with the approach taken

in the upcoming Bangladesh Bank ESRM Guidelines. The high-level guidance for categorization is presented in Table 10.5 below.

Table 10.5. E&S Categorization by PFIs

Category	Description	
High risk	Sub-projects that are likely to have highly significant adverse E&S impacts that are diverse ⁵² , irreversible ⁵³ , or unprecedented ⁵⁴ , or transactions whose impacts affect an area broader than the sites or facilities subject to physical works	
	PFIs will always categorize the projects that may potentially involve activities in the List of E&S Sensitive Activities as High risk.	
Substantial risk	Sub-projects that are likely to have considerable adverse E&S impacts but are less sensitive and more limited than those under category High. Their impacts are site-specific and largely reversible, which could be readily identified and reliably mitigated through recognized good practices.	
Moderate risk	Sub-projects that are likely to have moderate adverse E&S impacts, which if mitigated with timely interventions and continuously monitored and reviewed can be controlled with minimal impacts.	
Low risk	Sub-projects that do not have the characteristics of High risk category, Substantial and Moderate risk sub-projects are classified as Low risk category. No further E&S assessment work is required after screening, but there is need to verify compliance with national regulations and relevant permit requirements and also routinely monitor compliance.	

10.8 Risk Factors and Proportionality

Since the PFIs' ESMS – including E&S categorization that forms an integral part of it – is required to cover the entire PFI's portfolio, which may consist of various financing products (project finance, SME finance, leasing finance etc.), E&S categorization described in section 10.7 above covers all these types of financing.

However, within this broad PFI categorization system, infrastructure sub-projects under IPFF II (which represent relatively large-scale projected finance transactions) should be classified as

⁵² Diverse Impacts – impacts resulting on multiple E&S components or receptors over a varying time and spatial scale (e.g. activities that can cause large scale adverse impacts on local air quality, noise levels, generation of

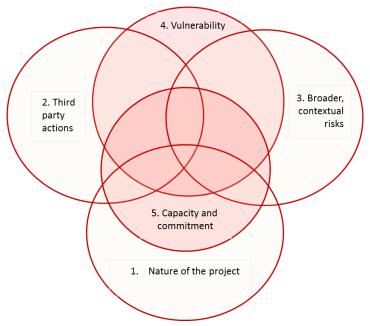
hazardous wastes as well as nuisance to community).

53 Irreversible Impacts – impacts on E&S components that, in all practical terms are permanent in nature and cannot be reversed in spite of the removal of the causal stress factor (e.g. construction or change in land use that permanently alters the natural drainage or destroys habitats used by migratory birds).

⁵⁴ Unprecedented Impacts – are impacts that are first of its kind in terms of available knowledge of their potential to cause harm to the E&S components and their effective mitigation (e.g. impact of noise pollution on an endangered faunal species in a geographical region where no prior studies are available on impact tolerance and response of the species).

High risk or **Substantial risk** category, as the risks and impacts are generally higher than in other industries and / or types of financial products. Categorization decisions should take into account multiple factors contributing to categorization (Figure 10.3).

Figure 10.3. Risk Factors



The E&S categorization will decide the nature of further E&S assessment and mitigation requirements. This will also identify sub-projects to be excluded at an early stage to avoid or reduce significant adverse impacts and save costly and time-consuming procedures and analysis. See Figure 10.4 for a representation of risk and effort.

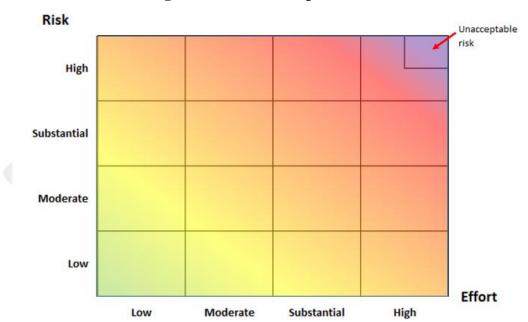


Figure 10.4. Effort Proportionate to Risk

10.9 Verification of PFI's E&S Categorization by Bangladesh Bank

Once a PFIs proposes a category for the sub-project to be financed through IPFF, the PFI will:

- Submit its proposed categorization decision to Bangladesh Bank IPFF Cell, along with supporting documentation prepared on the basis of sub-project initial and detailed screening process.
- Seek a No Objection from IPFF Cell for the proposed sub-project categorization. 55
- Confirm the E&S category to project sponsor and communicate the associated requirements for assessment, consultation, disclosure, development of mitigation measures (ESMPs, specific plans, Environmental and Social Action Plan) etc.

10.10 E&S Assessment for High and Substantial Risk Projects

E&S categorization will determine the process and rigor of subsequent E&S due diligence. The IPFF Cell of Bangladesh Bank will be responsible for coordinating the involvement of the Project and ESIA Preparation Partner to support the process of conducting the required assessments and development of applicable E&S documents on behalf of the project sponsor.

In cases where the sub-projects are in advanced stages or preparation or construction, audits of these existing operations will be conducted to ensure their conformity with the World Bank requirements. When applicable, these audits will always be managed by the IPFF Project Cell,

⁵⁵ In case of sub-projects initially categorized by PFIs as "Moderate risk", formal clearance must be obtained from Bangladesh Bank and No Objection must be obtained from the World Bank.

including contracting third parties so as to ensure the audits' independence and overcome limitations of any such audits that may be conducted by project sponsors.

In all such cases, the project sponsor is responsible to make all relevant information available to the IPFF Cell in order to carry out proper assessments, and to ensure the quality and accuracy of information presented.

E&S Risk Assessment for Substantial Risk Sub-projects

For Substantial risk transactions, the E&S risks and impacts are perceived to be considerable but site specific and with established remedial and good practice measures.

If the sub-project is one that is subject to seeking revised Environmental Clearances (EC) from the DoE and/or requires preparation of an ESIA report under the ECA, the PFI may proceed to process the loan application, but will not disburse the loan until the EC is obtained or the EIA is reviewed and approved by Bangladesh Bank. Project sponsor provides proof of issuance EC or letter of approval from the DoE regarding the ESIA.

For sub-projects in this category that do not require revised EC or do not have to carry out a full ESIA, an E&S Due Diligence (ESDD), E&S Audit may be carried out on the proposed sub-projects which focuses on two elements:

- (a) Compliance of facilities and operations with relevant environmental, occupational health and safety practices, assessment of labor and working conditions including gender issues, if applicable, and social laws, regulations, and applicable World Bank requirements; and
- (b) The nature and extent of environmental and/or social impacts, as a result of past/ ongoing activities and proposed transactions. The scope and depth of the audit or review should be commensurate to potential impacts and type of sub-projects.

Upon completion of the due diligence, the findings, conclusions, and recommendations shall be presented in the ESDD report. The recommendations should include the necessary actions which must be implemented for the proposed investment to proceed to financial closure.

A corrective Environmental and Social Action Plan (ESAP) will be developed if the ESDD finds that negative but manageable impacts may occur as a result of continuing implementation of ongoing activities and implementation of new activities under the proposed sub-project. The ESAP may call for preparation and implementation of an ESMP to address the impacts that are identified based on the audit. The ESAP, if required, should also include measures to inform potentially affected people of the nature of transactions, potential impacts, mitigations measures and grievance mechanisms. The ESAP should be attached to the loan proposal (and later to the loan agreement).

E&S Risk Assessment for High Risk sub-projects

For High risk transactions, the E&S risks and impacts are perceived to have highly significant adverse environmental and / or social impacts that are sensitive, diverse or unprecedented, or

transactions whose impacts affect an area broader than the sites or facilities subject to physical works. Such sub-projects will always require an ESIA.

The extent and type of ESIA requirement shall be determined giving due consideration to the national regulatory requirements and the World Bank requirements. The project sponsor, based on the applicable ESIA risk management instruments, will prepare process, timeframe and responsibilities for securing the requisite clearances and permissions and provide it to the PFI that, in turn, will provide it to Bangladesh Bank for No Objection. If the project sponsor refuses to comply with the ESIA requirements, the subproject would be ineligible for financing.

A corrective ESAP will be developed if the ESDD finds that negative but may under the proposed sub-project. The ESAP may call for preparation and implementation of an ESMP to address the impacts that are identified based on the ESIA. The ESAP, if required, should also include measures for structures stakeholder engagement with potentially affected people, potential impacts, and mitigations measures. The ESAP should be attached to the loan proposal (and later to the loan agreement).

10.11 Determination of Required E&S Assessment and Management Instruments

The documentation requirements for each sub-project will be determined based on the screening procedures. The possible instruments required under national legislation are presented below:

- (a) Project Description
- (b) Initial Environmental Examination (IEE)
- (c) Environmental Impact Assessment (EIA)
- (d) Process flow diagram, layout plan, waste discharge, treatment and disposal arrangement, etc.
- (e) NOC from local authority
- (f) Land ownership/rental deed, if applicable
- (g) Rehabilitation Action Plan (RAP), if applicable
- (h) Feasibility Report
- (i) Pollution Abatement Plan and Emergency Plan

Under the World Bank Performance Standards, there are a variety of E&S assessment and management documents that may be required. It is recommended that these documents form part of the E&S Management Plan and are logically linked, to the extent possible.

In all cases, regardless of the required assessment and management documents, project sponsor must prepare an Environmental and Social Action Plan, which will define desired outcomes and actions to address the issues raised in the risks and impacts identification process, as measurable events to the extent possible, with elements such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods, and with estimates of the resources and responsibilities for implementation.

Table 10.6. Determination of Required E&S Assessment and Management Documents

Project Risk Category	E&S Assessment and Management Documents	
	New Construction	Expansion or Refinancing of Existing Facility
High Risk Substantial Risk	Full Environmental and Social Impact Assessment (ESIA), including Environmental and Social Management Plan (ESMP) Resettlement Action Plan (RAP), ⁵⁶ if physical or economic displacement will result from land acquisition Livelihood Restoration Plan (LRP), in cases where subproject involves economic displacement only Tribal Peoples' Development Plan (TPDP) ⁵⁷ , if subproject will affect tribal peoples Biodiversity Management Plan (BAP), if the sub-project affects critical habitats, provided it complies with the relevant provisions for carrying out activities in or near critical habitats Simplified/ partial/ focused ESIA / EIA (if required by national regulations) ESMP consisting, at a minimum, of standard environmental codes of practice and supplemented, if necessary, with additional analysis and site-specific mitigation measures	Environmental and Social Audit ⁵⁸ of existing facility operations Environmental and Social Impact Assessment (ESIA) for expansion component Environmental and Social Management Plan (ESMP), including remedial actions if required based on audit findings, as well as management measures for new construction/retrofit as well as ongoing operations Resettlement Action Plan (RAP), if physical or economic displacement will result from land acquisition associated with expansion Livelihood Restoration Plan (LRP), in cases where subproject involves economic displacement only Tribal Peoples' Development Plan (TPDP), if subproject will affect tribal peoples Environmental and Social Audit of existing facility operations Simplified ESIA / EIA for expansion component (if required by national regulations) ESMP consisting, at a minimum, of standard environmental codes of practice and supplemented, if necessary, with additional
	Resettlement Action Plan (RAP), if physical or economic displacement will result from land acquisition associated with expansion Tribal Peoples' Development Plan	analysis and site-specific mitigation measures for construction /retrofit activities, remedial actions if required based on audit findings, and management measures for ongoing operations Resettlement Action Plan (RAP), if physical or
	(TPDP), if subproject will affect tribal peoples	economic displacement will result from land acquisition associated with expansion Tribal Peoples' Development Plan (TPDP), if subproject will affect tribal peoples
Moderate Risk ⁵⁹	Sub-projects that may require limited or focused E&S impact assessment or	Sub-projects will comply with the regulatory requirement E&S permitting and registration.

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⁵⁶ A Resettlement Action Plan (RAP) is required if the project will result in physical or economic displacement of over 200 people. If fewer people need to be resettled, then an abbreviated RAP will be required, including compensation for land already acquired if applicable. The RAP should be based on a social assessment (SA).

⁵⁷ A Tribal Peoples' Development Plan (TPDP) is required if the project will affect any tribal peoples, or if it takes place on the ancestral lands claimed by tribal peoples. The TPDP should be based on a tailored Social Assessment and a process of Free, Prior, Informed Consultation (FPIC) with the affected tribal peoples.

⁵⁸ Environmental and Social Audit will be required for expansion and re-financing of sub-project in addition to the project ESIA.

⁵⁹ Moderate risk category can be assigned to a sub-project funded under IPFF II in exceptional cases. The PFI proposing this category must obtain clearance from Bangladesh Bank and No Objection from the World Bank.

Project Risk Category	E&S Assessment and Management Documents	
	New Construction	Expansion or Refinancing of Existing Facility
	straightforward application of environmental citing, pollution standards, design criteria, or construction standards. They will also be required to comply with the regulatory requirement for E&S permitting and registration.	

10.12 Consultation and Disclosure

Once the screening and documentation requirements are agreed by the project sponsor, PFI, and confirmed by the Bangladesh Bank, the project sponsor will develop detailed documents/ plans and impact mitigation measures as required by the IPFF II Policy and Procedures, and obtain the environmental clearances for each sub-project before starting the construction. Sound environmental and social practices have to be incorporated into the subproject design and implementation and potential negative impacts will have to be mitigated to acceptable levels / standards.

The project sponsors have primary responsibility for the quality and accuracy of the information in the ESIA document, as well as public consultation and disclosure of the documents and transmission of final versions to the PFI.

The project sponsor is responsible in all cases for obtaining all necessary environmental clearances and other applicable national requirements. To the extent possible, the preparation of required documents under World Bank requirements should be done in conjunction with preparation of comparable documents – if those exist – required for national regulatory compliance (e.g., EIA, EMP, land acquisition and resettlement plan, etc.).

Environmental and social risk management documents/ plans will be subject to public consultation and disclosure in an accessible place, in a timely manner, in a form and language understandable to key stakeholders, prior to the finalization of the documents. Particular attention will be given to ensure project-affected communities have adequate time and ready access to draft documents before consultation takes place. ⁶⁰

Consultation for High risk category projects and projects that require RAPs, LRPs, or TPDP will be undertaken as required by the relevant Performance Standards and as described in section 8.1 to understand the concerns of affected communities, explain impacts and entitlements, garner feedback regarding specific mitigation measures and ensure that these have been considered and incorporated where appropriate in the finalized documents. Stakeholder engagement is an

 60 Detailed guidance on proper stakeholder engagement process according to World Bank Performance Standards can be found here:

 $\frac{http://www.ifc.org/wps/wcm/connect/938f1a0048855805beacfe6a6515bb18/IFC_StakeholderEngagement.pdf?MO}{D=AJPERES}$

iterative process that should be followed throughout the SIA and RAP preparation, implementation and monitoring and evaluation phases.

Information to be disclosed will include, at a minimum: sub-project design, risks and impacts, entitlement matrix (where physical and/or economic displacement is involved), proposed mitigation and management measures, grievance mechanism and implementation arrangements. During the design and implementation phases, this information will be updated and continually made available to stakeholders.

Disclosure means could vary, but may include posters, booklets, newspapers, the internet, and community meetings. All relevant documents will be disclosed at a public place accessible to affected groups and other stakeholders prior to consultation to establish the basis for meaningful consultation and participation (ICP). Disclosure should be done in a culturally appropriate form and language. At a minimum the ESIA document, RAP and TPDP (as applicable) should be available in Bangla, in locally accessible locations to project-affected communities. Disclosure and consultation mechanisms will be planned and detailed in the relevant documents.

In view of the World Bank's Access to information Policy and Open Data Initiative, the Borrower, PFIS, Bangladesh Bank, and project sponsors will allow disclosure of information regarding environment and social risk management by the World Bank.

10.13 Response to Disasters and Other Crises

An emergency and disaster management plan should be included in each sub-project's ESMP to outline the measures required in the event that a natural disaster or a crisis occurs, to address the significant environmental, health and safety issues that may be encountered. The immediate steps to be taken to address the environmental, health and safety impacts generated by the project during natural disasters should be part of the mitigating measures identified in the Emergency Preparedness and Response Plan, as part of the sub-project's overall ESMP. The emergency plan should also specify measures to bring the facilities back to working condition. The actions taken should be included in the environmental and social performance report and the self-monitoring report that will submitted by the project sponsors to PFIs.

10.14 Legal Covenants

PFIs will include environmental and social conditions of the loan in the legal documentation with the project sponsor. Legal covenants should include at least the following commitments by the project sponsor:

- Comply with any E&S-related exclusions, as specified in legal documents.
- Implement the environmental mitigation and management measures specified in the Environmental and Social Action Plan (ESAP) with time-bound targets, including all conditions stipulated in the ESMP and other plans (Acton Plan may also include time-bound targets for developing specific plans, such as a Biodiversity Action Plan as conditions of disbursement).
- Design, construct, operate, maintain and monitor the sub-project in compliance with

the national requirements, as well as the Bank's E&S requirements.

- Use all reasonable efforts to ensure the social and environmental performance of the sub-project is in compliance with the Bank's E&S requirements.
- The project sponsor has not received nor is aware of any existing or threatened complaint, order, directive, claim, citation or notice from any Authority under applicable law and local requirements.
- Within three days after its occurrence, notify the PFI of any social, labor, health and safety, security or environmental incident, accident or circumstance having, or which could reasonably be expected to have, any material impact on the implementation or operation of the sub-project in compliance with the applicable E&S requirements or a Material Adverse Effect.
- Provide periodic E&S performance reporting according to an agreed template within a specified timeframe.

10.15 Review and Clearance of E&S Assessment and Management Documents

Review of the E&S assessment and management documents for sub-projects according to national regulations and World Bank requirements is the ultimate responsibility of the PFI(s) that will finance the activity. Once project sponsors prepare the necessary documents as described above, the following review process will take place, depending on sub-project category. Review of the documents for quality and consistency will be done with the assistance of the Project and ESIA Preparation Partner.

Table 10.7. Review and Clearance Process for E&S Risk Assessmewnt and Management Documents

Sub-project Category	PFI	Bangladesh Bank
High risk	Review for quality and completeness	Clearance
Substantial risk	Review for quality and completeness	Clearance
Moderate risk ⁶¹	Review for quality and completeness	No Objection

Clearance would involve a more in-depth review of the E&S risk assessment and management instruments as compared to No Objection, including providing detailed comments on each of the instruments and confirming that Bangladesh Bank is in agreement with the action items and timelines stipulated in the Environmental and Social Action Plan (ESAP) prior to signing a

⁶¹ In exceptional circumstances

financing agreement between project sponsor and the PFI. A clearance memorandum would be issued by Bangladesh Bank to the PFI.

No Objection would involve a general review of the E&S risk assessment and management instruments, with optional comments. It will also involve confirming that Bangladesh Bank is in agreement with the action items and timelines stipulated in the Environmental and Social Action Plan (ESAP) prior to signing a financing agreement between project sponsor and the PFI. A No Objection letter will be issued by Bangladesh Bank to the PFI.

Role of the World Bank

The World Bank will review a consolidated Environmental and Social Performance Reports submitted by Bangladesh Bank every 6 month, on the E&S performance of both PFIs and subprojects. In addition, the World Bank will:

- Review and provide No Objection the ESIA for:
 - o The first High risk sub-project financed by a PFI with E&S risk rating RR-3.
 - o High Risk projects financed by PFIs with E&S risk rating RR-1 or RR-2.
- In case sub-projects are proposed by PFIs to be categorized as Moderate risk, provide a No Objection in support to formal clearance required from Bangladesh Bank.
- Periodically review the rationale for PFIs risk ratings, as prepared by Bangladesh Bank (Sustainable Finance Department).
- Conduct regular supervision activities for PFIs to ensure requisite systems and capacity to manage risks associated with IPFF II financed sub-projects are in place.
- Ensure that appropriate legal covenants are included in the financing agreements between PFIs and project sponsors.
- Review annual E&S reporting provided by Bangladesh Bank that, in turn, will consolidate such reporting received from PFIs and supplement it with the results of its own supervision and monitoring activities.
- Conduct regular supervision activities for all sub-projects to ensure adequate implementation of mitigation measures according to the agreed ESAP and technical plans.

10.16 Supervision, Monitoring, and Reporting

Implementation of the E&S risk management measures during sub-project implementation is the responsibility of project sponsors. To the effect, the project sponsor will be responsible for ensuring adequate implementation of the ESMP and associated specific plans and actions. All costs associated with the ESIA and ESMP process (including but not limited to costs to carry out public consultation, consultant fees and field expenses to conduct necessary assessment and monitoring studies, as well as administrative fees for filing and processing fee of IEE and ESIA

report) and cost of environmental and social monitoring are ultimately the responsibility of the project sponsor. Monitoring activities by project sponsors is the requirement both by the GoB EIA process and the World Bank.

The project sponsor should allocate its own funds for EA / ECC processing since the loan does not finance any processing fee and cost associated with review. However, assistance will be provided by the technical partners, as described in section 10.2 above.

Sub-projects are required to conduct regular self-monitoring of parameters indicated in the sub-project's ESMP and Action Plan if required based on findings of an ESIA or Environmental and Social Audit.

The primary purpose of performance monitoring is to ensure the implementation of sound and standard environmental procedures as defined during the project preparation. Specifically, it aims to:

- Monitor sub-project's performance against the conditions set in the ECC and all applicable laws, rules and regulations;
- Monitor compliance with the ESMP and other plans;
- Provide a basis for timely decision-making and effective planning and management of environmental and social measures through the monitoring of actual project impacts *vis-a-vis* the predicted impacts in the ESIA.

Cost of implementing Environmental and Social Management Plan (ESMP) including monitoring activities, needs to be estimated as a part of the preparation of ESMP. Many of the activities to be carried out as a part of ESMP would not involve any additional direct cost e.g., employing existing work force, where appropriate; keeping sub-project vehicles in good operating condition; scheduling deliveries of materials/ goods; good housekeeping, avoiding spills; etc.

On the other hand, a number of activities would require additional cost. At the same time, a number mitigation measures, including health and safety measures, would require additional cost; these include medical examination, installation of health and safety signs, awareness documents (signs/ posters), water sprinkling on surfaces, traffic control (e.g., deputing flagman), traffic light, plantation, and protective gear. The table below provides basis/ method of estimation of costs of different items of ESMP. Similar approach should be followed for estimation of cost of additional measures, if required.

Table 10.8. Example of Implementation and Monitoring Budget

Sl. No.	Item	Basis of Cost/Estimated Cost ⁶²
1.	Noise level	Prevailing rate (- Tk. 5,000/- per measurement per day)
2.	Air Quality (SPM, PM ₁₀)	Prevailing rate (- Tk. 8,000/- per

⁶² Prevailing cost means cost as of 2014

Sl. No.	Item	Basis of Cost/Estimated Cost ⁶²
		measurement)
3.	Water quality Turbidity, Total Suspended Solids, Dissolved Oxygen)	Prevailing rate (- Tk. 2,000/- per sample)
4.	Health/ safety signs (size and number to be estimated)	Prevailing PWD/LGED/REB/ PGCB rate /Lump sum amount
5.	Water sprinkling on aggregate	Latest PWD/LGED rate (if available)/A fixed rate per cubic meter of aggregate per day
6.	Traffic control (estimate number of flagman needed and duration of work)	Latest PWD/ LGED rate (if available)/A fixed rate per flagman per day/ Lump sum amount
7.	Traffic light	Latest PWD/ LGED rate (if available)/ Lump sum amount
8.	Others	

Note: Cost items of ESMP implementation depend on nature of the project and phases of project implementation.

The overall monitoring and supervision structure for the project will consist of several levels, as follows:

- a). As described above, project sponsors will conduct supervision and monitoring of sub-projects' E&S performance as the primary level. Project sponsors will be required to provide this monitoring information to PFIs and Bangladesh Bank to conduct further monitoring activities to ensure sound E&S risk management in sub-projects, as well as proper functioning of the project's overall ESMS.
- b). The second level of supervision and monitoring of sub-projects E&S performance will be the responsibility of the PFIs, who can engage consultants and third parties in this process and will produce monitoring reports to be shared with Bangladesh Bank and World Bank to support their oversight and supervision roles respectively.
- c). The third level of supervision, per section 10.2 of these Procedures, Bangladesh Bank will conduct performance monitoring vis-à-vis sub-projects to assure that PFIs adequately fulfil their responsibilities. As part of this process, Bangladesh Bank, with assistance of its Monitoring Partner (retained by Bangladesh Bank, as described in section 10.1 of these Procedures) will regularly visit the sub-project areas throughout implementation in order to supervise the implementation of the agreed E&S Action Plans and ensure they are implemented in compliance with the World Bank requirements. The results of such monitoring will be factored into the PFI's rating done by Bangladesh Bank, as detailed in (d) below and factored into the criteria included in Annex 11 (risk rating criteria for PFIs).
- d). Bangladesh Bank will additionally monitor performance of the PFIs in terms of the adequate implementation of their ESMS, including assigning performance-based E&S risk

rating, as described in section 3.8 of the Policy and further detailed in section 10.3 of the Procedures.

10.17 E&S Auditing and Reporting by Bangladesh Bank

Third party audit will be commissioned by the Bangladesh Bank for auditing and reporting of the IPFF II project as a whole. One of the components under this audit will be to review of the effectiveness of the E&S risk management arrangements and outcomes. The third party auditor will review the monitoring and supervision reports of the project sponsors and those prepared by the PFIs. The independent audit will include both a desk audit/review and a field audit. Consequently, an audit report will be prepared which will also include recommendations and corrective actions needed for such projects in which E&S gaps are observed. The report will be shared with the World Bank. The audit report will be also be used to identify remedies, follow up and learning lessons towards current and future interventions.

10.18 Public Consultation on IPFF II E&S Policy and Procedures

Meaningful consultations shall be conducted on the IPFF II Policies and Procedures. Bangladesh Bank will provide relevant materials in a timely manner prior to consultations and in a form and language that are understandable and accessible to the groups being consulted. The outcome of such consultations will be factored in the overall IPFF II project design with regard to E&S risk management, as well as sub-project development. It is noted that consultation and communication is an iterative process which will be used at all stages of the IPFF II project to ensure that stakeholder feedback is incorporated in project design and implementation as far as feasible.

A summary of public consultations will be prepared and disclosed by Bangladesh Bank.

This consultation process should identify and include various stakeholders relevant to the IPFF II. Some of the identified stakeholder groups include:

- Ministry of Industry
- Ministry of Environment
- Department of Environment
- Other Government departments
- PPP Authority
- Prospective project sponsors
- Financial Institutions / Banks
- Non-Government Organizations
- Worker's representatives, etc.
- Civil society organizations (e.g. academia, research centres, media, etc.)

The IPFF II Policy and Procedures document will be translated into Bangla language and both Bangla and English versions will be made available on Bangladesh Bank website (www.bangladesh-bank.org) and also made available for public access at World Bank Office in Dhaka and the Bank's Infoshop. Hard copies of the document will also be made available in Bangladesh Bank and potential PFIs. The disclosure notification will be published in one Bangla and one English daily newspaper. IPFF II Policy and Procedures document shall also be made available on request from Bangladesh Bank.

11 SPECIFIC GUIDANCE FOR ESIA AND ESMP PREPARATION

11.1 Environmental and Social Impact Analysis

The ESIA describes possible adverse effects that the proposed subproject may pose to the environment. It recommends mitigation measures and how will they be implemented. The ESMP – either as an accompanying chapter of the ESIA, or as a stand-alone document when a full ESIA is not required provides detail on how the recommended mitigation measures will be implemented and outlines requirements, institutional arrangements/responsibilities, timelines, estimated costs and sources of funds for management and monitoring of both positive and negative effects of the project.

The key environmental and social concerns in Bangladesh include the following and special care needs to be taken for preparing an ESIA and ESMP:

- Liquid effluents
- Ambient Air Pollution
- Surface water quality
- Solid and Hazardous Waste management
- Seasonal fluctuations in ground water table
- Noise pollution
- Groundwater quality
- Arsenic Contamination of Aquifers
- Traffic management
- Saline intrusion (coastal areas)
- Drainage
- River bank erosion
- Flooding
- Wetland deterioration
- Land degradation
- Indoor Air Pollution
- Forestry management
- Biodiversity conservation
- Fish and fisheries resource management
- Loss of land/ structures/assets/crops
- Displacement of people or economic / livelihood activities
- Impacts to tribal communities

• Impacts to physical cultural resources

It is important to consider not only the impacts on these key environmental and social concerns (often also referred to as "Valued Environmental Components" or VECs) associated with the facility installations themselves, but also with the associated facilities and activities required for its construction and operation, including support infrastructure (roads, workers' camps, sources of power and water, waste management facilities, borrow and disposal areas, etc.).

The following table provides potential environmental and social impacts from different activities of a project.

Table 11.1. Potential Environmental Impacts

Activity	Potential Impacts
Construction	Impacts during construction may include:
Workforce	Tensions between outside workers and local communities
	Affected living standard and income of local residents due to occupation of farmland/aquaculture land
	Market distortion due to temporary inputs to local economy
	Unemployment of local labor
	Disruption to livelihoods, cultural activities, and wellbeing of locals
	Competition for employment with locals.
Worker's Camp and	Impacts during construction may include:
Site Installation	Generation of significant volumes of wastewater and solid waste
	Stockpiling of waste and illegal dumping
	 Contamination of land, surface water and groundwater caused by spillage and leakage from storage of hazardous materials including petroleum products, chemicals, hazardous substances or hazardous wastes.
	Water courses, nearby rice paddies, and agricultural/aquaculture land can be easily contaminated with wastewater and solid wastes.
Erosion and Sedimentation	Roadbed and side slopes digging, roadbed filling, road surface paving, bridge foundation treatment, materials stack, concrete plants, construction machinery operation etc. can:
	Destroy surface vegetation
	Aggravate soil erosion
	Weakened soil conservation capacity
	Temporarily change water flow patterns
Emissions and Dust (Air Quality)	Sources for air pollution during construction that can be a nuisance and cause health problems are:
	 Fugitive dust emissions due to exposure of slope surface, uncovered stockpiling area, earth moving and excavation activities
	Dust emission due to blasting of rock
	Dust from vehicles and unpaved roads
	Wind blow during transportation of material by vehicles and when transporting on unpaved access roads

Activity	Potential Impacts
	Gases emissions from batching plants and concrete mixing stations
	Gases emissions during payment of road surface by asphalt plant;
	 Air pollutant emissions from exhaust of construction plant and vehicles such as CO, CO2, NOx, and SO2.
	Air pollution problems during the operation phase are:
	• Exhaust from vehicles (e.g. CO, NOx) that may deteriorate air quality in tunnel and at nearby sensitive receptor locations; and
	Gases emissions during road maintenance and re-surfacing of road surface (e.g. asphalt plant).
Noise and Vibration	Disturbances to livelihoods and damage to structures can be cause by:
	 Operation of the various equipment during construction (air compressor, concrete mixers, powered mechanical equipment, bulldozers, excavators, etc);
	 Vehicles transporting materials within construction site and beyond the construction boundary;
	Piling activities during construction of foundations / piers;
	Ventilation systems during tunnel construction;
	Blasting and vibration during tunnel construction
	During the operation phase, noise may be generated by:
	Traffic noise from road and horning of vehicles;
	Noise from service areas and car parking areas; and
	Construction plant during road maintenance.
Earthworks, Fill	Impacts include:
Slopes, Cuts, Borrow	Loss of topsoil affecting productive land.
Pits, Quarries, Disposal sites, Stockpiles	 Land instability from incorrect earth removal or unstable deposition of spoil, leading to landslides or erosion events.
	Discharge of sediments into watercourses, rice paddies, drainages, and irrigation canals.
	Erosion of riverbanks, slopes, and productive land
	Noise and vibration
	Dust emissions affecting health.
	Disturbances or damage to physical cultural resources.
	Damage to agricultural land and native vegetation
	Visual Impacts
Disposal of Debris,	Impacts include:
Demolition of Structures	Damage of local forest areas, contamination of drainage watercourses and impacts on land by Improper disposition of Construction and vehicle waste
	Injure of workers and the general population by falling debris and flying objects
Clearing of	Large-scale moving activities, disturbance of soil profile and removal of vegetation can
Construction Areas	result in:
_	result in: • Soil erosion and visual impact

Activity	Potential Impacts
	Loss of habitat and vegetation for animals
	 Discharging sediment and vegetation material into water courses affecting in- stream habitat
	 Discharging sediment and vegetation material into rice paddies, and irrigation canals
Landscape, Visual	Landscape and visual impacts during construction can result from:
Impacts and Site Restoration	 Poor/inadequate aesthetic design and landscaping design of the proposed road structures
	 Poorly implemented temporary mitigation measures and slope protection measures during excavation and slope work.
	After the completion of construction and before operation of the project, landscape and visual impact may occur because of:
	• Lack of appropriate compensatory planting at the end of construction or non-native species
	Planting of species visually incompatible to the background environment;
	 Lack of proper maintenance/watering of newly planted vegetation during the post- construction period.
	 Lack of proper restoration of cleared areas, such as borrow pits, stockpiles and disposal areas, construction camp areas, areas under bridges, and any areas occupied temporarily
Water Quality	Pollution of watercourses, groundwater, natural habitats and productive land caused by:
	Wastewater generated from construction equipment;
	Wastewater from bored piling locations;
	 Soil erosion / flush away from uncovered stockpiling locations, uncovered excavation site and unprotected slope surface during adverse weather conditions;
	 Uncontrolled surface water run-off carrying sediment laden discharges directly into natural water bodies such as streams, fish ponds, rivers and local irrigation channels;
	 Domestic sewage generated by construction workers, such as kitchen, shower, campsite, etc.
	Main water quality issues during operation phase are:
	Wastewater generated;
	Pollution of nearby water body due to toxic materials and
	Wastewater discharge from service areas, car parking and toll station
Solid Waste, Hazardous and	Damage to local forest areas, pollution of drainage watercourses and natural habitats, and impact on agricultural land caused by:
Chemical Waste	Surplus excavated materials requiring disposal;
	 Disposal of used wooden boards for trenching works, scaffolding steel material, site hoarding, packaging materials, containers of fuel, lubricant and paint;
	 Waste generated by demolition of existing houses / buildings affected by the project or breaking of existing concrete surface;
	 Domestic solid waste generated by construction workers, construction campsite, kitchen, toiletries,
	Improper disposition of hazardous wastes such as waste oil, spent lubricant,

Improper handling and storage of hazardous and chemical substances and construction materials Discharges of sediment into water courses affecting in-stream habitat.	Activity	Potential Impacts
Natural Water Course Discharges of sediment into water courses affecting in-stream habitat. Erosion of river banks Introduction of invasive species. Changing water course paths blocking fish passage and affecting in-stream habitat from fallen debris from the construction process. Discharges of oil and fuel to water courses affecting water quality. Ecological Considerations (Fauna and Flora) Impacts during construction include: Destruction of native vegetation and land outside proposed working areas Damage of forest areas Loss of habitat and vegetation for animals due to site clearance Temporary destruction or disturbance of aquatic life due to bridge works Land occupation at ecological sensitive areas Damage of forests and waterways adjacent to camps and work areas. Illegal hunting of wild animals by construction workers Lack of re-construction of lost habitats and re-creation of diverse ecosystems. Impacts during operation phase include: Traffic noise and lighting can force wildlife to leave their natural habitats Lack of evaluation of the success of recreation of habitat and identification of further measures to improve ecological conditions Traffic accidents with wildlife crossing Econstruction Site Safety Impacts include: Risk associated with working in enclosed environment such as inadequate ventilation and fireflighting within tunnel / tunnel shaft Seepage of water into tunnel during the tunnel construction; Collapse within tunnel when drilling through geologically unstable ground layers Risk associated with blasting and fire Risk associated with equipment and traffic movements, on and off the construction sites. Traffic Management Impacts include: Traffic congestion during construction due to the increase of heavy traffic; degradation of local roads due to heavy equipment machinery and traffic detours; Pedestrian safety specially for school children during construction; Increase in		solvents, and contaminated materials resulting from leakage of oil and fuel.
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Community Relations Lack of communication and consultation with local communities can lead to an opposition to a project, delays in the construction process increased costs and unsatisfactory solutions.		Pedestrian safety specially for school children during construction;
opposition to a project, delays in the construction process increased costs and unsatisfactory solutions.		Increase in traffic accidents
Health Issues Impacts include:	Community Relations	opposition to a project, delays in the construction process increased costs and
	Health Issues	Impacts include:

Activity	Potential Impacts
	Spread of disease due to poor housekeeping and accumulation of domestic waste within the construction site
	Stagnant water may result in mosquitoes breeding.
	Unsafe sex conduct could bring the HIV/AID risk to the local communities.
	Illnesses brought by outside construction workers.
Cumulative Impacts	Cumulative impacts can be defined as impacts, which potentially develop from the combined impacts of more than one project or large scale program occurring within the same area of influence and time span. In such cases, cumulative impacts will have to be assessed based on the combined effects of potential impacts from the various program inputs. The other projects or activities contributing to the cumulative impact may be outside of the purview of the subproject sponsor's responsibility or influence; nonetheless, such impacts need to be identified in the subproject ESIA. The identification of cumulative effects may signal that the significance rating of a given project-related impact should be elevated and more careful management attention paid by the subproject sponsor.
	The cumulative impacts of IPFF type subprojects are likely to fall along the following environmental parameters:
	Change in land use
	Traffic
	Industrial wastewater effluent
	Solid waste disposal
	Noise.

11.2 Social Impact Assessment

The Social Impact Assessment (SIA) is one of the primary requirements of the project sponsor in order to comply with social requirements for a World Bank-assisted project. The project sponsor should use social impact assessment specialists for the SIA.

11.2.1 Identifying Social Impact Assessment Variables

This is another important consideration before conducting the SIA, as this incorporates the local characteristics of the project affected areas and establishes a baseline for variables that would be used to collect data. A general list of social variables is given below:

- (a) **Population characteristics:** present population and expected change, ethnic and racial diversity, and influxes and outflows of temporary residents as well as the arrival of seasonal or leisure residents.
- (b) **Community and institutional structures:** the size, structure, and level of organization of local government including linkages to the larger political system
- (c) **Political and social resources:** distribution of power authority, the interested and affected publics, and the leadership capability and capacity within the community.
- (d) Individual and family changes: factors, which influence the daily life of the

individuals and families, including attitudes, perceptions, family characteristics and friendship networks.

(e) **Community resources:** patterns of natural resource and land use; the availability of housing and community services.

The Table 11.2 gives a matrix relating project stage to Social Impact Assessment Variables.

Table 11.2. Social Impact Assessment Variables Matrix

	Social Impact Assessment Variable	Pre- Construction	Implementation/Construction	Operation/Mai ntenance
i.	Population Characteristics			
ii.	Population change			
iii.	Ethnic and racial distribution			
iv.	Relocated populations			
v.	Influx or outflows or temporary workers			
vi.	Seasonal residents			
vii.	Community and Institutional Structures			
viii.	Voluntary association			
ix.	Interest group activity			
х.	Size and structure of local government			
xi.	Historical experience with change			
xii.	Employment/income characteristics			
xiii.	Employment equity of minority groups			
xiv.	Local/regional/national linkages			
XV.	Political and Social Resources			
xvi.	Distribution of power and authority			
xvii.	Identifications of stakeholders			
xviii.	Interested and affected publics			
xix.	Leadership capability and characteristics			
XX.	Individual and Family Changes			
xxi.	Perceptions of risk, health, and safety			
xxii.	Displacement/relocation concerns			
xxiii.	Trust in political and social institutions			
xxiv.	Residential stability			
XXV.	Community Resources			
xxvi.	Change in community infrastructure			

Social Impact Assessment Variable		Pre- Construction	Implementation/Construction	Operation/Mai ntenance
xxvii.	Land use patterns			
xviii.	Effects on cultural, historical, and archaeological sites			

11.2.2 Combining Social Impact Assessment Variables, Project Stage, and Setting

Social impact specialists engaged by the project sponsor will construct a matrix to that will serve as a guide for their assessing of significant social impacts. For each project stage, the assessor should identify potential impacts on each social variable identified in the matrix. This approach ensures that no critical areas are overlooked. The analytical procedures would be repeated for *each of the SIA variable* for *each stage of the project*. The procedures for accomplishing these tasks are outlined below.

11.2.3 Steps in the Social Impact Assessment Process

The process in the social assessment is described below in 10 steps.

- (a) **Public Involvement**: Develop an effective public Involvement plan to involve all potentially affected publics. Requires identifying and working with all potentially affected groups starting at the very beginning of planning for the proposed action.
- (b) **Identification of Alternatives**: Describe the proposed action of policy change and reasonable alternatives. The proposed action is described in detail to begin to identify the data requirements needed from a project proponent (World Bank) to frame the SIA
- (c) **Baseline Conditions**: Describe the relevant impact zone/area of influence and baseline conditions. These are the existing conditions and past trends associated with human environment in which the proposed activity is to take place.

The Base conditions would include the following set aspects of human environment:

- (i) Relationship with the biophysical environment
- (ii) Historical background: including initial settlement and subsequent shifts in population
- (iii) Political and social resources
- (iv) Culture, attitudes and socio-psychological conditions
- (v) Population characteristics including the demographics of relevant groups (including all significant stakeholders and groups)
- (d) **Scoping**: Identify the full range of probable social impacts that will be addressed based on discussion or interviews with numbers of all potentially affected. After initial scoping, the social impact assessor (social impact specialist engaged by the project sponsor) selects the SIA variables for further assessment situations.

Considerations need to be given to both the impacts perceived by the project sponsor/executing agency (as the case may be) and to those perceived by the affected groups and communities through consultations.

The principal methodology employed here is reviews of the existing social science literature, public scoping, public surveys, and public participation techniques. It is a requirement of OP 4.12 that views of affected people are taken into consideration.

Relevant criteria for selecting impacts include:

- (i) Probability of the event occurring
- (ii) Number of people including indigenous populations that will be affected
- (iii) Duration of impacts (long-term vs. short-term)
- (iv) Value of benefits and costs to impacted groups (intensity of impacts)
- (v) Extent that the impact is reversible or can be mitigated
- (vi) Likelihood of causing subsequent impacts
- (vii) Relevance to present and future policy decisions
- (viii) Uncertainty over possible effects
- (ix) Presence or absence of controversy over the issue.
- (e) **Projection of Estimated Effects-Investigate the probable impacts:** The probable social impacts will be formulated in terms of predicted conditions without the actions (baseline projection); predicted conditions with the actions; and predicted impacts which can be interpreted as the differences between the future with and without the proposed action. Investigation of the probable impacts involves five major sources of information:
 - (i) Data from project proponents
 - (ii) Records of previous experience with similar actions as represented in reference literature as well as other SIA's.
 - (iii) Census and vital statistics
 - (iv) Documents and secondary sources
 - (v) Field research, including informant interviews, hearing, group meetings, and surveys of the general population.

The record of previous experience is very important to the estimation of future impacts. Expert knowledge of the social impact specialists is used to enlarge this knowledge base and to judge how the study case is likely to deviate from the typical patterns.

(f) **Predicting responses to impacts:** This determines the significance of the identified social impacts. After direct impacts have been estimated the Social Impact Specialist must next estimate how the affected people will respond in terms of attitude and actions. The actions of affected groups are to be estimated using comparable cases

- and interviews with affected people about what they expect to do.
- (g) **Indirect and Cumulative Impacts**: This estimates subsequent impacts and cumulative impacts. Indirect impacts are those caused by the direct impacts; they often occur later than the direct impacts, or further away. Cumulative impacts are those impacts which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions regardless of which agency or person undertakes them.
- (h) **Changes in Alternatives**: Recommend new or changed alternatives and estimate or project their consequences. Each new alternative or recommended change should be assessed separately. Here more innovative alternatives and changes probably should be presented in an experimental structure.
- (i) **Mitigation**: Develop a mitigation plan. A SIA should identify means to mitigate adverse impacts. These measures include avoiding the impact by not taking or modifying an action; minimizing, rectifying, or reducing the impacts through the design or operation of the project; or compensation for the impact by providing substitute facilities, resources, or opportunities
- (j) **Monitoring and Impact Evaluation**: Develop a monitoring and impact evaluation plan. A monitoring and impact evaluation program should be developed for identifying deviations from the proposed action and any important unanticipated impacts. A monitoring plan should be developed to track project and program development and compare real impacts with projected areas.

11.2.4 Mitigation of Social Impacts

Impact mitigation includes the principles, procedures and mitigation measures that are relevant and suitable to the project for ensuring the most appropriate environmental mitigation and enhancement plans applicable during different stages of project implementation. Environmental and social impacts of the subprojects can broadly be classified as those taking place during preconstruction, construction and operational phases.

Table 11.3. List of Probable Impacts during Various Phases of the Project

Pre-Construction	Construction	Operation and Maintenance
 Site Surveys & Investigations Inducement of uncertainties relating to land acquisition Stimulation of new construction to obtain higher compensation 	 Contractors' Camps Employment Employment opportunities for local population Conflicts between the imported workers and local population Risk of HIV/AIDS and other transmittable diseases Inducement of traffic congestion & related road safety hazards 	Increased employment opportunities Increased economic activity
Land & Property Acquisition	Clearance of Site	

Pre-Construction	Construction	Operation and Maintenance
Loss of and displacement from homestead land Loss of agricultural land and other productive assets Loss of business/commercial land or premises Loss of public buildings and facilities Loss of cultural heritage/Resources Loss of sensitive habitats	Interference with utility services	
Construction Materials Loss of and displacement from productive land Waterborne disease risks/Safety hazard on abandonment Visual alteration in landscape quality		
Construction Traffic Damage to road pavement & structures Increased traffic congestion & related road safety hazards.		

11.3 Environment and Social Management Plans

The Environmental and Social Management Plan (ESMP) clearly laid out: (a) the measures to be taken during both construction and operation phases of the project to eliminate or offset adverse environmental impacts, or reduce them to acceptable levels; (b) the actions needed to implement these measures; and (c) a monitoring plan to assess the effectiveness of the mitigation measures employed.

The following table provides generic examples of common mitigation measures for various identified impacts which would be found in a typical Environmental and Social Management Plan (ESMP). The table should be considered as generic guidance only; actual mitigations and management measures will need to be confirmed on a subproject basis as part of the ESIA process.

Table 11.4. Generic Example Mitigation Measures in ESMP

Issue	Key Principle/Mitigation Standard	Mitigation Measures
General Issues:		
Water supply affecting ecology or neighboring	Camp to provide its own water supply that does not	Any water supply sources should be located so that it does not adversely affect the villages supply.

Issue	Key Principle/Mitigation Standard	Mitigation Measures
community water supply.	affect village water supply.	The intake of water from streams for water supplies should leave residual flows in the watercourses. Storage tanks should be used to buffer water supplies.
Wastewater discharges affecting water quality	Wastewater to be treated prior to discharge.	Sewerage disposal methods should be designed to the standards outlined by the government
Solid waste polluting the environment and causing health hazards	No waste to be burnt or buried on site.	All solid wastes shall be removed from site and disposed of at a landfill.
General Construction Issue	es:	
Noise of machinery associated with construction activities	Noise must not unreasonably intrude on traditional village life.	Keep a current list of all noise producing machinery and noisy activities Operate machinery only during designated hours in agreement with local communities Adopt a complaint mechanism that will enable capturing and addressing issues upfront Work to be carried out in daylight, in typical working hours. Concrete batching plants and other noisy equipment to be located as far as practical from settlements
Dust generation from construction activities	Dust must not cause a hazard or nuisance to village life.	Dusty operations to occur only during designated hours. Adopt complaint mechanism Concrete batching plants and other dusty equipment to be located as far as practical from settlements.
Vibration disturbance from construction activities	Vibration must not unreasonably intrude on traditional village life.	Keeps a list of all vibration producing machinery and activities causing vibration. This machinery operation to occur only during designated hours (to be confirmed by contractor in agreement with villages). Use of complaints register and procedures to address issues as they arise.
Increased utilization of roads by traffic associated	There should be no significant increased risk	Road upgrades, including signage, speed humps, regrading.
with construction activities	to local populations from traffic associated with the	Training of locals regarding the hazards of traffic.
	development.	Training of vehicle drivers regarding the driving risks through villages and along remote roads.
		Use of complaints register and procedures to address issues as they arise.
Pollution risk activities occurring on site	Develop appropriate storage, transport and use	Keeps a current list of all potentially contaminating materials used on site.
	practices for storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers.	Develop and implement appropriate storage, transport and use practices to recognized standards. Solid waste disposal shall be taken off site.
	There shall be no solid or	

Issue	Key Principle/Mitigation Standard	Mitigation Measures
	liquid waste disposal directly or indirectly to any water course (whether flowing or not).	
Excavation and Blasting:		
Noise disturbance of local populations	Noise must not unreasonably intrude on traditional village life.	Keep lists of all noise producing equipment. This machinery operation to occur only during designated hours (to be confirmed by contractor in agreement with villages). Blasting to occur at the same time each day, and / or a warning siren should sound prior to blasting.
Vibration disturbance of local populations	Vibration must not unreasonably intrude on traditional village life.	Keep current lists of all vibration producing machinery This machinery operation to occur only during designated hours (to be confirmed by contractor in agreement with villages). Blasting to occur at the same time each day, and / or a warning siren should sound prior to blasting
Material Stockpiling:		
Runoff of suspended sediments from stockpiles	Stockpiling activities should not give rise to storm water containing elevated suspended solids. Provide treatment to achieve 75% reduction in suspended solids.	No direct discharge of sediment laden water without treatment. Stockpiles should be compacted as much as practical and not be exposed for extended periods. Storm water should be diverted around stockpiles.
Dust generation from stockpiles	Dust must not cause a hazard or nuisance to village life.	Stockpiles should be compacted and not exposed for extended periods. Stockpiles should be reused as soon as practicable.
Soil / Overburden Remova	al and Placement:	
Generation of suspended solids from bare ground and runoff into watercourses	Development activities should not give rise to storm water containing elevated suspended solids. Provide treatment to achieve 75% reduction in suspended solids.	No direct discharge of sediment laden water without treatment. Earthworks and land clearance should be minimized and phased. Any discharges to watercourses should occur during high flow and / or discharged as close to the outfall as possible to maximize mixing. Stockpiling should occur at least 10m from a water course. Re-vegetation of exposed areas as soon as practicable. Timing of works around the drier seasons where possible. Provision of storm water cut off drains wherever possible.
Introduction of invasive species	Fill material should not contain invasive species.	The use of imported fill shall be minimized. Machinery should be cleaned prior to working on site to reduce the opportunity of the spread of weed seeds.

Issue	Key Principle/Mitigation Standard	Mitigation Measures
Disturbance of natural habitats for spoil / alluvial material.	Soils should be reused where possible in the development – to reduce the need for spoil sites and the need to import fill.	Stockpile and reuse soils before excavating new soils / alluvium.
Efficiency of control measures over time	Control measures should continue to work appropriately throughout the construction period.	Earthworks control measures should be inspected and maintained in efficient operating condition over the construction period.
Concrete Manufacture:	T	
Contaminants in water discharged from concrete manufacturing, including rise in pH.	No direct discharges of concrete batching water to any water course. Provide treatment prior to discharge to achieve 75% reduction in suspended solids.	Settlement ponds and / or sediment infiltration gallery. Monitoring immediately upstream and 50m downstream of the discharge with a clarity tube to estimate any effects on clarity; for pH to detect alkali discharges. Any storm water discharges to watercourses should occur during high flow and / or discharged as close to the outfall as possible to maximize mixing. Water to be reused where possible in the process. Procedures for handling of un-hydrated cement material and wet cement to avoid spills.
Community nuisances.	Noise and dust must not unreasonably intrude on traditional village life.	Concrete batching plants and other noisy / dusty equipment to be located as far as practical from villages.
Fuel Storage and Use:		
Pollution risk associated with the storage and use of fuels for all plant, generators and vehicles	No oil, lubricants, fuels or containers should be drained or dumped to ground or waterways. Accidental spills shall be minimized, and procedures put in place to clean up the environmental damage.	Keep a current list of all fuels stored on site. Keep the Safety Data Sheet of all hazardous materials used on site. Develop appropriate storage, transport and use practices to recognized standards. Diesel to be stored in truck tankers or in overhead tanks to a maximum of 5000 liters. Diesel to be stored on flat ground, and 100m from a waterway. Dikes to capture 100% of fuel must be placed around fuel storage areas. All refueling of vehicles and plant to be done on flat ground. All significant vehicle and plant maintenance shall be undertaken offsite where possible. Spill kits and emergency procedures should be used and staff trained. There shall be no deliberate discharge of oil, diesel, petrol or other hazardous materials to the surrounding soils and waterways.
Works in and near Rivers: Sediment discharges	Work in the wetted area of	Stabilize works at the end of each working day and
arising from working in	the riverbed should be	prior to storm events.

Issue	Key Principle/Mitigation Standard	Mitigation Measures
and near the river. For blasting in or near the river, refer to the blasting issues, above.	minimized, and only in relation to the construction of the power house, weir and intake structure or to insert culverts for stream crossings.	Do the work during low flow periods. Works shall be minimized. Diversion of the river around the work area where possible.
Village impacts:		
Key Considerations for a Communication Strategy to avoid deterioration of current quality of life and traditional livelihoods	Communication channels are established between Villagers, Construction Supervisors, and state PCUs to facilitate information flow and easier process for lodging complaints	Set up a communication network for discussing issues between Construction supervisors Contractors and the villagers and the state PCUs built on recognized negotiation structures Construction Supervision Consultant and the Contractors will have an Environmental Specialist on site to ensure daily conformance with environmental health and safety guidelines and to respond to complaints A Health Program to be included in the Contractor's Construction and Workers Camp Management Plan. This will be made available to the communities Education and orientation of outside workers to local culture and social norms before the start of work. Camps to be self-sufficient in resources and services. (refer to the workers camp table below) Villagers shall be adequately informed of all potential hazards to health and safety with regards to increased traffic, blasting, machinery operation.
Traffic causing safety risks to road users	Construction traffic will be managed to minimize the impact on existing road users.	Signage to be used to identify current risks to road users. Construction Supervision consultancy and Contractors to discuss major traffic issues with village representatives prior to the event to discuss course of action. Heavy traffic to avoid the hours when school children walk to and from school.
Sediment affecting river water uses.	Sediment discharges to the river shall be minimized.	Refer to the sections above discussing erosion and sediment control.

The table below provides another example of how an ESMP typically would present the association between project activities, their impacts, the specified mitigation measures,

institutional arrangements and costs for their implementation.

Table 11.5. Example ESMP Responsibilities and Costs

Project Activity	Potential Impacts	Proposed Mitigation Measures	Institutional Responsibility	Estimated Costs (Example Only)
Use of land within power plant construction area, along gas pipeline route, and along the transmission line route	Damage to vegetation	Appropriate clearing techniques (hand clearing, not mechanized clearing) will be utilized. Any trees of protected species will be relocated. In case relocation is not possible, the project developer will pay a special fee to the local environmental fund.	Contractor/ Plant Operating Company	US\$10,000
Use of land within power plant construction area, along gas pipeline route, and along the transmission line route	Loss of fertile topsoil and soil erosion	Fertile topsoil will be removed, stored in an isolated area away from construction activities, and covered with plastic to prevent runoff/erosion. Upon construction completion, topsoil will be returned and the area revegetated with plants similar to the original vegetation/native to the area.	Contractor/ Plant Operating Company	US\$20,000
Construction works	Air pollution by dust	When necessary, construction site will be sprayed with water, particularly during hot, dry, windy conditions.	Contractor/ Plant Operating Company	US\$2,000
Construction works	Noise from construction works	Construction will be confined to normal work-hours (8AM to 6PM). If construction must be conducted before/after these hours, local public will be notified at least one week in advance.	Contractor/ Plant Operating Company	_

The following table meanwhile provides an example for a Monitoring Plan, which is another critical component of the ESMP:

Table 11.6. Example of ESMP Monitoring Plan (Construction Phase)

Potential Environmental Impacts	What Parameter Is to Be Monitored?	Where Is the Parameter to Be Monitored?	How Is the Parameter to Be Monitored?	When Is the Parameter to Be Monitored?	Institutional Responsibility	Estimated Costs (Example Only)
Damage to vegetation	Clearing techniques and relocation procedures utilized; record of fees to environmental fund	Power plant site, pipeline and transmission line routes	Visual and by comparison with pre-construction photo survey	Monthly throughout construction period	Project sponsor (possibly engaging third- party monitoring agency)	US\$15,000
Loss of fertile topsoil and soil erosion	Soil storage procedures and location	Soil storage sites	Visual	Weekly during site preparation and construction period	Project sponsor (possibly engaging third- party monitoring agency)	US\$10,000
Air pollution by dust	Dust level	All active construction sites	Visual	During construction	Project sponsor (possibly engaging third- party monitoring agency)	US\$12,000
Noise from construction works	Noise level, dB[A]	All active construction sites	Measurements by a licensed organization using certified measurement devices	During construction	Project sponsor (possibly engaging third- party monitoring agency)	US\$15,000

11.4 Project Specific Example of ESMP

Gas Fired Power Generation Project

Environmental management and monitoring activities for gas fired power plant project could be divided into management and monitoring: (a) during construction phase, and (b) during operation phase.

The environmental management during the construction phase should primarily be focused on addressing the possible negative impacts arising from: (a) Generation and disposal of sewage, solid waste and construction waste, (b) Increased traffic, (c) Generation of dust (particulate matter), (d) Generation of noise, and (e) Deterioration of water quality and disturbance of river bed ecosystem from possible gas pipe line construction. The environmental management should also focus on enhancing the possible beneficial impacts arising from employment of local workforce for construction works.

The table below summarizes the potentially significant environmental impacts during construction phase, the measures needed to eliminate or offset adverse impacts and enhance positive impacts. The environmental management during the operation phase should primarily be

focused on addressing the following issues: (a) Emission from the power plant, (b) Generation of noise, and (c) Waste generation at the plant.

Table 11.7. Significant Environmental Impact during Construction Phase and Mitigation Measures

Activity/Issues	Potentially Significant Impacts	Proposed Mitigation and Enhancement Measures	Responsible Parties
Influx of Works	Generation of sewage workers and solid waste	 Construction of sanitary latrine and septic tank system Erecting "no litter" sign, provision of waste bins/cans, where appropriate Waste minimization, recycle and reuse Proper disposal of solid waste 	Contractor (Monitoring by PIU of IE)
	Possible spread of disease from workers	 Clean bill of health a condition for Employment Regular medical monitoring of workers 	
Transportation of equipment, materials and personnel; storage of materials	 Increased traffic/navigation Generation of noise, especially affecting the nearby school and residential areas 	 Scheduling of deliveries during non school hours and after regular working hours School going children should be protected from traffic hazard during construction phase, with installation of proper traffic sign and warnings Speed reduction to 10 km per hour within the Siddhirganj complex 	Contractor (Monitoring by PIU of IE)
	Deterioration of air quality from increased vehicular movement, affecting people in the surrounding areas	Keeping vehicles under good condition, with regular checking of vehicle condition to ensure compliance with national standards	
	• Wind-blown dust from material (e.g., fine aggregate) storage areas	 Watering unpaved/dusty roads Sprinkling and covering stockpiles Covering top of trucks carrying materials to the site and carrying construction debris away from the site 	
Construction activities, Including operation of construction	Generation of noise from construction activities (general plant and access road construction), especially affecting the nearby school	 Use of noise suppressors and mufflers in heavy equipment Avoiding, as much as possible, construction equipment producing excessive noise during school hours and also at night 	Contractor (Monitoring by PIU of IE)

Activity/Issues	Potentially Significant Impacts	Proposed Mitigation and Enhancement Measures	Responsible Parties
equipment	and residential areas	Avoid use of noisy equipment such as stone crusher at the project site	
		• Avoiding prolonged exposure to noise (produced by equipment) by workers	
		Creating a buffer zone between the school and construction site to reduce disturbance to normal schooling and to protect school children from health hazard	
	• Deterioration of air quality from windblown dust and	Not using equipment such as stone crushers at site, which produce significant amount of particulate matter	
	possible use of equipment, such as stone (aggregate) crushers	 Immediate use of construction spoils as filling materials Immediate disposal/sale of excavated materials Continuous watering of bare areas 	
	Generation of construction waste	Hauling of construction debris away from the site and their appropriate disposal in a sanitary landfill	
	• Accidents	Regular inspection and maintenance of equipment	
		Environmental health and safety briefing	
		Provision of protective gear	
	Spills and leaks leading to soil and water contamination with hydrocarbon	Good house keeping	
		Proper handling of lubricating oil and fuel	
	and PAHs	Collection. proper treatment, and disposal of spills	
	Employment of force work labor/force	Local people should be employed in possible the project activities as much as possible.	
Possible gas pipeline construction across the river	 Deterioration of river water quality Disturbance of fish movement and 	 Regular monitoring of fisheries resources Provision of fish-friendly structures 	Contractor (Monitoring by PIU)
nearby	breeding		

The table below summarizes the potentially significant environmental impacts during operation phase, the measures needed to eliminate or offset adverse impacts and enhance positive impacts. A "Project Implementation Unit" of IE, which has been recommended in the section 3.4.2 of this ESMF, at the power plant complex in order to implement the ESMP.

Table 11.8. Significant Environmental Impact during Operation phase and Mitigation Measures

Activity/Issues	Potentially Significant		
	Impacts	Measures	Parties
Power Generation	• Emission from the	• Using tall stack	PIU of IE
	power plant	Using low nitrogen oxide burners	
		Installation of stack emission	
		monitoring equipment for major	
		pollutants	
		Planting of indigenous trees around	
		the project site, especially along the	
		boundary of the school and residential	
		areas located close to the project site	
		Restrictions may also be imposed on	
		installation of industries in the area	
		that emit significant amount of	
		articulate matter.	
	• Generation of noise	Provision of silencers for generators and	
		turbines	
		Planting of indigenous trees around the	
		project site	
		Regular plant maintenance	
		Regular noise monitoring, especially at	
		the school and residential quarters	
		located close by	
		• Use of ear-muffs and ear-plugs by plant	
		personnel working in the generator and	
		turbine facilities of the plant	
Water	Depletion of	Regular monitoring of groundwater	PIU of IE
	groundwater resources	level	FIUULE
Consumption			
Wasta samanti :	• Inappropriate disposal of	Good housekeeping	DILLACIE
Waste generation	sewage causing	Proper construction and maintenance of	PIU of IE
	environmental pollution	wastewater disposal system for the plant	
	Generation of solid	premises	
	waste including sludge	• Ensuring proper storage treatment, and	
	from demineralizer.	disposal of all solid waste	

ANNEXES

ANNEX 1. DEPARTMENT OF ENVIRONMENT CATEGORIZATION

Depending on the extent of impact on the environment, industries and projects are classified in four different categories under the ECR 1997. The four categories are:

- (1). Green;
- (2). Orange A and;
- (3). Orange-B;
- (4). Red

While DoE categories, as described below, determine GoB requirements for EIA/ ESIA, it should be noted that where ESIA is not required by the national law but required by the World Bank, the latter requirement will prevail.

Green Category

Projects, which do not have any negative impact on the environment, belong to Green category.

Orange A Category

Orange category includes those projects that produce such wastes that can produce moderate or significant impacts on environment but the impacts could be mitigated easily if proper action is undertaken. Depending on the nature and extent of impacts the projects under Orange category has been sub-divided into two sub-categories-Orange A and Orange B.

The projects/industries categorized under "Orange-A" are likely to produce some wastes but those are not harmful for surrounding environment and can be managed easily.

Orange B Category

The "Orange-B" category projects/industries are those likely to produce adverse environmental impacts but not to any significant level and that the impacts can be mitigated with no residual adverse impacts.

Orange B category projects need to conduct IEE which help in understanding the potential extent of environmental impacts. IEE of the project or industry reveals that further investigation is needed, the sponsors will have to carry out a detailed EIA.

Red Category

This category includes industries, first requiring IEE for the purpose of obtaining site clearance, and then EIA, for obtaining environmental clearance (ECC). In this case also an application has to be made in a prescribed format along with an IEE report, on the basis of which site clearance may be granted with suitable conditions or the project may be rejected, on grounds of unsuitable location. If the site clearance is granted, the project proponent can go ahead with implementation of the project subject to the conditions as may be stipulated while granting the site clearance.

List of Different Categories of Industrial units or projects are shown in Annex- A

DoE issues the following clearances to the sponsors depending on the category of the project

(Table A1.1):

- (a) Issuing Site Clearance Certificate (SCC) for Orange-A, Orange-B and Red category projects, on basis of Initial Environmental Examination (IEE).
- (b) Approving TOR for EIA, and completed EIA, for Red category projects, and
- (c) Issuing Environmental Clearance Certificate (ECC) for all category projects.

Table A1.1. DoE Categorization of Industries

Project Category	DoE Certificate	Documents to be Submitted	
Green	ECC	i. Application (in Form-3)	
		ii. Necessary treasury challan	
		iii. General information on the industry	
		iv. Raw materials & finished products	
		v. Registration certificate from BOI (if applicable)	
		vi. NOC from local authority	
		vii. Land ownership/ rental deed etc (if applicable)	
		viii. Rehabilitation Action Plan (RAP) if applicable	
Orange-A	SCC, ECC	i. Application (in Form-3)	
		ii. Same documents, as required for Green Category projects	
		iii. Additional documents: process flow diagram, layout plan waste	
		discharge, treatment and disposal arrangement etc.	
		iv. Rehabilitation Action Plan, if applicable	
Orange-B SCC, ECC		i. Application (in Form-3)	
	ii. Same documents, as required for Green Category projects. Additional documents: Initial Environmental Examination (IEE)		
		iii. Feasibility Report, Information / report as specified in the	
		iv. checklist given in the IEE eg. map, process flow diagram, layout plan showing waste discharge, treatment and disposal arrangement.	
		v. Rehabilitation Action Plan, if applicable	
Red	SCC,	i. Application (in Form-3)	
	Approval of	ii. Feasibility Report (applicable only for new industries)	
	EIA, ECC	iii. IEE Report including TOR for EIA	
		iv. Process flow Diagram	
		v. Layout Plan with location of facility	
		vi. Drawing of the facility	
		vii. Time Frame (for new industries only)	
		EMP along with process flow diagram, layout Plan with facility location & facility Scheme (for Existing Industry only)	
		ix. Pollution Abatement Plan and emergency Plan	
		x. NOC from local Authority	
		xi. Rehabilitation Action Plan, if applicable.	

List of Industries/Projects under Different Categories as per ECR 1997

Schedule - 1

Classification of Different Industrial Units or Project

Based on Impact & Location

[(vide Rule 7 (2)]

A. Green Category

- 1. TV, Radio, etc. Assembly & Manufacture
- 2. Watch Manufacture & Assembly
- 3. Telephone Assembly
- 4. Toy Manufacture Assembly
- 5. Book Binding
- 6. Rope, Mat, Floor Mat (Cotton, Jute & synthetic)
- 7. Photography (except cinematography & x-ray)
- 8. Imitation Leather Product
- 9. Motor Cycle, Bicycle, Toy Bicycle Assembly
- 10. Scientific & Mathematical Instrument Assembly (except manufacture
- 11. Musical Instrument
- 12. Sports Goods (except plastic products)
- 13. Tea Packaging (except processing)
- 14. Powder Milk Repacking (except manufacture)
- 15. Bamboo & Cane Product-,
- 16. Artificial Flower (except plastic)
- 17. Pen & Ball Pen
- 18. Jewellery (shop only, except manufacture)
- 19. Candle
- 20. Medical & Surgical Goods (except manufacture)
- 21. Cork Product Manufacturing plant (except metal product
- 22. Laundry (except washing)

Note:

- All Cottage Industries in industrial schedule except those listed above shall be outside Environmental Clearance requirement (Cottage Industry means industrial manufacture or service by full or part time work of family members and limited to investment ceiling of TK. 500, 000 only);
- 2 No industry listed above may be located in residential area.
- 3 As far as possible location of industrial unit in industrialised or designated industrial area or moderately open space is desirable.
- 4 Location of industrial unit likely to emit it unacceptable limit of noise, smoker or bad odor in commercial area is not permissible.

B. Orange A Category

- 1. Cattle Farm (below 10 animals in city & below 20 in rural area)
- 2. Poultry (upto 250 birds in city & 1000 in rural area)
- 3. Whole Flour, Rice, Turmeric, Pepper Milling. Pulse Grinding/Milling upto 20 horse power)
- 4. Weaving & Handloom
- 5. Shoe & Leather Goods Manufacture (upto capital of fk. 500,000)
- 6. Saw Mill
- 7. Wood, Iron/Steel, Aluminium etc. Furniture (upto capital of Tk. 500,000).
- 8. Printing; Press
- 9. Plastic & Rubber Goods (except I'VC)
- 10. Restaurant
- 11. Carton/Box Manufacture/printing & Packaging
- 12. Cinema Hall
- 13. Dry Cleaning
- 14. Imitation Leather Goods Manufacture (upto capital of Tk, 500.000),
- 15. Sports Goods
- 16. Salt. Manufacture (upto capital of Tk. 1000,000)
- 17. Agriculture Machinery & Equipment
- 18. Industrial Machinery & Equipment.

- 19. Jewelry Manufacture
- 20. Pin, Gem Clip
- 21. Spectacles' Frame
- 22. Comb
- 23. Brass, Bronze, Utensil, Souvenir Manufacture
- 24. Biscuit & Bread Manufacturing Plant (upto capital of Tk. 500,000).
- 25. Chocolate & Lozenge Manufacturing Plant (upto capital of Tk. 500,000).
- 26. Wooden, Boat Building.

C. Orange B Category

- 1. PVC Products
- 2. Synthetic Fiber (Raw Material)
- 3. Glass Factory
- 4. Life Saving Drug (applicable to formulation only)
- 5. Edible Oil
- 6. Coat Tar
- 7. Jute Mill
- 8. Hotel, Multistory Commercial & Apartment Building
- 9. Foundry
- 10. Aluminium Product
- 11. Glue (except animal glue)
- 12. Brick/Tile
- 13. Lime
- 14. Plastic Product
- 15. Bottling Potable Water, Soft Carbonated Drink Manufacture & Bottling
- 16. Galvanising
- 17. Perfume, Cosmetics
- 18. Flour (large)
- 19. Carbon Rod
- 20. Stone Crushing, Cutting, Grinding
- 21. Fish, Meat, Food Processing

- 22. Printing & Writing Ink
- 23. Animal Feed
- 24. Ice Cream
- 25. Clinic & Pathology Laboratory
- 26. Clay, China clay, Crockery, Sanitary ware (ceramic)
- 27. Shrimp Processing
- 28. Water Treatment Plant
- 29. Metal Utensil/Spoon etc.
- 30. Sodium Silicate
- 31. Match
- 32. Starch & Glucose
- 33. Cattle Feed
- 34. Automatic Rice Mill
- 35. Motor Vehicle Assembly
- 36. Wooden Vessel Manufacture
- 37. Photography (X-ray & cinematography film studio work)
- 38. Tea Processing
- 39. Powder Milk, Condensed Milk, Dairy
- 40. Steel Rerolling
- 41. Wood Treatment
- 42. Soap
- 43. Refrigerator Repair
- 44. Metal & Machine Repair Shop
- 45. Engineering Workshop (upto capital of Tk. 1000000)
- 46. Spinning Mill
- 47. Electrical Cable
- 48. Cold Storage
- 49. Tyre Retreading
- 50. Motor Vehicle Repair Workshop (upto capital of Tk. 1000,000).
- 51. Cattle Farm, above 10 animals in city & above 20 in rural area
- 52. Poultry (above 250 birds in city & 1000 in rural area)
- 53. Whale Flour, Rice, Turmeric, Pepper Milling, Pulse Milling/Grinding (above

- 20 Horse Power)
- 54. Shoe, Leather Goods Manufacture (above capital of Tk, 500,000).
- 55. Wood, Iron/Steel, Aluminum etc. Furniture (above capital of Tk. 500,000).
- 56. Imitation Leather Goods Manufacture (above capital of Tk. 500,000)
- 57. Salt Manufacture (above capital of Tk. 100,000).
- 58. Biscuit & Bread Manufacturing Plant (above capital of Tk. 500,000).
- 59. Chocolate & Lozenge Manufacturing Plant (above capital of Tk. 500,000).
- 60. Clothing, Sweater Manufacturing
- 61. Apparel Washing
- 62. Power Loom
- 63. Road construction/Reconstruction/Extension (feeder road, local street)
- 64. Bridge construction/Reconstruction/Extension (below 100 meter length)
- 65. Public Toilet
- 66. Ship Breaking
- 67. G I Wire
- 68. Battery Assembly
- 69. Dairy & Food

Note:

- 1. No industry listed above should be located in residential area
- 2. As far as possible location of industrial unit in industrialised, or designated industrial area or moderately open space is desirable.
- 3. Location of industrial unit likely to emit unacceptable limit of noise, smoke, bad odor in commercial area is not permissible.

D. Red Category

- 1. Leather Processing (tannery)
- 2. Formaldehyde
- 3. Urea Fertilizer
- 4. TSP Fertilizer
- 5. Chemical Paint, Polish, Varnish, Enamel
- 6. Power Plant
- 7. All Mineral Projects (Coal, limestone, hard rock, natural gas, petroleum etc.)
- 8. Cement

- 9. Oil Refinery
- 10. Synthetic Rubber
- 11. Paper & Pulp
- 12. Sugar
- 13. Distillery
- 14. Fabric Dyeing & Chemical Treatment
- 15. Caustic Soda, Potash
- 16. Other Alkali
- 17. Iron & Steel Plant
- 18. Pharmaceutical Raw Materials, Basic Medicine
- 19. Electroplating
- 20. Photo Film, Paper & Chemical
- 21. Manufacture of Miscellaneous Products from Coal & Petroleum
- 22. Explosive
- 23. Acids & their Salts (Organic, Inorganic)
- 24. Nitrogen Compounds (cyanide, cyanamide etc.)
- 25. Plastic Raw Material Manufacture (PVC, PP/Steel, Polystyrene etc.)
- 26. Asbestos
- 27. Fiber glass
- 28. Insecticide, Fungicide & Pesticide
- 29. Phosphorus & its compounds
- 30. Chlorine, Fluorine, Bromine, Iodine & their compounds
- 31. Industrial gases (except nitrogen/oxygen & carbon dioxide)
- 32. Waste Insecticide
- 33. Other Chemicals
- 34. Arms
- 35. Nuclear Power
- 36. Liquor
- 37. Other Non-metallic Chemicals not mentioned above
- 38. Other Non-metals not mentioned above
- 39. Industrial Estate
- 40. Basic Industrial Chemicals

- 41. Non-ferrous Metal elements
- 42. Detergent
- 43. Earth Filling, Industrial/ Domestic/Commercial waste
- 44. Sewerage Treatment Plant
- 45. Life saving Drug
- 46. Animal Glue
- 47. Rat Filler
- 48. Refractories
- 49. industrial Gases (Oxygen, Nitrogen & Carbon dioxide)
- 50. Battery
- 51. Hospital
- 52. Ship Building
- 53. Tobacco processing Cigarette/Biri Manufacture
- 54. Metal Body Vessel Building
- 55. Wooden Body Vessel building
- 56. Refrigerator/ Air conditioner/ Air cooler manufacture
- 57. Tyre & Tube
- 58. Board Mill
- 59. Carpet
- 60. Engineering Workshop, above capital of Tk. 1,000,000
- 61. Motor Vehicle Repair Workshop, above capital of Tk. 1,000,000
- 62. Water Treatment Plant
- 63. Sewerage Pipeline laying/re-laying/extension
- 64. Water, Electricity, Gas Distribution System construction/re-construction/extension
- 65. Mineral Resources exploration/mining/distribution
- 66. Flood Control Dam, Polder, Dike etc. construction/reconstruction/extension (regional. national & international)
- 67. Road construction/reconstruction/Extension (regional, national & international)
- 68. Bridge construction/reconstruction/extension (width 100 meters or over)
- 69. Murate of Potash (manufacturing)

Note:

- 1. No industry listed above may, be located in residential area
- 2. As far as possible, location of industrial unit in industrialized, or designated industrial area, or moderately open space is desirable.
- 3. Location of industrial unit likely to emit unacceptable limit of noise, smoke, bad odor is not permissible.
- 4. After obtaining Location Clearance based on IEE Report, the EIA Report including time Frame and ETP Diagram have to be submitted subsequently as per approved programme outline.

ANNEX 2. DEPARTMENT OF ENVIRONMENT ENVIRONMENTAL CLEARANCE PROCESS

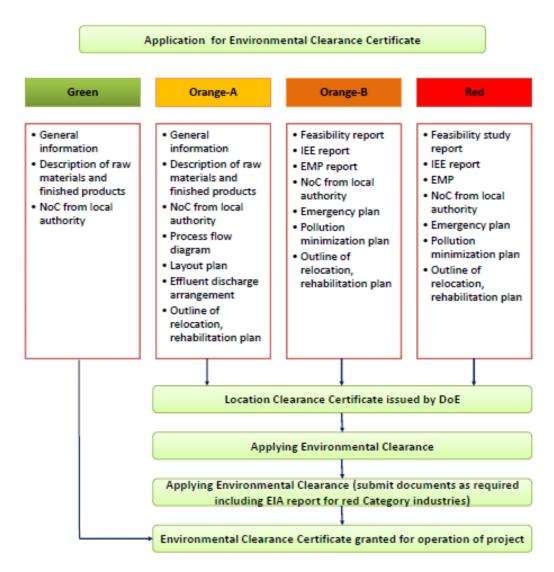
The Environment Conservation Rules (1997) describe the procedures for obtaining Environmental Clearance Certificates (ECC) from the Department of Environment (DoE) for different types of proposed units or projects. It also includes forms for obtaining clearance certificates and standards for pollution control. "EIA Guidelines for Industries" published by the DoE provides guidance on conducting Environmental Assessments. Any person or organization wishing to establish an industrial unit or project must obtain ECC from the Director General. The application for such certificate must be in the prescribed form together with the prescribed fees laid down in Schedule 13, through the deposit of a Treasury Challan in favor of the Director General. The DoE process for obtaining ECC is presented in Figure A2.1.

DOE authority reserves the right to request additional information, supporting documents, or other additional materials for the proposed project. Under the conditions specified in the ECR-97, the DoE divisional authority must issue environmental Location Clearance Certificates (LCC) within 60 working days from the date of submitting the application, or the refusal letter with appropriate reasons for such refusal. The LCC issued remains valid for a one-year period and is required to be renewed 30 days prior to its expiry date.

Green category industries are considered relatively pollution-free and therefore ECC is issued to all existing and proposed industrial units and projects, falling in the Green Category without undergoing EIA.

Orange category industries fall into two categories. Category Orange-A Industries are required to submit general information, a feasibility report, a process flow diagram and schematic diagrams of waste treatment facilities along with their application for obtaining ECC. Category Orange-B industries are required to submit an Initial Environmental Examination (IEE) report, along with their application and the information and papers specified for Category Orange-A industries.

Figure A2.1. Process for obtaining EC Certificate form DOE



Apart from general requirement, for every Red category proposed industrial unit or project, the application must be accompanied with feasibility report, Initial Environmental Examination (IEE), Environmental Impact Assessment (EIA) based on approved ToR by DoE, Environmental Management Plan (EMP). As per ECR-97 all existing industries/projects in Orange B and Red category require an Environmental Management Plan (EMP) to be prepared and submitted along with necessary other papers while applying for environmental clearance. The process for Red category clearance is presented in Figure A2.2 below.

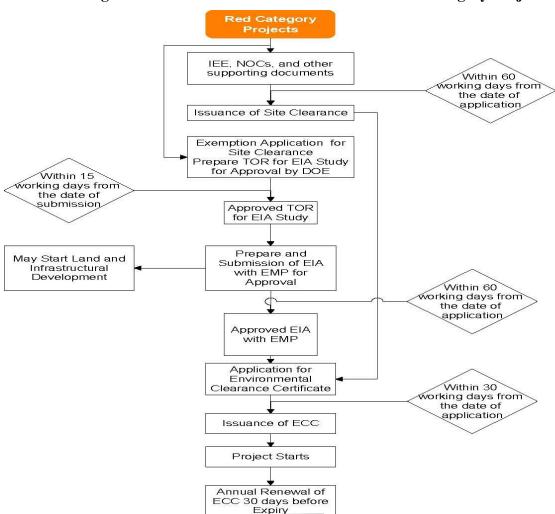


Figure A2.2. The DoE Clearance Process for Red Category Projects

ANNEX 3. BANGLADESH: NATIONAL AND INTERNATIONAL AREAS OF BIODIVERSITY IMPORTANCE IN BANGLADESH

Ecologically Critical Areas (Environmental Conservation Act 1995, amendment of 5 October 2010)

Table A3.1. Ecologically Critical Areas Declared By DOE

Ecologically Critical Areas (ECAs)	Total Area, (Ha)	Name of District	Name of Upazila	Name of Union/Pourashava	Name of Mouza
1. Sundarbans	7,62,034	Bagerhat, Khulna and Satkhira	Upazilas within 10 km peripheral distance of the identified reserve forest area.	Unions/ Poura-shavas under the Upazilas listed in the previous column.	Mouzas under the Unions/Pourashavas listed in the previous column.
2. Cox's Bazar-Teknaf sea beach	10,465	Cox's Bazar	Cox's Bazar	Cox's Bazar, Zilonja, and Khuruskul	Sea beach, sand rim, estuary, forest, wetland, etc. as recorded in the register of Land Revenue Dept., Cox'sBazar.
			Ramu	Khunia Palong	Jungle Khunia Palong, Jungle Dhoa Palong, Pecher Deep and Jungle Gorasia Palong.
			Ukhia	Ukhia and Zalira Palong	Zalira Palong and Inani
			Teknaf	Teknaf, Bahar Chara and Sabrang	Teknaf (excluding Bazar and Border Check post), Silkhali, Sabrang, Shah Porar Deep (excluding border check post) and Bordayle
3. Saint Martin Deep (island)	590	Cox's Bazar	Teknaf	Saint Martin Deep (island)	Narikel Jinjira
4.Sonadia Deep (island)	4,916	Cox's Bazar	Moheshkhali	Kutubjum	Sonadia, Ghoti Bhanga (part)
5.Hakaluki Haor	18,383	Moulvi Bazar and Sylhet	Borolekha, Kulaura, Fenchuganj and Golapganj	Sujanagar, Barni, Talikpur, Poschimjuri, Jafarnagar, Boromchol,	Water bodies, recorded as Beel in the register of Land Revenue Department, located in all

Ecologically Critical Areas (ECAs)	Total Area, (Ha)	Name of District	Name of Upazila	Name of Union/Pourashava	Name of Mouza
				Boksimali, Vatera,	Mouzas/part of
_	_	_		Gilachhara, Uttar Bade Pasa and Sharifganj	Mouzas under the jurisdiction of Unions listed in the previous column.
6.Tanguar Haor	9,727	Sunamganj	Taherpur and Dharmopasa	Uttar Srepur, Dokkhin Srepur, Uttar Bonsikundi and Dokkhin Bonshikundi	Water bodies, recorded as Beel in the register of Land Revenue Department, located in all Mouzas/part of Mouzas under the jurisdiction of Unions listed in the previous column.
7.Marjat Baor	200	Jhenaidah	Kaliganj	Water bodies, recorded as Beel in the register of Land Revenue Department, located in all Mouzas/part of Mouzas under the jurisdiction of Unions listed in the previous column.	Water bodies, recorded as Beel in the register of Land Revenue Department, located in all Mouzas/part of Mouzas under the jurisdiction of Unions listed in the previous column.
8.Gulshan-Baridhara Lake	101	Dhaka		Dhaka	Urban Wetland
9.Buriganga	7607 (Total area of 4 rivers	Dhaka	_	Dhaka	River
10.Turag	_	Dhaka	_	Dhaka	River
11.Sitlakhya	_	Dhaka		Dhaka	River

Ecologically Critical Areas (ECAs)	Total Area, (Ha)	Name of District	Name of Upazila	Name of Union/Pourashava	Name of Mouza
12.Balu	_	Dhaka	_	Dhaka	River

Terrestrial and Marine Protected Areas in Bangladesh (Including Ramsar Sites) Table A3.2. Terrestrial and Marine Protected Areas

1. Aila Bee Wildlife 13. Dubriar Haor Wildlife 25. Khadimnagar 37. Ramsagar National Sanctuary National Park Sanctuary Park 2. Ata Danga Baor 14. Dulahazara Safari 26. Kuakata Eco Park 38. Rema-Kalenga Wildlife Sanctuary Park Wildlife Sanctuary 3. Banshkhali Eco Park 15.Erali Beel Wildlife 27. Kuri Beel Wildlife 39. Sangu Matamuhari Sanctuary Sanctuary 4. Bhawal National Park 16.Fasiakhali Wildlife 28. Lawachara National 40. Satchari National Park Sanctuary Park 5. Bil Bhatia Wildlife 17. Hail Haor Wildlife 29. Madhabkunda Eco 41. Sitakunda Eco Park Sanctuary Sanctuary Park 6. Bogakine Lake 18.Hakaluki Haor 30. Madhupur National 42. Sundarbans East Wildlife Sanctuary Wildlife Sanctuary Wildlife Sanctuary Park 7. Chalan Beel Wildlife 19.Hazarikhil Wildlife 31. Madhutila Eco Park 43. Sundarbans South Sanctuary Sanctuary Wildlife Sanctuary 8. Char Kukri-Mukri 20.Himchari National 32. Meda Beel Wildlife 44. Sundarbans West Wildlife Sanctuary Wildlife Sanctuary Park Sanctuary 9. Chimbuk Wildlife 21.Jinjira Reefs 33. Naaf River Wildlife 45. Tangua Haor Nature Sanctuary Reserve Sanctuary 10. Chunati Wildlife 22.Kaptai National Park 34. Nijhum Dweep 46. Teknaf Game Reserve Sanctuary National Park 11. Companigoni Wildlife 23.Kawadighi Wildlife 35. Pablakhali Wildlife 47. West Bhanugach Sanctuary Sanctuary Sanctuary Wildlife Sanctuary 12. Dakhar Haor Wildlife 24.Kawadighi Haor 36. Rajkandi Wildlife Wildlife Sanctuary Sanctuary Sanctuary

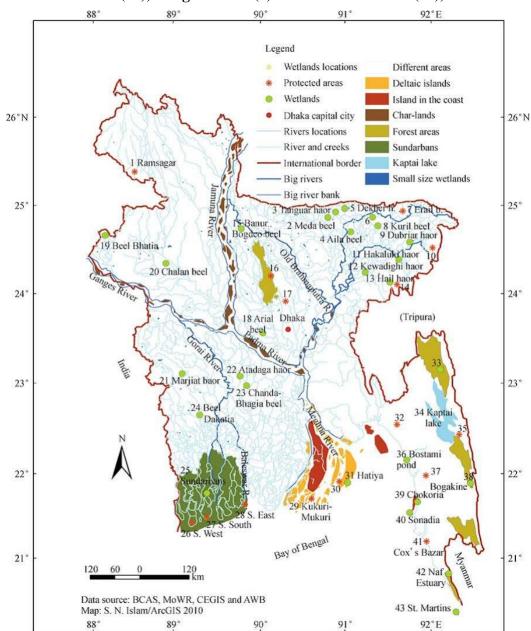


Figure A3.1. Map of Wetlands in Bangladesh including Ramsar Sites (The Sundarbans (25), Tanguar Haor(3) and Hakaluki Haor (11))

Internationally Recognized Areas of Biodiversity Importance

Includes Areas Likely to be Considered Critical Habitats under World Bank Performance Standard 6 – Biodiversity Conservation and Sustainable Management of Living natural Resources

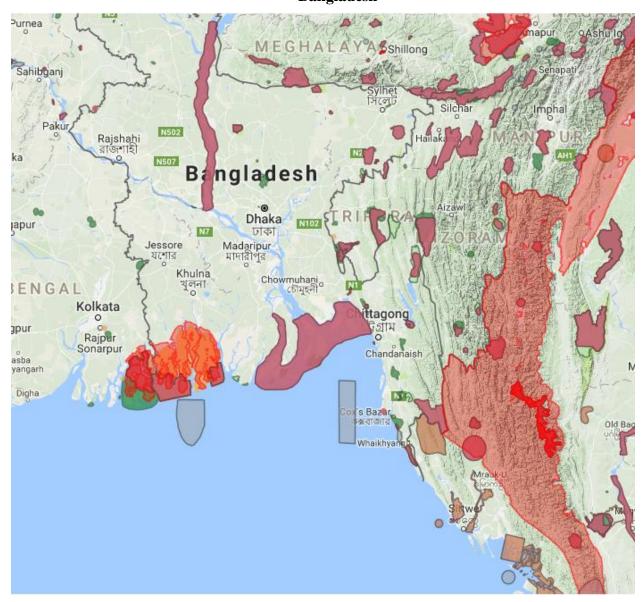


Figure A3.2. Intrnationally Recognized Areas of Biodiversity Importance in Bangladesh

Source: Integrated Biodiversity Assessment Tool (IBAT) for World Bank Group. Legend (checked items appear on the map above, if present):

Protected areas: national-level	Priority sites for biodiversity
☑ IUCN management categories Ia, Ib, II	Key Biodiversity Areas
✓ IUCN management categories III, IV	Important Bird & Biodiversity Areas
✓ IUCN management categories V, VI	Alliance for Zero Extinction Sites
✓ IUCN management categories not	✓ Unique/Highly Threatened Ecosystems
reported/not assigned	Regions of conservation importance
Protected areas: regional	☐ Endemic Bird Areas
Natura 2000	☐ Biodiversity Hotspots
Regional Seas	☐ High Biodiversity Wilderness Areas
Protected areas: international	☐ WWF Ecoregions
✓ ■ Natural/Mixed World Heritage sites	☐ WWF Freshwater Ecoregions
✓ Ramsar sites	☐ WWF Marine Ecoregions
UNESCO Man and the Biosphere	▼ Tiger Conservation Landscapes
Reserves	☐ Bird Migration Flyways
Species	Completeness
☐ Species Grid	☐ KBA Completeness
☐ Freshwater Biodiversity	☐ KBA Completeness

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ANNEX 5. COMPARATIVE ANALYSIS WORLD BANK PERFORMANCE STANDARDS (PS) 2-8 AND BANGLADESHI LAWS

Disclaimer: This comparative analysis should be treated as a starting, high-level, point of comparison between Bangladesh laws and WB Performance Standards. This list is not exhaustive and based on high level overview and on the ground experience of working in infrastructure projects in Bangladesh.

PS2: Labor and Working Conditions

The comparison relies upon the Bangladesh Labor Act 2006. This can be further refined based on a review of the Labor Rules of 2015. It is possible that some aspects of PSs that have been indicated as not covered under the labor law are covered under other laws.

Table A5.1. Labor and Working Conditions (PS2)

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
1	Human resource policies and procedures	The law overall covers all key aspects including display of salient aspects of the act at appropriate places, issue of	Development, adoption and effective communication of human resource policies and procedures, reasonable working conditions and terms of employment
2	Working conditions and terms of employment	appointment letters, ID cards to workers, training on this law for specific persons and provides for companies, if they so want, to put in place their own service rules with due approval of the Chief Inspector.	consistent with the national law and the requirements of PS2. Workers must be provided with documented information about their rights under national labor and employment law. Additionally, PS2 specifically includes provisions for migrant labor and worker accommodations.
3	Workers' organizations	The Laws provide for workers as defined in the law to join Trade Unions and provides for collective bargaining.	PS2 expects companies to comply with the law where the law recognizes workers' organizations.
4	Non- discrimination and equal opportunity	Limited and explicit provision requiring equal wages for equal work without discrimination.	Equal opportunity and non-discrimination covers all employment decisions commencing from hiring, compensation, terms of employment, access to training, job assignment, promotion, termination, retirement and disciplinary procedures covering also migrant workers and with special reference to harassment/exploitation/intimidation of women employees.

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
5	Retrenchment	Law provides for retrenchment on grounds of redundancy with one month notice and additional compensation or gratuity whichever is higher	The law does not specifically mention analysis of alternative to retrenchment in case of collective dismissals and development of retrenchment plans on the principles of non-discrimination.
6	Grievance mechanism	There is a provision for any worker to file a complaint with the employer and obtain a response within 30 days. Failing which or if the worker is not satisfied with the response/redress, approach a labor court.	Company putting in place a grievance redress mechanism for direct employees and enabling access to an appropriate grievance mechanism for contract workers expected.
7	Child labor	Child defined as persons below the age of 14 year ⁶³ and their employment not permitted. Persons above 14 years are defined as adolescent and permitted work with specific restrictions, particularly adolescents are not to be employed in jobs declared hazardous by the government.	Requires compliance with national law relating to employment of minors, requires that anyone under the age of 18 years not be employed in hazardous activities, and employment of children under 18 years be only after a risk assessment, and with regular monitoring of health, working conditions and hours of work.
8	Forced labor	Provisions related to bonded, indentured, compulsory, involuntary labor or extraction of work under threat or penalty not specifically mentioned.	Requires that forced labor and trafficked persons be not employed.
9	Occupational health and safety	Occupational Health and safety provisions generally covered in the law.	Provides specific reference to Good International Industry Practices (GIIP) ⁶⁴ and WBG EHS Guidelines in development of system and practices for assessment, prevention, mitigation and management of occupational health and safety risks, and emergency preparedness and response.

 $^{^{63}}$ Bangladesh Children's Act 2013 defines all persons below the age of 18 as children. Not clear how this impacts the Labor Law definition of Child as being under 14 years of age.

⁶⁴ Defined as the exercise of professional skill, diligence, prudence, and foresight that would reasonably be expected from skilled and experienced professionals engaged in the same type of undertaking under the same or similar circumstances globally or regionally. The outcome of such exercise should be that the project employs the most appropriate technologies in the projects-specific circumstances.

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
10	Workers engaged by third parties	Contract workers covered under the definition of "workers" and all provisions applicable to "workers" applicable to contract workers unless specifically stated otherwise.	Requires that the company make commercially reasonable efforts to ensure that the contractors have an ESMS in place to operate in a manner consistent with all the provisions of PS2 other than those related to retrenchment and supply chain workers.
11	Supply chain	No specific reference to assessing safety, forced and child labor risk in the primary supply chain.	Assess and address where there is risk of child labor, forced labor and high risk of significant safety issues in the primary supply chain. Where company is unable to remedy above issues in the supply chain, it will progressively overtime shift to suppliers who can demonstrate compliance with the relevant provisions of PS2.

PS3: Resource Efficiency and Pollution Prevention

Table A5.2. Resource Efficiency and Pollution Prevention (PS3)

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
1	Resource efficiency	The Environment Conservation Act, 1995 and subsequent amendments in 2000 and 2002: Formulation of guidelines relating to control and mitigation of environmental pollution, conservation and improvement of environment The Ground Water Management Ordinance, 1985: Management of ground water resources	Implementation of technically and financially feasible and cost effective measures for improving efficiency in energy consumption, water consumption and other resources by integrating principles of cleaner production. Project must adopt measures to avoid or reduce water usage so that it does not have significant adverse impact on others.
2	Greenhouse gases	Ozone Depleting Substances (Control) Rules, 2004: Ban on the use of Ozone depleting substances and phasing out of Ozone depleting substances None for GHG quantification and reporting	Alternatives to be considered and implementation of technically and financially feasible and cost-effective options to reduce project-related GHG emissions. For projects that are expected to or currently produce more than 25,000 tonnes of CO2-equivalent annually, requirement to quantify direct emissions from the facilities owned or controlled within the physical project boundary as well as indirect emissions associated with the off-site production of energy used by the project.

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
3	Pollution prevention including contamination assessment	The Environment Conservation Act, 1995 and subsequent amendments in 2000 and 2002: • Framing applicable limits for emissions and effluents • Framing of standards for air, water and noise quality • Formulation of guidelines relating to control and mitigation of environmental pollution, conservation and improvement of environment • Declaration of Ecologically critical areas Environment Court Act, 2000 and subsequent amendments in 2002: Act for completing environment related legal proceedings effectively Noise Pollution (Control) Rules 2006: Prevention of Noise pollution and standards for noise levels	Avoid and minimize and/or control the release of pollutants to air, water, and land due to routine, non-routine, and accidental circumstances. To address potential adverse project impacts on existing ambient conditions, relevant factors to be considered including (i) existing ambient conditions; (ii) the finite assimilative capacity of the environment; (iii) existing and future land use; (iv) the project's proximity to areas of importance to biodiversity; and (v) the potential for cumulative impacts with uncertain and/or irreversible consequences. When the project has the potential to constitute a significant source of emissions in an already degraded area, additional strategies to be adopted that avoid or reduce negative including option of evaluation of project location alternatives and emissions offsets. In case of historical pollution (land/ground water contamination), if the legal responsibility of project sponsor is established, liabilities to be resolved in accordance with national law, or with GIIP. It is to be noted that emission levels specified in the General EHS Guidelines and in the sector specific guidelines sometimes differ from national standards.
4	Waste management including duty of care for hazardous waste	None directly related but some broad policies in place such as: National Environmental Policy, 1992: Protection and sustainable management of the environment. Bangladesh is a signatory to the Basel Convention.	Avoid and/or reduce the generation of hazardous and non-hazardous waste materials. Recover and reuse waste in a manner that is safe for human health and the environment and incase recovery and reuse is not possible, treat, destroy or dispose the waste in an environmentally sound manner including appropriate control of emissions and residues. For hazardous waste, GIIP alternatives to be adopted for environmentally sound disposal while adhering to the limitations applicable to its transboundary movement. For hazardous waste disposal by third parties, only reputable and legitimate contractors licensed by the relevant government regulatory agencies to be hired and chain of custody documentation to the final destination to be obtained.
5	Pesticides use	Agricultural Pesticide Ordinance, 1971: Under section 5 the Government can refuse registration of pesticides detrimental to vegetation, human or animal health. The government has	No purchase, storage, use, manufacture, or trade in products that fall in WHO Recommended Classification of Pesticides by Hazard Class Ia (extremely hazardous); or Ib (highly hazardous) and Class II (moderately hazardous) unless appropriate controls on manufacture, procurement, or distribution

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
		banned certain pesticides, although no effective legal mechanism is put in place to halt their illegal importation and sale under different name and level. <i>The Fertilizer Regulation Order</i> , 1995: The Technical Sub-committee,	and/or use of these chemicals are applied. Formulation and implementation of an integrated pest management (IPM) and/or integrated vector management (IVM) approach targeting economically significant pest infestations and disease vectors of public health significance.
		constituted under Article 12 of this Order, shall conduct environmental assessments of the impacts of new fertilizers and bio-fertilizers and make recommendations to the government regarding their production, importation, marketing and use.	Use of chemical pesticides that are low in human toxicity, that are known to be effective against the target species, and that have minimal effects on non-target species and the environment.

PS4: Community Health, Safety and Security

Table A5.3. Community Helath, Safety, and Security (PS4)

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
1	Infrastructure and equipment design and safety	Mostly covered under Bangladesh National Building Code 2014 and Labor Laws and includes provisions for designs to be approved by appropriate authorities.	Specifically refers to design and construction in accordance with GIIP and where public access is expected design to take into account additional risk from operations or natural hazards and principles of universal access. Third party review of designs and monitoring required in case where key structural elements located in high risk areas that expose communities to risk.
2	Hazardous materials management and safety	While Disaster Management Act 2012 covers hazards from projects and operations, no specific requirement for structured assessment of risk to communities from projects and implementation of avoidance, minimization and mitigation measures. Though some elements of community health and safety are covered in the Vehicle Act 1927, Motor Vehicle Ordinance 1983	Structured assessment of risk to communities from hazardous materials, and measures to avoid, minimize and mitigate the risk by modifying, substituting or eliminating the condition or material causing potential hazard including appropriate measures in decommissioning and transport of hazardous materials.

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
3	Ecosystem services ⁶⁵	Some of the ordinances and laws like Protection and Conservation of Fish Act and Rules, Bangladesh Water Act 2013 and Ground Water Management Ordinance, Draft wetland Policy, National Water Bodies Protection Act 2000, address issues related to project impact on provisioning and regulating ecosystem services.	Projects direct impact on provisioning and regulating ecosystem services that may affect community health and safety needs to be assessed and mitigated.
4	Community exposure to disease	Prevention of Malaria Special Provision Ordinance 1978 addresses issues related to spread of this disease from projects to communities. Includes provisions for medical examination of workers, onsite treatment and vector control.	Requires assessment and mitigation of potential community exposure to water borne, water based, water related and vector borne diseases from project activities including transmission of communicable diseases due to influx of project related labor.
5	Emergency preparedness and response	Disaster Management Act 2012 and National Disaster Management Plan addresses community exposure to emergency and has roles defined for government agencies right up to local level including involvement of communities in management. However, role of project companies not clear.	Requires development of offsite emergency response plan, collaboration with Affected Communities, Local Authorities and other relevant parties, taking a lead in preparing and responding particularly in case of potential emergencies arising from the project.
6	Security personnel	The Bangladesh Private Security Regulations Act, 2006, covers some aspects requiring service providers to be registered, related to hiring (i.e. persons with criminal antecedents can't be hired), guards have to be appropriately trained by the service provider and requires that where armed guards are required, government ANSER has to be engaged. ANSER's rules of engagement requires use of arms to be last resort and incident reporting to seniors.	Includes requirements for proper background checks before hiring, training, specific security personnel procedures particularly where armed guards are deployed based on the proportionality principle, and provision of a grievance mechanism for affected communities in relations to use of security force and commitment to investigate allegations of unlawful and abusive acts of security personnel followed by appropriate actions.

⁶⁵ Ecosystem services are the benefits that people, including businesses, derive from ecosystems. Ecosystem services are organized into four types: (i) provisioning services, which are the products people obtain from ecosystems; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes; (iii) cultural services, which are the nonmaterial benefits people obtain from ecosystems; and (iv) supporting services, which are the natural processes that maintain the other services.

PS5: Land Acquisition and Involuntary Resettlement

While Bangladesh law provides for land acquisition, the regulations and rules are not very explicit regarding the resettlement and rehabilitation of Project Affected Persons (PAPs). The World Bank PS5 requires the following:

- (a) Preparation of a Resettlement Action Plan.
- (b) Payment of adequate compensation for various losses at full replacement cost.
- (c) Rehabilitation to ensure improvement/or at least restoration of lost economic activities, income and standard of living.
- (d) Public consultation during the entire process of social assessment and disclosure of information (where ensuring that the information available to stakeholders is adequate and accessible is key).
- (e) A grievance procedure that is accessible and adequately responsive (time for processing claims, etc.).
- (f) Describes private sector responsibilities under government-managed resettlement.

Table A5.4. Land Acquisition and Involuntary Resettlement (PS5)

Issue	1982 Ordinance	WB PS Requirements
Scope of application	Legal owners Share-croppers Tenants	Persons affected by land acquisition or restrictions on land use resulting from defined types of land-related transactions. Affected persons/ communities include those with: • Legally recognized rights • Customary claims to land • No legally recognized claims • Seasonal resource users such as herders or fishing families, hunters and gatherers
Compensation	Based on market values over previous 12 months.	Replacement cost which is equal to "Market value + transaction cost of restoring the assets".
Uses of material from dismantled structures	Material is to be auctioned after being compensated for it.	Impacted persons have right to salvageable materials.
Minimization of impacts	Discourages unnecessary acquisition but no mechanism to monitor.	Follows the mitigation hierarchy and must consider alternative project designs to avoid or minimize physical and/ or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.
Cut-off dates	Not addressed	The RAP/SIA process must have a "Cut-off date" which effectively is the date the completion of the Census survey. This Cut-off date is the basis for defining eligibility and entitlement.
Consultation	No consultation required	Mandatory Consultation and Disclosure requirements including;

Relocation	No assistance provided	 External Communication Procedure for ALL business activities For Business activities where there are Affected Communities the requirement is for "a stakeholder engagement, disclosure, grievance management and ongoing reporting to communities/stakeholder" For business activities with potentially significantly adversely affected communities the requirement is for "Informed consultation and Participation" based on inclusive engagement and ensuring participation in decision making of the affected stakeholders Requirement for Free, Prior and Informed Consent in case of adverse impact on Indigenous People Relocation assistance and transitional support part of
assistance Livelihood restoration	Not addressed	the RAP. The requirement is for the project to restore or improve livelihoods of affected communities. Livelihood restoration is a core component of the RAP or, in cases of projects involving economic
Private sector responsibilities under government- managed resettlement	Not addressed	displacement only, a Livelihood Restoration Plan. Project sponsor to collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes consistent with PS5. Where government capacity is limited, project sponsor will play an active role during resettlement planning, implementation, and monitoring. Project sponsor will identify and describe government resettlement measures. If these measures do not meet the relevant requirements of PS5, prepare a Supplemental Resettlement Plan.

PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources Table A5.5. Biodiversity Conservation and Sustainable Management of Living Natural Resources (PS6)

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
1	Protection and	The Environment Conservation	All habitat categorized as natural and modified
	conservation of	Act, 1995 and Environmental	including both spatial and temporal elements.
	biodiversity	Conservation Rules, 1997 and	Those are further categorized as critical habitats,
		subsequent Amendments:	which is a sub-set of either natural or modified
		Declaration of Ecologically	habitats.

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
		Critical Areas. The Forest Act, 1927 and subsequent amendments in 1982 and 1989: Categorization of forests as reserve, protected and village forests and permission required for use of forest land for any non-forest purposes. Bangladesh Wild Life (Preservation) Act, 1974: Preservation of Wildlife Sanctuaries, Parks, and Reserves National Biodiversity Strategy and Action Plan (2004): Conserve, and restore the biodiversity of the country; maintain and improve environmental stability for ecosystems; ensure preservation of the unique biological heritage of the nation; guarantee the safe passage and conservation of globally endangered migratory species.	Modified Habitat: areas that may contain a large proportion of plant and/or animal species of non-native origin, and/or where human activity has substantially modified an area's primary ecological functions and species composition. Natural Habitat: areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition. Critical habitats: areas with high biodiversity value, including habitat of significant importance to Critically Endangered and/or Endangered species; endemic and/or restricted-range species; habitat supporting globally significant concentrations of migratory species and/or congregatory species; highly threatened and/or unique ecosystems. Differentiated approaches are specified for projects in each of these different categories of habitat ranging from demonstrating no net loss (in natural habitats) to demonstrating net gain (in critical habitats). The mitigation hierarchy for biodiversity management incudes offsets as the last step after all other measures have been considered. Legally Protected and Internationally Recognized Areas: In cases where project is located within a legally protected area or an internationally recognized area, it is to be demonstrated that the proposed development in such areas is legally permitted and consultation with Affected Communities, Indigenous Peoples and other stakeholders has been conducted.
2	Invasive Alien Species	Bangladesh Wild Life (Preservation) Act, 1974: Stop introduction of invasive alien species, genetically modified organisms and living modified organisms.	Any new alien species (not currently established in the country or region of the project) to be not intentionally introduced unless this is carried out in accordance with the existing regulatory framework.
3	Management of ecosystem services	National Biodiversity Strategy and Action Plan (2004): covering ecosystem services and includes strategy on ecosystem: Strategy 2: Conserve ecosystems, species and genetic pool of the country to ensure that the present and future wellbeing of the country and its people are secure Strategy 3: Restore ecosystems	Identification of priority ecosystem services for projects likely to adversely impact ecosystem services. Priority ecosystem services include: (i) those services on which project operations are most likely to have an impact resulting in adverse impacts to Affected Communities; and/or (ii) those services on which the project is directly dependent for its operations. Affected communities participation to be ensured in the determination of priority ecosystem services in accordance with the

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
		and rehabilitate endangered species Protection and Conservation of Fish Act and Rules, Bangladesh: Protection and conservation of fish in Government owned water bodies Water Act 2013: Integrated development, management and conservation of water resources Ground Water Management Ordinance: Management of groundwater resources Draft wetland Policy, 1998: Establishment of principles for the sustainable use of wetland resources National Water Bodies Protection Act 2000	stakeholder engagement process. With respect to impacts on priority ecosystem services on which the project depends, impacts on ecosystem services should be minimized and measures implemented to increase resource efficiency of operations as described in PS3.
4	Sustainable management of living natural resources	National Biodiversity Strategy and Action Plan (2004): Strategies and actions identified towards the conservation and sustainable management of biodiversity.	Management of living natural resources in a sustainable manner, through the application of industry-specific good management practices and available technologies for activities involving primary production of living natural resources (covering natural and plantation forestry, agriculture, animal husbandry, aquaculture, and fisheries). Application of credible globally, regionally, or nationally recognized standards where they exist.
5	Supply chain	None	Requirement for adoption of systems and verification practices as part of the ESMS to evaluate primary suppliers incase primary production is known to be produced in regions where there is a risk of significant conversion of natural and/or critical habitats.

PS7: Indigenous Peoples

Table A5.6. Indigenous Peoples (PS7)

Sl. No.	Criteria	Requirements as Per Gob Law	WB PS Requirements	
1	Consultation	Chittagong Hill Tracts Regional	Informed Consultation and Participation where	
		Council Act, 1998 : The	there is adverse impact of project on tribal	
		committee formation requires	communities with special emphasis on	
		members from tribal and non-	involvement of women members.	
		tribal community including	Consultation should, in addition to members of	
		representation from tribal and	affected communities of indigenous peoples,	
		non-tribal women members	also involve traditional institutions providing	

Sl. No.	Criteria	Requirements as Per Gob Law	WB PS Requirements		
			sufficient time for decision making processes.		
2	Free, Prior, and Informed Consent (FPIC)	Not addressed	In three specific situations FPIC of the Affected Communities of Indigenous Peoples must be obtained. FPIC applies to project design, implementation, and expected outcomes related to impacts affecting the communities of Indigenous Peoples. When any of these three specific circumstances apply, the project sponsor will engage external experts to assist in the identification of the project risks and impacts.		
3	Mitigation Planning	Not addressed	Development of an Indigenous People's Plan or a broader community development plan with separate components for Indigenous Peoples		
4	Coverage	Not addressed	Broader coverage of impacts on Indigenous Peoples including on cultural heritage both tangible and intangible assets/knowledge.		
5	Benefit Sharing	Not addressed	Where a project proposes to use the cultural heritage including knowledge, innovations, or practices of Indigenous Peoples for commercial purposes, the project sponsor will inform the Affected Communities of Indigenous Peoples of (i) their rights under national law; (ii) the scope and nature of the proposed commercial development; (iii) the potential consequences of such development; and (iv) obtain their FPIC. The project sponsor will also ensure fair and equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with the customs and traditions of the Indigenous Peoples.		

PS8: Cultural Heritage

Table A5.7. Cultutal Heritage (PS8)

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements	
1	Provisions and	The Antiquities Act 1968: The	Require development of provisions for managing	
	procedures for	act mentions that an Advisory	chance finds through a chance find procedure	
	managing	Committee of the government	which will be applied in the event that cultural	

Sl. No.	Criteria	Requirements as Per GoB Law	WB PS Requirements
	chance find	will decide on necessary steps but does not make explicit what needs to be done.	heritage is subsequently discovered. The project will not disturb any chance find further until an assessment by competent professionals is made and actions consistent with the requirements of this Performance Standard are identified.
2	Ensure community access	The ACT requires land owner to ensure community access, alternatives are not explored.	Requires to ensure continued access to the cultural site or will provide an alternative access route, subject to overriding health, safety, and security considerations.
3	Coverage	The Act covers only tangible cultural heritage.	Covers both tangible and intangible cultural heritage.
4	Benefit sharing	The Act is silent on benefit sharing. It mentions that if any object, location is determined as historical or cultural heritage, the government has the right to acquire it after paying due compensation to the owner.	Aims to promote the equitable sharing of benefits from the use of cultural heritage.
5	Consultation	An advisory committee determines all outcomes related to cultural heritage sites and objects.	Project sponsor to consult with the Affected Communities to identify cultural heritage of importance, and to incorporate into the decision-making process the views of the Affected Communities on such cultural heritage. Consultation will also involve the relevant national or local regulatory agencies that are entrusted with the protection of cultural heritage.

ANNEX 6. DEVELOPING A BIODIVERSITY ACTION PLAN/BIODIVERSITY MANAGEMENT PLAN⁶⁶

Where biodiversity values of importance to conservation are associated with a project site or its area of influence, the preparation of a Biodiversity Action Plan (BAP) and/or a Biodiversity Management Plan (BMP)⁶⁷ provides a useful means to focus a project's mitigation and management strategy.

Project sponsors might also opt to incorporate biodiversity-related mitigation and management measures into other, more general, Environmental Management Plans or Action Plans. The risk in this case is that commitments might appear less evident or buried among many others, and possibly be less focused. The development of a BAP is a Performance Standard 6 requirement when operating in critical habitats and should be developed when operating in natural habitats. A BMP is highly encouraged in both. A BAP/BMP may also be useful in modified habitats if biodiversity values of importance to conservation are associated with those areas.

Development of Biodiversity Action Plan

In general, a BAP consists of any number of biodiversity-related actions that need to be carried out to fulfill the needs of a particular requirement, request or expectation (e.g., Lender compliance, legal requirement, stakeholder concerns). BAP are often developed when there are information gaps in a project's ESIA or its ESMS. Gaps that are frequently encountered with respect to biodiversity management include the following: (i) insufficient or inadequate baseline data (often due to time and/or seasonal constraints during baseline collection); (ii) inadequate or non-existent processing of data in a manner that clearly defines high biodiversity values; (iii) inadequate engagement and consultation with stakeholders, especially with external specialists; (iv) substandard consideration of impacts and lack of quantified impact analysis; (v) inadequate identification of mitigation measures, including those needed to mitigate significant residual impacts; and, (vi) inadequate or non-existent monitoring procedures. Whatever the case, the function of the BAP is to identify corrective action measures and a framework for their implementation. Additional opportunities for conservation identified in consultation with relevant stakeholders could also be implemented through a BAP.

One of the most important elements of a BAP is the definition of its overarching goal, supported by a set of objectives. For example, if the purpose of a BAP is to mitigate significant residual impacts in critical habitat, the goal might be to design a biodiversity offset that achieves net gains of relevant biodiversity values, and the objectives would spell out how that goal is to be achieved. A BAP should not include a lofty goal with the motive of moving project activities forward or placating external stakeholders. The goal/objectives should be realistic and based on measurable targets. Each objective should outline a series of actions and include completion indicators or monitoring targets, and the responsible party and a timeframe. All of the above should be developed in consultation with relevant stakeholders, including government, external specialists, local/international conservation organizations and Affected Communities.

Considerable guidance is available on the development of BAPs for the public sector, but these are of limited value to the private sector. There are relatively few other publically available

⁶⁶ Source: IFC ESRP

⁶⁷ May take many names, including Ecological Management Plan (EMP) or Flora and Fauna Management Plan.

guidance documents on this topic.⁶⁸ Project conditions and assessments will vary considerably, and the BAP will be used to respond to different needs. Furthermore, the terminology "BAP" is not well-defined for private sector purposes, and there is no one widely recognized, cross-sectoral framework for its development (as there is, for example, with a Resettlement Action Plan).

Development of Biodiversity Management Plan

The BMP is developed when the baseline, impact assessment and proposed mitigation measures are adequate and the only remaining issue is to collate such information into one implementable and auditable Management Plan. The Plan should spell out the mitigation measures, parties responsible for their implementation (e.g., contractor, government), monitoring requirements and the monitoring schedule (e.g., weekly, monthly, biannual). Like any other Environmental or Social Management Plan, the BMP should be integrated into the overall system for management of E&S risks and impacts, and not remain an outlier to the system. See *Integrating Biodiversity into Environmental Management Systems* published by the Energy and Biodiversity Initiative for reference.⁶⁹ In the case of biodiversity offsets, the Management Plan might take the form of a more elaborate Implementation Plan, and external expertise would be required for its development (especially as offsets are often managed by third parties). See the *Biodiversity Offset Implementation Handbook* developed by the Business and Biodiversity Offsets Program (Forest Trends, 2009) for reference.⁷⁰

There is a difference between the monitoring requirements included in a BMP and a Biodiversity Monitoring and Evaluation Program. The former is standard operating practice for all Management Plans in that monitoring requirements for the *implementation of mitigation measures* are defined within the Plan. For projects with significant, diverse and unprecedented impacts key performance indicators are often defined for each Plan as the basis for monitoring. However, a Biodiversity Monitoring and Evaluation Program is a different concept and a technical discipline within the field of conservation biology. The monitoring of biodiversity does not lend itself well to standardized methods, such as those defined for air quality, noise or wastewater monitoring. Biodiversity Monitoring and Evaluation programs (for use in private sector field applications) require the development of metrics to monitor, for example, the persistence of a particular species in the landscape/seascape or the succession of fauna and flora communities with respect to project-related disturbance. Given the diversity of species and ecosystems, the development of accurate metrics will always require the expertise of specialists. Like the BAP, fundamental to a Biodiversity Monitoring and Evaluation Program is the

⁶⁸ See also discussion papers by Maguire, S., *et al.* 2010. *Developing a Biodiversity Action Plan Through an Integrated Phased Approach*. Society of Petroleum Engineers (SPE) International Conference on Health, Safety and Environment (HSE) in Oil and Gas Exploration and Production, 12-14 April 2010, Rio de Janeiro, Brazil; Paper no. 127208-MS (describes experience from Peru LNG Project, Hunt Oil); and Croucher, T. and Dholoo, E. 2010. *To BAP or not to BAP? Challenges and Opportunities in the Adoption of Biodiversity Actions Plans for the Oil and Gas Sector*. SPE International Conference on HSE in Oil and Gas Exploration and Production, 12–14 April 2010, Rio de Janeiro, Brazil; Paper no. 127133-MS

⁶⁹ http://www.theebi.org/products.html See also *Biodiversity Management Systems: Proposal for the integrated management of biodiversity at Holcim Sites*. IUCN, Gland, Switzerland (2010) for an example from the cement sector. http://cmsdata.iucn.org/downloads/biodiversity_management_system_final.pd

⁷⁰ http://bbop.forest-trends.org/guidelines/

definition of a goal and its objectives. For private sector field applications, the goal/objectives should always be linked to measuring biodiversity values with respect to project-related impacts. See *Biodiversity Indicators for Monitoring Impacts and Conservation Actions* published by the Energy and Biodiversity Initiative for reference.⁷¹

Given the complexity of natural (and many modified) habitats, biodiversity management needs to be considered within the context of adaptive management. Findings from monitoring programs and adapt management and mitigation responses should be evaluated as necessary to more effectively ensure the protection of the biodiversity values in question.

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⁷¹ http://www.theebi.org/products.html

ANNEX 7. EXAMPLE ECOSYSTEM SERVICES REVIEW TEMPLATE

Below is an illustrative example of an Ecosystem Services Review (ESR) template. In general, ESR procedures are nascent and dynamic, and the following offers a potential framework. Type I priority services would depend on the Degree of Impact, Relevance to Affected Communities and Degree of Management Control. Type II priority services would depend on the Degree of Dependence (on project operations) and the Degree of Management Control.

For the purposes of the ESR, ecosystem services are categorized as two types:

- **Type I**: Provisioning, regulating, cultural and supporting ecosystem services, over which the client has direct management control or significant influence, and where impacts on such services **may adversely affect communities**.
- **Type II**: Provisioning, regulating, cultural and supporting ecosystem services, over which the client has direct management control or significant influence, and on which **the project directly depends for its operations** (examples of this type of ecosystem service are provided below in paragraph GN142).

Ecosystem Service	Degree of Impact (Type I)	Degree of Dependenc e (Type II)	Relevance to Affected Community (Type I)	Degree of Management Control (Type I/II)
Provisioning				
Crops				
Livestock				
Capture fisheries				
Aquaculture				
Wild foods				
Timber and other wood fiber				
Other fibers (e.g., cotton, hemp, silk)				
Biomass fuel				
Freshwater				
Genetic resources				
Biochemicals, natural medicines, and pharmaceuticals				
Regulating				
Air quality regulation				
Global climate regulation				
Regional/local climate regulation				
Water regulation				
Erosion regulation				
Water purification and waste treatment				
Disease regulation				
Pest regulation				
Pollination				
Natural hazard regulation				
Cultural				
Sacred or spiritual sites				
Areas used for religious purposes				
Supporting				
Nutrient capture and recycling				

Primary production		
Pathways for genetic exchange		

ANNEX 8. RESETTLEMENT IN DIFFERENT PROJECT TYPES

Resettlement effects result from a wide range of project types envisaged under IPFF II. These range from small plots of land required for schools or health centers may create limited resettlement effects. Long alignments required for power lines, roads, railways, or canals may cause resettlement along a narrow right of way, or disrupt community networks, dividing roads, paths, irrigation systems, and landholdings. Many types of projects have the resettlement effects as set out in the **Table A8.1**.

Table A8.1. Resettlement in Different Project Types

Sector	Project Components	Type of Resettlement Effect
Power and Energy	 Transmission alignment Power generation plants, transmission stations, substations, and access roads Hydroelectric power reservoirs 	 Minor resettlement effects from construction of pylons. These might be severe if landholdings are small. Right-of-way restrictions, without land acquisition, might affect people's land use along the transmission alignment. May require temporary land borrow during construction. Well documented consultation with land owners and a signed MOU permitting the project to draw lines across private lands are required. May cause severe localized effects, and temporary land borrow during construction. Power plants may cause resettlement effects through pollution of land, air, or water. Reservoir construction can have severe and often widespread effects, displacing whole communities from construction and inundation areas, and disrupting patterns of communication, landholdings, social and economic systems, and resource use. Temporary land borrow for construction.
Transport	 Road or rail alignment Associated stations, terminals, bridges Airports, seaports, river ports 	 Resettlement effects over alignment. Disruption can usually be addressed within existing community units because alignment is narrow. However, if the alignment is long, cutting across administrative boundaries, the distribution of responsibilities may be unclear and entitlements may vary between sections. Alignments might divide landholdings, local roads and paths, irrigation systems, economic and social networks, or access to resources. May require temporary land borrow for construction May cause localized resettlement effects, and necessitate temporary land borrow for construction Severe resettlement effects for communities currently occupying land are possible. Can displace whole communities, or disrupt patterns of communication, landholdings, social and economic systems and resource use. Temporary land borrow for construction
Water supply and sanitation	 Reticulation systems Pumping stations, treatment sites Reservoirs for water 	 Temporary land borrowing. Use of existing rights-of- way (for example, roads) can minimize disruption. Narrow land corridors might be acquired permanently with minor disruption.

Sector	Project Components	Type of Resettlement Effect
	supply	May cause more severe localized effects. Temporary land borrowing for construction.
		Reservoir construction can have severe and often widespread effects
Solid waste	• Transfer stations, landfill sites	May cause severe localized effects
Urban renewal	Urban infrastructure sites	May cause severe localized effects
Health	Sites for hospitals, clinics, teaching facilities	May cause severe localized effects. Communities might be prepared to volunteer small sites for community services.
Education	• Sites for schools, training institutions, etc	May cause severe localized effects. Communities might be prepared to volunteer small sites for community services.
Irrigation and Flood control	 Canal alignments, protective embankments, and associated works Dams 	 Resettlement effects over a narrow alignment. Dam construction can have severe and widespread effects
Mining operations	Strip mining	May cause severe localized effects, or resettlement effects due to severe loss of environmental quality (ex. Polluted land or water)
Forestry developments	Reforestation, industrial plantations, forest closure	May cause loss of access to forest products for cash and subsistence. Loss of grazing rights. Displacements of communities.
Parks, conservation sites	National parks or biodiversity areas	May cause loss of grazing rights, or disruption of grazing routes. May displace communities from park.

ANNEX 9. SAMPLE OUTLINE OF A RESETTLEMENT ACTION PLAN

- 1. *Description of the project*: General description of the project and identification of the project area.
- 2. *Potential impacts*: Identification of
 - (a) the project component or activities that give rise to resettlement;
 - (b) the zone of impact of such component or activities;
 - (c) the alternatives considered to avoid or minimize resettlement; and
 - (d) the mechanisms established to minimize resettlement, to the extent possible, during project implementation.
- 3. *Objectives and studies undertaken:* The main objectives of the resettlement program and a summary of studies undertaken in support of resettlement planning / implementation, e.g., census surveys, socio-economic studies, meetings, site selection studies...etc.
- 4. *Regulatory framework:* Relevant laws of the country, policies and procedures, performance standards.
- 5. *Institutional framework:* Political structure, NGOs.
- 6. Stakeholder engagement: Summary of public consultation and disclosure associated with resettlement planning, including engagement with affected households, local and/or national authorities, relevant CBOs and NGOs and other identified stakeholders, including host communities. This should include, at a minimum, a list of key stakeholders identified, the process followed (meetings, focus groups etc), issues raised, responses provided, significant grievances (if any) and plan for ongoing engagement throughout the resettlement implementation process.
- 7. Socioeconomic characteristics: The findings of socioeconomic studies to be conducted in the early stages of project preparation and with the involvement of potentially displaced people, including results of household and census survey, information on vulnerable groups, information on livelihoods and standards of living, land tenure and transfer systems, use of natural resources, patterns of social interaction, social services and public infrastructure.
- 8. *Eligibility*: Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates.
- 9. Valuation of and compensation for losses: The methodology used in valuing losses to determine their replacement cost; and a description of the proposed types and levels of compensation under local law and such supplementary measures as are necessary to achieve replacement cost for lost assets.
- 10. *Magnitude of displacement:* Summary of the numbers of persons, households, structures, public buildings, businesses, croplands, churches, etc., to be affected.

- 11. *Entitlement framework:* Showing all categories of affected persons and what options they were/are being offered, preferably summarized in tabular form.
- 12. *Livelihood restoration measures:* The various measures to be used to improve or restore livelihoods of displaced people.
- 13. *Resettlement sites:* Including site selection, site preparation, and relocation, alternative relocation sites considered and explanation of those selected, impacts on host communities.
- 14. *Housing, infrastructure, and social services*: Plans to provide (or to finance resettlers' provision of) housing, infrastructure (e.g., water supply, feeder roads), and social services (e.g., schools, health services); plans to ensure comparable services to host populations; any necessary site development, engineering, and architectural designs for these facilities.
- 15. *Grievance procedures:* Affordable and accessible procedures for third-party settlement of disputes arising from resettlement; such grievance mechanisms should take into account the availability of judicial recourse and community and traditional dispute settlement mechanisms.
- 16. Organizational responsibilities: The organizational framework for implementing resettlement, including identification of agencies responsible for delivery of resettlement measures and provision of services; arrangements to ensure appropriate coordination between agencies and jurisdictions involved in implementation; and any measures (including technical assistance) needed to strengthen the implementing agencies' capacity to design and carry out resettlement activities; provisions for the transfer to local authorities or resettlers themselves of responsibility for managing facilities and services provided under the project and for transferring other such responsibilities from the resettlement implementing agencies, when appropriate.
- 17. *Implementation schedule*: An implementation schedule covering all resettlement activities from preparation through implementation, including target dates for the achievement of expected benefits to resettlers and hosts, and implementing the various forms of assistance. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project.
- 18. *Costs and budget*: Tables showing itemized cost estimates for all resettlement activities, including allowances for inflation, population growth, and other contingencies; timetables for expenditures; sources of funds; and arrangements for timely flow of funds, and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies.
- 19. *Monitoring, evaluation and reporting*: Arrangements for monitoring of resettlement activities by the implementing agency, supplemented by independent monitors to ensure complete and objective information; performance monitoring indicators to measure inputs, outputs, and outcomes for resettlement activities; involvement of the displaced persons in the monitoring process; evaluation of the impact of resettlement for a reasonable period after all resettlement and related development activities have been completed; using the results of resettlement monitoring to guide subsequent

implementation.

General Sample for a Power Transmission Project

Chapter No.	Chapter & Description		
	Table of Content		
	Executive Summary		
	Abbreviations		
Chapter 1	Introduction		
1.1	Background of the Report		
1.2	Objectives of the SIA/ RAP Study		
1.3	Scope of Work		
1.4	Limitations		
1.5	The SIA/ RAP study team		
1.6	Methodology		
1.7	Structure of the Report		
Chapter 2	Policies and Guidelines		
2.1	Overview		
2.2	Policies regarding construction of power transmission lines		
	i. The Electricity Act (1910)		
	ii. Building Construction (Amendment) Act, 1990 and Building Construction Rules '1996		
	iii. Power Policy, 1995		
	iv. Energy Policy (1996)		
	v. Industrial Policy (1999)		
2.3	Policies regarding land acquisition/ requisition and development		
	i. The Acquisition and Requisition of Immovable Property Ordinance, 1982		
	World Bank Directives regarding RAP		
Chapter 3	Description of the project		
3.1	Major Components of the Project		
3.2	Project Location		
	i. Proposed Transmission Lines		
	ii. Proposed Sub-stations		
3.3	Physical Features of the Transmission Lines		
3.4	Physical Features of the Sub-stations		

Chapter No.	Chapter & Description	
3.5	Component of the Construction Works	
3.6	 Civil Construction Works i. Electrical Works ii. Testing and Commissioning of Equipment iii. Construction Equipment iv. Work Schedule 	
Chapter 4	Baseline Condition of the Towers	
4.1	Methodology	
4.2	Land Use	
4.3	Baseline condition of tower sites	
Chapter 5	Analysis of Social Impacts and Mitigation Options	
5.1	Introduction	
5.2	Selection of ISCs	
5.3	Potential social impacts and mitigation options	
Chapter 6	Public Consultation and Disclosure	
6.1	Public Consultation	
6.2	Methodology.	
6.3	Results of Public Consultation	
6.4	Consultation with Govt. Organizations, Industries and Real Estate Companies	
6.5	Disclosure Plan	
Chapter 7	Resettlement Action Plan	
7.1	The project and the scope of resettlement	
7.2	Objective and Policy Frame	
7.3	Findings of Socio-economic Survey of PAP Households (Tower) i. Identification of PAPs/PAHs and Losses, PAP/PAH survey for Towers ii. Summary of the socio-economic information of the tower sites Migration status Population, Age and Sex Structures	
7.4	Findings of socio-economic survey of the ROW7. i. Socio-economic profile of population and households along the entire ROW ii. Settlement and Infrastructures in the ROW	
7.5	Approach and Operational Framework	

Chapter No.	Chapter & Description		
	i. Approach		
	ii. Operational framework		
	iii. Definitions		
7.6	Impact of the Project Sites		
	i. Project Affected Entities		
	ii. Loss of Buildings and Structures within 20 m area		
	iii. Loss of Land		
	iv. Loss of Trees		
	v. Affected Households		
	vi. Loss of Income by Affected Households		
	vii. Loss of Community Resources (Roads)		
7.7	Impact of the Project on the ROW		
7.8	Entitlement Framework		
7.9	Social Impact Management		
	i. Description of the Organogram		
7.10	RAP Implementation and Compensation Payment Schedule		
7.11	Monitoring and Evaluation		
7.12	i. Cost Estimation for Compensation		
	ii. Compensation for Land (Tower Site)		
	iii. Compensation for Land (sub-station site)		
	iv. Compensation for Buildings		
	v. Compensation for Trees		
	vi. Displacement Allowances		
	vii. Livelihood Restoration		
	viii. Crop Compensation for the ROW		
	ix. Summary of Compensation Estimate		
Chapter 8	Conclusions and Recommendations		
8.1	Conclusions		
8.2	Recommendations		
Appendix	Appendix – A: Relevant sections of the Electricity Act 1910		
	Appendix – B: Questionnaire for PAP Households Survey and Survey in ROW		
	Appendix – C: Social Impact Assessment		
	Appendix – D: List of Participants in Public Consultation Sessions Appendix – E: Letter to Dhaka WASA regarding land for Sub-station		
	Appendix – E. Letter to Dilaka WASA regarding rand for Sub-station Appendix – F: Letter to Local Government Office regarding public consultation		
Annexes	Annex – A: Horizontal Profile of Proposed Siddhirganj – Maniknagar 230 kV T/L		
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Chapter No.	Chapter & Description	
	Annex – B: Individual PAP Profile of Actual Land Owner and Tenant Households	

ANNEX 10. TERMS OF REFERENCE FOR ENVIRONMENTAL AND SOCIAL MONITORING CONSULTANT

TERMS OF REFERENCE FOR ENVIRONMENTAL AND SOCIAL MONITORING CONSULTANT

1. Background

The Government of Bangladesh (GoB) with support from World Bank has taken the Investment Promotion and Financing Facility (IPFF) Project to open a new window for infrastructure financing through private sector participation. The IPFF has made available partial debt financing through private sector financial intermediaries for eligible, government-endorsed infrastructure projects to be developed by private sector. Projects developed solely by the private sector but identified by the Government to be in the public interest are also eligible for financing. The project also seeks to assist the Government of Bangladesh in facilitating new infrastructure projects with potential for private sector participation and in developing the capacity of the financial institutions for the ongoing provisions of infrastructure finance.

The IPFF project has exhausted its first phase allocation amount of \$50.00 million (\$47.5 million investment and \$2.50 million TA for capacity building) in its third year of operation, and considerable excess demand still exists. The initial funds have been used exclusively in the power sector as a matter of priority. Another financial agreement has been signed already between IDA and GOB for additional financing of US\$257million which includes US\$ 10 million for technical assistance and US\$247 million for on lending. The IPFF requires that each investment project be screened for potential environmental and social impacts, and be subjected to appropriate Environmental Assessment. One of the major requirements of IPFF financing is to comply with applicable World Bank E&S policies and standards, as well as DOE requirements, which are preceded with the preparation of proper Initial Environmental Examination (IEE) and EIA Reports. An essential part of EIA report is Environmental and Social Management Plan (ESMP), which lays out the mitigation and monitoring plan of the investors. Realizing the importance of the ESMP, the client (i.e., BB) wants to ensure the proper implementation of ESMP.

The BB and IDA approval of the loan to the investor requires that WB E&S standards and DOE compliance to be ensured. The investor is responsible for preparing IEE and EIA, and proper implementation of ESMP. IPFF has decided to *engage an environmental monitoring consultant to conduct independent monitoring of the implementation of the ESMP during the construction and operational phases of approved projects (within the tenure of the IPFF project implementation period)*. The investor will need to assist the Consultant with all the required information and assistance in carrying out the services.

The **Bangladesh Environmental Conservation Act,** (1995) is the predominant environmental legislation in Bangladesh. Its main objectives are to control pollution and to promote conservation. The **Environmental Conservation Rules** (1997) are a set of rules, which are developed to cover the environmental regulations for Bangladesh. Environmental compliance in Bangladesh primarily relates to complying with the above act and rules. The World Bank Performance Standards and Environmental, Health and Safety (EHS) Guidelines (see

<u>www.ifc.org/ehsguidelines</u>) lay out requirements and standards on environmental, social, health and safety aspects of World Bank financed projects.

The following infrastructure sectors are eligible for financing under IPFF:

- (a) power generation, transmission, distribution, renewable energy and services.
- (b) port development(sea, river and land) including inland container terminals, inland container depot and other services;
- (c) environmental, industrial and solid waste management projects
- (d) highways and expressways including mass-transit, bridges, tunnels, flyovers, interchanges, city roads, bus terminals, commercial car parking, etc;
- (e) airports, terminals and related aviation facilities;
- (f) water supply and distribution, sewerage and drainage;
- (g) industrial estates and parks development;
- (h) Social Sector (Health, education)
- (i) Information Technology

As a reference, below is the list of projects financed to date by IPFF:

Sl.	Name of the Projects	Current Status
1.	22 MW Tangail (gas-fired power plant)	In Operation
2.	22 MW Narshingdi (gas-fired power plant)	In Operation
3.	22 MW Feni (gas-fired power plant)	In Operation
4.	11 MW Mohipal, Feni (gas-fired power plant)	In Operation
5.	22 MW Barabkunda, Chittagong (gas-fired r plant)	In Operation
6.	35 MW Dhaka EPZ (gas-fired power plant)	In Operation
7.	44 MW Chittagong EPZ (gas-fired power plant)	In Operation
8.	50 MW HFO Power Plant (Patenga, Chittagong)	In operation
9.	55 MW HFO Power Plant (Nababganj, Southern Dhaka)	Under construction
10	D- Water Tech Limited	In operation
11.	WTP capacity expansion at Comilla EPZ	In operation

Sl.	Name of the Projects	Current Status
12.	WTP capacity expansion at Adamjee EPZ at Narayanganj	In operation
13.	Expansion / refinancing of KDS Container Depot, Shitakunda, Chittagong	In operation
14.	Fibre@home Limited	In operation

The BB needs to engage a consultancy firm with good track record of monitoring ESMP of the power plants both in operation and construction phase financed under IPFF.

2. **Objectives**

The purpose of consultancy service is to monitor compliance to WB and DOE requirements specified in the project EIAs and Environmental and Social Management Plans (ESMPs), and there by verify the effective implementation of their ESMPs.

3. Scope of Services

3.1 Monitoring and Evaluation

In general, monitoring of a project involves the collection of routine data that measure progress toward achieving project objectives. It is used to track changes in project performance over time. Its purpose is to permit stakeholders to make informed decision regarding the effectiveness of the project. In IPFF additional financing, it is expected that, for each investment approved for financing, the Environmental Monitoring consultant will complete detailed environmental monitoring reports assessing project performance with the approved ESMP as well as any other applicable stand-alone environmental, social, biological, health and safety management plans developed for the investment, to verify that management and mitigation measures as mentioned in the ESMP and other plans (as applicable) are appropriately implemented that unforeseen impacts are detected at an early stage and allow corrective measures to be implemented, if needed. The frequency of the monitoring reports will generally range from monthly (during construction stage) to quarterly (during operation stage), but may vary depending on the type of investment, the specific parameters to be monitored, and any applicable investment-specific considerations. For each monitoring report, multiple monitoring visits may be required (potentially up to weekly for some indicators). Monitoring shall commence upon investor signing of the loan document to receive funding from IPFF, and will continue throughout the tenure of the IPFF project. Monitoring reports are expected be based on review of applicable documentation as well as carrying out of field measurements and observations at the investment site. Prior to initiation of the first monitoring report for each project phase (construction and operation) of a given investment, the consultant shall review available background documents and develop a work plan outlining the specific parameters and methodologies of field data collection to be utilized.

3.2 Compliance

IPFF II E&S Policy and Procedures include both E&S instruments and applicable policies

covering both the World Bank and GOB requirements. This instrument has been prepared as a separate and stand-alone document to be used for the IPFF project, and sets out mitigation, monitoring and institutional measures to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The consultant shall refer to the IPFF II E&S Policy and Procedures for additional guidance on specific monitoring parameters and requirements for IPFF investments.

For the power sector, the following environmental monitoring parameters would be expected to be covered, unless otherwise specified in the investment-specific EMP, related management plans as well as the World Bank Performance Standards and Environmental, Health and Safety (EHS) guidelines and applicable national regulations.

3.2.1 Example of Environmental Monitoring Parameters for Power Sector - Construction Phase

Key environmental issues pertaining power sector during the construction phase are given below:

<u>Emission to air:</u> Fugitive dust may be emitted from general site work, road improvements (the existing dirt access roads will require upgrades and resurfacing), and truck traffic (related to deliveries of materials and equipment). Concrete and asphalt batch plants may also contribute to particulate emissions. The operation of machinery and vehicles would also have air quality impacts.

Plant operation would result in emissions of sulphur dioxide, nitrogen oxides, carbon monoxide, carbon dioxide, particulate matter less than 10 microns and total suspended particulate. The particulates may contain small amounts of trace metals. Sulphur dioxide emission would be controlled through limiting the sulphur content of the fuel. Nitrogen oxide emission would be controlled through burner management and water injection to the combustion turbines. Particulate emissions would be reduced through good combustion control to minimize the products of incomplete combustion.

<u>Noise:</u> Noise from construction activity may be significant. Noise emitting equipment should comply with the national noise standards and should be properly maintained. Work involving nuisance noise would be minimized during locally recognized days of rest and at nights.

<u>Ground and surface water:</u> Minor short-term lowering of the groundwater table may occur in the vicinity of the site during dewatering of the foundation excavations. The limited drawdown from dewatering activity is not expected to have a significant impact. Storm water discharges can be managed to minimize water quality impacts to nearby surface water sources. Water from dewatering activities could contain suspended solids, oil and grease. Measures could be taken to remove settle able solids prior to discharging water from the site.

<u>Other considerations:</u> Some other relevant issues are to be monitored by the EIA consultant during construction phase:

- While few trees could be affected by the site work, no trees would be cut that do not interfere with the site work.
- The final site grade would facilitate drainage and avoid flooding and pooling. A site drainage plan would be developed to protect against erosion.

- Construction equipment would meet the applicable noise standard of WB or international best practices.
- To reduce dust from site access upgrades, disturbed areas would be watered on as needed basis.
- The water supply for use in construction of the generation facility would be monitored to ensure that it does not adversely affect other water uses in the area.
- A spill and emergency response plan would be developed and put in place prior to commencement of construction.
- The upgrade of the main access road to the plant would have a positive effect on local traffic.
- Disturbance to aquatic life would be minimized by careful siting of the intake and outfall.
- Topsoil of the final site would be graded and planted as appropriate.

3.2.2 Example of Environmental Monitoring Parameters for Power Sector - Operational Phase

<u>Emissions to air</u>: Plant operation would result in emissions of sulfur dioxide, nitrogen oxides, carbon monoxide, carbon dioxide, particulate matter less than 10 microns and total suspended particulate. The particulates may contain small amounts of trace metals. The generation facility would be designed to meet the WB and DOE emission standards and ambient air quality impact limits. Sulphur dioxide emission would be controlled through limiting the sulfur content of the fuel or using fuel Gas desulfurization system in the plant. Nitrogen oxide emission would be controlled through burner management and water injection to the combustion turbines. Particulate emissions would be reduced through good combustion control to minimize the products of incomplete combustion.

<u>Noise:</u> Significant noise levels can result from operation of the power station. The engines would be designed to limit noise within DOE and WB compliance.

<u>Water impact:</u> Water intake for the once-through cooling system may affect a localized zone of the marine ecosystem where the intake structure is located. The primary impacts of concern are impingement of marine life on the intake screens and entrainment of marine species in the cooling water system. Design parameters that can be used to minimize the impact of fish communities are location, inlet spacing and inlet velocity. An intake bar would be used to prevent large fish from being entrained in the system.

<u>Thermal discharge</u>: If the temperature in the vicinity of the discharge location increases significantly, modifications to the diffuser can be made to enhance the diffusion of the thermal plume.

<u>Chemical discharge in cooling water:</u> Chemical discharge in the plant cooling water is expected to be negligible for a gas fired small power plant.

<u>Hazardous waste:</u> The amount of hazardous waste originating from maintenance sources would be very low for the aforesaid power plants. However, the waste would consist primarily of spent

lubricants, used rags and spent clean-up solvents. There would be no ash residue and no sludge accumulation from fuel discharge.

<u>Public complaints:</u> There should be an arrangement of regular public consultation. It helps to identify any possible complaints which the local populace may have regarding the construction and operation of the power plant and will provide an opportunity to inform the residents concerning the project progress. Public consultation also provides an opportunity for advising local people of any foreseen disturbances that might otherwise cause concern.

Some other relevant issues are to be monitored by the EIA consultant during operational phase:

- The engines would employ state of the art technology for all pollutants.
- Workers in close proximity to this equipment may be required to use hearing protection.
- The location of the cooling water intake would be chosen to minimize the impact on the aquatic environment. Bar screen intake screens would be utilized. Final screening with travelling water screens at cooling water pump suctions would be employed. An inlet velocity of less than 1 m/s would be used to minimize entrainment.
- A sewage treatment facility would be provided at the plant and discharge of treated effluent would be combined with the cooling water discharge. (Only for large power plants)
- Clearing for transmission lines would be minimized. The line would be routed to minimize the impact on residential areas. The electromagnetic field emitted by the line would be checked.
- Landscaping would be used to enhance the appearance of the generation facility.

3.2.3 Laboratory Tests

For determining the environmental parameters, the laboratory tests should be carried out in reliable laboratories. The preference of laboratories sequentially are as follows:

- i) The laboratory of BCSIR
- ii) In case of tests those are not available at BCSIR, will be run at any other accredited laboratory of the country or at DOE laboratory with prior approval from IPFF.

3.2.4 For gaseous substance harmful to human beings (if any)

Additional parameters will be added in the contract for any gaseous substances produced by the plant which may be harmful to human beings. The consultant will address the chance of leaking such type of gases/harmful elements through the pipelines of existing power plants as well as provide a suggestion for a remedy in their periodic report.

3.3 Monitoring schedule

A tentative monitoring schedule of common indicators for power plants, for both construction and operational phase, has been provided here. But it is expected that the consultant can propose more structured and detailed monitoring schedule, based on his/her expertise, as well as on the

specifics of the investment.

	Phase	Monitoring Item	Process and Methodology	Frequency		
1	Constr	Construction dust	1 & 1			
2	Construction phase	Construction noise	Major works to be undertaken during normal working hours	Monthly		
	ıase		Nearby residents to be warned of any unusual noisy operation			
3		Ground and surface water	Monitor whether significant pollution is being created for any activities	Monthly		
			For ground water, Arsenic and Iron content should be taken under consideration			
4		Other parameters as specified in the EMP	Based on the significance of the parameters	Monthly		
1	Operational phase		Ambient air quality monitoring (SOx, NOx CO) and PM ₁₀ (for all power plants) and PM _{2.5} (for all power plants) survey to be undertaken during plant operation (PM _{2.5} 24 hours average have to be done)	Quarterly at factory gate		
2	lase	Fuel quality Analysis of sampling, Sulfur content,		Quarterly for HFO plants		
3		Stack emission	SPM, NOx, SOx, PM	Quarterly		
		Lubricant Management	Quantity (virgin and used), safe storage, spillage and disposal	Monthly		
4		Water & liquids discharge	Analysis by sampling, review of safe disposal, pH, TDS, TSS, DO, BOD ₅ , COD.	Weekly for large power plants		
			For ground water, Arsenic and Iron content should be taken under consideration			
5	Noise level		Plant to meet design levels Ear muffs to be provided as per requirement Warning signs where appropriate Noise monitoring	Quarterly and upon receipt of complaint around the plant perimeter (i.e., at least at 4 places) and in the control room. Averaging period: 8 hrs		
6		Chemical waste	Effluent from neutralizing tank to be analyzed by sampling, review of safe disposal, there should be provision for adequate handling of hazardous waste, such as sludge etc	Half-yearly		

	Phase	Monitoring Item	Process and Methodology	Frequency	
7		Socio-economic	By periodic social survey	Annual	
8		Public complaints	Complaints will be noted by maintaining register	As soon as complaint received	
9		Terrestrial ecology	Monitoring the impacts to plant and vegetation nearby. There should be appropriate provision for heat disposal. Need to compare present situation with scenario mentioned in ESIA report. No vast study is required.	Semi-annually	
10		Aquatic ecology	Effluent discharge to be monitored for pH, BOD, oil & grease and temperature (as appropriate)	Weekly for large power plants	

Note: for all items, averages of parameters are to be observed and taken according to respective regulations of Bangladesh Government.

3.4 Reporting

There shall be a proper reporting system at every investment site. Through regular reporting the environmental monitoring consultant has to ensure the satisfactory obtaining and maintaining all environmental data records and for correct implementation of the public complaints and emergency procedures. Above all he has to uphold the extent to which the project is having or has had the desired impact, in what areas it is effective, and where corrections need to be considered.

4. Deliverables and Time Budget

The deliverables for each project will contain the following:

SI No.	Name of Deliverables	Deliverables	Time
1.	Work Plan describing the detailed planning of the assignment, including parameters to be monitored, methodologies and schedule for each subproject investment.	D1	15 days after work order to proceed
2.	Construction Phase: Project progress report (separate reports for each investment), with emphasis on status of construction dust, noise and water quality, and any other key issues to be identified on a project by project basis	D2	Every month

SI No.	Name of Deliverables	Deliverables	Time
3.	Operational Phase: Quarterly reports (separate reports for each investment) on monitoring the items as has been mentioned in the monitoring schedule	D3	Quarterly
4.	Final Report (for each investment)	D4	Within 15 days after completion of assignment

The Consultant will be required to provide reports for more than one investment at the same time and will prepare individual reports for each.

ANNEX 11. CRITERIA FOR PFIS' E&S RISK RATING

Risk Rating Factor		Detailed Criteria for Assessment (Guidance Only)
Management Factors		
E&S Staffing and Capacity: <i>This entails appointing staff to</i>	1)	Does the PFI's board and senior management (e.g. CRO, Head of Credit etc) have a good and sufficient understanding on the importance of good E&S risk management?
manage E&S issues and to develop and implement training programs for investment staff	2)	Is there a designated full-time staff person and/or a department/committee with responsibility for E&S risk management? What background and technical expertise in terms of E&S risk management do they have? Which key aspects need to be strengthened?
on effective E&S risk management.	3)	Which staff/department is responsible for ongoing day to day E&S risk management ? Has the designated E&S staff undergone adequate training on E&S risk management to perform their functions (e.g. STEP, ESRA, PS training)?
	4)	What is the level of awareness and capacity of the loan/investment staff on E&S issues and in undertaking E&S due diligence? What specific aspects would need to be strengthened (e.g. level of knowledge of E&S laws and regulations, EIA requirements, business case, policies and processes, PSs, sector specific risks)?
	5)	Does the PFI utilize or propose to utilize external consultants to support E&S risk management (if yes for which aspects) and does this effectively help to address internal capacity gaps?
	6)	Has the PFI identified the training needs for those persons with responsibility for overseeing E&S risk management and implementation of the ESMS? What is the training plan and has it been effectively implemented?
	7)	Does the PFI have sufficient capacity to develop and roll-out a training program for all staff or is the use of external support (consultants) advisable?
	8)	Has the PFI developed E&S related training materials /courses and what is the quality?
	9)	Which ongoing training and training for new staff is being provided? Is this effectively integrated into the PFI's overall staff training program?
E&S Management System:	1)	Does the PFI endorse and comply with Bangladesh Bank ESRM Guidelines?
This entails development of an	Do	es the PFI have a policy with regard to E&S issues? Has it been approved by the PFI's board?
ESMS (policy, procedures, tools, etc) which has formally been adopted by Senior	2)	Does the FI's ESMS include a documented process to assess and monitor the E&S impacts and risks of its projects, and is this process integrated into the loan/investment review process of the institution?
Management and communicated to the	3)	Does the ESMS adequately specify the applicable requirements (i.e., the Exclusion List, Restricted Activities, National Laws, and/or the Performance Standards)?
organization.	4)	Does the ESMS specify the scope or types of investments/activities covered by the ESMS (e.g., the PFI's entire lending activities; the specific activities funded by IPFF II investments; asset class), and indicate the applicability of the requirements for the various types of products?
	5)	Does the ESMS specify organizational responsibilities for E&S risk management?

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	Does the ESMS include procedures for monitoring and review of the portfolio to assess ongoing E&S performanc and the status of CAP implementation?
	Does the ESMS include the necessary tools and guidance notes for effective implementation?
	Does the PFI require its borrowers to provide periodic reports pertaining to projects' E&S performance?
	Does the PFI require its borrowers to report accidents and incidents pertaining to their loans in a timely fashion?
	1) Has the PFI developed a system to review and regularly update the ESMS and capture updates to legislation and international best practices, if relevant and to continuously improve the functioning of its ESMS?
	2) Has the ESMS been approved by senior management?
	3) Are the E&S policies and procedures effectively communicated across the PFI's organization? How are these communicated?
Management Commitment: This entails the level of management commitment to	Which budget resources has senior management allocated for the development and implementation of the ESMS (e.g. consultant to develop the ESMS or to undertake ESDD reviews), for hiring/contracting E&S staff/consultants needed and particularly training on E&S risk management?
incorporate E&S aspects into the FI's risk management	Does the board and senior management play an active role in fostering adequate E&S risk management practices and ensuring internal communication, including on its importance throughout the organization?
practices including resource provision, endorsement, empowerment and leadership.	Has the PFI's management team integrated E&S into their long-term business strategy to enhance its practices and how are business /corporate needs balanced with E&S issues?
строметили или гешегзир.	Has the E&S staff/committee/department been fully empowered and hence has the needed leverage to undertake their functions and ensure proper ESMS implementation across the institution?
	Does the PFI proactively and regularly review the effectiveness of its ESMS and staff capacity and been implementing improvements to enhance its practices?
	How responsive has the PFI been in addressing E&S performance gaps (existing PFIs) or to introducing E&S risk management (ESMS, staff, training, reporting, ESDD prior review) (new PFIs)?
	Has the PFI undertaken any initiative(s) that go beyond compliance with external investor requirements (e.g. application of ESMS beyond asset class, or PS screening although not required) and/or played an active leadership role in the market (national initiatives, sustainability reporting, EP signatory)?
	Has the PFI worked towards or obtained any environmental certifications for its ESMS (ISO)?
	Identify any other aspects that demonstrate the PFI's commitment (e.g. consistent ESMS roll-out across a large number of subsidiaries, application of the ESMS beyond the 'relevant financing operation'.
Performance Factors	
Portfolio E&S compliance with applicable requirements:	Is the PFI undertaking E&S due diligence in line with the ESMS procedures and key steps outlined therein and appropriately applying the ESDD tools developed? Please have the PFI provide evidence of E&S due diligence.
applicable requirements.	appropriately applying the 2022 tools developed. I lease have the 111 provide evidence of Ecco due difference.

- ESMS Procedure Implementation
- Quality of ESDD
- Monitoring of E&S
 Performance and Follow-up

This entails adequate ESMS implementation including appropriate categorization; screening, identification and mitigation of risks and impacts; and motoring of the portfolio to ensure compliance of subprojects with the applicable requirements.

- 2) Does the PFI's **staff conduct project site visits** prior to, during and after loan application review? If so, please have the PFI provide evidence of this.
- 3) Is the PFI adequately screening against the Exclusion List and applying the Guidance on the List of E&S Sensitive Activities?
- 4) Is there evidence of **adequate categorization** of the activities financed?
- 5) What is the quality of the PFI's E&S due diligence undertaken against the national laws and/or the Performance Standards? Are E&S risks and impacts adequately identified and appropriate mitigation measures included into Corrective Action Plans?
- 6) Are the **ESDD findings included in the loan/investment approval documentation** (e.g. credit committee memo) and discussed during Credit Committee meetings?
- 7) Will **obtaining E&S permits/licenses or clearance** of environmental liabilities be included in the CODs? How is ongoing compliance with these requirements monitored?
- 8) **Is ongoing compliance with the applicable requirements** (e.g. XL, RA, HC, PSs) and implementation of Corrective Action Plans **incorporated into the loan/investment agreements** with the PFI's borrowers/investee companies?
- 9) Is the PFI actively monitoring the E&S performance of project sponsors (review of annual reports, site visits), including the status of Action Plan implementation after disbursement/investment?

PS2 Compliance: This entails establishment of adequate labor and working conditions as well as Life, Fire and Safety measures in line with PS2 and the national laws.

- 1) Has the PFI adopted and is implementing **human resource policies and procedures consistent with the requirements of PS2 and the national laws** (e.g. written policy/procedures outlining employment conditions, written contracts, relations with 3rd party contractors) and adequately informs its employees about these policies?
- 2) Does the FI **recognize the rights of their employees to form and join employee organizations** of their choosing? Is there any evidence of **discrimination or restrictions** posed by the FI?
- 3) How does the FI ensure that the principles of **equal opportunity and non-discrimination** are applied in all employment decisions (e.g. non-discrimination policy, anti-harassment policy, medical testing)?
- 4) Have any **collective dismissals** taken place or are planned? Have **adequate retrenchment plans** been developed and did the **retrenchment process include appropriate consultations, communication of selection criteria and compensation payment information**, as well as a **grievance mech**anism in line with the requirements of PS2 and the national laws?
- 5) Has the PFI established an effective mechanism for employees to raise workplace concern and provide feedback, and communicated this to its employees?
- 6) Have there been any **labor disputes, court cases, strikes or collective disputes**? What issues did they relate to and how have they been resolved?
- 7) Does the FI comply with all **regulatory requirements regarding LFS** such as fire safety permits and have outstanding issues identified during fire safety inspections been addressed?

	8)	Are adequate operational LFS procedures , including organizational responsibilities, fire emergency plans, monitoring and testing processes in place (existing and new facilities)?
	9)	Does the FI provide regular training and awareness raising activities on LFS for its staff including fire drills, first aid and firefighting training, and conduct safety audits?
Communication Factors		
Quality and Quantity of Information available for	1)	Has the PFI been responsive and provided Bangladesh Bank with the required information during the appraisal to assess its current E&S practices, portfolio, PS2/LFS aspects etc?
Appraisal (or Supervision): This entails provision of	2)	Has the PFI been providing its annual E&S report regularly to Bangladesh Bank ? Is adequate information provided (portfolio, ESMS, staff etc) and are reports submitted within the agreed-upon timelines ?
adequate and timely information during appraisal or	3)	Does the PFI adequately notify Bangladesh of accidents and incidents?
supervision by the FI.	4)	Has the PFI been providing to Bangladesh Bank (were required) notifications on High risk projects , the agreed upon E&S information in capital call notices and the ESDD for review?
Internal and External	1)	Is appropriate E&S performance information periodically reported internally to senior management?
Stakeholder Communications: This entails	2)	What mechanism/channel does the PFI have in place to receive and register external communication and complaints regarding its operations (phone number/hotline, website, email, other)?
internal feedback loops within the FI and external	3)	How does the FI screen, assess and address concerns received?
communications and grievance	4)	What mechanism is in place to respond to complaints , and track and document them?
mechanisms.	5)	How many inquiries have been received to date/during the reporting period and what were they mainly related to?
	6)	Is the PFI making publically available any E&S/Sustainability reports regarding its activities?

ANNEX 12. ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

Environmental and Social Screening Checklist

The purpose of this checklist is to identify potential environment and social issues related to project development, construction and operation. This is a generalized checklist (non-exhaustive) format for infrastructure project. The user/ project proponent may fill-up the format, which may be reviewed by an Environmental Professional to categorize the project.

(A) Project Background

1.	Name of Proposed Project	
2.	Location	
3.	Project objective	
4.	Capacity or size of the Project	
5.	Proposed date of commencement of work	
6.	Proposed construction period	
7.	Sector	
8.	Executing Agency	

(B) Environmental and Social Screening of Project

Sl. No	Screening Questions	Yes	No	Possible Negative Environmental Impact/Comments
	Potential Environmental Impacts Sub-project implementation.			
1.	Will the renovation work disturb other academic/hospital/residential activities?			
2.	Project's sitting: Is the Project site adjacent to or within any of the following environmental sensitive areas?			In the case select "yes", describe detailed information such as: name of historical property, natural resource, nearest distance from the Sensitive area to the Project site etc
	i. Cultural heritage site			

Sl. No	Screening Questions	Yes	No	Possible Negative Environmental Impact/Comments
	ii. Protected areas			
	iii. Wetland			
	iv. Forest			
	v. Estuary			
	vi. Buffer zone of Protected areas			
	vii. Nature reserves like bird yard, mangrove forest etc			
	viii. Rivers and reservoirs			Name of main water bodies (rivers), lakes, reservoirs and nearest distance to the Project site
	ix. Canals and irrigation system			Assess the density of the canal system in the Project's area
	x. Agricultural land			
3.	Potential environmental impacts: Will the Project cause:			If select " yes", please describe and briefly assess impact's level
	i. Encroachment on historical/cultural areas			
	ii. Encroachment on critical ecosystem (e.g. sensitive or protected area, national park, nature reserve etc)			
	iii. Disfiguration of landscape and increase waste generation			
	iv. Change of surface water quality or water flows			
	Increase water turbidity due to run- off and erosion			
	Waste water from camping sites is directly discharged to the surface water resources or not?			
	Construction waste is directly discharged to the surface water or not			
4.	Will it create major noise/vibration?			If select " yes", please list of main reasons
5.	Will it create dust problem around the sites?			If select " yes", please list of main reasons

Sl. No	Screening Questions	Yes	No	Possible Negative Environmental Impact/Comments
6.	Will it temporarily stop the water supply and sanitation system?			
7.	Will any refrigeration/air conditioning units be removed/ disposed?			
8.	Will any liquid waste, or an item containing liquids (including oils), need to be transported off-site for reuse, recycle or disposal?			
9.	Will equipment containing polychlorinated biphenyls (PCB's) be removed (i.e. transformers, capacitors, hydraulic and heat transfer systems, etc.)?			
10.	Will building materials containing asbestos be removed/disposed?			
11.	Will any building materials be removed/disposed that are coated with lead-based paint?			
12.	Will any building materials be removed/disposed that contain lead, silver or chrome?			
13.	Will batteries be removed/disposed (lead-acid or nickel-cadmium batteries from emergency lights and other battery-powered or battery-backup items?			
14.	Will mercury-containing devices (switches, gauges, thermostats) be removed/disposed?			
15.	Will an emergency generator set or other aboveground storage tank (AST) be installed or removed?			
16.	Will the workers be provided protective equipment, devices and clothing and be ensured those are used?			
17.	Will enough health and safety direction and insurance be provided to the workers?			
18.	Permanent land acquisition			If select " yes", please list of land

Sl. No	Screening Questions	Yes	No	Possible Negative Environmental Impact/Comments
				area for permanent acquisition, type of soils, and purpose of acquisition
19.	Temporary land acquisition			If select " yes", please list of land area for permanent acquisition, type of soils, and purpose of acquisition, duration of acquisition
20.	Is there any household need to be relocated?			If yes, how many households?
21.	Would the resettlement site is environmentally and/or culturally sensitive			If select "yes" briefly describe the potential Impacts
22.	Is there any risk of disease dissemination from construction workers to the local peoples (and vice versa)?			Estimated number of groups of workers to be hired for project construction in the commune/ district
23.	Is there any potential for conflict between construction workers and local peoples (and vice versa)?			
24.	Are explosive and hazardous chemicals used within the Project?			If select "yes", please list of these materials
25.	In the past, there was any accident incurred due to landmines or explosive materials remaining from the war?			
26.	Will Project's construction cause disturbance to the transportation in the Project's site?			If select "yes", please assess the impact level: • Significant impact • Medium impact • Minor
27.	Project's construction will cause any damage to the existing local roads system?			
28.	Will soil excavation during Project's construction cause soil erosion?			If select "yes", please assess the impact level: • Significant impact • Medium impact • Minor
29.	Will Project need to open new access roads?			If select "yes", please briefly estimate number of temporary access roads and their locations
30.	Will Project cause fragmentation of habitat of flora and fauna?			If select "yes", please describe

Sl. No	Screening Questions	Yes	No	Possible Negative Environmental Impact/Comments
31.	Will Project cause impact on air transportation?			
32.	Will Project cause risk to safety and human health (EMF, electric shock etc.)?			If select "yes" ", please describe

ANNEX 13. SAMPLE OUTLINE OF ESIA AND ESMP⁷²

i. Cover page

Including logo, project title, name of developer, name of consultant, date of original and date of revised versions

ii. Table of Contents

1. NON-TECHNICAL SUMMARY

Should concisely discuss significant findings and recommended actions in appropriate and understandable lay language

2. BACKGROUND

- 2.1 Project justification and purpose
- 2.2 Project location

Should include maps showing project site and area of influence

2.3 Project description and associated activities, detailing the operation modes

Describing the project context (geographic, ecological, social, health and temporal) as well as additional / associated project components, such as transmission lines, access roads and water supply).

Should also describe facilities and activities by third parties that are essential for successful operation of the project.

3. ENVIRONMENTAL POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

Presents the national policy, legal and administrative framework. Also presents obligations to international environmental and social treaties, agreements and conventions, the international standards applied to the project, other priorities and objectives for E&S performance identified by the buyer / project sponsor. Explains environmental and social requirements of the project investors.

4. APPROACH AND METHODOLOGY

This Chapter must set out the approach and methodology used in the ESIA and how the data and information collected has been incorporated in the findings and recommendations.

4.1 General Approach

For example including flow charts depicting how the ESIA has been developed

4.2 Methodology

Describe the methodology used for data gathering, including the scientific approach for the baseline studies, for example sampling methods, instrumentation etc.

⁷² Source: Electricity Regulatory Authority. GUIDE FOR CONTENT OF ESIA. 2014-09-30 (Rev. 2014-11-17)

Describe the methodology used to categorize the significance of the environmental and social impacts identified (e.g. into high, medium and low risks).

4.3 ESIA Team

Briefly outline how the ESIA work was organised, the names of the team members, their roles and their qualifications.

4.4 Assumptions, uncertainties and constraints

Identify any information gaps and/or limitations to the available data.

4.5 Stakeholder consultation

Describe the stakeholder consultation process and the results. This may be presented as follows (extract from the ERA template for a Stakeholder Engagement Plan):

Stakeholder groups	Key Stakeholders	Summary of Specific Interest
International		
Governmental		
Non-government organisations		
Operational suppliers, clients and client rep		
Institutions (universities, think tanks)		
Internal stakeholders	E.g. staff and employees	E.g. training and skills development
Public groups		
General communities		
Other key affected parties		

5. ENVIRONMENTAL AND SOCIAL BASELINE STUDY

Defines the study area delineated for the boundaries of the baseline study. Describes relevant physical, biological, socioeconomic, health and labour conditions, including any changes anticipated before the project start.

Considers current and planned development activities within the project area but not directly connected to the project. Indicates accuracy, reliability and sources of the data used.

6. ANALYSIS OF ALTERNATIVES

Analysis of alternatives: comparing reasonable alternatives to the proposed project technology, design, and operation in terms of their potential E&S impacts, the feasibility of mitigating these impacts, etc. The alternatives should match the alternative designs presented in the Feasibility Study. Include technical drawings, maps etc. of alternative designs.

Provide the criteria for the assessment and identification of the best design option available. Identify and provide justification for the best design option.

7. IMPACT IDENTIFICATION AND EVALUATION

Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures for the negative impacts, and any residual negative impacts that cannot be mitigated.

Identifies and estimates the extent and quality of the available data, key data gaps, and uncertainties associated with predictions, and specified topics that do not require further attention. Evaluates impacts and risks from associated facilities and third party activities.

Examines global, trans-boundary, and cumulative effects as appropriate.

8. MITIGATION/OPTIMISATION MEASURES AND RESIDUAL IMPACTS

Consists of the set of mitigation and management measures to be taken during implementation of the project to avoid, reduce, mitigate or remedy for adverse social and environmental impacts. These should be prioritised on the basis of an assessment of their significance.

9. ENVIRONMENTAL AND SOCIAL MANAGEMENT PROGRAMME

Organises the mitigation and optimization measures identified in chapter 8 into a programme of overall activities.

This may be made more operational through the development of specific action plans.

The ESMP may be a multiple of other plans, for example Stakeholder Engagement Plan, Resettlement Action Plan etc.

The ESMP may be structured as follows:

Issues/aspects	Location	Mitigation measure	Key verifiable indicator	Person responsible	Remarks	Cost (USD)
Construction						
1.						
2.						
Etc.						
Operation						
1.						
2.						

Etc.			
200.			

10. MONITORING, EVALUATION AND REPORTING

Outline the monitoring, evaluation and reporting measures to be put in place to assess the effectiveness of the mitigation measures. Describe who will be responsible for their implementation, and whether a management system will be put in place.

11. CONCLUSION AND RECOMMENDATIONS

This section must present a clear statement of the conclusions and recommendations on actions to be taken to ensure that environmental issues are adequately addressed in subsequent project preparation, implementation, monitoring and evaluation phases.

12. APPENDICES

- 12.1 References Used
- 12.2 Technical Appendices
- Records of stakeholder engagement.
- List of stakeholders consulted or engaged. (Record of interagency and consultation meetings. Records of any other means of obtain the views of affected groups, such as surveys.)
- Terms of Reference.
- Other technical information and data, as required.
- List of ESIA report preparers individuals and organizations
- References written materials used in the study preparation to be listed as follows: Author, (year), reference title, journal or publisher, page number
- Associated reports, audits and plans (e.g. resettlement action plan or indigenous peoples/natural resource dependent community plan, community health plan).
- Action plan describing actions necessary to implement the various sets of mitigation measures, prioritise these actions, timeline for implementation, schedule for communicating with the affected communities

ANNEX 14. SAMPLE TOR FOR CONDUCTING AN ESIA

Environment and Social Impact Assessment (ESIA) is a decision support mechanism to ensure that the project design and implementation are environmentally sound and sustainable. During the preparation phase, the objective of the ESIA is to provide inputs to the selection of sub-projects, feasibility study; preliminary and detailed design as well as assist development of a holistic development of the project package. During the implementation phase, environmental management plans (developed as a part of the ESIA during the preparation phase) are to be used for executing the environmental mitigation, enhancement and monitoring measures.

Objectives of ESIA

In the preparation phase, the ESIA shall achieve the following objectives:

- i. Identify and analyze upstream environmental issues that may affect the project and the sector.
- ii. Establish the environmental and social baseline in the study area, and identify any significant environmental, social, health and safety issues (direct/indirect/induced/cumulative).
- iii. Assess impacts of the project, and provide for measures to address the adverse impacts by the provision of the requisite avoidance, mitigation and compensation measures.
- iv. Integrate the environmental issues in the project planning and design; and
- v. Develop appropriate management plans for implementing, monitoring and reporting of the suggested environmental mitigation and enhancement measures.

The ESIA studies and reporting requirements to be undertaken under these TOR must conform to the GoB regulations and the Bank guidelines.

Description of the Project

Include description of the project; covering geographical location, type of development envisaged, including a description of project activities. Also include current status of the project. Provide brief information on any other study already completed/on-going or proposed) to be added by Client.

Scope of Work

The ESIA comprises the following 3 components: (i) Environmental screening / Inception Report for the entire project; (ii) Environmental and Social Impact Assessment (ESIA) for the individual project/sub-projects, as required; and (c) Environmental and Social Management Plans (ESMPs) for the individual project/sub-projects.

The following section gives the detailed scope of work in each of these stages.

Inception

The Consultants shall use the inception period to familiarize with the project details. The Consultants shall recognize that the remaining aspects of the project, such as engineering and social, would be studied in parallel, and it is important for all these aspects are integrated into the final project design to facilitate their successful project implementation. The Consultants should also recognize that due care and diligence planned during the inception stage helps in improving the timing and quality of the ESIA reports.

During the inception period the Consultants shall: (a) study the project information to appreciate the context within which the ESIA has to be carried-out; (b) identify the sources of secondary information on the project, on similar projects and on the project area; (c) carry out a reconnaissance survey and (d) undertake preliminary consultations with selected stakeholders.

Following the site visits and stakeholder consultations, as well as a review of the conditions of contract with the Client, the consultant shall analyse the adequacy of the allocated man-power, time and budget and shall clearly bring out deviations, if any. The Consultant shall study the various available surveys, techniques, models and software in order to determine what would be the most appropriate in the context of this project.

The Consultant shall interact with the engineering and social consultants to determine how the ESIA work fits into the over-all project preparation cycle; how overlapping areas are to be jointly addressed; and to appropriately plan the timing of the deliverables of the ESIA process. These shall be succinctly documented in the Inception Report.

Environmental Screening

Consultants shall summarize the potential environmental impacts. During such categorization, consideration shall be paid to: (i) location of project with respect to environmentally sensitive areas; and (ii) volume, nature and technology of construction. The screening parameters should be such that their identification and measurement is easy, and does not involve detailed studies.

Environmental Scoping

Based on result of the environmental screening exercise, consultants shall suggest the scope of Environmental and Social Impact Assessment to be undertaken. It shall include a listing of other environment issues that do not deserve a detailed examination in the project ESIA (covering, for example, induced impacts that may be outside the purview of the client) along with a justification. The scoping needs to identify and describe the specific deviations or inclusions vis-à-vis the EA ToR provided, if any, along with a justification; modify this ToR for the project ESIA, if required; and recommend studies that need to be conducted in parallel but are outside the ESIA process.

i. *Baseline:* All regionally or nationally recognized environmental resources and features within the project's influence area shall be clearly identified, and studied in relation to activities proposed under the project. These will include all protected areas (such as national parks, wildlife sanctuaries, reserved forests, RAMSAR sites, biosphere reserves, wilderness zones), unprotected and community forests and forest patches, wetlands of local/regional importance not yet notified, rivers, rivulets and

other surface water bodies. and sensitive environmental features such as wildlife corridors, biodiversity hotspots, meandering rivers, flood prone areas, areas of severe river erosion, flood embankments (some of which are also used as roads). Consultants shall consolidate all this information in a map of adequate scale.

ii. Stakeholder Identification and Consultation: Consultation with the stakeholders shall be used to improve the plan and design of the project rather than merely having project information dissemination sessions. The consultants shall carry out consultations with Experts, NGOs, concerned Government Agencies and other stakeholders to: (a) collect baseline information; (b) obtain a better understanding of the potential impacts; (c) appreciate the perspectives/concerns of the stakeholders; and (d) secure their active involvement during subsequent stages of the project.

Consultations shall be preceded by a systematic stakeholder analysis, which would: (a) identify the individual or stakeholder groups relevant to the project and to environmental issues; (b) include expert opinion and inputs; (c) determine the nature and scope of consultation with each type of stakeholders; and (d) determine the tools to be used in contacting and consulting each type of stakeholder group. A systematic consultation plan with attendant schedules will be prepared for subsequent stages of project preparation as well as implementation and operation, as required.

iii. *Identification of Relevant Macro/Regional Level Environmental Issues:*Consultants shall determine the Valued Environment Components (VECs) considering the baseline information (from both secondary and primary sources), the preliminary understanding of the activities proposed in the project and, most importantly, the stakeholder (and expert) consultations, which would need to be carefully documented. Use of iterative Delphi techniques is recommended.

Based on the identification of VECs, consultants shall identify information gaps to be filled, and conduct additional baseline surveys, including primary surveys. The consultants shall conduct a preliminary analysis of the nature, scale and magnitude of the impacts that the project is likely to cause on the environment, especially on the identified VECs, and classify the same using established methods. For the negative impacts identified, alternative mitigation/management options shall be examined, and the most appropriate strategy/technique should be suggested. The preliminary assessment should clearly identify aspects where the consultants shall also analyse indirect and cumulative impacts during all phases and activities of the project. For the positive measures identified, alternative and preferred enhancement measures shall be proposed.

iv. *Environmental Assessment:* The Consultants shall undertake necessary impact analysis on the basis of primary and secondary information and outputs from the stakeholder consultation process. In the cases of very significant environmental losses or benefits, the consultants shall estimate the economic/financial costs of environment damage and the economic/financial benefits the project is likely to cause. In the cases, the impacts or benefits are not too significant, qualitative methods could be used. In addition, wherever economic and financial costs of the environmental impacts cannot be satisfactorily estimated, or in the cases of significant irreversible environmental

impacts, the consultants shall make recommendations to avoid generating such impacts.

- v. *Environmental and Social Management Plan*: The consultants shall prepare an ESMP to address identified planning, design, construction and operation stage issues. For each issue, the consultants shall prepare a menu of alternative avoidance, mitigation, compensation, enhancement and/or mitigation measures, as required/necessary. Consultants shall provide robust estimates of costs for environmental management measures. These costs shall be verified for common works items in line with the rate analysis for other works. The consultants shall organize consultations with line departments and will the finalize the ESMP.
- vi. *Environmental Inputs to Feasibility Study and Preliminary Project Design:* The ESIA consultants shall make design recommendations, related to alignment, cross-sections, construction material use, mitigation and enhancement measures. The ESIA consultants shall interact regularly with the Client and familiarize themselves with the project's over-all feasibility analyses models, so that the ESIA inputs are in conformity to the needs of the over-all feasibility study.
- vii. *Capacity Building and Training Plan Preparation:* Based on the preliminary findings of the environmental screening, stakeholder consultations and analysis of the project sponsor's capacity to manage environmental issues, the consultants shall prepare a Capacity Building Plan (including requirement of additional technical staff and facilities) to ensure effective implementation of the ESMP. Earmarking staff for environmental and social management and improving their skill-sets would be simultaneously pursued during project preparation and implementation.

A detailed training plan shall be prepared to develop and strengthen environmental capacities of the project sponsor. The strategy may include, as deemed necessary, a mix of hands-on training for key staff involved in project preparation, site visits to similar projects, and whenever required, full-fledged academic programs on environmental management at well-recognized institutions.

The consultants shall interact regularly with the project sponsor throughout project preparation to ensure that the knowledge, skills and perspectives gained during the ESIA assignment are transferred to the sponsor and are utilized effectively during project implementation.

viii. Co-ordination among Engineering, Social, Environment and Other Studies: The consultants, with assistance from the project sponsor, shall establish a strong co-ordination with the other project-preparation studies — engineering, social and/or institutional development. The consultants shall keep in mind the specific requirements of the project in general, and the engineering/design studies in particular, and shall plan their outputs accordingly. It is recommended that some of the consultation sessions may be organised in co-ordination with the social and engineering consultants, as feasible, and when the stakeholders consulted are the same.

The consultant shall review the contract documents – technical specifications, and rate analysis, to ensure that there are minimal conflicts between the ESMP stipulations and specifications governing the execution of works under the project.

- ix. *Public Disclosure:* The consultants shall prepare a non-technical ESA summary report for public disclosure and will provide support to the project sponsor in meeting the disclosure requirements, which at the minimum shall meet the World Bank's policy on Public Disclosure. The consultants will prepare a plan for in-country disclosure, specifying the timing and locations; translate the key documents (including executive summary of ESIA/ESMP) in local language; draft the newspaper announcements for disclosure; and help the sponsor to place all the ESA reports in the sponsor's website.
- x. *Consultant's Inputs:* The Consultants are free to employ resources as they see fit. Additional expertise, shall be provided as demanded by the context of the project. The consultants are encouraged to visit the project area and familiarize themselves, at their own cost, before submitting the proposal; and propose an adequate number and skill-set for the senior specialists and technical support staff for the ESIA assignment. Further, the consultant will allocate adequate number of field surveyors, distinct from the technical support staff, to complete the study in time. Timing is an important essence for any ESIA study, which shall be closely coordinated with the works of the engineering and social teams, simultaneously involved in preparation of the project.

The consultants shall provide for all tools, models, software, hardware and supplies, as required to complete the assignment satisfactorily. These should be widely recognized or accepted. Any new model or tool or software employed should be field-tested before use or the purpose of this ESIA.

The consultants shall make formal presentations, coordinated by the client, at key milestones on the (a) proposed work plan after submitting the Inception Report; (b) recommendations from the environmental screening; and (c) ESIA findings, design and ESMP recommendations. All supporting information gathered by the consultant in undertaking these terms of reference would be made available to the client.

xi. *Consultant's Outputs:* The consultant is expected to provide the outputs, as per the schedule given in the ToR. The Consultants are expected to allocate resources, such as for surveys, keeping this output schedule in mind.

ANNEX 15. SAMPLE TOR FOR ENVIRONMENTAL AND SOCIAL AUDIT

1. Need for Environmental and Social Audit

It is important to recognize that the World Bank Operational Policies require that the Environmental and Social Assessments (ESA) of private sector projects, financed by Financial Intermediary Loan (FIL) institutions undergo the same rigorous treatment, as in case of regular public sector investment projects. However, it is practically unachievable. In public sector projects, the Bank is involved from the inception of the project and goes along in all the stages from project identification, feasibility study, tendering, evaluation, award of contract, financing and construction in the continuum of project development stages, as given in Policy and Strategy for Public-Private Partnership (PPP), 2010. But in a (PPP) project, the Bank or a Participating Financial Institution (PFI) comes in the project scene only at the time of financing. The Bank or the PFI enters into the project life when much of the Environmental and Social Assessment (ESA) activities have been completed. As such it cannot control these activities and can only make a due diligence on the past activities, to ensure compliance.

After the environmental and social impact assessment study report has been approved it is imperative to take all practical measures to ensure the implementation of the environmental and social management plan by carrying out a auditing study on a regular basis (recommended once a year) and ensuring that the criteria used for the audit is based on the environmental and social management plan (ESMP) developed during the environmental and social impact assessment process.

An environmental social audit shall be done through an external agency in accordance with the terms of reference set in consultation with the IE, PFI and Bangladesh Bank. The environmental social audit shall be conducted by a qualified and authorized environmental and social auditor or inspector who shall be an expert or a firm of experts approved by Bangladesh Bank.

2. Objectives

The objectives of environmental and social audit will be to appraise project activities, specially taking into account environmental and social regulatory frameworks, environmental standards, environmental health and safety measures and sustainable use of natural resources. The objectives are outlined as

- i. to ensure compliance with the World Bank and DOE environmental and social requirements as identified in section 1.11 to 1.16 of this ESMF;
- ii. to identify any environmental and social issues associated with a particular project;
- iii. to identify and evaluate the financial implications related to environmental and social issues;
- iv. to minimise exposure to financial risks associated with these issues;

- v. to maximise opportunities for environmental or social benefits and minimise the potential for adverse environmental and social impacts (such as pollution or accidents) associated with project;
- vi. to facilitating management control of environmental practices
- vii. to exploring improvement opportunities

An Environmental Social Audit will be typically categorized as - pre-audit, on-site audit and post audit.

3. Scope and Impact of Environmental and Social Audit

The audit must be carried out on existing facilities which focuses broadly on two elements:

- (a) Compliance of existing facilities and operations with relevant environmental (including occupational health and safety) and social laws, regulations, and applicable IFC and World Bank policies' requirements (ref. Section 1.11 -1.16); and
- (b) The nature and extent of environmental and/or social impacts, including contamination to soils, groundwater, and structures, as a result of past/ on-going activities and proposed transactions.

The scope and depth of the audit or review should be commensurate to potential impacts and type of transactions. PFI /IE may propose financing from IPFF facility either from

- i. an entity which is already in operation (in this case refinancing proposal from IPFF) or
- ii. a new project awaiting financial closure.

In case of refinancing, Environmental and Social Audit will be taken as part of due diligence assessment on a potential IPFF investment and the audit must evaluate current performance and management commitments (including ESMP, Health and Safety Plan, grievance mechanism, stakeholder engagement and communications, and all other programs and commitments as applicable) to the ESMF requirements for IPFF subprojects, and identify gaps against these requirements and necessary corrective actions / gap filling measures in order to ensure compliance.

A corrective Action Plan will be developed if the environmental and social impact audit or review finds that negative but manageable impacts may occur as a result of continuing implementation of on-going activities or new implementation of proposed transactions. The Action Plan may call for preparation and implementation of an ESIA, an IEE, an Environmental and Social Management Plan (ESMP) as relevant, to address the impacts that are identified based on the audit.

The Action Plan should also include measures to inform potentially affected people of the nature of transactions, potential impacts, mitigations measures and grievance mechanisms. The Action Plan should be attached to the loan proposal and the assessment and verification for compliance with the proposed actions, the ESMS of relevant PFIs, and this ESMF is a condition of loan/transaction approval.

4. Pre-audit activities

The pre audit activity aims to develop an audit plan for the on-site activities and to make the necessary preparation and arrangements for the on-site audit. The tasks at this stage are to

- a) indicate the objective, scope and criteria of the audit;
- b) develop an audit plan for the on-site activities;
- c) prepare audit questionnaire;
- d) review background information
 - Site layout plan(s);
 - Site history, use and activities;
 - Organizational structure at audit site;
 - Internal environmental policies, procedures and guidelines.
- e) review operational information
 - operational activities and process description;
 - Management system policies, procedure and program documentation;
 - Relevant records (compliance, monitoring, training, maintenance, calibration etc.);
 - Other relevant information pertaining to environmental management practices.
- f) Conduct initial site visit
 - Meet with officer-in-charge to explain purpose of audit;
 - Assess whether background information gathered is up to date and accurate;
 - Follow-up on the list of preliminary audit impressions;
 - Identify and request additional site information as necessary;
 - Confirm thoroughness of audit scope;
 - Establish adequacy of resources for audit.
- g) Develop on-site questionnaire and audit protocols
- h) Review Audit Plan and arrange logistics
 - Audit scope;
 - Audit schedule:
 - Audit protocols;
 - Allocated resources.

5. On-site Audit Activities

The on-site audit objectives should reflect those of the environmental and social audit, which are:

- a) Verification of legislative and regulatory compliance
- b) Assessment of internal policy and procedural conformance
- c) Establishment of current practice status
- d) Identification of improvement opportunities
- e) Conduct on-site meeting
 - Present audit scope and objectives;
 - Outline the audit approach and methodology;
 - Address questions or concerns of site personnel;
 - Rally staff support and assistance.
- f) Document Review
 - Management policy;
 - Management system documentation;
 - Operational procedures;
 - Records (utility, inventory, monitoring, calibration, transportation, training etc.);
 - Previous audit reports.
- g) Conduct detailed site inspections with aid of on-site audit protocols to look for evidence on:
 - Verification of legislative and regulatory compliance;
 - Assessment of internal policy and procedural conformance;
 - Establishment of current practice status;
 - Identification of improvement opportunities;
 - Status of operational practice;
 - Staff participation in management system.
- h) Conduct Staff Interview to obtain information on
 - Actual practices (current and past);
 - Compliance with/or deviation from statutory and departmental requirements;
 - Awareness of requirements and expectations.
- i) Review Audit Evidence to ensure adequacy of audit evidence at the conclusion of onsite audit by:

- Reviewing information gathered;
- Collecting additional information as needed;
- Substantiating audit findings;
- Summarizing and documenting all findings and observations;
- Identifying issues requiring immediate attention/mitigation
- Noting outstanding issues requiring follow-up.
- j) Conduct closing meeting: The closing meeting provides an opportunity at the conclusion of on-site audit to:
 - Debrief the senior site management;
 - Summarize the audit activities and findings;
 - Highlight system strengths and weaknesses;
 - Discuss preliminary findings and recommended corrective action;
 - Bring up findings requiring immediate attention;
 - Clarify any outstanding issues;
 - Address staff questions or concerns.

6. Post audit activities

The post audit activity aims to produce an Audit Report with audit findings and recommendations and to contribute towards formulation of an Action Plan for continual performance improvement. The activities will be as follows:

a) Collate information and follow up outstanding issues

Information to be organized should include

- Completed pre-audit questionnaire, operational document checklists;
- Completed on-site survey questionnaires, on-site audit protocols;
- All relevant correspondence, memoranda, reports, diagrams and drawings;
- Copies of records, photographs, and other information collected during the site visit;
- Detailed inspection and interview notes and summaries.

7. Audit Imperatives

The environmental and social audit imperatives are enumerated as follows:

a) management practice assess compliance with all relevant environmental law and social regulatory frameworks on health and safety, sustainable use of natural resources and acceptable national and internal standards;

- b) verify the levels of compliance by the proponent with the conditions of the environmental and social management plan;
- c) review existing project documentation related to all infrastructural facilities and designs;
- d) examine monitoring programs, parameters, and procedures in place for control and corrective actions in case of emergencies;
- e) examine records of incidents and accidents and the likelihood of future occurrence of the incidents and accidents;
- f) examine and seek views on health and safety issues from the project employees, the local and other potentially affected communities.

8. Outline of the Audit Report

An audit report shall include but shall not be limited to the following information:

- a) An Executive Summary
- b) Introduction and Background of the Audit
- c) Audit Scope and Objective
- d) Description of Audit Approach and Methodology
- e) Summary of Audit Finding
 - the past and present impacts of the project;
 - the responsibility and proficiency of the operators of the project;
 - existing internal control mechanisms to identify and mitigate activities with a negative environmental impact;
 - existing internal control mechanisms to ensure the workers' health and safety; and
 - the existence of environmental and social awareness and sensitization measures, including environmental standards, and regulations, law and policy, for the managerial and operational personnel.

f) Recommendations and Conclusions

Conducting an environmental and social audit is not an option but a sound precaution and a proactive measure in today's heavily regulated environment. The project proponent/ Executing Agency has a valuable role to play, encouraging systematic incorporation of environmental perspectives into many aspects of an organization's overall operation, helping to trigger new awareness and new priorities in policies and practices.