



Infrastructure Development Company Limited (IDCOL)

Environmental and Social Safeguards Framework (ESSF)

Policy and Procedures

August 2011

ESSF Document Revision No.: ESSF/IDCOL/Rev/2011/ 01

The ESSF has been restructured entirely and ESF and SSF have been merged in the three chapters of the updated ESSF to enable better communication and implementation.

Sr. No.	Section revised in ESSF 2008	Section in ESSF 2011	Brief description of revision and reason for change
Main ESSF document			
1.	Chapter I, Section A	Chapter I, Section A	Addition of financial advisory services and organizational structure of IDCOL (Figure 1) to cover all IDCOL services
2.	Chapter I, Section B	Chapter I, Section B	Converted the section to Business Process of IDCOL. Components of PPIDF included as part of the section. Business processes for advisory services and project finance inserted so as to integrate them with ESSF. Inserted Figure 2: IDCOL Business Process - Advisory Services and Figure 3: IDCOL Business Process – Project Finance
3.	Chapter I, Section C	Deleted	Section has been deleted in the update as IDCOL investment focus sector checklists listing environmental issues have been inserted in the Annex
4.		Chapter I, Section C	Background of ESSF 2008 and reason for updating ESSF in 2011 has been elaborated in this section
5.	Chapter I, Section E&F	Chapter III, Section C&B	Restructured during ESSF update to better organize the document
6.	Chapter II, Section G&H	Chapter III, Section A	Restructured during ESSF update to better organize the flow of the document. Purpose and objectives sections have been merged as they were found overlapping
7.	Chapter II, Section I, J &K	Chapter II	Includes environmental and social acts, rules and regulations. Restructured during ESSF update to better organize the document. Inserted Table 1: Categorization of IDCOL focus sectors as per ECR-97 and Figure 4: GOB process for obtaining EC Certificate from DOE Updated section on waste management (para 41) and labour code (para 45, 46 and 47) Updated with ADB's Environmental and Social Safeguard Policy Statement, 2009 (Section B) Inserted section on Bangladesh Bank's Environmental Risk Management (ERM), February 2011 (Section C); World Bank's Environmental and Social Management Framework (ESMF), June 2011 (Section D) due to changes in respective policies and introduction of new policies/guidelines Inserted section on Harmonized Framework for ESSF (Section E)
8.	Chapter III	Integrated in relevant sections of Chapter I and II	Restructured during ESSF update to better organize the document Inserted Figure 10 to show the structure of IDCOL's ESSF
9.	Chapter IV, Section Q	Chapter III, Section D, E, F &G	Operational procedures have been prepared for two cases – new projects and advanced stage/refinance projects for High, Moderate and Low risk projects considering Inserted Figure 11 to map with change in operational

Sr. No.	Section revised in ESSF 2008	Section in ESSF 2011	Brief description of revision and reason for change
			framework Inserted prohibited investment activities list (Section D, sub-section ii) to meet ADB SPS and other lenders requirements Inserted E&S risk rating system (Section D, sub-section iii) to meet BB ERM requirement
10.	Chapter IV, Section Q	Chapter III, Section I	Grievance Redress Mechanism has been escalated to an individual section to highlight its importance in the implementation of ESSF and updated to harmonize with ADB SPS requirements
11.	Chapter IV, Section V	Chapter III, Section H	Consultation has been escalated to an individual section to highlight its importance in the implementation of ESSF Updated to harmonize with ADB SPS requirements
12.	Chapter IV, Section S, T & U	Chapter III, Section K	Proposed Institutional Structure for Implementation of ESSF includes (i). Structure of Environmental and Social Safeguards Management Unit (ii). Responsibilities of ESSMU (iii). Allocation of Responsibilities Sub-section ii & iii has been revised for further clarity in responsibilities of environmental and social safeguards specialists and common tasks. Inserted Figure 12 for proposed ESSMU structuring
13.		Chapter III, Section L	Inserted section on ESSF Information Management for control of documents
Annexes			
	Annex E-5	Annex E-7	Updated in line with ADB policy change as per SPS 2009
	Annex E-7	Annex E-10	Revised to Preliminary Environmental Appraisal Report as ADB does not require a short report as per SPS 2009
	Annex E-8, E-10	Annex E-6	Updated as ADB SPS Safeguard Requirements – 1: Environment (Terms of Reference of EIA) as per ADB SPS 2009
	Annex E-9	Annex E-14	Revised to better content
	Annex E-11	Annex E-11	Updated and prepared for each of IDCOL's investment focus sectors to meet ADB SPS and other lenders requirements
		Annex E-5	Inserted annex on Legal Enforcement of Health and Safety Laws in Bangladesh in line with the Labour Code 2006 requirements of GOB
		Annex E- 8	Inserted annex on Comparison Between Bangladesh Bank ERM 2011 and IDCOL ESSF (August 2011)
		Annex E- 9	Inserted annex on Site Visit Checklist – Environmental Safeguards to assist IDCOL and project proponents in better implementation of ESSF
		Annex E-12	Inserted annex on Scope for Annual Environmental Monitoring Report for Subproject Companies to meet ADB SPS 2009 requirements
		Annex E- 15	Inserted annex on Guidance for Incorporating EMP into Contract Documents to assist IDCOL and project proponents in better implementation of ESSF
	Annex S-3	Deleted	Short RP not required as per ADB SPS 2009
	Annex S-4	Annex S-3	Updated as ADB SPS Safeguards Requirement-2:

Sr. No.	Section revised in ESSF 2008	Section in ESSF 2011	Brief description of revision and reason for change
			Involuntary Resettlement as per ADB SPS 2009
	Annex S-5	Annex S-5	Updated in line with ADB policy change as per SPS 2009
	Annex S-6	Deleted	Short ADP not required as per ADB SPS 2009
	Annex S-7	Annex S-4	Updated as ADB SPS Safeguards Requirement-3: Indigenous People as per ADB SPS 2009
	Annex S-8	Annex S-6	Revised as per ADB SPS 2009 requirements and further clarity
	Annex S-9	Annex S-7	Revised as per ADB SPS 2009 requirements and further clarity
	Annex S-10	Deleted	RP and ADP format forms part of SR 2 and SR 3 as per ADB SPS 2009 included as Annex 3 and 4
	Annex S-11	Deleted	guidelines for preparation of RP and ADP forms part of SR 2 and SR 3 as per ADB SPS 2009 included as Annex 3 and 4
		Annex ES- 1	Inserted annex on ADB's Prohibited Activities List as per ADB SPS 2009
		Annex ES- 2	Inserted annex on ADB Safeguard Policy Statement as per ADB SPS 2009
		Annex ES- 3	Inserted annex on Environmental and Social Section in the Loan Application Form to assist IDCOL in better implementation of ESSF
		Annex ES- 4	Inserted annex on Outline of Environmental and Social Due Diligence Report to meet ADB SPS 2009 requirements on due diligence
		Annex ES- 5	Inserted annex on Format for Annual Environmental and Social Performance Report to ADB to meet ADB SPS 2009 requirements on reporting
		Annex ES- 6	Inserted annex on Terms of Reference for ESSF Annual Audit to assist IDCOL in better implementation of ESSF
<i>(Signature of ESSMU Manager, IDCOL)</i> Name:			<i>(Signature of Director (Legal), IDCOL)</i> Name:

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Abbreviations

ADB	Asian Development Bank
ADF	Asian Development Fund
ADP	<i>Adibasi</i> Development Plan
BB	Bangladesh Bank
CFL	Compact Fluorescent Lamp
ECA-95	Environment Conservation Act, 1995
ECC	Environmental Clearance Certificate
ECR-97	Environment Conservation Rules, 1997
EDD	Environmental Due Diligence
EIA	Environment Impact Assessment
EMP	Environment Management Plan
EMS	Environment Management System
ESAM	Environmental and Social Appraisal Manual
ESSMU	Environment and Social Safeguards Management Unit
ESSF	Environmental and Social Safeguards Framework
ESMF	Environmental and Social Management Framework
ESMS	Environmental and Social Management System
ERM	Environmental Risk Management
FI	Financial Intermediary
GOB	Government of Bangladesh
GRC	Grievance Redress Mechanism
IDCOL	Infrastructure Development Company Limited
IEE	Initial Environmental Examination
IPSA	Initial Poverty and Social Assessment
ISO	International Organization of Standardization
KYC	Know-Your-Client
LAB	Lead Acetate Battery
LCC	Location Clearance Certificate
NBFI	Non Bank Financial Institution
NEMAP	National Environmental Management Action Plan
NGO	Non-Government Organization
MoU	Memorandum of Understanding

OCR	Ordinary Capital Resources
OHSAS	Occupational, Health and Safety Standard
OM	Operational Manual
OP	Operational Policy
PEAR	Preliminary Environment Appraisal Report
PLS	Preliminary Letter of support
PPIDF	Public-Private Infrastructure Development Facility
PSIF	Private Sector Infrastructure Fund
REREDP	Rural Electrification and Renewable Energy Development Project
RES	Renewable Energy Systems
RP	Resettlement Plan
SAR	Social Assessment Report
SHS	Solar Home Systems
SMIP	Small and Medium Infrastructure Subprojects
SP	Safeguard Policies
SSF	Social Safeguards Framework
ToR	Terms of Reference
USD	United State Dollars

ENVIRONMENTAL AND SOCIAL SAFEGUARDS FRAMEWORK (ESSF)

I. INTRODUCTION

A. About IDCOL

1. Infrastructure Development Company Limited (IDCOL) was established on 14 May 1997 by the Government of Bangladesh (GOB). The Company was licensed by Bangladesh Bank as a Non-Bank Financial Institution (NBFi) on 5 January 1998. Since its inception, IDCOL is playing a major role in bridging the financing gap for developing medium and large-scale infrastructure and renewable energy projects in Bangladesh. In less than a decade, the company now stands as the market leader in private sector energy and infrastructure financing in Bangladesh.
2. IDCOL's mission is to promote economic development in Bangladesh by encouraging private sector investment in energy and infrastructure projects. Its values and goals include achieving global standards and competence, transparency and integrity, and social and environmental responsibility.
3. IDCOL is involved in the following areas of business:
 - (i). Financing small, medium and large infrastructure projects
 - (ii). Refinancing Non-Government Organizations (NGOs)/Microcredit Financing Institutions' credits for the promotion of renewable energy projects
 - (iii). Providing financial advisory services to both financial institutions and project Sponsors/Borrowers
 - (iv). Organizing training courses on project finance and financial modeling and environmental and social safeguards.

(i). Financing small, medium and large infrastructure projects

4. IDCOL acts as a catalyst for attracting private debt financing in infrastructure projects. The company is actively pursuing its objective of developing infrastructure. IDCOL focuses on financing the following sectors:
 - (a). Power Generation*
 - (b). Renewable Energy*
 - (c). Telecommunications*
 - (d). Ports (Major and Minor)
 - (e). Toll Roads and Bridges *
 - (f). Urban Environmental Services (Such as Municipal Solid Waste and Hazardous Waste Disposal Facilities, Common Industrial Effluent Treatment Plants etc.)

- (g). Gas and Gas-related Infrastructure
- (h). Water Supply and Distribution
- (i). Information Technology
- (j). Other Infrastructure development projects

** Investments have been largely limited to these sectors in the last few years. Other sectors are expected to require funding in the near future as development in these sectors accelerates*

5. As a lender to small, medium and large infrastructure projects, IDCOL is a complementary source of funds and is able to provide loans covering up to 40% of the project cost within the framework of an appropriate financing plan.
6. The project proponent is expected to infuse a level of equity that is appropriate to the project considering the risks associated with its implementation and operation but, at a minimum, that investment must be at least 20% of the total project cost. Banks and other credit institutions (both public and private) often cooperate with IDCOL in drawing up the overall financing package for major projects and participating with loans and other services.

(ii). Financial Advisory Services

7. IDCOL provides financial advisory services to both financial institutions and project proponents.
8. Advisory services to financial institutions include:
 - (a). Reviewing due diligence report prepared by the financial institutions on various cost items of the project with specific reference to various engineering and other hard cost items.
 - (b). Reviewing project appraisals prepared by the financial institutions and identifying areas in the technical and financial sections of such report and suggesting any improvements.
 - (c). Advising financial institutions and their lawyers on the legal documentation to ensure that the project documents are properly structured with equitable risk sharing; and that financial institutions' interests are properly secured.
9. Advisory services to project proponents include:
 - (a). Assisting project proponents in securing finance from cross border sources.
 - (b). Assisting project proponents in loan negotiation and documentation.
 - (c). Structuring / designing financial models for proponents.

(iii). Organizational Structure

10. The organizational structure of IDCOL is shown in **Figure 1**.

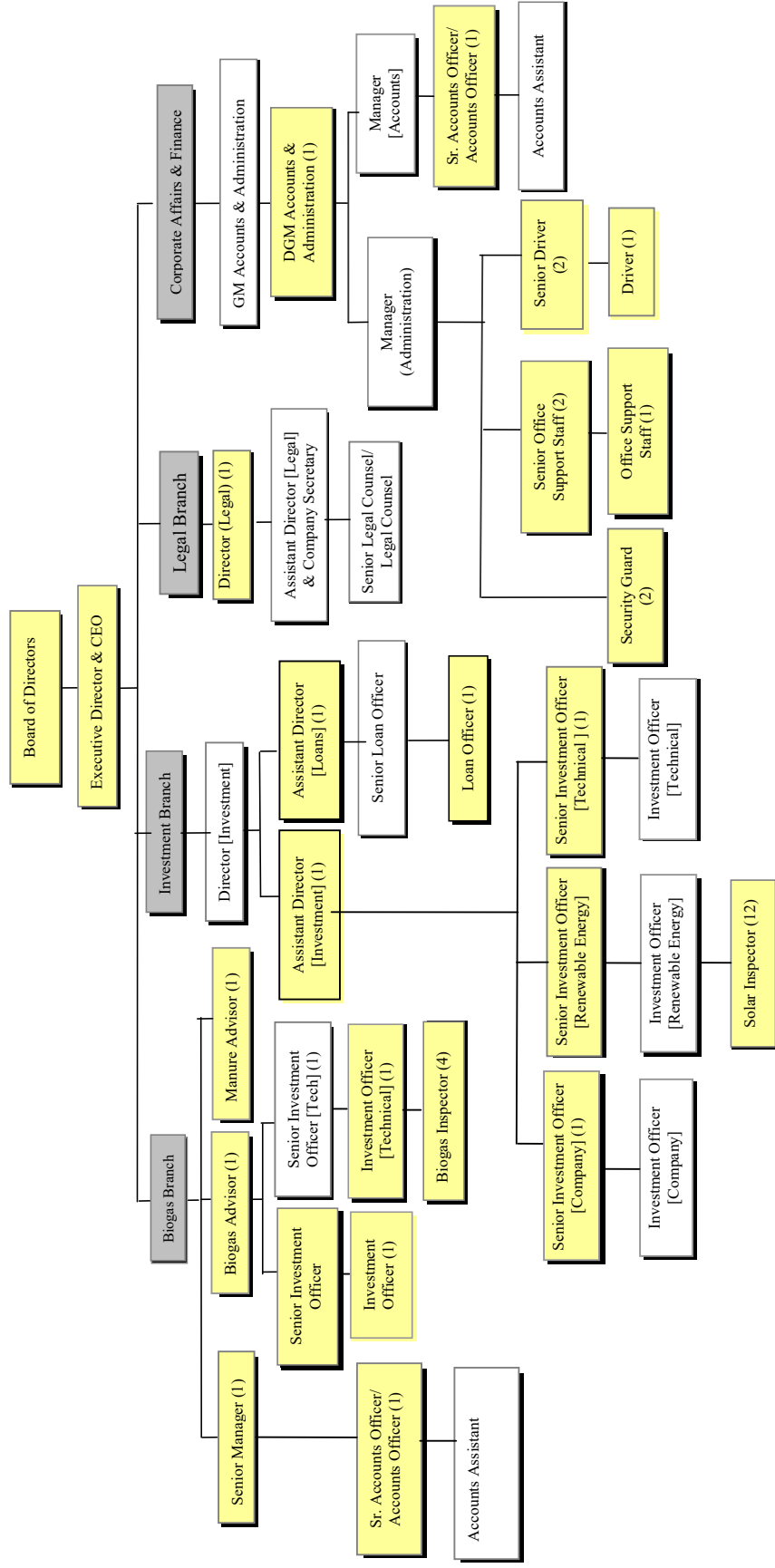


Figure 1: Organizational Structure of IDCOL

B. Business Processes of IDCOL

(i). Business Process for Advisory Services

11. The business process for advisory services at IDCOL is shown in **Figure 2**.

A) Advisory Services for Financial Institutions



B) Advisory Services for Project Proponents



Figure 2: IDCOL Business Process - Advisory Services

The advisory services of IDCOL are limited to the renewable energy sector projects as of now. However, it is possible that IDCOL may provide advisory services for other sector projects at a later date.

(ii). Business Process for Project Finance

12. **Loan application:** The project proponent is required to fill IDCOL's loan application form which includes specific financial and technical information. A feasibility study of the project has to be submitted with the loan application. After an initial clearance-in-principle, a non-binding Preliminary Letter of Support (PLS), including a draft Term Sheet and Loan Agreement is issued to the project proponent.
13. **Appraisal:** IDCOL carries out an appraisal of the economic, technical and financial viability of each project and ensures that the investment is in line with national policies and priority development programmes of the Government of Bangladesh. During the appraisal, IDCOL also verifies compliance with environmental regulations.
14. **Approval:** The Board of Directors of IDCOL, approve the project after examination of the final appraisal report.
15. **Monitoring:** IDCOL loan contracts include terms for monitoring of implementation progress and expenditure. After completion, a report is prepared which also compares actual expenditure with that estimated initially.

16. The business process steps followed in IDCOL are presented in **Figure 3**.

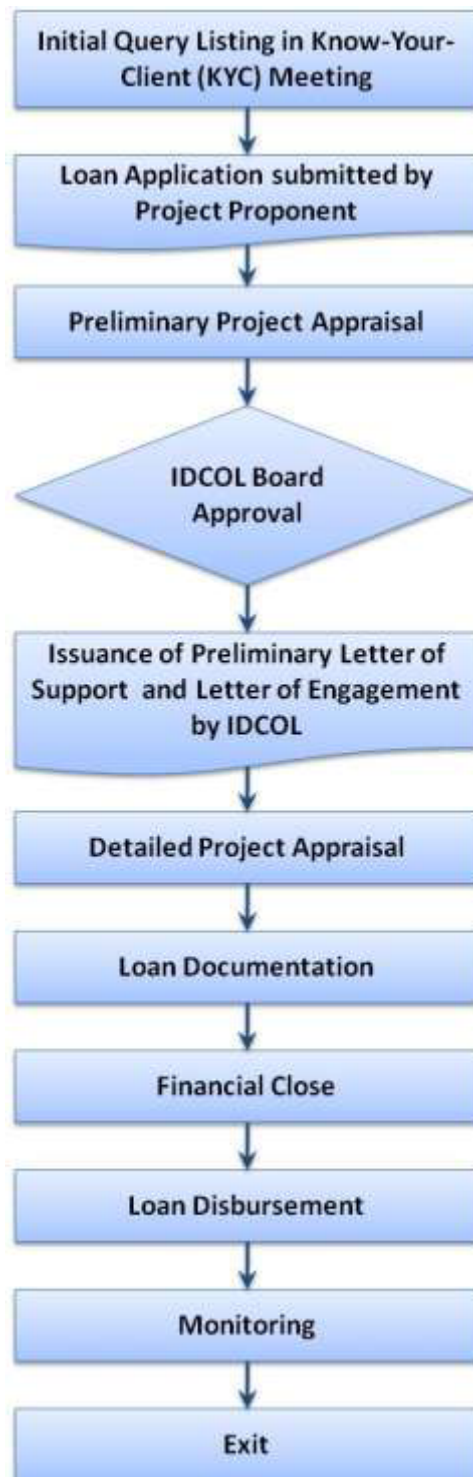


Figure 3: IDCOL Business Process – Project Finance

17. While IDCOL would be drawing its funds from various sources such as ADB, WB, EIB, DfID, GIZ and IDB and JICA, one of the key lenders is the Asian Development Bank (ADB)

through the Public-Private Infrastructure Development Facility (PPIDF), financing of a US dollar denominated loan of up to US\$165 million.

18. Since ADB's SPS is one of the key requirements of the PPIDF, the loan facility is explained below. The PPIDF has two purposes, namely: (i) the financing of infrastructure subprojects implemented by the private sector; and (ii) providing funds to IDCOL's successful renewable energy program which was started under the Rural Electrification and Renewable Energy Development (RERED) Project, originally funded by the World Bank.
19. The PPIDF has the following three components
 - (a). Component A: Financing of Private Sector sponsored large infrastructure subprojects (to be funded from ADB's Ordinary Capital Resources (OCR) loan) This Component will support projects exceeding total project cost of USD 10 million across various infrastructure sectors.
 - (b). Component B: Small and Medium Sized Infrastructure subprojects – Small and Medium Infrastructure Subprojects (SMIP) (to be financed out of Asian Development Fund (ADF) loan). It is expected that approximately USD 50 million or equivalent of the ADF loan will be provided to IDCOL in Taka for the purposes of SMIP with a total project cost of not more than 10 million USD per SMIP.
 - (c). Component C: Renewable Energy subprojects (to be financed out of the ADF loan). Under this Component, USD 33 million equivalent will be provided to IDCOL in Taka to finance the set up of Renewable Energy Systems (RES) such as Solar Home Systems (SHS) and/or biomass based installations through a micro-finance based, direct sales programme.
20. World Bank has extended Second Additional Financing for the RERED Project which is Component C of PPIDF. The second additional financing will support: (i) scale up of the Projects renewable energy components that are providing affordable lighting in rural areas through the installation of SHS's and providing reliable electricity generated from other renewable energy sources (US\$166 million); (ii) Technical assistance (US\$6 million)

C. Background on Environmental and Social Safeguard Framework (ESSF), 2008

21. IDCOL developed an Environmental and Social Appraisal Manual (ESAM) in 2000 in response to the requirements of the World Bank in processing Private Sector Infrastructure Fund (PSIF).
22. ADB was financing a USD denominated loan of up to US\$165 million to IDCOL through PPIDF. As per ADB's environmental and social safeguards for Category FI (Financial Intermediaries), an Environmental and Social Management System had to be developed. Hence Environmental and Social Safeguards Framework (ESSF) was prepared by IDCOL in 2008 and was built upon the ESAM that was in operation at IDCOL. It also drew operational experience of ESAM (albeit limited) in the context of PSIF.

23. At the time of preparation of the ESSF in 2008, ADB had three Safeguard Policies (SPs) - the Policy on Involuntary Resettlement (1995), the Policy on Indigenous Peoples (1998), and the Policy on Environment (2002). These policies outlined internal safeguard policy compliance processes. Operations Manuals (OM) Sections F1/F2/F3 elaborated these procedures and requirements.
24. The ESSF 2008 composed of the Environmental Management System (EMS) Framework and the Social Safeguards Framework (SSF) applicable to all transactions under PPIDF and was prepared to meet GOB and ADB environmental and social safeguards FIs.
25. The ESSF was applicable for all Components and subprojects financed from ADB resources by IDCOL, through direct lending and refinance operations and to both public and private sector companies. The ESSF applied at the project-level for Components A and B and for biogas and biomass power plants financed under Component C. For solar energy projects financed under Component C, ESSF applied at the programme-level.
26. In order to meet the requirements of category FI of ADB, IDCOL's ESSF had been structured to reflect the following:
- (a). Environmental and social policy
 - (b). Operational steps viz environmental and social procedures as practiced in project processing and in the project life cycle
 - (c). Institutional structure to operate the ESSF and allocation of responsibilities
 - (d). Capacity development plan at IDCOL, guidance and checklists
 - (e). Annual environmental and social auditing and reporting
 - (f). Updating of the ESSF
27. Since preparation of ESSF in 2008,
- (a). ADB's environmental and social safeguard policies and operational procedures have been updated and presented in Safeguard Policy Statement (SPS) 2009.
 - (b). Bangladesh Bank (BB), the central bank and apex regulatory body for the country's monetary and financial system has prepared Environmental Risk Management (ERM) guidelines for banks and financial institutions in January 2011.
 - (c). An Environmental and Social Management Framework (ESMF) has been prepared for the World Bank-supported Second Additional Financing for RERED Project in June 2011, which is Component C under PPIDF.
28. Hence IDCOL has undertaken the task to update and harmonize the ESSF prepared in 2008 with ADB's SPS, BB's ERM and ESMF for RERED project.

II. REQUIREMENTS ON ENVIRONMENTAL AND SOCIAL COMPLIANCE AND SAFEGUARDS APPLICABLE TO IDCOL

A. Environmental and Social Regulatory Framework in Bangladesh

(i). Environmental Regulatory Framework in Bangladesh

29. **Environmental Policies, Acts and Rules:** The Department of Environment (DOE) has developed a Climate Change strategy and action plan in 2009.
30. Legislative references for Environmental Impact Assessment (EIA) in Bangladesh are the Environmental Policy 1992, Environmental Conservation Act 1995 (ECA-95) and the Environmental Conservation Rules 1997 (ECR-97). Department of Environment (DOE), under the Ministry of Environment and Forest (MoEF), is the regulatory body responsible for enforcing the ECA '95 and ECR '97.
31. ECA-95 provides for conservation of the environment, improvement of environmental standards and control and mitigation of environmental pollution. ECR-97 lays down the process for obtaining clearances, includes forms for obtaining clearance certificates and standards for pollution control.
32. The MoEF has formulated draft Environmental Critical Areas Rules, 2010 under the ECA-95. The draft rules provide a list of restricted activities in critical areas under Section 3; the process for applying for landuse change declared as critical area under the Rules in Section 13 for development of a project and levies penalties on project proponents that contravene the Rules.
33. Noise Pollution Rules, 2006 and Medical Waste Management Rules have also been formulated under the ECA-95.
34. **Environmental Clearance:** The ECR-97 describes the process and requirements for obtaining Environmental Clearance (EC) Certificate for industrial units or projects from the DOE.
35. As per the Rules, an industrial unit or project is classified as Green, Orange-A, Orange-B and Red categories.
36. Environmental Clearance Certificate shall be issued to all existing industrial units and projects and to all proposed industrial units and projects falling in the Green Category.
37. It is the responsibility of the project proponent to conduct an EIA of a development proposal, and the responsibility of reviewing EIAs for issuing Location Clearance certificate (LCC) Environmental Clearance Certificate (ECC) rests on DOE (ECR-97).

38. DOE has guidelines for formulating EIAs for industrial projects and for projects in sectors such as Textiles, Pulp and Paper. Formats are also available Environmental Management Plans (EMPs).
39. The categorization of IDCOL focus sectors as per ECR-97 are given in **Table 1**.
40. The GOB process for obtaining EC certificate from DOE is given in **Figure 4**.

Table 1: Categorization of IDCOL focus sectors as per ECR-97

IDCOL Focus Sectors	Categorization as per ECR-97
Power Generation*	Red Category
Renewable Energy*	Not included in Schedule-1 of ECR-97
Telecommunications*	Not included in Schedule-1 of ECR-97
Ports	Not included in Schedule-1 of ECR-97
Toll Roads and Bridges *	Red Category
Urban Environmental Services	Red Category
Gas and Gas-related Infrastructure	Red Category
Water Supply	Red Category
Information Technology	Not included in Schedule-1 of ECR-97

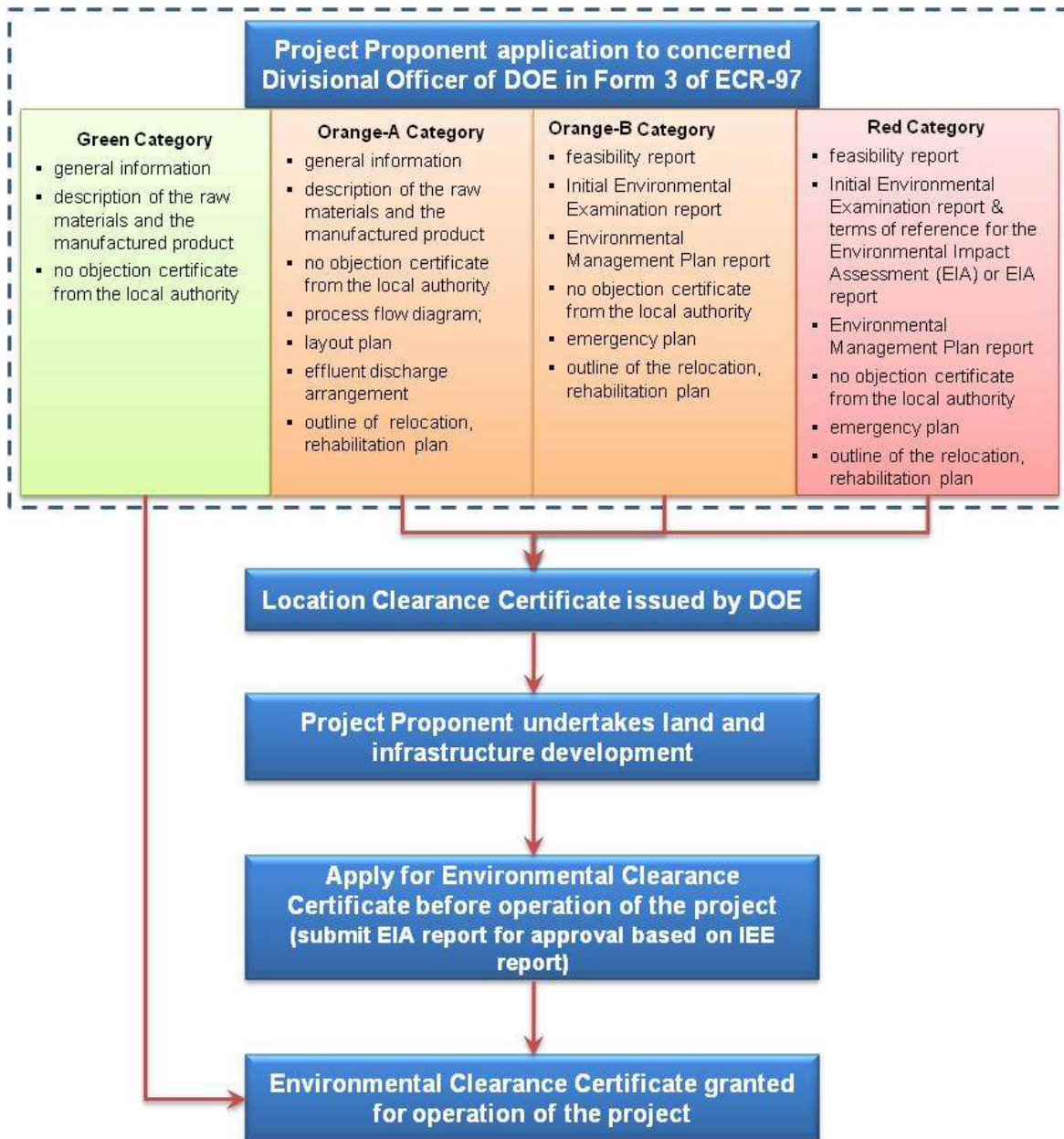


Figure 4: GOB process for obtaining EC Certificate form DOE

41. Waste Management: DOE initiated the National 3R Strategy in December 2010. This strategy lays down the roles of various stakeholders in Bangladesh, viz. Private Sector

- Involvement in recycling activities
- Investment in 3R related projects
- Participate in the development of infrastructure facilities in collection, transportation and recycling of waste
- Provide 3R related infrastructure at industry level
- General awareness creation

42. This policy is expected to create a demand for development of common environmental infrastructure which could also be a focus area for IDCOL in the near future.
43. One of the examples of such projects is the Dhaka Environment and Water (DEW) Project of the MoEF that focuses on developing Common Effluent Treatment Plants (CETPs) in Greater Dhaka, being jointly developed by DOE and the Local Government Engineering Department (LGED) wherein an environmental and social management framework has been prepared. Since many of the sub-projects and their details are still being worked out the ESMF for DEW provides a review framework for assessing and planning management programmes.
44. **Health and Safety:** GoB introduced the Factories Act (1965) and associated Factories Rules (1979). Chapter IV on Safety in the Factories Act & Rules outline detailed requirements on safety for working with machinery, pressure vessels, industrial processes, etc.
45. GoB released the Labour Code in 2006, replacing the Factories Act and Rules, which is built more or less on the basis of the Factories Act and Rules but applies to a wider number of establishments beyond factories. The Code repeals the Factories Act (1965). The health, safety and welfare duties and obligations that were contained in the old Factories Act, 1965, have now been transposed to chapters 5 (health and hygiene), 6 (safety), 7 (special provisions with regard to health and safety, and 8 (Welfare measures) only applied to 'factories'. The new code however applies to 'establishments' which not only includes 'factories' but also shops, hotels, restaurants, cinema and certain kinds of offices.
46. In the past criminal prosecutions for offences contained in the Factories Act took place in the magistrate court. Now all prosecutions for offences must take place in the Labour Court using the Code of Criminal Procedure. There are new criminal offences relating to violations of the code that cause, death or injury (section 309) with significantly higher sentences available to the courts.
47. In the past only factory inspectors could prosecute criminal cases against industrial organizations. Now, this right has been extended to a wider category of people. **These developments are significant from the perspective of power infrastructure projects of IDCOL. Any incidents during construction and operation will have more wide spread implications if cause indicates negligence or deviation from norms.**
48. An overview of Environmental Policy and Regulations of GOB is presented in **Annex E-1**. A detailed description of the ECA-95 is presented in **Annex E-2**. The ECR-97 is detailed in **Annex E-3**. **Annex E-4** provides a compilation of Environmental Standards as directed by the ECR-97. **Annex E-5** provides requirements on legal enforcement of health and safety laws in Bangladesh.

(ii). Social Regulatory Framework in Bangladesh

49. Social regulatory frameworks in Bangladesh related to social safeguards are lined with several legislative enactments established in last several decades and some enactments are already amended according to the national interests. Apart from legislative enactments there is a draft policy on involuntary resettlement not approved by the Cabinet yet. All these social regulatory frameworks have summarized under A-C below.
50. **Land Acquisition:** Whenever it appears to the Government that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, the property is acquired using eminent domain. Land acquisition by eminent domain for infrastructure projects is governed by the *Acquisition and Requisition of Immovable Property Ordinance II (1982)* amended as of 1994. The ordinance supersedes earlier laws including the Land Acquisition Law of 1894 and others that have been in force between 1947 and 1982. In addition to the Ordinance, acquisition of any land or forest area, in Chittagong Hill-Tracts (CHT) districts require consent under the Chittagong Hill-Tracts (Land Acquisition) Regulation (1958), the CHT Regional Council Act 1998 and the Forest Act (1927).
51. Forest reserves, natural water-bodies, archeological sites and historical places are not acquired for development projects. Under the Ordinance the DC is entrusted to acquire land for any public infrastructure project. The requiring body, after getting approval of the administrative ministry, requests DC to undertake acquisition of the required land as per its proposal.
52. The fundamental rights under the Constitution indicate the general guidelines for a policy on resettlement/rehabilitation of citizens adversely affected (whatever be the mechanism) due to any activity of the State. Article 40 of the constitution states categorically that every citizen has the right to practice any lawful occupation which implies that anything that impedes such right (a) should not be done or (b) there should be supplementary measures to make good the losses incurred by the citizen. Resettlement and rehabilitation of adversely affected people due to infrastructure projects very clearly falls within this requirement for supplementary measures. However, as per Article 42, sub-clause 2, no law with provision of compensation for acquisition of land can be challenged in a court on the ground that such compensation has been inadequate.
53. The Acquisition and Requisition of Immovable Property Ordinance II (1982) is the basic instrument governing land acquisition in Bangladesh. It is restricted to “legal” owners of property as supported by records of ownership such as deeds, title or agreements to compensating for land as well as any business, structure, trees and crops on the land. The Ministry of Land (MOL) is authorized to deal with land acquisition. The MOL delegates some of its authority to the Commissioner at Divisional level and to the Deputy Commissioner at the District level. The Deputy Commissioners (DCs) are empowered by the MOL to process land acquisition under the Ordinance and pay compensation to the legal owners of the acquired property.

54. The East Bengal State Acquisition and Tenancy Act, 1950 (Revised 1994) (Sections 86 & 87) also define the ownership and use right of alluvion (payosti or reformation in situ or original site) and diluvion land (nadi sikosti) in the country. In legal terms, eroded lands (sikosti) inside the alluvion-diluvion (AD) line (i.e. including submerged land or underwater land) are considered khas land once declared by demarcating the AD Line.¹ However, the "original" owner(s) can claim the land if it reappears through natural process within 30 years.
55. The Government has recently prepared a draft national policy on involuntary resettlement and rehabilitation in 2008, which is consistent with the general policy of the Government that the rights of those displaced by development projects, river erosion and bastee eviction shall be fully respected, and that those displaced shall be treated with dignity and assisted in such a manner that safeguards their welfare and livelihoods irrespective of title, gender, and ethnicity.
56. **Laws and Policies on Adibasi/Ethnic Minority:** In the context of People's Republic of Bangladesh, the Constitution of Bangladesh does not mention the existence of the cultural and ethnic minorities in Bangladesh. The only protective provision for the ethnic minorities that the policy makers often refer to in the context is Article 28 (4) which states that: Nothing shall prevent the state from making special provision in favour of women and children or for the advancement of any backward section of the citizens. The above provision is an ambiguous one and it does not define who or what constitutes "backward". However, the Government recognizes existence of "tribal peoples" and the need for special attention and in general tribal people are essentially viewed as backward, poor and socio-economically & culturally inferior. Towards this end a special program was initiated in 1996-97 by the Prime Minister's Secretariat aimed at improving the socio-economic situation of the indigenous people of Bangladesh, resident outside the Chittagong Hill Tracts.
57. The Chittagong Hill Tracts Regulation, 1900 (Regulation I of 1900) is the regulatory framework for State sovereignty over the traditional rights of the *adibasis* living in the Chittagong Hill Tracts (CHTs) region.² They are governed through Revenue Circle Chiefs³ who are local revenue collectors vide an *amalnama* (authorization by the Government). The Deputy Commissioner and the Commissioner from the Central Government reserve the authority to settle land to the hill-men or non-hill residents or lease out land (non-transferable) for rubber plantation or establishing industries in the CHTs.

¹ The Assistant Commissioner of Lands (AC Land) in respective districts demarcates the AD Line each year in areas where rivers frequently erode their banks. According to law, if the land classified by an AD Line re-appears within 30 years from the date of erosion, the original owner(s) can claim the land.

² The CHT districts comprise the reserved forests, the circle of the three Chiefs, viz. the Chakmas Chief, the Bohmong Chief and Mogh Chief and the Maini Valley (rule 35).

³ The Circle Chiefs form an Advisory Council to the Deputy Commissioner (DC) for administration of their respective circles and exercise their authority as Chiefs in the prompt enforcement in the mouzas of their circles of all orders of the DC.

58. The Chittagong Hill –Tracts (Land Acquisition) Regulation, 1958 regulation has provision for payment of compensation for requisitioned property. The compensation may be fixed by agreement or by rules framed on this behalf.
59. The Forest Act, 1927 (Act XVI of 1927) revised as of 2000 deals with Reserved Forest, Village Forest, Protected Forest, control over forests on lands not being the property of Govt.
60. The National Parliament of Bangladesh in 24 May 1998 passed the Peace Accord 1997 as the “Chittagong Hill Tracts Regional Council Act, 1998 (Act 12 of 1998). In addition to re-establishing peace, the Accord recognized the ethnic people’s right to land, culture, language, and religion. The Accord set out detailed provisions for strengthening the system of self-governance in the CHT, and redressing the most urgent land-related problems. A ministry on CHT Affairs was established by appointing a Minister from among the adibasis of hill districts. An Advisory Council from the CHT region assists this ministry. However, there is a demand for extending the scope of the CHT Affairs Ministry to include the adibasis in other areas of the country.
61. Adibasi / Ethnic Minority Rights in Poverty Reduction Strategic Paper (PRSP) 2005 includes strategic suggestions to preserve the cultural, social and economic identity and interests of the adibasi/ ethnic populations in and outside CHT.
62. Special guidelines on involuntary resettlement are given in **Annex S-1** and a review of policy and legal framework of GOB is presented in **Annex S-2**.

B. ADB’s Environmental and Social Safeguard Policy Statement, 2009

63. ADB affirms that environmental and social sustainability is a cornerstone of economic growth and poverty reduction in Asia and the Pacific. ADB’s Strategy 2020 therefore emphasizes assisting Developing Member Countries (DMCs) to pursue environmentally sustainable and inclusive economic growth. In addition, ADB is committed to ensuring the social and environmental sustainability of the projects it supports. In this context, the goal of ADB’s Safeguard Policy Statement (SPS) is to promote the sustainability of project outcomes by protecting the environment and people from projects’ potential adverse impacts.
64. The objectives of ADB’s safeguards are to:
- (a). avoid adverse impacts of projects on the environment and affected people, where possible;
 - (b). minimize, mitigate, and/or compensate for adverse project impacts on the environment and affected people when avoidance is not possible; and

- (c). help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.

65. Requirements of ADB's SPS for Financial Intermediaries (FIs) are as follows:

- (a). FIs shall be required to establish an appropriate environmental and social management system (ESMS) commensurate with the nature and risks of the FI's likely future portfolio to be maintained as part of the FI's overall management system.
- (b). FIs investments shall be in compliance with applicable national laws and regulations and will apply the prohibited investment activities list (**Annex ES-1**) to subprojects financed by ADB.
- (c). Where the FI's investments have minimal or no adverse environmental or social risks, the FI project will be treated as category C project and need not apply any other specific requirements.
- (d). Where the FI's subprojects to be funded by ADB, have potential for significant environmental or social impacts, the FI will be required to ensure that such subprojects meet ADB's safeguard policy requirements, including those specified in Safeguard Requirements 1-3. Refer **Annex E-6, Annex S-3** and **Annex S-4**.

66. The ESMS for the FIs shall incorporate the following elements:

- (a). environmental and social policies;
- (b). screening, categorization, and review procedure;
- (c). organizational structure and staffing including skills and competencies in environmental and social areas;
- (d). training requirements; and
- (e). monitoring and reporting.

67. ADB's SPS policy objectives, scope and triggers, and principles for environmental, involuntary resettlement and indigenous peoples safeguards is given in **Annex ES-2**.

(i). Environmental Safeguards

1. The SPS includes explicit policy principles and requirements on:

- (a). environmental assessment process
- (b). biodiversity protection and natural resources management
- (c). pollution prevention and abatement
- (d). occupational and community health and safety

(e). physical cultural resources

68. The environmental assessment process followed under ADB's SPS is represented in **Figure 5**.
69. A comparison of ADB's SPS and GOB environmental safeguards identifying requirements to be built into IDCOL's ESSF is given in **Annex E-7**.
70. **Since IDCOL is an FI, ADB requirements for Category FI shall be applicable for development of the ESSF and ADB's environmental assessment process shall be applicable to each sub-project for project processing under the ESSF.**

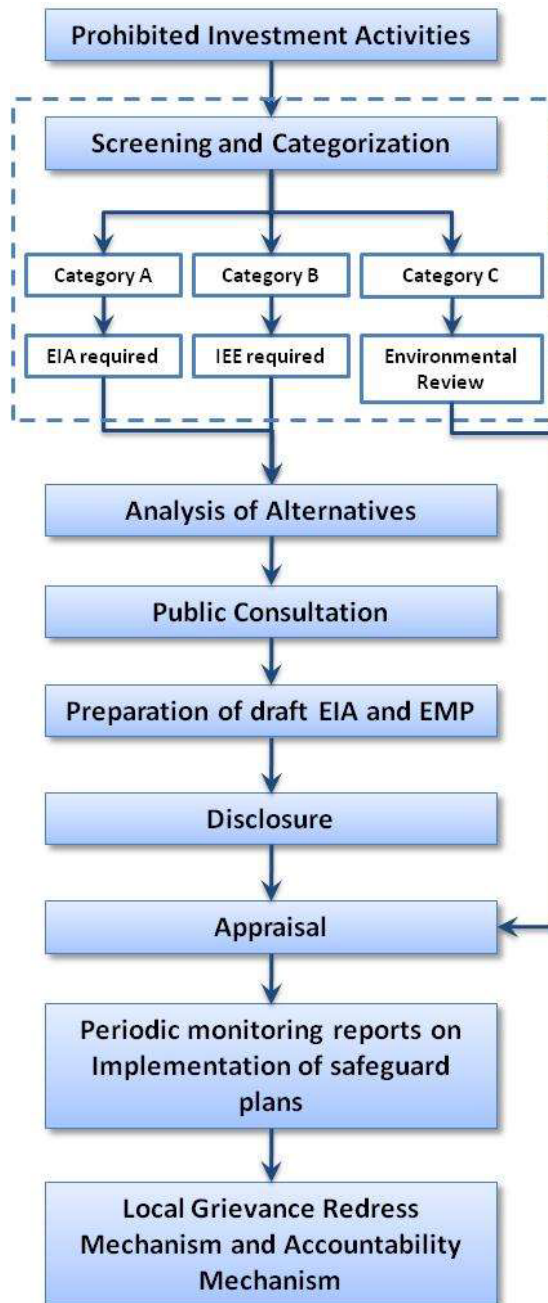


Figure 5: ADB's Environmental Assessment Process

(ii). Social Safeguards

71. ADB Social Safeguard Policies updated in June 2009 has categorized social safeguard requirements into two; namely i). Safeguard Requirements 2: Involuntary Resettlement, ii). Safeguard Requirement 3: Indigenous Peoples.

72. **Involuntary Resettlement.** The three important elements of the IR Policy are:

(i) compensation to replace lost assets, livelihood, and income;

(ii) assistance for relocation, including provision of relocation sites with appropriate facilities and services; and

(iii) assistance for rehabilitation to achieve at least the same level of well-being with the project as without it.

73. Some or all of the elements may be present in a project involving IR. Further IR stipulations are incorporated in the scope of a Resettlement Plan (for details see Annex S-1, S-3, S-6 and S-8).

74. A comparison of ADB's SPS and GOB social safeguards identifying requirements to be built into IDCOL's ESSF is given in **Annex S-5**.

75. The social assessment process followed under ADB's SPS is represented in **Figure 6**.

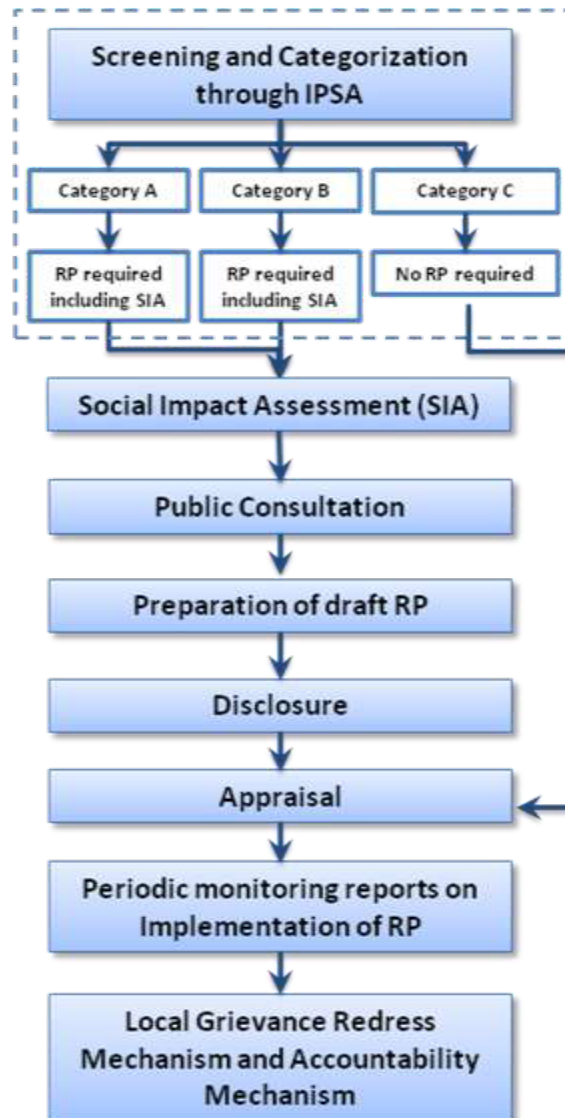


Figure 6: ADB IR Assessment Process

76. **Indigenous People.** For the development interventions it supports or assists, ADB will ensure that affected populations and persons are at least as well-off as they would have been in the absence of the intervention, or that adequate and appropriate compensation be provided. Policy implementation should ensure equality of opportunity for Indigenous Peoples to participate in decision making and benefit sharing. Implementation must also ensure that bank-financed interventions affecting Indigenous Peoples are:

- (i) consistent with the needs and aspirations of affected Indigenous Peoples;
- (ii) compatible in substance and structure with affected Indigenous Peoples' identity, culture, and social and economic institutions;

(iii) conceived, planned, and implemented with the informed participation of affected communities;

(iv) equitable in terms of development efforts and impact; and

(v) not imposing the negative effects of development on Indigenous Peoples without appropriate and acceptable compensation and their approval.

77. Consultation with Indigenous Peoples is the key to developing an effective, accurate, responsive Indigenous Peoples Plan (for details see S-5, S-7 and S-8).

78. The process followed for preparation of ADP is shown in **Figure 7**.



Figure 7: ADB ADP Assessment Process

C. Bangladesh Bank's Environmental Risk Management (ERM), February 2011

79. Bangladesh Bank (BB), the central bank and apex regulatory body for the country's monetary and financial system has prepared Environmental Risk Management (ERM) guidelines for banks and financial institutions in January 2011. BB recognizes that environmental risk affects credit risk to a great extent; and hence has developed a risk based approach to account for environmental risk when assessing financing opportunities.
80. **Principles:** All Banks and FIs should make an “in principle” commitment to ERM in general and to the following in specific:
- (a). Integration of ERM in their credit policies and procedures.
 - (b). Building awareness and providing Constant training and capacity building of their staff relevant to ERM.
 - (c). Adoption of a value adding approach to ERM with their potential borrower and aim to facilitate the borrower in addressing environmental issues that could lead to risks.
81. **Requirements:** BB recommends that all Banks and FIs should pass a Resolution of the Board or appropriate top and senior management committee on the adoption of these Guidelines and acceptance of the above principles. On an annual basis, all Banks/FIs should undertake a top management review to determine whether ERM is being effectively practiced in its operations.
82. **Procedures:** The procedures to be followed by FIs as per BB's ERM guidelines are as follows:
- (a). Relationship banking / marketing: Identifying and planning for Environmental risks
 - (b). Credit risk management: Integrating Environmental risks
 - (c). Credit processing and approval process: Incorporating Environmental risk covenants
 - (d). Credit Administration: Verifying Environmental risk considerations
 - (e). Credit Monitoring: Carrying out Environmental risk monitoring
 - (f). Database on Non-Performing Loans (NPLs) due to Environmental risks
 - (g). Reporting system
83. **The risk based approach recommended in BB's ERM shall be applicable to FIs and shall be incorporated in the operational procedures of IDCOL's ESSF.**
84. A comparison between BB's ERM and IDCOL's ESSF (May 2011) has been prepared for identification of procedures to be incorporated for harmonization of the two, attached in **Annex E-8.**

D. World Bank's Environmental and Social Management Framework (ESMF), June 2011

85. The Environmental and Social Management Framework (ESMF) provides general policies, guidelines, codes of practice and procedures to be integrated into the implementation of the World Bank-supported Second Additional Financing for RERED Project.
86. The objective of the ESMF is to ensure that activities under the proposed operations will address the following issues:
- (a). If possible avoid, or minimize potential negative environmental and social impacts as a result of either individual subprojects or their cumulative effects;
 - (b). Enhance positive environmental and social outcomes;
 - (c). Protect environmentally sensitive areas from additional disturbance from project interventions;
 - (d). Protect human health; and
 - (e). Ensure compliance with World Bank safeguard policies

(i). General Principles for Environmental Safeguard Management

87. Considering the extent and nature of the project and magnitude of potential environmental impacts, additional financing to RERED project has been assigned as Environmental Category of "B" on overall basis.
88. IDCOL will be responsible for monitoring of environmental safeguard compliance with the support of the POs. The environmental safeguard will be integral part of the contract agreement between IDCOL and POs.
89. The project will educate the communities on proper use and maintenance of SHS and other renewable energy technologies through POs. IDCOL will arrange awareness raising campaign for POs about the adverse impact of improper management of expired battery.
90. The equipment and accessories manufacturers/suppliers of the project will follow the Section VII (special provisions related to health, hygiene and safety) of Bangladesh Labor Act 2006 to ensure occupational health and safety related to the project activities. In addition, they will follow the prevailing country environmental act and rules to ensure sound environmental management of recycling of used lead-acid batteries.
91. IDCOL will strengthen monitoring on distribution of new battery as well as collection of expired battery. IDCOL will ensure half-yearly monitoring of battery recycling plants.
92. **Project processing under ESMF:** No site specific environmental assessment will be required for household system (SHS, biomass, compact fluorescent lamps -CFL etc.). The exact locations of other renewable energy technologies at firm level and/or commercial are

not known at this stage and may not be known at appraisal. The requirement to carry out an environmental analysis as part of project preparation can be waived. However, for subprojects with potential adverse impacts, an environmental and social screening/assessment will be carried out during project implementation prior to approval for any sub-project.

93. The environmental assessment for solar based mini-grid, wind power, mini-hydro, biomass or biogas based electricity will follow GOB procedure for environmental clearance. The environmental impacts that have to be included in the assessment are given in the ESMF. The reports will be submitted to the World Bank for review and clearance prior to clearance of construction.
94. The RERED project forms Component C under PPIDF and hence principles of environmental safeguard management and project processing procedures of ESMF shall be incorporated in IDCOL's ESSF. The RERED project processing as per the ESMF is explained in **Figure 8**.

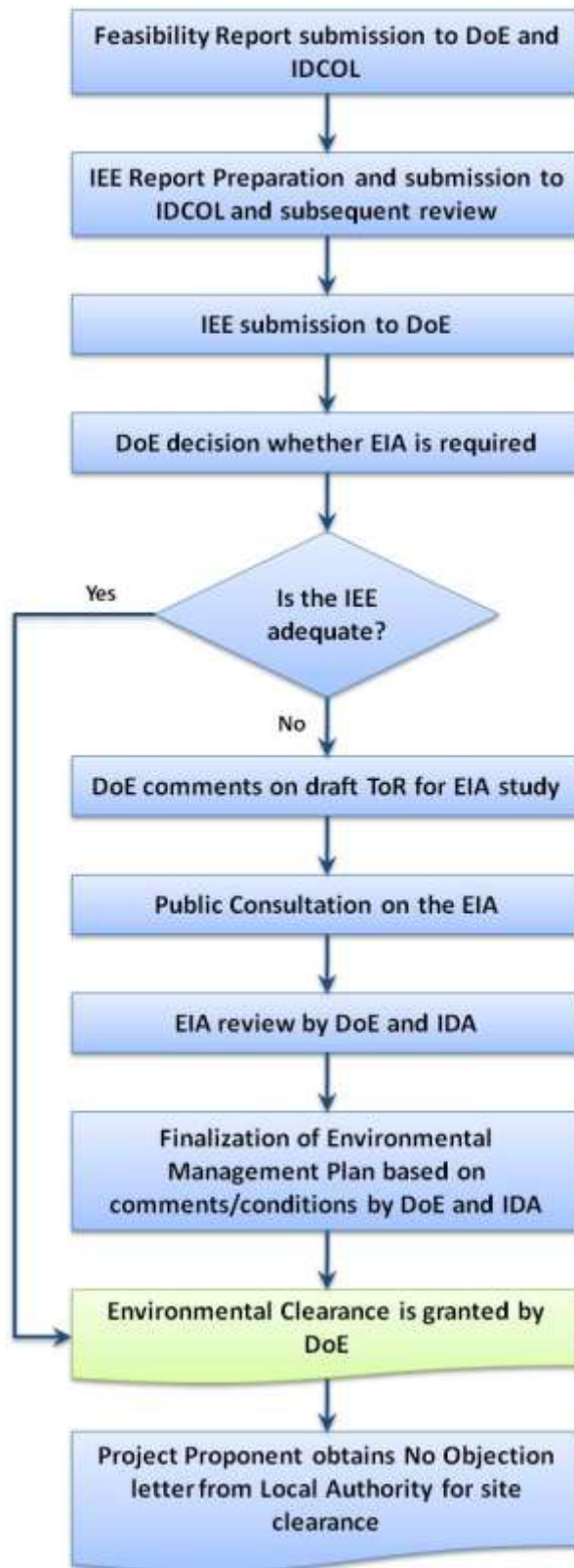


Figure 8: Project Processing as per ESMF for RERED Project

(ii).General Principles for Social Safeguard Management

95. No negative impacts are anticipated towards Indigenous Peoples. World Bank Operational Policy (OP) 4.10 will not be triggered by the project.
96. The project may extend facilities in areas where indigenous people (IPs) live. However, availing the facilities/services/products is purely on a voluntary basis for all paying customers (including IPs). SHSs are also being installed in IP areas like Chittagong Hill Tracts through Partner Organizations (POs), which are well-versed in IP languages to offer adequate consultation on maintenance of products and proper usage of facilities offered.
97. IDCOL will arrange awareness raising campaign for POs about the adverse impact of improper management of expired battery. Where the sub-projects operate in IP areas, IDCOL will ensure that consultations are inclusive, carried out in local languages and adhere to local cultural norms and practices.
98. No land acquisition will be financed under the credit. Land, whether made available via direct purchase, leasing or government owned will be screened to ensure that no physical or economic displacement of communities/persons will take place. Bank policy OP 4.12, Involuntary Resettlement will not be triggered by the project. For screening involuntary resettlement and indigenous people aspects, a well-structured questionnaire for social compliance will be followed.
99. IDCOL will be responsible for monitoring of social safeguard compliance with the support of the POs. The social safeguard will be integral part of the contract agreement between IDCOL and POs. IDCOL will adopt required measures to strengthen its capacity for social safeguard management.

E. Towards a Harmonized Framework for ESSF

(i). Environmental safeguards

100. The requirements of GOB environmental safeguards, ADB's SPS, BB's ERM and ESMF for RERED (World Bank guidelines) are shown in **Figure 9**.

<p>GOB Environmental Safeguards</p> <ul style="list-style-type: none"> ● Requirements for Industrial Units and Projects ● Location Clearance ● Categorization: Green, Orange-A, Orange-B, Red ● Category Orange-B/ Red: <ul style="list-style-type: none"> ▪ Feasibility Report, Initial Environmental Examination Report, ▪ Environmental Management Plan (EMP) Report, ▪ No objection certificate from the Local Authority, ▪ Emergency Plan, ▪ Outline of the relocation, rehabilitation plan ● Labour Code 2006 for health and safety 	<p>ADB Safeguard Policy Statement</p> <ul style="list-style-type: none"> ● Environmental and Social Management System (ESMS) for Financial Intermediaries ● Prohibited Investment Activities List ● Categorization: <ul style="list-style-type: none"> ▪ Category A – EIA ▪ Category B – IEE ▪ Category C – Environmental Review ● Public Consultation ● Information Disclosure ● Monitoring and Reporting ● Grievance Redress Mechanism
<p>Bangladesh Bank ERM</p> <ul style="list-style-type: none"> ● Environmental Risk Management (ERM) in credit risk for Banks and Financial Institutions ● ERM Policy ● Identifying and categorizing environmental risk – High, Moderate, Low (Sector Specific) ● Incorporating Environmental risk covenants ● Environmental risk monitoring ● Database on Non-Performing Loans (NPLs) due to Environmental risks ● Reporting system 	<p>World Bank's ESMF</p> <ul style="list-style-type: none"> ● General Principles for Environmental Safeguard Management <ul style="list-style-type: none"> ▪ All projects classified as Category B ▪ Bank policy OP 4.10 will not be triggered ▪ Monitoring ▪ Educate the communities ▪ GOB Labour Code 2006 to be followed by manufacturers/suppliers ▪ Monitoring (new battery) and collection (expired battery) ● EIA will follow GOB procedure for EC ● EIA and mitigation measures ● Capacity-building and monitoring of safeguard framework implementation ● Consultation and Disclosure

Figure 9: Key Requirements of GOB, BB ERM, ADB SPS, World Bank ESMF

101. The ESSF developed in 2008 and updated in May 2011, were created with a primary focus of creating a system that will help IDCOL subscribe to ADB's E&S safeguards and national E&S regulation applicable at that point in time.
102. **The revised ESSF for IDCOL (August 2011) shall be updated to incorporate the following:**
- (a). **Prohibited Investment Activities List of ADB SPS**
 - (b). **Risk based approach recommended in BB's ERM**
 - (c). **Capacity building of IDCOL and other stakeholders as required by ESMF**
 - (d). **Safeguard requirements of ADB SPS for biodiversity protection and natural resources management; pollution prevention and abatement; occupational and community health and safety; and physical cultural resources in environmental assessment**

(iii). Social Safeguards

103. Land acquisition is having legislative enactments as summarized in Social Regulatory Framework in Bangladesh. However, these enactments are not covering IR issues and National Policy Involuntary Resettlement of GOB is not approved by the Cabinet yet. There is no policy level document in relation to IPs in Bangladesh.
104. Comparison of the two shows that GOB's social safeguards approach as it relates to IR and IPs issues differs considerably from that of ADB, as well as of WB and other Global Financial Institutions. For the Indigenous Peoples (*adibasi*) issues, a significant gap is the lack of national coverage in the GOB legislation along with differences in terms of consultation requirements; *adibasis* in Chittagong Hill Tracts (CHT) have legal coverage safeguarding their social and cultural rights while those outside CHT have no special legislative safeguards. For involuntary resettlement, the areas of differences include payment of market vs. replacement cost for lost land and assets as well as differences in eligibility, entitlement and livelihood restoration (see **Annex S-5** for a gap analysis).
105. The differences between GOB involuntary resettlement policies (i.e., land acquisition policies) and those of ADB, particularly the latter's emphases on; a) utilizing the principle of "replacement price" over "market prices, b) livelihood restoration and c) recognizing non-titled persons' rights to compensation. Similarly, the GOB *Adibasi* framework does not include all such populations in the country and does not include requirements for development plans for projects affecting *Adibasis*.

III. REVISED ENVIRONMENTAL AND SOCIAL SAFEGUARDS FRAMEWORK FOR IDCOL

A. Objectives of ESSF

106. The ESSF will assist IDCOL in achieving the following objectives:

- (a). Assess infrastructure projects being funded by IDCOL, for their environmental and social (E&S) impacts, early in the project lifecycle or IDCOL's entry in to the project whichever applicable
- (b). Identify and fulfill all E&S obligations put forth by various external stakeholders (GoB institutions and Global Financial Institutions such as ADB, WB, IFC, etc.)
- (c). Ensure E&S legal compliance of the projects
- (d). Influence and mandate (as relevant) clients and downstream agencies to ensure legal compliance and manage E&S risks
- (e). Defines and outlines policies, procedures, roles, and responsibilities for managing impacts, risks, and effects on environment, involuntary resettlement and *adibasi*⁴ peoples of subprojects that are financed by IDCOL.

107. The ESSF shall be applicable to all components and subprojects financed from ADB resources by IDCOL as well as other funds operated by IDCOL, through direct lending and refinance operations to both public and private sector companies at project and programmatic levels.

B. Environmental and Social Policy of IDCOL

108. IDCOL's E&S policy statement emphasizes IDCOL's sensitivity and concern to environmental and social issues, commitment towards legal compliance, and responsiveness towards E&S requirements of its development partners and is communicated to all its stakeholders.

109. The E&S Policy of IDCOL provides the necessary direction for implementation of the operational framework of the ESSF.

⁴ Groups referred to by international organizations as Indigenous Peoples can be referred to in Bangladesh as ethnic minorities or *adibasi(s)*. Adibasi is the term employed in the draft "National Policy on Involuntary Resettlement and Rehabilitation, 2008." Adibasis in Bangladesh include Chakmas and other groups in the Chittagong Hills, Garos in Madhupur Forest, Khasis in Sylhet, Rakhains in Coxsbazar/Patuakhali and Santhals in Rajshahi/Dinajpur and other smaller communities in the country.

Proposed Environmental and Social Policy Statement of IDCOL's ESSF

IDCOL has a mandate of financing private sector for developing medium to large-scale infrastructure and renewable energy projects in Bangladesh.

IDCOL recognizes the significance of environmental, health / safety and social considerations in infrastructure development and believes in sustainable development

In order to achieve the above, IDCOL is committed to:

- (a). Mainstream environmental, health / safety and social (E&S) considerations in appraising and financing infrastructure projects to avoid / minimize adverse impacts and risks to the environment and people that may be affected
- (b). Ensure compliance with all relevant E&S policy and legislative requirements and laws of the lands with which it engages and remain responsive to the E&S requirements of international best practices
- (c). Avoid / minimize land acquisition and resettlement through selection of appropriate locations and design of projects
- (d). Where land acquisition is unavoidable, compensate replacement value of such acquired land/property will be paid before displacement or replace with land having equal value and quality together with other facilities such as housing and basic infrastructure facilities.
- (e). Ensure protection of vulnerable groups, such as the economically and socially disadvantaged, women, children, physically handicapped and indigenous people and take appropriate measures to restore their livelihood as relevant

Chief Executive Officer

Authorised Signatory

Date:

110. The top management of IDCOL should seek approval of the E&S Policy and the ESSF from the Board of Directors of IDCOL. Conformance to BB's ERM should also be verified formally by sharing the ESSF with BB and seeking their endorsement.

111. IDCOL should formally release a signed version of the policy for internal and external communication. This process should be followed when the policy is reviewed and updated periodically.

112. The E&S policy statement will be reviewed periodically by the top management at IDCOL to ensure its relevance, robustness and applicability with respect to the E&S concerns and obligations of IDCOL's operations.
113. The review periodicity will be governed by the changes in IDCOL's business mandates, project canvas and investment processes along with updates in relevant safeguard policies and regulation. It is proposed that a biannual review should be considered as a minimum.

C. Structure of ESSF

114. In order to meet all the requirements described in the preceding sections, IDCOL's ESSF has been structured to reflect the following:
- (a). Integrated E&S policy
 - (b). Screening
 - i. Project Screening based on List of Prohibited activities
 - ii. E&S Risk Rating for the Project
 - (c). Operational Procedures for Risk Mitigation and Control
 - (d). Institutional structure for operation of the ESSF including allocation of roles and responsibilities
 - (e). Advisory Panel of Experts to guide the ESSMU
 - (f). Capacity development plan at IDCOL for continued strengthening
 - (g). Annual E&S auditing and reporting
 - (h). Updating of the ESSF based on feedback and experience of its application to projects
115. **Figure 10** presents the overall structure of the ESSF explained above.

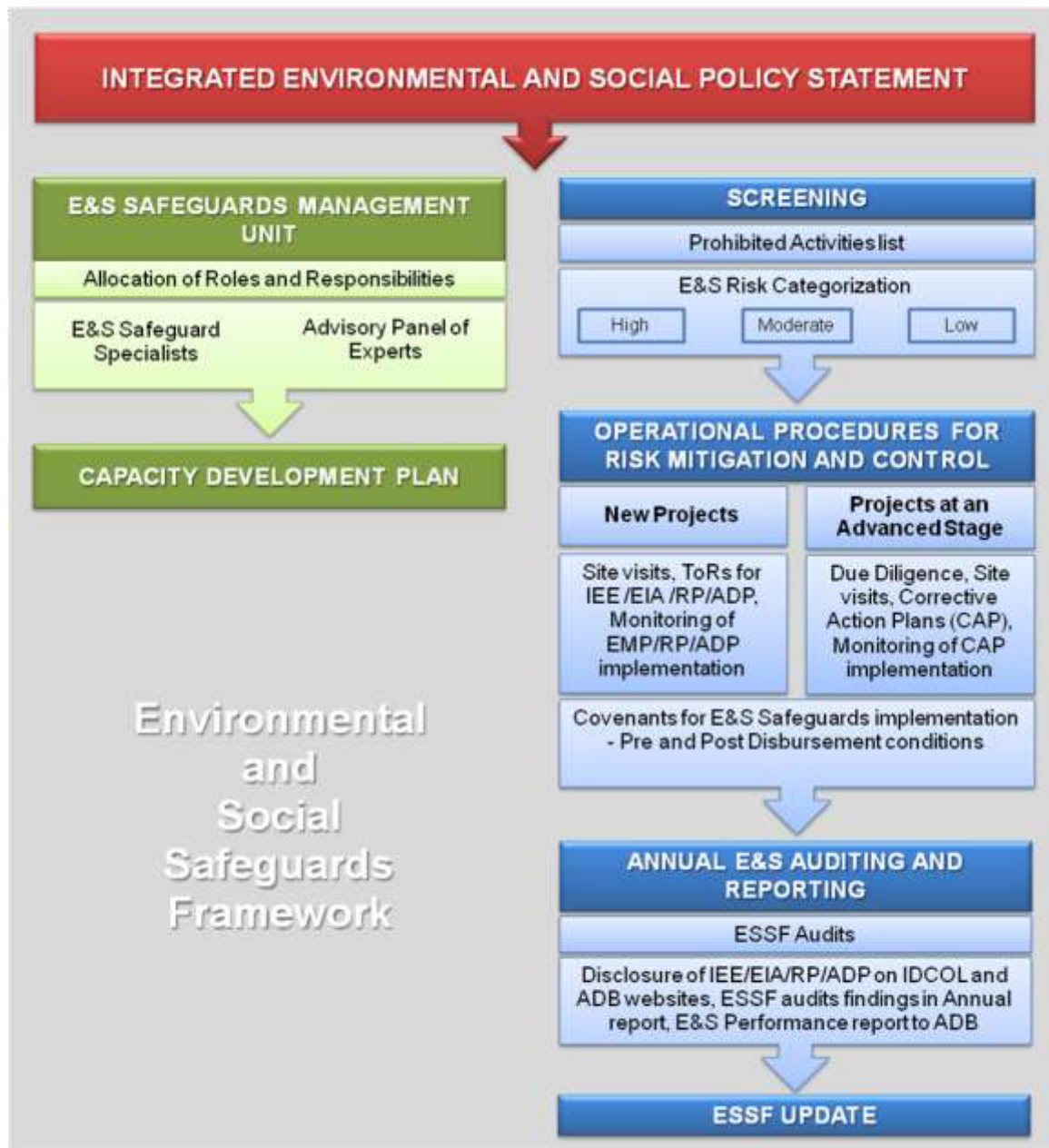


Figure 10: Structure of IDCOL's ESSF

116. The advisory services provided by IDCOL are not expected to entail E&S risks and hence the ESSF does not incorporate risk mitigation and control procedures for these services.
117. The operational procedures under IDCOL's ESSF for Component C of PPIDF would differ from those applicable for Components A and B. Hence the procedures have been presented in separate sections.

D. General Operational Procedures for ESF and SSF

118. The operational procedures described in this section are applicable to Components A and B of PPIDF as well as other IDCOL funds and shall be implemented by ESSMU⁵ in coordination with the investment and loan teams.

(i). Know-Your-Client Meeting

119. The project proponent seeking financial assistance shall make an application for the consideration of IDCOL, loan application format is attached in **Annex ES-3**. A Know-Your-Client (KYC) meeting shall be conducted between the project proponent and IDCOL. The project proponent at this stage shall also be referred to the ESSMU for understanding requirements and procedures of IDCOL's ESSF for the project. The ESSMU shall guide the project proponent for filling the E&S section of the loan application form. The ESSMU shall also disclose:

- (a). IDCOL's business process with ESSF integration
- (b). E&S risk rating
- (c). Appraisal report preparation by ESSMU
- (d). Terms of Reference for EIA studies to follow ADB' SPS safeguard requirements or Terms of Reference for Initial Environmental Examination (IEE) studies as per ESSF
- (e). Site visit requirement
- (f). Conditions precedent and subsequent to disbursement

(ii). Prohibited Investment Activities List:

120. When a project comes to IDCOL for financing, the same shall be forwarded to the ESSMU and the ESSMU shall verify it against IDCOL's list of prohibited investment activities (see **Annex ES-1**). Any project featuring in this list shall not be financed by IDCOL.

121. Not all activities would directly apply, since core industrial sectors are not financed by IDCOL.

122. However, it would be necessary for IDCOL to ascertain prior information from the project proponents, on activities specific to IDCOL's sectors (*listed below for illustration*) and exclude them from financing if confirmed or convince the proponent to consider alternatives.

⁵ ESSMU stands for Environmental and Social Safeguards Management Unit. The structure and responsibilities of ESSMU have been described in the Institutional Structure section of the Operational Framework of ESSF.

- (a). Banned Hazardous chemicals, Pesticides and insecticides, Pharmaceuticals
 - (b). Ozone depleting substances
 - (c). Poly Chlorinated Biphenyls
 - (d). Ports that may support transboundary trade of waste or waste products
 - (e). Projects that involve marine and coastal fishing practices that could harm vulnerable and protected aquatic species in large numbers
123. Certain items from the prohibited list such as *harmful or exploitative forms of forced and child labour or use of unbonded asbestos fibre*, will be agreed upfront with project proponents / contractors, and implemented through loan covenants or Conditions Subsequent (CS).

(iii). Proposed E&S Risk Rating System

124. This section presents the risk rating criteria to be followed in the ESSF for projects that have **cleared** the List of Prohibited Investment Activities. Refer **Table 2**.
125. The risk rating criteria is applicable to new (Greenfield) as well as existing projects (where IDCOL is refinancing).
126. The risk rating criteria for ESSF harmonizes requirements of:
- (a). GOB' ECR-'97 Green, Orange-A, Orange-B and Red categories
 - (b). BB's ERM risk rating approach customized for IDCOL's investment focus sectors
 - (c). Criteria for classifying projects as Category A/B/C according to ADB's SPS
 - (d). Capacity of the project proponent to manage E&S risks
127. A **desk review of the project documents**, is recommended before evaluating the risk rating of the project.
128. The project proponent shall provide ESSMU required information related to E&S aspects of the project in the Loan Application Form.

Table 2: Project E&S Risk Rating Criteria in ESSF

E&S Risk Rating Criteria		Yes	No
1.	For new projects, does the project have any pending compliance such as Location and Environmental Clearance based on its category (Red, Orange-A, Orange-B and Green), from the DOE? For refinancing projects, does the project have a pending DOE Clearance or pending necessary operating licenses and permits on		

E&S Risk Rating Criteria		Yes	No
	EHS from respective regulatory authorities?		
2.	Is the project located <i>in the immediate vicinity (likely to cause adverse impact)</i> of environmentally critical areas (<i>national parks, wetlands, wildlife habitats, important bird areas, and protected areas</i>)? Ref: Draft Environmentally Critical Areas Rules, 2010		
3.	Does the project construction and/or operation lead to environmental impacts that are diverse, irreversible and / or unprecedented [#] in nature? Refer to IEE/EIA reports if available or Environmental Due Diligence (EDD) during site visit, to answer this question		
4.	Does the project require involuntary resettlement that results in loss of land or livelihoods or physically displaces more than 200 persons		
5.	Is the project site on or in immediate vicinity of socially vulnerable or Indigenous People owned or occupied land and has the potential to cause an adverse impact on their culture and identity		
6.	Is the project vulnerable to climate change related impacts?		
	<i>E&S Capacity of the Borrower</i>		
7.	Does the Borrower have a documented Policy on E&S Performance?		
8.	Does the Borrower have dedicated human resources to address E&S performance?		
9.	Has the Borrower established and implemented Environmental, Health & Safety Management Systems and Social Accountability Systems for the Project SPV or in the parent company?		

Diverse, Irreversible and Unprecedented Environmental Impacts

- **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)
- **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 landuse that permanently alters the natural drainage or destroys habitats used by migratory birds*)

- **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*)

129. Rules for determination of Risk Rating:

- Based on the Table 2 above, if any question numbered 1 to 6 is answered as **Yes**, the Project E&S Risk is rated “**High**”.
- If all the questions numbered 1 to 6 are a **No** and **at least one** of the questions numbered 7 to 9 is a **No**, then the Project E&S Risk is rated as “**Moderate**”.
- In case of refinancing of existing projects in advanced stage, if all the questions numbered 1 to 6 are a **No** and **any two** of the questions numbered 7 to 9 is a **No**, then the Project E&S Risk is rated as “**High**”.
- If all questions numbered 1 to 6 are a **No** and all questions rated 7 to 9 are a **Yes** then the Project E&S Risk is rated as “**Low**”.

E. Operational Procedures of ESF

(i). New /Greenfield Projects

130. **High Risk Projects (applicable if risk rating is High on account of questions 1,2,3 or 6):** For new projects categorized as ‘High’ risk, the following procedures shall be followed:

- The ESSMU shall visit the project area. A site visit checklist is attached in **Annex E-9**
- The project proponent shall submit the IEE checklist to IDCOL that was submitted to DOE while applying for Location Clearance
- The ESSMU shall prepare a preliminary environmental appraisal report (PEAR) based on the risk rating, site visit and IEE checklist. Refer **Annex E-10** for the format of PEAR. The PEAR shall also consist of conditions precedent and subsequent to disbursement. The ESSMU shall discuss these conditions with the project proponent and obtain an in principle agreement before sending the same for IDCOL Board for approval. The PEAR shall also be sent to ADB and an approval shall be obtained before approval of loan from IDCOL.
- The conditions to be incorporated in the PEAR shall in addition include the following:
 - EIA shall be prepared based on Safeguard Requirements of ADB given in **Annex E-6** along with terms of reference (ToR) from DOE.

- (ii). The EMP shall include mitigation measures for the key issues identified for the applicable sector given in **Annex E-11**. Outline for EMP report is given in **Annex E-14**.
- (e). Once IDCOL issues the preliminary letter of support and letter of engagement, ESSMU shall conduct a detailed environmental appraisal based on the EIA and EMP report submitted by the project proponent.
- (f). The EIA and EMP report shall also be submitted to ADB by ESSMU for approval.
- (g). The requirements of IDCOL ESSF on GOB legal compliance, implementation of EMP, monitoring, reporting, information disclosure, grievance redress mechanism shall be inserted in the loan documentation as covenants. Guidance for incorporation of EMP in contract documents is given in **Annex E-15**.
- (h). The project proponent shall submit the LCC from DOE to IDCOL before loan disbursement.
- (i). On completing construction of the project and obtaining ECC from DOE, the project proponent shall submit the same to IDCOL.
- (j). The project proponent shall submit half yearly monitoring reports on implementation of EMP, the scope of the report is given in **Annex E-12**.

131. **Moderate Risk Projects:** For new projects categorized as 'Moderate' risk, the following procedures shall be followed:

- (a). The ESSMU shall conduct a desk review of the environmental section of the loan application form.
- (b). The project proponent shall submit the IEE checklist to IDCOL that was submitted to DOE while applying for Location Clearance
- (c). The ESSMU shall prepare a PEAR based on the risk rating, desk review and IEE checklist. Refer **Annex E-10** for the format of PEAR. The PEAR shall also consist of conditions precedent and subsequent to disbursement. The ESSMU shall discuss these conditions with the project proponent and obtain an in principle agreement before sending the same for IDCOL Board for approval.
- (d). The conditions to be incorporated in the PEAR shall in addition include the following:
 - (i). IEE shall be prepared based on Safeguard Requirements of ADB given in **Annex E-6** in a format given in **Annex E-13**.
 - (ii). The EMP shall include mitigation measures for the key issues identified for the applicable sector given in **Annex E-11**. Outline for EMP report is given in **Annex E-14**.
- (e). Once IDCOL issues the preliminary letter of support and letter of engagement, ESSMU shall conduct a detailed environmental appraisal based on the IEE and EMP report submitted by the project proponent.
- (f). The IEE and EMP report shall also be submitted to ADB by ESSMU for information.

- (g). The requirements of IDCOL ESSF on GOB legal compliance, implementation of EMP, monitoring, reporting, information disclosure, grievance redress mechanism shall be inserted in the loan documentation as covenants. Guidance for incorporation of EMP in contract documents is given in **Annex E-15**.
- (h). The project proponent shall submit the LCC from DOE to IDCOL before loan disbursement.
- (i). On completing construction of the project and obtaining ECC from DOE, the project proponent shall submit the same to IDCOL.
- (j). The project proponent shall submit annual monitoring reports on implementation of EMP, the scope of the report is given in **Annex E-12**.

132. **Low Risk Projects:** For new projects categorized as 'Low' risk, the following procedures shall be followed:

- (a). The ESSMU shall prepare a PEAR (refer **Annex E-10** for format) based on review of the loan application form and risk rating.
- (b). The project proponent shall submit the Location and/or Environmental Clearance Certificate from DOE to IDCOL before loan disbursement.
- (c). The requirements of IDCOL ESSF on GOB legal compliance, implementation of EMP, monitoring, reporting, information disclosure and grievance redress mechanism shall be inserted in the loan documentation as covenants, if any.

For all new projects agreements between Proponent (Sponsor) and Contractor should include prohibition of *harmful or exploitative forms of forced and child labour or use of unbonded asbestos fibre during construction period*

(iv). Refinancing/Existing Projects in advanced Stage

133. **High Risk Projects:** For refinancing/existing projects categorized as 'High' risk, the following procedures shall be followed:

- (a). The project proponent shall submit the EIA and EMP reports as well as the LCC and ECC Certificate granted by DOE to IDCOL.
- (b). The ESSMU shall in addition visit the project area to check the status of works and compliance with the EMP.
- (c). The ESSMU shall prepare a PEAR based on the risk rating, site visit and review of EIA and EMP reports. Refer **Annex E-10** for the format of PEAR. The PEAR shall also consist of conditions precedent and subsequent to disbursement. The ESSMU shall discuss these conditions with the project proponent and obtain an in principle agreement before sending the same for IDCOL Board for approval. The PEAR shall

also be sent to ADB and an approval shall be obtained before approval of loan from IDCOL.

- (d). The conditions to be incorporated in the PEAR shall in addition include the following:
 - (i). EIA and EMP reports shall be reviewed by IDCOL based on Safeguard Requirements of ADB given in **Annex E-6** and sector specific checklist given in **Annex E-11**.
 - (ii). An Environmental Due Diligence (EDD) and Corrective Action Plan (CAP) shall be prepared by ESSMU based on review of EIA, EMP reports and site visit. The CAP shall be implemented by the project proponent.
- (e). Once IDCOL issues the preliminary letter of support and letter of engagement, ESSMU shall conduct EDD and prepare the CAP appraisal based on the EIA and EMP report submitted by the project proponent and additional site visit where required.
- (f). The EDD and CAP shall also be submitted to ADB by ESSMU for approval.
- (g). The requirements of IDCOL ESSF on GOB legal compliance, implementation of CAP, monitoring, reporting, information disclosure, grievance redress mechanism shall be inserted in the loan documentation as covenants. Guidance for incorporation of EMP in contract documents is given in **Annex E-15**.
- (h). On completing construction of the project and obtaining ECC from DOE, the project proponent shall submit the same to IDCOL.
- (i). The project proponent shall submit half yearly monitoring reports on implementation of CAP.

134. **Moderate Risk Projects:** For refinancing/existing projects categorized as 'Moderate' risk, the following procedures shall be followed:

- (a). The project proponent shall submit the IEE and EMP reports as well as the Location and ECC granted by DOE to IDCOL.
- (b). The ESSMU shall conduct a desk review of the environmental section of the loan application form.
- (c). The ESSMU shall prepare a PEAR based on the risk rating, desk review, IEE and EMP reports. Refer **Annex E-10** for the format of PEAR. The PEAR shall also consist of conditions precedent and subsequent to disbursement. The ESSMU shall discuss these conditions with the project proponent and obtain an in principle agreement before sending the same for IDCOL Board for approval.
- (d). The conditions to be incorporated in the PEAR shall in addition include the following:
 - (i). IEE and EMP reports shall be reviewed by IDCOL based on Safeguard Requirements of ADB given in **Annex E-6** and sector specific checklist given in **Annex E-11**.

- (ii). An EDD and CAP shall be prepared by ESSMU based on review of IEE and EMP reports. The CAP shall be implemented by the project proponent.
 - (e). Once IDCOL issues the preliminary letter of support and letter of engagement, ESSMU shall conduct EDD and prepare the CAP appraisal based on the IEE and EMP report submitted by the project proponent. Refer **Annex ES-4** for outline of report.
 - (f). The EDD and CAP shall also be submitted to ADB by ESSMU for information.
 - (g). The requirements of IDCOL ESSF on GOB legal compliance, implementation of CAP, monitoring, reporting, information disclosure, grievance redress mechanism shall be inserted in the loan documentation as covenants. Guidance for incorporation of EMP in contract documents is given in **Annex E-15**.
 - (h). On completing construction of the project and obtaining Environmental Clearance Certificate from DOE, the project proponent shall submit the same to IDCOL.
 - (i). The project proponent shall submit annual monitoring reports on implementation of CAP.
135. **Low Risk Projects:** For refinancing/existing projects categorized as 'Low' risk, the following procedures shall be followed:
- (a). The ESSMU shall prepare a PEAR (refer **Annex E-10** for the format) based on review of the loan application form and risk rating.
 - (b). The project proponent shall submit the Location and/or Environmental Clearance Certificate from DOE to IDCOL before loan disbursement.
 - (c). The requirements of IDCOL ESSF on GOB legal compliance, implementation of EMP, monitoring, reporting, information disclosure, grievance redress mechanism shall be inserted in the loan documentation as covenants, if any.

For all refinanced projects agreements between Proponent (Sponsor) and Contractor should include prohibition of *harmful or exploitative forms of forced and child labour or use of unbonded asbestos fibre during construction period*

F. Operational Procedures of SSF

(i). New Projects

136. All subprojects that have not yet received a PLS by IDCOL at the time of ADB and other global financial institutions' loan effectiveness are considered as new projects. This case will represent situation of regular project processing and monitoring. The procedural steps for this case are set out below:

137. **High and Moderate Risk Projects (applicable if risk rating is High on account of questions 4 or 5 or Moderate on account of question 9):** For new projects categorized as 'High' risk, the following procedures shall be followed:

- a. Brief the project proponent on the ESSF during the Know-Your-Client (KYC) meeting. Explain the environmental and social safeguard policy requirements in the completion of the loan application form⁶. **Annex ES-3** shows a section that may be included.
- b. In preparing loan application, it is strongly advised that the subproject Project proponent be familiar with the environmental and social policy requirements of the GOB.
- c. The ESSMU (Environment and Social Safeguard Specialist) shall visit the project area.
- d. The ESSMU should study thoroughly feasibility report of the project, detailed design of the project, and other relevance documents submitted by the Project proponent before the field visit.
- e. The site visit should be comprised with project specific observation, Focused Group Discussions, and Key-informant discussions with all project related primary and secondary stakeholders.
- f. The ESSMU shall prepare a Initial Poverty and Social Assessment (IPSA) describing general socioeconomic features of the project influenced people including existing poverty level of them. In addition, this assessment should include gender related information of project influenced/affected people and potential project impact on reducing poverty and other social inequalities as a result of the project.
- g. The IPSA should contain basic social impact screening checklists for IR and IPs (see **Annex S-6** and **Annex S-7**).

⁶ Presently, IDCOL's Loan Application Form does not ask for basic Environmental and Social information. Recently, under the World Bank-supported Investment Promotion and Financing Facility (IPFF), Bangladesh Bank has introduced a section on Environmental Compliance. Under this ESSF, IDCOL will factor a similar section in its Loan Application Form.

- h. The IPSA shall also be sent to ADB and other Global Financial Institutions (if required).
- i. An approval shall be obtained from the Global Financial Institutions (if relevance) before approval of loan from IDCOL.
- j. Based on the categorisation of project impacts on project influenced/affected people following reports shall be prepared by the Project proponent;
 - i. Resettlement Plan (see **Annex S-3** for outline of a RP)
 - ii. Adibasi Development Plan (see **Annex S-4** for outline of a ADP)
- k. The Social Impact Assessment (SIA) is a technical report prepared at the instruction of the Lenders and prepared on behalf of the project proponent. The SIA would report the results of the social impacts, focusing on the likely involuntary resettlement effects and impacts on *adibasis* of the proposed subproject. The SIA would be based on quantitative and qualitative project-site investigations by a qualified social science professional. **Annex S-3 (section 2)** provides ToR for the SIA. The extent of the SIA should be proportionate to the expected IR and impacts on *adibasi* , as indicated by the initial screening for the Preliminary Project Appraisal. Based on the impacts a resettlement entitlements matrix shall be prepared by the project proponent (see **Annex S-8**).
- l. The Project proponent should submit required social safeguard reports to ESSMU for review and all finalised report/s shall be submitted to IDCOL for approval.
- m. Approved RP and ADP shall be sent to ADB and other Global Financial Institutions (if required).
- n. Once the Loan Sanction Letter is issued, all approved reports by IDCOL and ADB (if necessary other Global Financial Institutions (if required) shall be pasted in their web sites for information disclosure.
- o. Monitor whether the conditionalities have been met, especially on approvals of RP/ADP has been achieved. For projects with a RP and/or a ADP, monitoring should be quarterly; for subprojects with short plans, monitoring should be semi-annual. Project proponent should make social monitoring reports available to affected people. Format for monitoring implementation of RP/ADP is given in **Annex S-9**. All monitoring reports should be sent to ADB and other global financial institutions, and disclosed publicly to affected stakeholders.
- p. Continue monitoring progress on the subproject through monitoring reports received from the project proponent. Conduct field visits if required.

138. **Low Risk Projects:** For new projects categorized as 'Low' risk (ADB categorised as C), the following procedures shall be followed:

- a. Brief the project proponent on the ESSF during the Know-Your-Client (KYC) meeting. Explain the environmental and social safeguard policy requirements in the completion of the loan application form⁷. **Annex ES-3** shows a section that may be included.
- b. In preparing loan application, it is strongly advised that the subproject Project proponent be familiar with the environmental and social policy requirements of the GOB.
- c. The ESSMU (Environment and Social Safeguard Specialist) shall visit the project area.
- d. The ESSMU should study thoroughly feasibility report of the project, detailed design of the project, and other relevance documents submitted by the Project proponent before the field visit.
- e. The site visit should be comprised with project specific observation, Focused Group Discussions, and Key-informant discussions with all project related primary and secondary stakeholders.
- f. The ESSMU shall prepare a Initial Poverty and Social Assessment (IPSA) describing general socioeconomic features of the project influenced people including existing poverty level of them. In addition, this assessment should include gender related information of project influenced/affected people and potential project impact on reducing poverty and other social inequalities as a result of the project.
- g. The IPSA should contain basic social impact screening checklists for IR and IPs (see **Annex S-6** and **Annex S-7**).
- h. The IPSA shall also be sent to ADB and other Global Financial Institutions (if required).
- i. An approval shall be obtained from the Global Financial Institutions (if relevance) before approval of loan from IDCOL.
- j. Once the Loan Sanction Letter is issued, all approved reports by IDCOL and ADB (if necessary other Global Financial Institutions (if required) shall be pasted in their web sites for information disclosure.

⁷ Presently, IDCOL's Loan Application Form does not ask for basic Environmental and Social information. Recently, under the World Bank-supported Investment Promotion and Financing Facility (IPFF), Bangladesh Bank has introduced a section on Environmental Compliance. Under this ESSF, IDCOL will factor a similar section in its Loan Application Form.

- k. Monitor whether the conditionalities have been met. Project proponent should make social monitoring reports available to affected people. All monitoring reports should be sent to ADB and other global financial institutions, and disclosed publicly to affected stakeholders. Format for monitoring implementation of RP/ADP is given in **Annex S-9**.
- l. Continue monitoring progress on the subproject through monitoring reports received from the project proponent. Conduct field visits if required.

(ii).Refinancing / Existing Projects in Advanced Stage

139. All subprojects that have already received the Preliminary Letter of Support (PLS) by IDCOL but have not yet received final loan approval by the IDCOL Board of Directors at the time of ADB loan effectiveness. This case will be transitional. For such projects, the process will be essentially of **due diligence** and would be as follows:

140. **High and Moderate Risk Projects (applicable if risk rating is High on account of questions 4 or 5 or Moderate on account of question 9):** For refinancing/existing projects categorized as 'High' risk (ADB categorised as A), the following procedures shall be followed:

- a. The ESSMU should study thoroughly feasibility report of the project, detailed design of the project, and other relevance documents submitted by the Project proponent before the field visit.
- b. The ESSMU shall review all social safeguard reports – IPSA, RP and ADP (if required) and identify the adequacy in compliance purposes.
- c. The ESSMU (Environment and Social Safeguard Specialist) shall visit the project area.
- d. The site visit should be comprised with project specific observation, Focused Group Discussions, and key-informant discussions with all project related primary and secondary stakeholders.
- e. The ESSMU shall gauge the discrepancies between the reports contents and measures taken by the Project proponent.
- f. Based on the field visit a due diligence report shall be prepared by the ESSMU and it should submit to the IDCOL Board of Management and their approval.
- g. The approved due diligence report shall be sent to ADB and other Global Financial Institutions (if required).
- h. If there is a substantial gap between report's findings and the actual field situation, a Correctional Action Plan (CAP) shall be prepared by the ESSMU.

- i. The CAP shall prepare in consultation of the Project proponent and they should endorse the CAP before submit it to IDCOL approval.
 - j. Approved CAP by the IDCOL shall be sent to ADB and other Global Financial Institutions (if required).
 - k. All approved reports by IDCOL and ADB (if necessary other Global Financial Institutions where required) shall be pasted in their web sites for information disclosure.
 - l. Monitor whether all the conditionality has been met. Subproject Project proponent should make social monitoring reports available to affected people. All monitoring reports should be sent to ADB and other global financial institutions, and disclosed publicly to affected stakeholders. Format for monitoring implementation of RP/ADP is given in **Annex S-9**.
 - m. Continue monitoring progress on the subproject through monitoring reports received from the project proponent. Conduct field visits if required.
141. **Low Risk Projects:** For refinancing/existing projects categorized as 'Low' risk (ADB categorised as C), the following procedures shall be followed:
- a. The ESSMU should study thoroughly feasibility report of the project, detailed design of the project, and other relevance documents submitted by the Project proponent before the field visit.
 - b. The ESSMU shall review all social safeguard reports – IPSEA, RP and ADP (if required) and identify the adequacy in compliance purposes.
 - c. The ESSMU (Environment and Social Safeguard Specialist) shall visit the project area.
 - d. The site visit should be comprised with project specific observation, Focused Group Discussions, and Key-informant discussions with all project related primary and secondary stakeholders.
 - e. The ESSMU shall gauge the discrepancies between the reports contents and measures taken by the Project proponent.
 - f. If there is no substantial gap between report's findings and the actual field situation, a due diligence report shall be prepared by the ESSMU.
 - g. It should submit to the IDCOL Board of Management and their approval.
 - h. The approved due diligence report shall be sent to ADB and other Global Financial Institutions (if required).

- i. All approved reports by IDCOL and ADB (if necessary other Global Financial Institutions (if required) shall be pasted in their web sites for information disclosure.
 - j. Monitor whether all the conditionality has been met. Subproject project proponent should make social monitoring reports available to affected people. All monitoring reports should be sent to ADB and other global financial institutions, and disclosed publicly to affected stakeholders. Format for monitoring implementation of RP/ADP is given in **Annex S-9**.
 - k. Continue monitoring progress on the subproject through monitoring reports received from the project proponent. Conduct field visits if required.
142. The mainstreaming of ESSF operational framework with IDCOL's business process is shown in **Figure 9**.

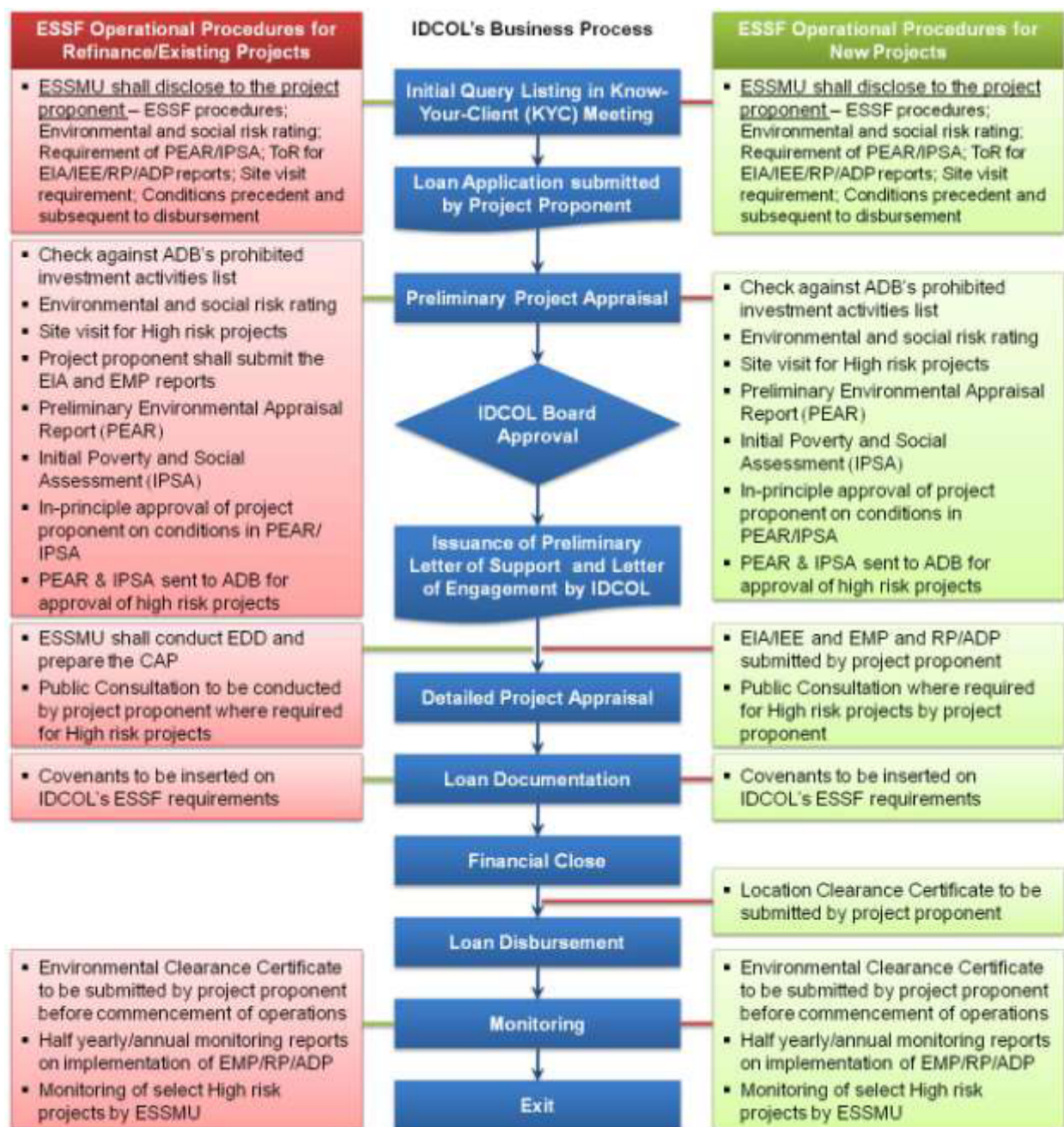


Figure 11: Mainstreaming ESSF Operational Framework with IDCOL's Business Process

G. Operational Procedures of ESSF for Component C

143. The Component C under PPIDF shall finance the set up of RES such as SHS and/or biomass based installations through a micro-finance based, direct sales programme.

144. **Projects under Component C shall be classified as a 'Moderate' risk on a programmatic level.**

145. Financing of these systems do not entail significant adverse environmental or social impacts at the level of an installation or a programme. No involuntary resettlement and rehabilitation related issues are expected under this Component as land acquisition or any livelihood-affecting activities are not involved.
146. SHS shall involve making provision of Lead Acetate Batteries (LAB) and CFLs. Since thousands of such packages are expected to get financed and implemented, two issues that shall have to be looked into on a programme level has emerged viz. (a) disposal of CFL and (b) disposal of LABs.
147. Disposal of used CFLs has come up a pressing concern since no national level guideline, or recycling unit is present in Bangladesh.⁸
148. IDCOL has already formulated LAB recycling policy viz. “Policy Guidelines on Disposal of Warranty Expired Batteries” on June 14, 2005 for RERED project and operational guidelines. (refer **Annex E-16**). This system will be followed under the ESSF.
149. Based on the principles laid down under this ESSF, IDCOL shall make efforts to use long life LABs and low mercury CFLs to the extent possible. IDCOL may in addition explore setting of CFL recycling plants at strategic locations in partnership with agencies like GTZ, Waste Concern etc.
150. IDCOL, as a policy tool shall ensure that following are agreed upon by the borrowers / sub-borrowers and technology providers in Component C projects, which translates as a loan covenant in the agreements/ MoUs:
- (a). Compliance at all times with all relevant and applicable GoB E&S legislation
 - (b). Follow ‘Good Practice’ delineated in IDCOL’s ESMF (July, 2011) and from other miscellaneous sources
 - (c). All battery suppliers shall be certified by ISO 14001: 2004 (Environmental Management System) and OHSAS 18001:2007 (Occupational Health & Safety Management System).⁹
151. IDCOL shall also assure itself and its stakeholders that marketing strategies for the RES are inclusive and they target adibasis so as to encourage them to share in the benefits of the program in numbers at least equivalent to their proportion in the general population of the marketing territory.

⁸ However, the ESMF (July, 2011) has noted (see para 42 page 21) that under the Second Additional Financing project (financed by the World Bank) there is a provision for a consulting support to develop the national guideline for CFL disposal.

⁹ In the ESMF, IDCOL was recommended to advocate its battery manufacturers to become ISO 14001:2004 (Environmental Management Standard) and OHSAS 18001:2007 (Occupational Health Safety Standard) certified by June, 2011. As per data included in the ESMF (see para 30 page 16), barring Rahimafrooz and Panna Batteries, none of the others were found to be complaint with GoB legislation. Considering the field realities, the ESMF has concluded to provide additional six months to the battery manufacturers affiliated to IDCOL to become ISO 14001 & OHSAS 18001 compliant.

152. IDCOL has a comprehensive monitoring system for RES that has tiers of inspectors, IDCOL officers and independent assessors. Hence, instead of an independent monitoring system, a small format as per **Annex E-17** shall be added. IDCOL shall provide an annual report on Component C at a program level following this format.

H. Consultation and Disclosure

(i). Public Consultation

153. **Consultation during Environmental Assessment:** Public consultation is not a requirement as per GOB environmental regulations. It shall be conducted as per ADB's SPS requirements for High risk projects only.
154. New Projects - For High risk projects, public consultation shall be conducted at the scoping stage of the environmental assessment process to identify environmental impacts of the project as well as before appraisal after preparation of the draft EIA before receipt of Location Clearance Certificate from DOE.
155. Refinance/Existing projects at an advanced stage- For High risk projects that are sensitive, public consultations shall be carried out during implementation of EMP and the conclusion and recommendations should be incorporated into a revised EMP.
156. **Consultation for Involuntary Resettlement:** For all new projects, the project proponent will conduct meaningful consultation with affected persons, their host communities, and civil society for every project and subproject identified as having IR impacts. In the process of consultation the project proponent or specific consultants who are conducting the consultation process should follow qualitative methods (FGDs, KIIs, and observation) while carry out other methods.
157. Meaningful consultation is a process that;
- (a). begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle;
 - (b). provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people;
 - (c). is undertaken in an atmosphere free of intimidation or coercion;
 - (d). is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and
 - (e). enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

158. Consultation will be carried out in a manner commensurate with the impacts on affected communities. The project proponent will pay particular attention to the need of disadvantaged or vulnerable groups, especially those below the poverty line, the landless, the elderly, female headed households, women and children, IPs, and those without legal title to land.
159. **Consultations with Indigenous People (*Adibasi*)**: The project proponent will prepare an ADP in the context of the SIA and through meaningful consultation with the affected IPs communities. The ADP will set out the measures whereby the Project proponent will ensure;
- (a). that affected IPs receive culturally appropriate social and economic benefits; and
 - (b). that when potential adverse impacts on IPs are identified, these will be avoided to the maximum extent possible. Where this avoidance is proven to be impossible, based on meaningful consultation with indigenous communities, the ADP will outline measures to minimize, mitigate, and compensate for the adverse impacts.
160. In the process of consultation the project proponent or specific consultants who are conducting the consultation process should follow qualitative methods (FGDs, KIIs, and observation) while carry out other methods. The level of detail and comprehensiveness of ADP will vary depending on the specific subproject and the nature of impacts to be addressed. The Project proponent will integrate the elements of the ADP into the project's design.
161. **Public consultation may be combined if found relevant and more effective for environmental assessment as well as IR, especially when there are interlinkages between E&S issues.**

(ii). Information Disclosure

162. **Disclosure for environmental assessment.** For new projects, the ESSMU shall submit the following documents to ADB for disclosure on ADB's website
- (a). For High risk projects, A draft EIA including EMP at least 120 days with additional time required for incorporating comments on the draft EIA/EMP prior to ADB Board consideration;
 - (b). The final EIA/IEE;
 - (c). A new or updated EIA/IEE and Corrective Action Plan (CAP) prepared during project implementation, if any; and
 - (d). The environmental monitoring reports generated periodically (half-yearly/annually) during monitoring of project in implementation and operation phase of the project.

163. For refinance/existing projects at an advanced stage, the ESSMU shall submit the following documents to ADB for disclosure on ADB's website
- (a). CAP prepared during project implementation, if any;
 - (b). EDD report, if any; and
 - (c). The environmental monitoring reports generated periodically (half-yearly/annually) during monitoring of project in implementation and operation phase of the project.
164. **Disclosure for social assessment.** The ESSMU shall submit the following documents to ADB for disclosure on ADB and other Global Financial Institutions' website:
- (a). A draft RP and/or ADP endorsed by the project proponent before project appraisal;
 - (b). The final RP and/or ADP endorsed by the project proponent after the census of affected persons has been completed;
 - (c). A revised and updated RP and / or ADP, and a corrective action plan prepared during project implementation, if required; and
 - (d). The RP and / or ADP monitoring reports.
165. These documents will posted on the website of IDCOL as well as that of the Project proponent, if the project proponent has a website.
166. The project proponent will provide relevant resettlement information, including information from the above mentioned documents in a timely manner, in an accessible place and in a form and language(s) understandable to affected persons and other stakeholders.
167. **All documents disclosed on ADB's website shall also be disclosed on IDCOL's website where a page shall be dedicated for disclosure for ESSF.**

I. Grievance Redress Mechanism

168. The project proponent shall constitute a three-member Grievance Redress Committee (GRC) comprising of an officer representing the project proponent, not below the rank of the implementing officer, the elected member (local body) of the project area/location and one member from the public who is known to be a person of integrity, good judgment and commands respect among the community. The existence of the GRC will be disseminated to the affected persons through printed handouts providing details of the structure and process in redressing grievances.
169. The project proponent will document all complaints received, the action taken on each of them and send a report of the same every quarter to the ESSMU which shall also be communicated to ADB in the monitoring reports.

170. The GRC will address local public grievances regarding environmental impacts of project during construction and operation.
171. The project proponent will address issues through GRC to receive and facilitate the resolution of affected persons' concerns and grievances about physical and economic displacement and other project impacts, paying particular attention to the impacts on vulnerable groups. The GRC should be scaled to the risks and adverse impacts of the project.

J. Monitoring and Reporting

172. The monitoring and reporting procedures apply for both ESF and SSF.
173. The project proponent shall quarterly/ semi-annually/ annually prepare and submit an E&S monitoring report on the compliance with and effectiveness of the EMP/ RP/ ADP/ CAP to ESSMU at IDCOL. The monitoring report shall be sent to ADB for disclosure. Refer **Annex E-12** (environmental) and **Annex S-11** (social) for reporting format.
174. ESSMU at IDCOL shall promptly report to ADB any actual or potential breach of compliance requirements after it comes to their notice.
175. For High risk projects, ESSMU or hired independent E&S consultants shall visit the site to monitor implementation of EMP/ CAP/ RP/ ADP. Refer **Annex E-12** (environmental) and **Annex S-11** (social) for monitoring formats. Social consultants having expertise in monitoring IR and ADP will be engaged. Monitoring of ADP would be participative and in a culturally appropriate manner. **Annex S-10** gives a ToR for conduct of monitoring and evaluation of RP/ADP and Annex S-12 gives a sample methodology for planning social monitoring and evaluation.
176. ESSMU shall hire independent E&S consultants for conduct of annual audit of IDCOL's ESSF. Refer **Annex ES-6** for the ToR for conduct of ESMS audit.
177. Based on the review of the annual monitoring reports for High and Moderate risk projects submitted by the project proponent and the outcome of ESSF audit, the ESSMU shall prepare an annual E&S performance report in the format given in **Annex ES-5**. A CAP shall be prepared to address the gaps identified. The same shall be submitted to ADB along with the Periodic Finance Request (PFR).
178. An evaluation shall be carried out at the end of each project by the ESSMU through independent consultants to understand the final outcome of implementation of the project and E&S safeguards. The lessons from this evaluation must be shared with the project proponent and used for improving the safeguards practice of IDCOL.
179. IDCOL shall establish and maintain a database of non-performing loans due to environmental reasons, either in partial or full. If the project proponent has indicated environmental factors as one of the reasons for delays in making repayments, then this should be noted in the database.

180. IDCOL shall include a summary of findings from ESSF annual audit in their Annual Report.

K. Proposed Institutional Structure for Implementation of ESSF

(i). Structure of Environmental and Social Safeguards Management Unit

181. Considering the scope of the ESSF, IDCOL has set up an Environmental and Social Safeguards Management Unit (ESSMU). Currently the ESSMU features under the Investment branch of the organizational structure of IDCOL.

182. It is recommended that the ESSMU be retained under the **Legal Department** considering that ESSMU is largely carrying out risk management (on E&S issues similar to technical and financial) and has to do so in an independent manner. ESSMU will have to work in close coordination with the Assistant Directors during project appraisals for Investments and Loans for prevention and management of E&S risk in IDCOL's projects.

183. The ESSMU may be headed by an Assistant Director (ESSMU) reporting to Director (Legal). This would facilitate ESSMU's tasks more effectively and seamlessly. **Figure 12** shows the proposed organizational structure. The ESSMU shall also work in coordination with the Investment unit with regards to covenants on implementation of ESSF requirements.

184. The ESSMU Assistant Director will oversee and coordinate the application of ESSF, internal reviews and E&S due diligence / appraisal process.

185. The Assistant Director (ESSMU) shall be supported by Senior E&S Safeguards Specialists.

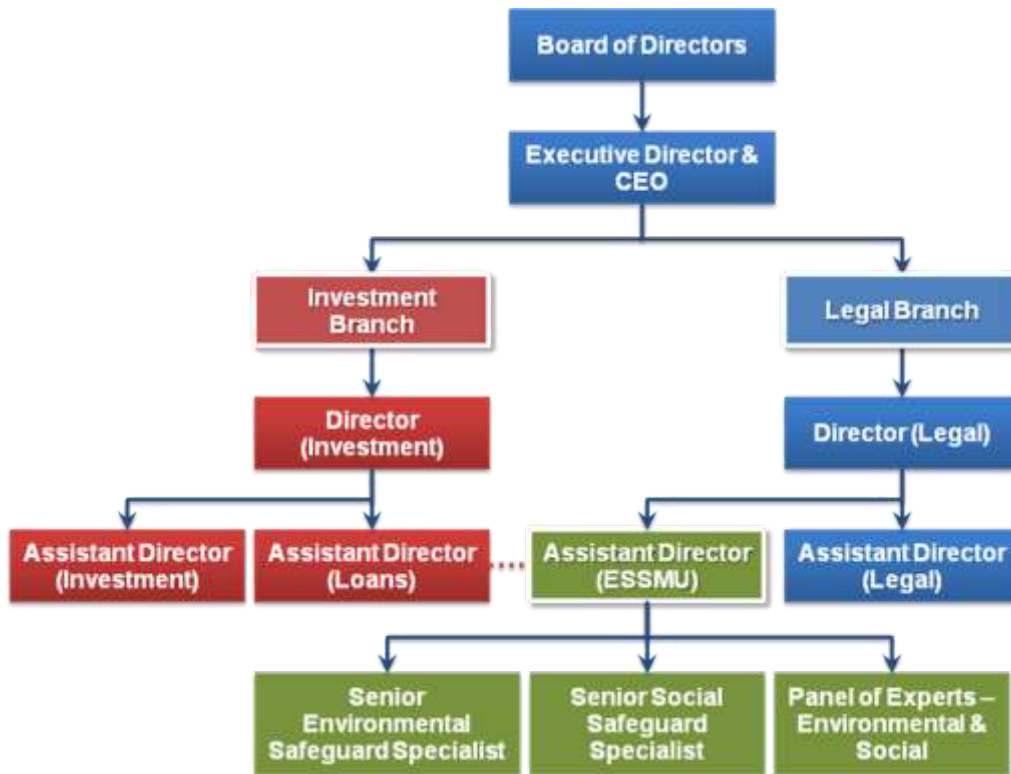


Figure 12: Proposed Institutional Structure of ESSMU

186. The environmental safeguards specialist will have a master level qualification in environmental science/engineering/planning with at least 7 years of experience in conducting/reviewing environmental assessments. The social safeguards specialist will have a masters level qualification and at least 7 years of experience in resettlement and tribal issues and social assessments. Familiarity with GOB regulations and procedures will be essential and exposure to Environment and social Safeguards policy requirements of ADB and other multilateral donor agencies is an advantage.

187. It is proposed that a formal empanelment of E&S consultants as well as laboratories in Bangladesh be carried out so as to maintain a ready dossier of competent agencies that could be directly engaged.

188. Based on requirements of projects, ESSMU will engage domain experts / consultants on a consultancy basis to carry out various studies (site assessments, EDD, IEE/EIA, Monitoring) required for management of E&S risks. These specialists may be drawn from a Panel and on project to project basis. This panel may consist of experts that have familiarity with sectors like energy and infrastructure, with some exposure to E&S issues.

(ii). Responsibilities of ESSMU

189. The environmental safeguards specialist shall deliver the following services:

- (a). Participate in the KYC meetings with client
- (b). Advise project proponent on completing the Environmental section of the Loan Application Form
- (c). Review of Loan Application Form to draw indicative term sheet
- (d). Categorization of project
- (e). Prepare PEAR
- (f). Issue Terms of Reference (ToR) for conduct of EIA/IEE/EDD/CAP
- (g). Review EIA/ IEE/ EDD/ CAP submitted for a project
- (h). Coordinate (including hiring consultants) conduct of monitoring of implementation of EMP/ CAP of select High risk projects
- (i). Review half-yearly monitoring reports of the compliance and effectiveness of the EMP/ CAP
- (j). Report progress of projects annually to ADB
- (k). Submit EIA of High risk projects to ADB for approval
- (l). Forward EIA/ IEE/ EDD/ CAP/ monitoring reports to ADB for disclosure and information

190. The social safeguards specialist will deliver the following services:

- (a). Participate in the KYC meetings with client
- (b). Advise project proponent on completing the Social section of Loan Application Form
- (c). Conduct review of Loan Application Form to draw indicative term sheet
- (d). Categorization of project
- (e). Issue ToR for conduct of SIA and RP/IPP
- (f). Review SIA and RP/ADP submitted for a project
- (g). Coordinate (including hiring consultants) conduct of monitoring of implementation of RP/IPP of select High risk projects
- (h). Review half-yearly monitoring reports of the compliance and effectiveness of the RP/IPP
- (i). Report on the progress of projects annually to ADB
- (j). Forward SIA and RP/ADP monitoring reports to ADB for disclosure
- (k). Submit RP/ADP of High risk projects to ADB for approval
- (l). Ensure financial commitment by the project proponent for RP/ADP implementation prior to loan disbursement
- (m). Review monitoring report submitted by PP/IA

191. The common services that ESMU shall deliver are:

- (a). Coordinate conduct of independent annual audit of IDCOL's ESSF.
- (b). Implementation of CAP for operations of IDCOL's ESSF.
- (c). Prepare annual E&S performance report to be submitted to ADB.
- (d). Coordinate with training specialists to conduct awareness and training program at IDCOL, project proponents on implementation and monitoring of EMPs, GOB's E&S Policy and Regulatory Framework, ADB safeguard policies, and IDCOL's ESSF
- (e). Update ESF/SSF based on operational experience.
- (f). Maintain ESSF page of IDCOL's website, respond to feedback received and factor the feedback as appropriate in project processing and monitoring as well towards the improvement of ESSF.

(iii). Allocation of Responsibilities

192. Project proponent shall be responsible for regular monitoring and periodic evaluation of safeguard compliance of the project with agreed milestones and performance levels particularly for purposes of disbursement of IDCOL funds. It shall send periodic safeguard progress reports in such form and, at such times, as may be prescribed by IDCOL's ESSF. The project proponent will therefore be responsible to report E&S compliance of the project to ESSMU in the formats as prescribed by the ESSF. **Table 3** summarizes allocation of responsibilities for implementation of E&S safeguards of IDCOL.

Table 3: Allocation of Responsibilities

Sr. No.	Tasks	Primary Responsibility	Secondary Responsibility
1.	Submit all documentation related to environmental clearances, NoCs etc. and EIA/EMP reports	Project Proponent	Review and Check by ESSMU
2.	Submit Involuntary Resettlement and Indigenous Peoples (tribal) Screening Checklist along with project concept note	Project Proponent	Review and Check by ESSMU
3.	Check each project for completion of application and list of prohibited activities by ADB	ESSMU/IDCOL	-
4.	Categorization and Issue ToR for conduct of EIA/ IEE/ SIA & RP/ADP	ESSMU/IDCOL	-
5.	Submit all relevant environmental information of High risk projects to ADB	ESSMU/IDCOL	-
6.	Check environmental compliance	ESSMU/IDCOL	Project Proponent for providing additional information as

Sr. No.	Tasks	Primary Responsibility	Secondary Responsibility
			required
7.	Check adequacy and effectiveness of EMP	ESSMU/IDCOL	Project Proponent for providing additional information as required
8.	Conduct EIA/ IEE/ EDD/ SIA	Project Proponent	ESSMU/IDCOL – support on ToR and identifying agency
9.	Prepare and Implement EMP/ RP/ ADP	Project Proponent	ESSMU/IDCOL – support on ToR and identifying agency
10.	Implement CAP	Project Proponent	-
11.	Review EIA/ IEE/ EMP/ CAP/ RP/ ADP prepared by Project Proponent	ESSMU/IDCOL	-
12.	Approval for Moderate and Low risk projects	ESSMU/IDCOL	-
13.	Submit EIA/RP/ADP of High risk projects to ADB for approval	ESSMU/IDCOL	-
14.	Ensure financial commitment of the Project Proponent to implement RP/IPP/EMP	ESSMU/IDCOL	Project Proponent
15.	Conduct monitoring of implementation of EMP/ RP/ ADP	Project Proponent	ESSMU/IDCOL
16.	Prepare and submit to ESSMU half-yearly/annual E&S monitoring report	Project Proponent	-
17.	Review half-yearly/annual E&S monitoring report	ESSMU/IDCOL	-
18.	Meet environmental compliance	Project Proponent	-
19.	Attend to public grievances	Project Proponent	-
20.	Conduct E&S monitoring and evaluation (select High risk projects)	ESSMU/IDCOL	Project Proponent
21.	Conduct annual E&S audit and disclose the annual E&S performance report and submit the final report to ADB	ESSMU/IDCOL	-
22.	Submit EIA/ IEE/ EDD/ CAP/ RP/ ADP for disclosure on ADB's website	ESSMU/IDCOL	Project Proponent
23.	Conduct awareness and training of project proponents and other stakeholders	ESSMU/IDCOL	Project Proponent
24.	Update ESSF based on FI experience	ESSMU/IDCOL	-

L. ESSF Information Management in IDCOL

193. **Introduction.** As the ESSF is being implemented on the lines of a management system it will need a structured approach to information management and document control. As part of its project appraisal and support on E&S due diligence, assessments and management IDCOL will collect large amount of data and information in the form of reports. At the same time records based on formats proposed in the ESSF will be created for communication to borrowers and stakeholders / other lenders.

194. It is therefore necessary that IDCOL establishes an information¹⁰ management mechanism to keep proper records in various forms (hard copies and soft copies) and maintain controlled (signed and updated) copies of all procedural documents.

195. The establishment of such a mechanism will help:

- (a). To assure that all environment and social compliances are planned, implemented and recorded in accordance to the ESSF (EMP, RP, ADP, etc.).
- (b). To record and document all operational procedures and formats (PEAR, IPSA, EDD, Site Visit Plans) as signed records in the ESSF
- (c). To use information for monitoring and evaluation purposes
- (d). To propose and revise corrective action plan if there are unforeseen project impacts and when there is a poor implementation process of environment and social safeguard requirements.
- (e). To use information for further studies related to project management, and environment and social safeguard management.

All required information in the project cycle that needs to be collected by ESSMU has been listed in **Table 4**.

Table 4: List of Documents required as per ESSF

Main Type	Sub Type	Stage of Collection in IDCOL's business cycle	
Project Documents	Loan Application Form	After meeting	Know-Your-Client
	Feasibility Report		
	Detailed Project Report		
Environmental Safeguards	Preliminary Environmental Appraisal Report with Sector specific checklist and risk rating checklist	Preliminary appraisal	project

¹⁰ Information systems are implemented within an organization for the purpose of improving the effectiveness and efficiency of that organization. Capabilities of the information system and characteristics of the organization, its work systems, its people, and its development and implementation methodologies together determine the extent to which that purpose is achieved.

Main Type	Sub Type	Stage of Collection in IDCOL's business cycle	
	Site Visit checklist		
	Initial Environmental Examination Checklist	Detailed project appraisal	
	Environmental Impact Assessment Report		
	Environmental Management Plan Report		
	Environmental Due Diligence & Corrective Action Plan Report		
	Inspection checklist on LAB and CFL for Component C		
	Location Clearance Certificate	Before Loan Documentation	
	Annual report on Component C at a program level	Monitoring	
	Environmental Clearance Certificate		
	Semi-annual/ Annual environmental monitoring report		
	External Monitoring report for select High risk projects		
	Database of non-performing loans		
Social Safeguards	IPSA including categorization checklists of IR and IP	Preliminary appraisal	project
	Resettlement Plan	Detailed project appraisal	
	<i>Adibasi</i> Development Plan	Detailed project appraisal	
	Quarterly/ Semi-annual/ Annual Progress Reports (internal) of implementation of RP/ADP	Monitoring and Evaluation	
	External monitoring reports as agreed by the borrower and IDCOL	Monitoring and Evaluation	
Common to Environmental and Social Safeguards	Environmental and Social Section in the Loan Application Form	After meeting	Know-Your-Client
	Annual E&S external audit report	Monitoring	
	Annual E&S performance report submitted to ADB		
Project Evaluation	Final Evaluation Report (internal)	Project completion/Exit	
	Final Evaluation Report (external) covering all projects benefits		

196. IDCOL ESSMU should create an internal system for information management based on the following:

- a. The revision page of the main ESSF document should be updated with relevant details and reasons whenever a change is made in the procedures or application of ESSF in IDCOL

- b. Establishing an approval workflow system for documents and maintain signed updated versions in the system based on pre-decided signatories within IDCOL for preparation, review and approval of documents
- c. Providing latest ESSF documents and formats to all investment managers for recording project E&S information
- d. Communicating and sharing relevant documents / records to Proponents / Sponsors and Lenders

M. ESSF Update

197. IDCOL's ESSF shall be maintained on its website for the purposes of sharing and towards receiving any comments or suggestions.
198. The ESSF will be reviewed each year, especially after the results of annual E&S audit. Based on the experience gained and considering further changes, if any, in GOB's environmental policy and regulatory framework or in the Environment Safeguard of ADB, the ESSF document will be appropriately updated. This task will be the responsibility of IDCOL's ESSMU. Refer **Annex ES-6** for ToR for IDCOL's ESSF annual audit.



Infrastructure Development Company Limited (IDCOL)

Environmental and Social Safeguards Framework (ESSF)

Annex

August 2011

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ANNEXES - ENVIRONMENTAL SAFEGUARDS

ANNEX E- 1: OVERVIEW OF ENVIRONMENTAL POLICY AND LEGISLATION IN BANGLADESH

1.1 Background

The severe floods of 1987 and 1988, and the resurgence of concern about environmental issues, have heightened in improving environmental conditions of the country through promulgation of numbers of policies and legislation in the country. All of the policies or legislation aimed at the conservation and protection of the environment. The existing policies and legislation, which are relevant to the environment, are described in the following sections.

1.2 Policies

1.2.1 Industrial Policy 1991

The Industrial policy of 1991 contains the following clauses in respect of environmental protection

- To conserve ecological balance and prevent pollution during industrialization
- To take effective steps for pollution control and conservation of environment during industrialization.

To ensure embodying of necessary pollution control and preventive measures by industrial investment project endangering environment

1.2.2 National Environmental Policy 1992

Bangladesh National Environmental Policy (GOB, 1992) was approved in May 1992, and sets out the basic framework for environmental action, together with a set of broad sectoral action guidelines. Key elements of the policy are:

- Maintenance of the ecological balance and overall progress and development of the country through protection and improvement of the environment.
- Protection of the country against natural disasters
- Identification and regulation of all types of activities which pollute and degrade the environment
- Ensuring sustainable utilization of all natural resources
- Active association with all environmentally-related international initiatives

Environmental policy contains the following specific objectives with respect to the industrial sector:

- To adopt corrective measures in phases in industries that causes pollution.
- To conduct Environmental Impact Assessments (EIAs) for all new public and private industries.
- To ban the establishment of any industry that produces goods that cause environmental pollution, closure of such existing industries in phases and discouragement of the use of

such goods through the development and/or introduction of environmentally sound substitutes.

- To ensure sustainable use of raw materials in industries and to prevent their wastage.

1.2.3 National Conservation Strategy

National Conservation Strategy (GOB/IUCN, 1992) was drafted in late 1991 and submitted to the Government in early 1992. This was approved in principle; however the final approval of the document is yet to be made by the cabinet. It underwent a number of modifications over the last five years, and is waiting to be placed before the cabinet finally sometime in late September 1997. For sustainable development in industrial sector, the report offered various recommendations; some of those are as follows:

- Industries based on nonrenewable resources should be made to adopt technology which conserves raw materials, and existing industries should be given incentives to install technical fixes to reduce wastage rate
- All industries, especially those based on imported raw materials, should be subjected to EIA and adoption of pollution prevention/control technologies should be enforced.
- No hazardous or toxic materials/wastes should be imported for use as raw material.
- Import of appropriate and environmentally sound technology should be ensured.
- Complete dependence on imported technology and machinery for industrial development should gradually be reduced, so that industrial development is sustainable with local skills and resources.

1.2.4 National Environmental Management Action Plan (NEMAP)

National Environmental Management Action Plan, also referred to as NEMAP (GOB, 1995) is a wide-ranging and multi-faceted plan, which builds on and extends the statements set out in the National Environmental Policy. NEMAP was developed to address issues and management requirements during the period 1995 to 2005, and sets out the framework within which the recommendations of the National Conservation Strategy are to be implemented.

NEMAP has the broad objectives of:

- Identification of key environmental issues affecting Bangladesh;
- Identification of actions necessary to halt or reduce the rate of environmental degradation;
- Improvement of the natural and built environment;
- Conservation of habitats and biodiversity;
- Promotion of sustainable development;
- Improvement in the quality of life of the people.

One of the key elements of NEMAP is that sectoral environmental concerns are identified. In outline, the environmental issues of the industrial sector include the following:

- Pollution arising from various industrial processes and plants throughout the country causing varying degrees of degradation of the receiving environment (Air, Water, and Land).
- There is a general absence of pollution abatement in terms of waste minimization and treatment.
- Low level of environmental awareness amongst industrialists and entrepreneurs.
- Lack of technology, appropriate to efficient use of resources and waste minimization leading to unnecessary pollution loading in the environment.

- Economic constraints on pollution abatement and waste minimization such as the cost of new technology, the competitiveness of labor, and intensive production methods as compared to more modern methods.
- Concentration of industry and hence pollution in specific areas which exacerbate localized environmental degradation and exceed the carrying capacity of the receiving bodies.
- Unplanned industrial development has resulted in several industries located within or close to residential areas, which adversely affects human health and quality of human environment.
- Establishment of industries at the cost of good agricultural lands and in the residential areas.
- Lack of incentives to industrialists to incorporate emission/discharge treatment plant in their industries.

1.2.5 Bangladesh Climate Change Strategy and Action Plan (BCCSAP), 2009

The thrust of the strategy is on sustainable development, poverty eradication and increased well being of all vulnerable groups in the society with special emphasis on gender sensitivity. The climate change action plan is built on six pillars, food security, social protection and health; comprehensive disaster management; infrastructure, research and knowledge management; mitigation and low carbon development; and capacity building and institutional.

1.2.6 Conventions, Treaties and Protocols

Bangladesh has consented to be bound by the terms of some 21 of the 44 principal international conventions, treaties and protocols relating to the environment (*Islam, 1996*). Those with partial and indirect relevance to industrial projects are the Paris convention of 1972 concerning the protection of the World cultural and natural Heritage, Convention concerning safety in the use of chemicals at work, Geneva 1990, Biodiversity convention, Rio-de-Janeiro, 1992, Convention concerning occupational health services, Geneva 1985 etc.

1.3 National Legislation

1.3.1 Environment Conservation Act 1995 (ECA 1995)

Formal concern at the national level, for the state of environment in Bangladesh can be traced back to at least Independence and passing of the Water Pollution Control Act in 1973. Under this a small unit was established in the Directorate of Public Health Engineering (DPHE) to monitor pollution of ground water and surface water.

In order to expand the scope of environmental management and to strengthen the powers for achieving it, the Government issued the Environmental Pollution Control Ordinance in 1977. The ordinance provided for the establishment of an Environmental Pollution Control Board, which was charged with formulating policies and proposing measures for their implementation. In 1982, the board was renamed as Department of Environmental Pollution Control (DEPC). Four divisional offices were established in Dhaka, Chittagong, Khulna and Bogra.

A special presidential order again renamed the DEPC to the Department of Environment (DOE) and placed under newly formed ministry of Environment and Forest (MoEF) in 1989.

The national environmental legislation known as Environmental Conservation Act, 1995 (ECA'95) is currently the main legislative document relating to environmental protection in

Bangladesh, which repealed the earlier environment pollution control ordinance of 1997 and has been promulgated in 1995.

The main objectives of ECA'95 are:

- Conservation and improvement of environment, and
- Control and mitigation of pollution of environment.

The main strategies of the act can be summarized as:

- *Declaration of ecologically critical areas, and restriction on the operation and process, which can be carried, out or cannot be initiated in the ecologically critical areas.*
- *Regulation in respect of vehicles emitting smoke harmful for the environment.*
- *Environmental clearance*
- *Regulation of the industries and other development activities - discharge permit.*
- *Promulgation of standards for quality of air, water, noise and soil for different areas for different purposes.*
- *Promulgation of standard limit for discharging and emitting waste.*
- *Formulation and declaration of environmental guidelines.*

Department of Environment (DOE) is implementing the Act. DOE is under the ministry of Environment and Forest and is headed by a Director General (DG). The DG has complete control over the DOE. The power of DG, as given in the Act, may be outlined as follows:

- The DG has the power to close down the activities considered harmful to human life or the environment. The operator does have the right to appeal and procedures are in place for this. However, if the incident is considered an emergency, there is no opportunity for appeal.
- The DG has the power to declare an area affected by pollution as an ecologically critical area. DOE governs the type of work or process, which can take place in such an area.
- Before going for any new development project, the project proponent must have to take Environmental Clearance from DOE. The procedures to take such clearance are in place.
- Failure to comply with any part of ECA'95 may result in punishment by a maximum of 05 years imprisonment or a maximum fine of Tk. 100,000 or both.

A set of the relevant rules to implement the ECA' 95 has recently been promulgated (August 1997). The rules mainly consist of:

- Categorized list (green, orange and red) of the projects;
- Application format to take environmental clearance;
- Ambient standards in relation to water pollution, air pollution and noise, as well as permitted discharge/emission levels of water and air pollutants and noise by industries.

The Rules incorporate "inclusion lists" of projects requiring varying degrees of environmental investigation.

Green List Industries are considered relatively pollution-free and therefore do not require an environmental clearance certificate from the DOE and no environmental study.

Orange List 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 DOE environmental clearance. 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.

Red List Industries are those which may cause 'significant adverse' environmental impacts and are therefore required to submit an EIA report. It should be noted that they may obtain an initial site clearance on the basis of an IEE report, and subsequently submit an EIA report for obtaining environmental clearance along with other necessary papers, like the feasibility study report, no objection from local authority.

As per ECR '97 all existing industries/projects in Orange B and Red category require an Environmental Management Plan (EMP) (not IEE or EIA) to be prepared and submitted along with necessary other papers while applying for environmental clearance.

Environmental standards in operation in Bangladesh also Promulgated under the Environment Conservation Rules 1997. There are standards prescribed for varying water sources, ambient air, noise, odor, industrial effluent and emission discharges, vehicular emission etc.

The Bangladesh standards intend to impose restrictions on the volume and concentrations of wastewater/solid waste/ gaseous emission etc. discharged into the environment. In addition a number of surrogate pollution parameters like Biochemical Oxygen Demand, or Chemical Oxygen Demand; Total Suspended Solids, etc. are specified in terms of concentration and/or total allowable quality discharged in case of waste water/solid waste. Additionally specific parameters depending on the manufacturing process are specified such as phenol, cyanide, copper, zinc, chromium etc. Air emission quality standards refer mostly to concentration of mass emission of various types of particulate, sulfur dioxide, and oxides of nitrogen and in some cases volatile organic compounds and other substances.

Application format for environmental clearance is in place can be collected from divisional offices of DOE.

1.3.2 The Environment Court Act, 2000

This act provides for the establishment of environment courts where as it is expedient and necessary for the trial of offences relating to environmental pollution and matters incidental thereto;

1.3.3 Other Legislation

Bangladesh legislation contains numerous laws, which are indirectly related to the environment. Other legislation, which is relevant, to various aspects of industrial project in general includes:

- The workman's Compensation Act of 1923, which provides legal basis for the payment by certain classes of employers to their workmen of compensation for injury by accident.
- The Forest act of 1927 (amended in 1989), which provides legal protection for wild flora and forest.

ANNEX E- 2: ENVIRONMENTAL CONSERVATION ACT (1995) OF GOB

Act No. 1 of 1995

issue of 16-2-1995 and amended by Act Nos 12 of 2000 and 9 of 2002.]

Draft ECA Amendment of 2010 to be added

An Act to provide for conservation of the environment, improvement of environmental standards and control and mitigation of environmental pollution.

Whereas it is necessary and expedient to provide for conservation of the environment, improvement of the environmental standards, and control and mitigation of environmental pollution;

It is hereby enacted as follows:

1. Short title and commencement.-

(1) This Act may be called the Bangladesh Environment Conservation Act, 1995.

(2) It shall come into force on such date as the Government may, by notification in the Official Gazette¹, specify and it shall be brought into force in different areas on different dates.

2. ²Definitions.- In this Act, unless there is anything contrary in the subject or context-

"conservation of environment" means improvement of the qualitative and quantitative characteristics of different components of environment as well as prevention of degradation of those components; *[Ref: Clause (f).]*

"Department" means the Department of Environment established under section 3 of this Act; *[Ref: Clause (a).]*

"Director General" means Director General of the Department; *[Ref: Clause (m).]*

¹ The Act was brought into force by MoEF notification of 30th May in Dhaka, Chitagong, Rajshahi, Khulna and Barisal Divisions w.e.f. 1st, 2nd, 3rd, 4th, and 5th of June 1995, respectively.

² The definitions are rearranged in English alphabetical order with reference to relevant clause of the original Bangla text of section 2. E.C.A. 155

"ecosystem" means the inter-dependent and balanced complex association of all components of the environment which can support and influence the conservation and growth of all living organisms; [Ref: Clause (g).]

"environment" means the inter-relationship existing between water, air, soil and physical property and their relationship with human beings, other animals, plants and micro-organisms; [Ref: Clause (d).]

"environment pollutant" means any solid, liquid or gaseous substance which causes harmful effect to the environment and also includes heat, sound and radiation; [Ref: Clause (e).]

"hazardous substance" means a substance, the chemical or biochemical properties of which are such that its manufacture, storage, discharge or unregulated transportation can be harmful to the environment; [Ref: Clause (j).]

"occupier", in relation to any factory or premises, means a person who has control over the affairs of the factory or the premises, and in relation to a product, means the person in possession of the product; [Ref: Clause (c).]

"person" means a person or group of persons, and includes any company, association or corporation, whether incorporated or not; [Ref: Clause (h).]

"pollution" means the contamination or alteration of the physical, chemical or biological properties of air, water or soil, including change in their temperature, taste, odor, density, or any other characteristics, or such other activity which, by way of discharging any liquid, gaseous, solid, radioactive or other substances into air, water or soil or any component of the environment, destroys or causes injury or harm to public health or to domestic, commercial, industrial, agricultural, recreational or other useful activity, or which by such discharge destroys or causes injury or harm to air, water, soil, livestock, wild animal, bird, fish, plant or other forms of life; [Ref: Clause (b).]

"rule" means rule made under this Act; [Ref: Clause (k).]

"use", in relation to any material, means manufacturing, processing, treatment, package, storage, transportation, collection, destruction, conversion, offering for sale, transfer or similar activity relating to such material; [Ref: Clause (i).]

"waste" means any solid, liquid, gaseous, radioactive substance, the discharge, disposal and dumping of which may cause harmful change to the environment; [Ref: Clause (l).]

³2A. **Overriding effect of the Act.** - Notwithstanding anything contained to the contrary in any other law for the time being in force, the provisions of this Act, rules and directions issued under this Act shall have effect.

3. Department of Environment.-

³ Section 2A was inserted by section 2 of Act 9 of 2002.

- (1) The Government shall, for carrying out the purposes of this Act, establish a Department to be called the Department of Environment and headed by a Director General.
- (2) The Director General shall be appointed by the Government and the terms and conditions of his service shall also be determined by the Government.
- (3) For proper performance of the functions of the Department, necessary officers and employees shall be appointed in the manner and on the terms and conditions prescribed by rules.

4. Power and functions of the Director General.-

- (1) Subject to the provisions of this Act, the Director General may take such measures as he considers necessary and expedient for the conservation of the environment, and improvement of environmental standards, and for the control and mitigation of environmental pollution, and he may issue necessary directions in writing to any person for the discharge of his duties under this Act.
- (2) In particular and without prejudice to the generality of the foregoing power, such measures may include all or any of the following :-
 - (a) co-ordination with the activities of any authority or agency having relevance to the objectives of this Act;
 - (b) prevention of probable accidents which may cause environmental degradation and pollution, undertaking safety measures and determination of remedial measures for such accidents and issuance of directions relating thereto;
 - (c) giving advice or, as the case may be, issuing directions to the concerned person regarding the environmentally sound use, storage, transportation, import and export of a hazardous substance or its components.
 - (d) conducting inquiries and undertaking research on conservation, improvement and pollution of the environment and rendering assistance to any other authority or organization regarding those matters;
 - (e) searching any place, examining any equipment, manufacturing or other processes, ingredients, or substance for the purpose of improvement of the environment, and control and mitigation of pollution; and issuance of direction or order to the appropriate authority or person for the prevention, control and mitigation of environmental pollution;
 - (f) collection and publication of information about environmental pollution;
 - (g) advising the Government to avoid such manufacturing processes, commodities and substances as are likely to cause environmental pollution;

(h) carrying out programs for observation of the quality of drinking water and preparation of reports thereon, and rendering advice or, as the case may be, issuing direction to the concerned persons to follow standards for drinking water.

(3) A direction issued under this section may include matters relating to closure, prohibition or regulation of any industry, undertakings or processes, and the concerned person shall be bound to comply with such direction:

⁴ [Provided that-

(a) the Director General shall, before issuing a direction of closure or prohibition of an industry, undertaking or process, send to the owner or occupier thereof a written notice so that he gets reasonable opportunity to make that industry, undertaking or process environmentally sound; and

(b) where the Director General considers it appropriate, he may also specify in the notice that actions under sub-section (2) of section 4A may be taken if, pursuant to the notice, measures are not taken to make the relevant activities environmentally sound:]

Provided further that, if the Director General considers that, due to a particular environmental pollution, the public life is likely to be in danger and that urgent action is necessary, he may immediately issue necessary directions.

(4) A time limit may be specified by the Director General for carrying out a direction issued under this section.

⁵ **[4A. Assistance from law enforcing agencies and other authorities.-**

(1) The Director General or a person authorized by him may, for the purpose of exercising any power or performing any function under this Act, request any law enforcing agency, or any other Government or statutory authority to render necessary assistance, and upon such request that agency or authority shall render the assistance.

(2) Where the Director General issues a direction for closure, prohibition or regulation of an industry, undertaking or process under section 4(3) and the owner or occupier thereof does not comply with the direction, the Director General may direct the provider of electricity, gas, telephone or water or all such services or any other service provided to the industry, undertaking or process to disconnect the service.

(3) Where a direction is issued under sub-section (2), the concerned person or institution shall be bound to take necessary action as specified in the direction.]

⁴ The first proviso to sec 4(3) was inserted by sec 3 of Act 9 of 2002.

⁵ Section. 4A was inserted by section 4 of Act 9 of 2002

5. Declaration of ecologically critical area.-

- (1) If the Government is satisfied that an area is in an environmentally critical situation or is threatened to be in such situation, the Government may, by notification in the official ⁶Gazette, declare such area as an ecologically critical area.
- (2) The Government shall, in the notification published under subsection (1) or in a separate notification, specify the activities or processes that cannot be initiated or continued in an ecologically critical area.

⁷6. Restrictions regarding vehicles emitting smoke injurious to environment.-

- (1) A vehicle emitting smoke or gas injurious to health or environment shall not be operated nor shall such vehicles be switched on except for the purpose of test-operation for stopping the emission of such smoke or gas.

Explanation.- In this section “smoke or gas injurious to health or environment” means any smoke or gas which exceeds the standards fixed by rules.

- (2) For the purposes of sub-section (1), the Director General or any person authorized by him may test any vehicle at any place or may stop a vehicle in motion for testing, and instantly test it or detain it for necessary period or may, if any vehicle violates that sub-section, seize it and other related documents, or may give necessary direction for testing the vehicle.
- (3) A report of the test under sub-section (2) shall be admissible as evidence in the proceedings of a court.
- (4) For the violation of sub-section (1) or a direction given under subsection (2), the driver or, as the case may be, the owner or both shall be liable.]

⁸[6A. **Restrictions on manufacture, sale etc. of articles injurious to environment.-** If, on the advice of the Director General or otherwise, the Government is satisfied that all kinds or any kind of polythene shopping bag, or any other article made of polyethylene or polypropylene, or any other article is injurious to the environment, the Government may, by notification in the official Gazette, issue a ⁹direction imposing absolute ban on the manufacture, import, marketing, sale, demonstration for sale, stock, distribution, commercial carriage or commercial

⁶ Certain areas declared as ecologically critical area by four notifications of MoEF.

⁷ Section 6 was substituted for the old section 6 by Sec. 5 of Act 9 of 2002.

⁸ Section 6A was inserted by Sec. 5 of Act 9 of 2002.

⁹ All kinds of Polythene shopping bag have been banned by a notification of MoEF and certain bags have been exempted by another notification.

use, or allow the operation or management of such activities under conditions specified in the notification, and every person shall be bound to comply with such direction :

Provided that such direction shall not be applicable to the following cases:-

- (a) if the article specified in the notification is exported or used for export;
- (b) if the direction mentions that it is not applicable to any particular kind of polythene shopping bag.

Explanation.- In this section “polythene shopping bag” means a bag, *thonga* or other container which is made of polyethylene or poly propylene or any compound or mixture thereof and is used for purchasing, selling, keeping or carrying another article.]

¹⁰[7. **Remedial measures for injury to ecosystem.-**

- (1) If it appears to the Director General that any act or omission of a person is causing or has caused, directly or indirectly, injury to the ecosystem or to a person or group of persons, the Director General may determine the compensation and direct the firstly mentioned person to pay it and in an appropriate case also direct him to take corrective measures, or may direct the person to take both the measures; and that person shall be bound to comply with the direction.
- (2) If a person, to whom a direction under sub-section (1) has been issued, fails to comply with the direction, the Director General may file a suit for compensation in the competent court or file a criminal case for failure to comply with the direction or file both kinds of cases.
- (3) For the purposes of determination of compensation or corrective measures under sub-section (1), the Director General may engage any specialist and other persons.
- (4) The Government may direct the Director General to take any action under this section and to submit a report thereon.]

8. Information to the Director General regarding environmental degradation or pollution.-

- (1) Any person affected or likely to be affected as a result of pollution or degradation of the environment may, in the manner prescribed by rules, apply to the Director General for remedy of the damage or apprehended damage.
- (2) The Director General may hold a public hearing and take other measures for disposing of an application made under this section.

9. Discharge of excessive environmental pollutant etc.-

¹⁰ Section 7 was substituted by sec. 2 of Act 12 of 2000.

- (1) Where, due to an accident or other unforeseen incident, the discharge of any environmental pollutant occurs or is likely to occur in excess of the limit prescribed by the rules, the person responsible and the person in charge of the place of occurrence shall take measures to control or mitigate the environmental pollution.
- (2) The persons referred to in sub-section (1) shall immediately inform the Director General of the occurrence or the likelihood of such occurrence as mentioned in that sub-section.
- (3) On receipt of information under this section with respect to the accident or other incident, the Director General shall take necessary remedial measures to control or mitigate the environmental pollution, and the said person shall be bound to render assistance and co-operation as required by the Director General.
- (4) The expenses incurred with respect to remedial measures to control and mitigate the environmental pollution under this section shall be payable to the Director General and may be realized from the persons referred to in sub-section (1) as public demand.

10. Power of entry etc.-

- (1) Subject to the provisions of this section, any person generally or specially authorized in this behalf by the Director General shall have the right to enter any building or other place at all reasonable times, with such assistance as he considers necessary for the following purposes, namely :-
 - (a) to perform his duties under this Act or rules;
 - (b) to inspect any activity carried out at such place or building under this Act or rules or a notice, order or direction issued thereunder;
 - (c) to test or verify any equipment, industrial plant, record, register, document or any other significant material;
 - (d) to conduct a search of a building or place if such person has reason to believe that an offence has been committed in that building or place in contravention of this Act or rule or any notice, order or direction issued thereunder;
 - (e) to seize any equipment, industrial plant, record, register, document or other material that may be used as evidence of the commission of any offence punishable under this Act or rules.
- (2) The person operating any industry, activity or process or the person handling any hazardous substance shall be bound to render all assistance to the said authorised person in discharging his duties under this Act.
- (3) The provisions of the Code of Criminal Procedure, 1898 (Act V of 1898) shall be followed in conducting any search and seizure under this section.

11. Power to collect samples etc.-

- (1) A person authorised in this behalf by the Director General may, in the manner prescribed by rules, collect from any factory, premises or other place any sample of air, water, soil or other substance for analysis.
- ¹¹(2) Subject to the provisions of sub-section (3) or (4), as the case may be, the report of a sample collector or the report of a laboratory or both the reports shall, in relation to a sample collected under this section, be admissible as evidence in the concerned proceedings.]
- (3) Subject to the provisions of sub-section (4), the person collecting the sample under sub-section (1) shall --
 - (a) serve, in the manner prescribed by rules, a notice to the occupier of the place or his agent specifying his intention to collect any sample;
 - (b) collect samples in presence of that occupier or his agent;
 - (c) place the sample in a container and seal the container after recording signatures of himself and of the occupier or his agent on the container;
 - (d) prepare a report on the collection of the sample and record signatures of himself and of the occupier or his agent;
 - (e) without delay send the container to the laboratory specified by the Director General.
- (4) Where, after issuing a notice under clause (a) of sub-section (3), the sample collector collects the sample under sub-section (1), but the occupier or his agent remains absent at the time of collecting sample or being present refuses to put signature on the container of the sample and report, then the collector shall, in the presence of two witnesses, secure the container by putting his own signature and seal the sample, and without delay send the samples to the laboratory ¹²specified by the Director General for analysis and shall state the fact of willful absence of the occupier or his agent or, as the case may be, of his refusal.

12. Environmental Clearance Certificate.- No industrial unit or project shall be established or undertaken without obtaining, in the manner prescribed by rules, an Environmental Clearance Certificate from the Director General.

¹¹ Section 11(2) was substituted by section 6 of Act 9 of 2002.

¹² Under sub-sec 11(4) DG, DoE by a circular dated 23/7/2002 has specified DoE divisional laboratories for the purpose of this Act.

13. Formulation of environmental guidelines.- The Government may, by notification in the official Gazette from time to time, formulate and publish environmental guidelines relating to the control and mitigation of environmental pollution, conservation and improvement of the environment.

14. Appeal.-

(1) Any person aggrieved by a notice, order or direction issued under this Act or rules may, within 30 days from the date of issuance of the notice, order or direction, appeal to the ¹³Appellate Authority constituted by the Government and the decision of such Authority on the appeal shall be final and shall not be called in question in any court :

Provided that the Appellate Authority may, if it is satisfied that for some unavoidable reason the aggrieved person could not file the appeal within that time, extend the period for filing the appeal by a period not exceeding thirty days.

(2) The Appellate Authority constituted under sub-section (1) may consist of one or more members: Provided that where the Appellate Authority consists of more than one member, the Government shall appoint one of the members to be the Chairman of the Authority.

(3) An appeal filed under this section shall be disposed of within 3 months from the date of its filing.

¹⁴ **15. Penalties.-**

(1) For violation of a provision or for non-compliance of a direction, or for the activities specified in the following Table, the penalty mentioned against them may be imposed :

TABLE

Sl. No.	Description of Offence	Penalty that may be imposed
1	Non-compliance of a direction issued under sub-section (2) or (3) of section 4	Imprisonment not exceeding 10 years or fine not exceeding 10 lac taka or both.
2	Violation of sub-section (2) by continuing activities or processes or by initiating activities or processes, prohibited under sub-section (1) of section 5 in an area declared as an ecologically critical area	Imprisonment not exceeding 10 years or fine not exceeding 10 lac taka or both.
3.	Violation of sub-section (1) of section 6	In case of first offence, a fine not exceeding taka 5 (five) thousand; in case of second

¹³ An appellate authority has been constituted by MoEF by a notification dated 3/11/1997.

¹⁴ Section 15 was substituted for old sec. 15 by sec. 7 of Act 9 of 2002.

		offence, a fine not exceeding taka 10 (ten) thousand; in case of each subsequent offence, an imprisonment not exceeding 1 year or a fine not exceeding taka 10 (ten) thousand or both.
4	If, in violation of a direction issued under section 6A, any article specified in the direction is – (a) manufactured, imported, marketed; (b) sold, exhibited for sale, stocked, distributed, commercially transported or commercially used	(a)Imprisonment not exceeding 10 years or fine not exceeding 10 lac taka or both. (b)Imprisonment not exceeding 6 months or fine not exceeding 10 thousand taka or both.
5	Non-compliance of a direction issued under sub-section (1) of section 7	Imprisonment not exceeding 10 years or fine not exceeding 10 lac taka or both.
6	Violation of sub-section (1) or (2), or failure to take remedial measures in accordance with sub-section (3) of section 9	Imprisonment not exceeding 10 years or fine not exceeding 10 lac taka or both : Provided that where a lower penalty is fixed by rules for violation of section 9(1), that penalty shall be applicable.
7	Failure to render, without reasonable excuse, assistance or cooperation to the Director General or a person authorized by him as required by sub-section (2) of section 10	Imprisonment not exceeding 3 years or fine not exceeding 3 lac taka or both.
8	Violation of section 12	Imprisonment not exceeding 3 years or fine not exceeding 3 lac taka or both.
9	Violation of any other provision of this Act or a direction issued under the rules or obstructing the Director General or a person authorized by him in discharging his duties or intentionally delaying the discharge of such duty	Imprisonment not exceeding 3 years or fine not exceeding 3 lac taka or both.

(2) Subject to the other provisions of this section, certain offences and penalties for such offences may be specified in the rules, but the penalty so specified shall not exceed imprisonment for 2 (two) years or a fine of Tk. 10 (ten) thousand or both.]

¹⁵ [15A. **Confiscation of materials and equipments involved in offence.-** Where a person is found guilty and sentenced under section 15, all equipments or parts thereof, transport, substance or any other thing used in the commission of the offence may be confiscated under order of the court.]

¹⁶ [15A. **Claim for compensation.-** Where a person or a group of persons or the public suffers loss due to violation of a provision of this Act or the rules made thereunder or a direction issued under section 7, the Director General may file a suit for compensation on behalf of that person, group or the public.]

16. Offences committed by companies.-

¹⁷ [(1) Where a company violates any provision of this Act or fails to perform its duties in accordance with a notice issued under this Act or the rules or fails to comply with an order or direction, then the owner, director, manager, secretary or any other officer or agent of the company, shall be deemed to have violated such provision or have failed to perform the duties in accordance with the notice or failed to comply with the order or direction, unless he proves that the violation or failure was beyond his knowledge or that he exercised due diligence to prevent such violation or failure.

Explanation.- For the purposes of this section -

(a) “company” means any statutory public authority, registered company, partnership firm, and association or organisation,

(b) director, in relation to a commercial establishment, also includes any partner or member of the board of directors.]

¹⁸ [(2) Where a company mentioned in sub-section (1) is a body corporate, such company, apart from any person charged and convicted under that sub-section, may also be charged and convicted under that sub-section in the same proceedings, but the penalty of fine only may be imposed on such company in a criminal proceedings.]

¹⁵ Section 15A was inserted by sec. 7 of Act 9 of 2002.

¹⁶ Section 15A was inserted by sec. 4 of Act 12 of 2000.

¹⁷ Existing provision of sec. 16 was numbered as sub-sec. (1) by sec 8(a) of Act 9 of 2002.

¹⁸ Sub-section (2) of sec. 16 was inserted by section 8(b) of Act 9 of 2002.

¹⁹**17. Cognizance of offence and claim for compensation.-** No court shall take cognizance of an offence or receive any suit for compensation under this Act except on the written report of an Inspector of the Department or any other person authorized by the Director General :

Provided that if the competent court is satisfied that a person presented a written request to the said Inspector or authorized person to accept a complaint about an offence or a claim for compensation and no action was taken within 60 (sixty) days after such request, and that the complain or claim deserves to be taken into cognizance for the purpose of trial, then the court may, after giving the Inspector or the authorized person or the Director General a reasonable opportunity of being heard, directly receive the complaint or claim for compensation without such written report, or may, if it considers appropriate, direct the said Inspector or the authorized person to investigate the offence or claim.]

18. Action taken in good faith.- No civil or criminal case or other legal proceeding may be instituted against the Government, Director General, or any other person of the Department for any action which caused or is likely to cause injury to any person, if such action is taken in good faith under this Act or rules.

19. Delegation of Power.-

- (1) The Government may delegate to the Director General or any other officer any of its powers under this Act or rules.
- (2) The Director General may ²⁰delegate to any other officer of the Department any of his powers under this Act or rules.

20. Power to make rules.-

- (1) The Government may, by notification in the official ²¹Gazette, make rules for carrying out the purposes of this Act.
- (2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters:
 - (a) determination of the standards of air, water, sound, soil and other components of the environment in relation to different areas for different purposes :

Provided that the Government may, by notification in the official Gazette, for a specified period suspend the application of such standard, generally or individually, in respect of industries or projects existing at the time of commencement of this Act;

¹⁹ Section 17 was substituted by sec. 9 of Act 9 of 2002.

²⁰ DG, DoE has delegated certain powers to DoE officers by a notification dated 9/9/1998 and by a circular dated 23/7/2002.

²¹ The Government has made Environment Conservation Rules 1997.

- (b) regulation of the establishment of industries and other development activities for conservation of environment;
- (c) determination of safe procedures for the use, storage and transportation of hazardous substances;
- (d) determination of safety and remedial measures for prevention of accidents which may cause pollution of the environment;
- (e) determination of the standards for effluent and discharge;
- (f) procedures for assessment of the environmental impact of various projects and activities, and procedures for their review and approval;
- (g) procedures for protection of the environment and ecosystem;
- (h) determination of fees for obtaining environmental clearance certificates and other services.

21. Repeal and saving.-

- (1) The Environment Pollution Control Ordinance, 1977 (Act XIII of 1977) is hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the repealed Ordinance shall be deemed to have been done under the provisions of this Act.
- (3) The Department of Environment existing before the commencement of this Act shall be deemed to have been established under section 3, and the Director General and other officers and employees of that Department shall be deemed to have been appointed under this Act.

(h) determine fees for clearance and other services.

21. Repeal and savings;

- (1) The Environmental Pollution Control Ordinance, 1977 (Act XIII of 1977) is hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the said Ordinance, shall be deemed to have been done or taken under the provisions of this Ordinance.
- (3) The Department of Environment existing before the commencement of this Act shall be deemed to have been constituted under section 3 of the said Act and the Director General and other officers and employees of that Department shall be deemed to have been appointed under this Act.

ANNEX E- 3: THE ENVIRONMENT CONSERVATION RULES, 1997

The Environment Conservation Rules, 1997

Government of the People's Republic of Bangladesh

Ministry of Environment and Forest

NOTIFICATION

Date, 12 Bhadra 1404/27 August 1997

S.R.O. No. 197-Law/97- In exercise of the powers conferred by section 20 of the Bangladesh environment Conservation Act, 1995 (Act 1 of 1995), the Government is pleased to make the following Rules:-

1. **Short Title.** – These Rules may be called the Environment Conservation Rules, 1997.

2. ²²**Definitions.** – In these Rules, unless there is anything contrary to the subject or context --

“**Act**” means Bangladesh Environment Conservation Act, 1995 (Act I of 1995); *[Ref. clause (b)]*

“**Department**” means the Department of Environment established under sub-section (1) of section 3 of the Act; *[Ref. clause (a)]*

“**Form**” means a form appended to these Rules; *[Ref. clause (e)]*

“**local authority**” means the City Corporation in relation to a metropolitan area, the Municipality in relation to a municipal area and the Union Parishad in relation to a rural area; *[Ref. clause (g)]*

“**parameter**” means the characteristics of a standard; *[Ref. clause (f)]*

“**Schedule**” means a schedule appended to these Rules; *[Ref. clause (c)]*

“**section**” means a section of the Act. *[Ref. clause (d)].*

²² The definitions are re-arranged in English alphabetical order with reference to the relevant clause of rule 2 as in the Bangla text.

3. Declaration of Ecologically Critical Area. –

- (1) The Government shall take the following factors into consideration while declaring any area as Ecologically Critical Area under sub-section (1) of section 5:-
- (a) human habitat;
 - (b) ancient monument;
 - (c) archeological site;
 - (d) forest sanctuary;
 - (e) national park;
 - (f) game reserve;
 - (g) wild animals habitat;
 - (h) wetland;
 - (i) mangrove;
 - (j) forest area;
 - (k) bio-diversity of the relevant area; and
 - (l) other relevant factors.
- (2) The Government shall, in accordance with the standards referred to in rules 12 and 13, specify the activities or processes which can not be continued or initiated in an Ecologically Critical Area.

²³4. Measures relating to vehicles emitting smoke injurious to health and environment.-

- (1) For the purposes of section 6 of the Act, every motor vehicle using petrol, diesel or gas as fuel shall be fitted with catalytic converter or oxidation catalyst or diesel particulate filter, or with such other instrument or device as may be approved by the Director General for ensuring that emission from the vehicle does not exceed the standards specified in schedule- 6.
- (2) If a vehicle is driven without being fitted with the apparatus specified in sub-rule (1), it shall be deemed to be a vehicle emitting smoke injurious to the environment or health, and for such violation the owner or the driver of the vehicle or in an

²³ 1 Rule 4 was substituted by MoEF Notification No. SRO 88-Law/2003 of 31st March 2003, w.e.f 1st April 2003.

appropriate case both the owner and the driver shall be liable to the penalty specified at serial no. 3 of the Table of section 15(1).

- (3) Where a penalty is imposed under sub-rule (2), the fact of such imposition shall be recorded briefly in such document or, as the case may be, demonstrated on such conspicuous part of the vehicle, in such form and for such period, as may be specified by the Director General.

5. Application relating to pollution or degradation of environment. –

- (1) Any person affected or likely to be affected as mentioned in sub-section (1) of section 8 may apply to the Director General in Form-1 for remedy of the damage or apprehended damage.
- (2) The Director General shall, within three months of receiving an application under sub-rule (1), dispose it of in accordance with sub-section (2) of section 8.

6. Notice for collection of Sample. – An officer intending to collect a sample under sub-section (3) of section 11 shall send to the occupier of the concerned place or his agent a notice in accordance with Form-2 about his intention.

7. Procedure for issuing Environmental Clearance Certificate. –

- (1) For the purpose of issuance of Environmental Clearance Certificate, the industrial units and projects shall, in consideration of their site and impact on the environment, be classified into the following four categories:-
 - (a) Green;
 - (b) Orange – A;
 - (c) Orange – B; and
 - (d) Red.
- (2) Industries and projects included in the various categories as specified in sub-rule (1) have been described in Schedule – 1.
- (3) Environmental Clearance Certificate shall be issued to all existing industrial units and projects and to all proposed industrial units and projects falling in the Green Category.
- (4) For industrial units and projects falling in the Orange – A, Orange – B and Red categories, firstly a Location Clearance Certificate and thereafter an Environmental Clearance Certificate shall be issued:

Provided that the Director General may, without issuing a Location Clearance Certificate at the first instance, directly issue Environmental Clearance Certificate if he, on the application of an industrial unit or project, considers it appropriate to issue such certificate to the industrial unit or project.

- (5) The entrepreneur of the concerned industrial unit or project shall apply to the concerned Divisional Officer of the Department in Form-3 alongwith appropriate fees as specified in Schedule – 13.
- (6) The following documents shall be attached with an application made under sub-rule (5):-

(a) For Green Category:

- (i) general information about the industrial unit or project;
 - (ii) exact description of the raw materials and the manufactured product;
- and
- (iii) no objection certificate from the local authority;

(b) For Orange – A Category:

- (i) general information about the industrial unit or project;
- (ii) exact description of the raw materials and the manufactured product;
- (iii) no objection certificate from the local authority;
- (iv) proces flow diagram;
- (v) Layout Plan (showing location of Effluent Treatment Plant);
- (vi) effluent discharge arrangement;
- (vii) outlines of the plan for relocation, rehabilitation (if applicable);
- (viii) other necessary information (if applicable);

(c) For Orange – B Category:

- (i) report on the feasibility of the industrial unit or project (applicable only for proposed industrial unit or project);
- (ii) report on the Initial Environmental Examination of the industrial unit or project, and also the process flow diagram, Layout Plan (showing location of Effluent Treatment Plant), design of the Effluent Treatment Plant (ETP) of the unit or project (these are applicable only for a proposed industrial unit or project);
- (iii) report on the Environmental Management Plan (EMP) for the industrial unit or project, and also the Process Flow Diagram, Layout Plan (showing location of Effluent Treatment Plant), design of the Effluent Treatment

Plant and information about the effectiveness of the ETP of the unit or project, (these are applicable only for an existing industrial unit or project);

(iv) no objection certificate from the local authority; (v) emergency plan relating adverse environmental impact and plan for mitigation of the effect of

pollution;

(vi) outline of the relocation, rehabilitation plan (where applicable);

(vii) other necessary information (where applicable).

(d) For Red Category:

(i) report on the feasibility of the industrial unit or project (applicable only for proposed industrial unit or project);

(ii) report on the Initial Environmental Examination (IEE) relating to the industrial unit or project, and also the terms of reference for the Environmental Impact Assessment of the unit or the project and its Process Flow Diagram; Or Environmental Impact Assessment report prepared on the basis of terms of reference previously approved by the Department of Environment, along with the Layout Plan (showing location of Effluent Treatment Plant), Process Flow Diagram, design

and time schedule of the Effluent Treatment Plant of the unit or project, (these are applicable only for a proposed industrial unit or project);

(iii) report on the Environmental Management Plan (EMP) for the industrial unit or project, and also the Process Flow Diagram, Layout Plan (showing location of Effluent Treatment Plant), design and information about the effectiveness of the Effluent Treatment Plan of the unit or project (these are applicable only for an existing industrial unit or project); (iv) no objection certificate of the local authority; (v) emergency plan relating adverse environmental impact and plan for mitigation of the effect of pollution; (vi) outline of relocation, rehabilitation plan (where applicable); (vii) other necessary information (where applicable);

(7) If an application for an Environmental Clearance Certificate for an industrial unit or project of Green Category is made under sub-rule (5) along with the relevant documents specified in sub-rule (6), then, within 15 days of the receipt of the application, the certificate shall be issued or the application shall be rejected mentioning appropriate reason for such rejection.

(8) If an application is made under sub-rule (5) along with the relevant documents specified in sub-rule (6), then in the case of an Orange- A Category industrial unit or project, within thirty days of the receipt of the application, and in the case of an Orange-B or Red Category industrial unit or project, within sixty days of the

receipt of the application, a Location Clearance Certificate shall be issued or the application shall be rejected mentioning appropriate reasons for such rejection.

(9) Upon receiving Location Clearance Certificate under Sub-rule (8), the entrepreneur—

(a) may undertake activities for land development and infrastructure development;

(b) may install machinery including ETP (applicable for industrial units or projects of Orange-A and Orange-B Category only);

(c) shall apply for Environmental Clearance Certificate upon completion of the activities specified in clauses (a) and (b), and, without the Environmental Clearance Certificate, shall not have gas line connection, and shall not start trial production in the industrial unit, and in other cases shall not operate the project (applicable for Orange-A and Orange-B Category industrial units or projects only);

(d) shall submit for approval of the Department the EIA report prepared on the basis of program outlined in IEE Report along with time schedule and ETP design (applicable only for Red Category industrial units or projects);

(10) Where an application is received under clause (c) of sub-rule (9), Environmental Clearance Certificate shall, within fifteen working days in case of industrial unit or project of Orange-A Category and within 30 working days in case of industrial unit or project of Orange-B Category, be issued to the entrepreneur or the application shall be rejected mentioning appropriate reasons.

(11) Where an application is received under clause (d) of sub-rule (9) in relation to an industrial unit or project of Red Category, the EIA report along with the time schedule and ETP design shall, within sixty working days, be approved or the application shall be rejected mentioning appropriate reasons;

(12) After EIA is approved under sub-rule (11), the entrepreneur – (a) may open L/C for importing machineries which shall include machineries relating to ETP; and

(b) shall, after installation of ETP, apply for Environmental Clearance Certificate without which he shall not have gas line connection and shall not start trial production in case of an industrial unit, and in other cases shall not start operation of the project.

(13) Where an application under clause (a) of sub-rule (12) is received in relation to an industrial unit or project of Red Category, Environmental Clearance Certificate shall be granted to the concerned entrepreneur within thirty workingdays, or the application shall be rejected mentioning appropriate reasons.

(14) Where an application is received under sub-rule (5) along with the documents specified in sub-rule (6), Environmental Clearance Certificate shall, within thirty working days in case of an industrial unit or project of Orange-A Category and

within sixty working days in case of Orange-B and Red Category, be issued to the concerned entrepreneur or the application will be rejected mentioning appropriate reasons.

²⁴ [7A. **Pollution under Control Certificate.**- Within two months after the vehicle is fitted with the apparatus specified in sub-rule (1) of rule 4 and registration and fitness certificate for the vehicle is issued, or as the case may be, within two months after the certificate is renewed, by the Bangladesh Road Transport Authority under the Motor Vehicles Ordinance, 1983 (LV of 1983), the owner of the vehicle shall

obtain the "Pollution Under Control Certificate" from the Director General in accordance with Form-4.

7B. **Restriction on importation and marketing of environmentally harmful smoke controlling apparatus.**- Before importation or marketing of the apparatus mentioned in rule 4(1), the person importing or marketing, as the case may be, shall obtain written approval from the Director General by demonstrating and proving its effectiveness.]

8. **Validity period of Environmental Clearance Certificate. –**

- (1) The period of validity of an Environmental Clearance Certificate shall be, in case of Green Category, three years from the date of its issuance and in other cases one year.
- (2) Each Environmental Clearance Certificate shall have to be renewed at least thirty days before expiry of its validity period.

9. **Appeal. –**

- (1) In the petition of an appeal under section 14, the grounds of the appeal against the relevant notice, order or direction shall be stated clearly and briefly.
- (2) Each appeal shall be accompanied by the following documents:-
 - (a) a certified copy of the notice, order or direction against which appeal is filed;
 - (b) a copy of the Environmental Clearance Certificate (if any);
 - (c) a Treasury Chalan showing proof of deposit of the appeal fee of Taka one thousand; and
 - (d) any other paper relevant to the appeal.

²⁴ 1 Rules 7A and 7B were substituted by MoEF Notification No. SRO-88/Law/2003 of 31st March 2003,

10. Procedure to be followed by Appellate Authority. –

- (1) The Appellate Authority shall fix a date of hearing of the appeal keeping in view of their office work load and the time required to serve notice on the parties.
- (2) The Appellate Authority shall send to the office against whose notice, order or direction the appeal has been filed a notice mentioning the date of hearing along with a copy of the petition of appeal.
- (3) For the purpose of disposing an appeal, the Appellate Authority may, at any time, call for all necessary papers and information from the appellant or the opposite party.

11. Procedure for hearing of appeal. –

- (1) The submission of the appellant in support of the appeal shall be heard on the date fixed for hearing or, if it is adjourned, on a subsequent date.
- (2) The Appellate Authority may dismiss the appeal if the appellant does not appear upon call for hearing on such date.
- (3) If the appellant is present but the opposite party is absent, the appeal shall be heard ex-parte.
- (4) If the appeal is dismissed under sub-rule (2), the appellant may, within the next thirty working days, again apply to the Appellate Authority for allowing the appeal.
- (5) The Appellate Authority, after hearing the parties or, as the case may be one of the parties, may approve, modify or set aside the disputed notice, order or direction.
- (6) The Appellate Authority shall record proper reasons in support of their decision, and shall specify the remedy to which the appellate is entitled.
- (7) Copy of the order of the Appellate Authority shall be sent as soon as possible to the concerned office of the Department and to the Director General.

12. Determination of environmental standards.– For carrying out the purposes of clause (a) of sub-section (2) of section 20, the standards for air, water, sound, odor and other components of the environment shall be determined in accordance with the standards specified in Schedules - 2, 3, 4, 5, 6,7 and 8.

13. Determination of the standards for discharge and emission of waste. –

For carrying out the purposes of clause (e) of sub-section (2) of section 20, the standard limits of the discharge of liquid waste and gaseous emission shall be determined in accordance with the standards specified in Schedules 9, 10 & 11, and the standards of the discharge or emission of wastes of various industrial units shall be determined in accordance with standards specified in Schedule-12.

14. Fees for Environmental Clearance Certificate and its renewal.– The fees for issuance of Environmental Clearance Certificate and its renewal under these Rules shall be payable in accordance with Schedule-13.

15. Various services and their fees.–

(1) Upon application of any person or organization, the Department shall supply analysis report of the samples of water, liquid waste, air and sound and also the information or data derived from such analysis.

(2) For services under sub-rule (1), appropriate fees are payable as described in Schedule-14.

16. Procedure for payment of fees. – Fees payable under these Rules shall be deposited with the Bangladesh Bank or a Government Treasury by a Treasury Chalan in favour of the Director General under the Head “65 Miscellaneous Income-tax-free Revenue”, and the copy of the Treasury Chalan shall be attached to the relevant application.

17. Information of special incident.– If, at any place, discharge or emission of environment pollutants occur in excess of the prescribed standards or if any place is under threat of facing such discharge or emission as a result of any accident or unforeseen incident, then the person or persons in charge of that place shall immediately inform the Director General of the occurrence or the threat.

FORM – 1

Application for remedy

[See Rule 5(1)]

Director General,

Department of Environment,

Government of the People's Republic of Bangladesh,

E-16, Agargaon, Dhaka-1207.

From:

.....

.....

Sir,

I am a person affected, or in apprehension of being affected, by environmental pollution or environmental degradation and hence applying for remedy under subsection-(1) of section-8 of the Bangladesh Environment Conservation Act, 1995, in respect of the following environmental damage/apprehended environmental damage:-

1. Name of the person/persons affected or in apprehension of being affected by

Environmental pollution or environmental degradation

.....

2. Reasons, how affected.

3. Site, where affected.

4. Description of damage/apprehended damage.

5. Time, when affected.

6. Name, address, etc., of person/persons/organization involved in causing the damage.

7. Remedy applied for.

Date

Signature

FORM – 2

Notice of intention for collection of sample

[See Rule 6]

Whereas it is necessary to collect sample of solid waste/waste water/gaseous emission/soil/any pollutant for analysis, on (date), at hours, from
**** of your industrial unit or project;

Therefore, you are hereby notified of the intention for collection of sample, and you/your appropriate representative are required to be present at the industrial unit or project on the date for putting signature on the container of the sample, and for rendering assistance in collection of the sample.

Sample Collection Officer

Name-

Designation-

M/S.....

.....

.....

*** Describe the source/location of effluent, waste, stack, etc., from where sample would be collected.

FORM – 3

Application for Environmental Clearance Certificate

[See Rule 7(5)]

Director/Deputy Director,

Department of Environment,

Dhaka Division/Chittagong Division/Khulna Division/Rajshahi Division (Bogra).

Sir,

I do hereby apply for Environmental Clearance Certificate for my proposed industrial unit or project, or for the existing industrial unit or project, and enclose papers and furnish information as follows :

1.(a) Name of the industrial unit or project :

Address of location of the industrial unit or project :

(b) Address of present office :

2.(a) Proposed industrial unit or project

:Expected date of starting construction :

: Expected date of completion of construction :

: Expected date of trial production in case of industrial unit, in other cases, date of starting operation of the project :

(b) Existing industrial unit or project

: Date of starting trial production in case of industrial unit, in other cases, date of starting operation of the project :

3. Name of product and quantity to be produced (daily/monthly/yearly) :

4.(a) Name of raw materials and quantity required (daily/monthly/yearly) :

(b) Source of raw material :

- 5.(a) Quantity of water to be used daily :
- (b) Source of water :
- 6.(a) Name of fuel and quantity required (daily/monthly/yearly) :
- (b) Source of fuel :
- 7.(a) Probable quantity of daily liquid waste :
- (b) Location of waste discharge :
- (c) Probable quantity of daily emission of gaseous Substance :
- (d) Mode of emission of gaseous substance :
8. Mouza (village) map indicating “Daag” (plot) number and “Khatiyani” (land tax account) number :
9. Approval of Rajdhani Unnayan Katripakkhya/ Chittgong Development Authority/Khulna Development Authority/ Rajshahi Development Authority (if applicable) :
- 10.(a) Design & time schedule of proposed Effluent Treatment Plant :
- (b) Fund allocated :
- (c) Area :
11. Process Flow Diagram :
- 12.(a) Location map of industrial unit or project :
- (b) Layout plan (with location of Effluent Treatment Plant) :
- 13.(a) IEE/IEA report* (if applicable) :
- (b) Environmental Management Plan* (if applicable) :
14. Feasibility Report (if applicable) :

Seal

Signature of the entrepreneur

Name :

Address:

Phone :

Date :

-: Declaration :-

I do hereby declare that all information provided by me in this application are true to the best of my knowledge and no information has been concealed or distorted herein.

(Name & signature of entrepreneur)

* Each page be countersigned by the person who fills out this application form and by the entrepreneur.

²⁵**FORM – 4**

Pollution under Control Certificate

[See Rule 7A]

It is hereby certified that vehicle No of Mr.
..... of
..... (address) emits the following gaseous substances as
measured at two-thirds of the maximum rotating speed of the vehicle :-

Parameter	Unit	Limit of Standards	Measurement taken
Black Smoke	Hartridge Smoke Unit (HSU)	65	
Carbon Monoxide	gm/k.m.	24	
	percent area	04	
Hydrocarbon	gm/k.m.	02	
	ppm	180	
Oxides of Nitrogen	gm/k.m.	02	
	ppm	600	

(2) The measurements so taken do not exceed the standards specified in Schedule-6.

(3) This Certificate shall remain valid till

Signature of Director

General/Authorized Officer

Seal

Department of Environment

²⁵ This form was inserted in the rules by gazette notification S.R.O.29-Law/2002 w.e.f. 28/2/2000.

SCHEDULE – 1

Classification of industrial units or projects based on its location and impact on environment.

[See Rule 7(2)]

(A) GREEN Category

1. Assembling and manufacturing of TV, Radio, etc.
2. Assembling and manufacturing of clocks and watches.
3. Assembling of telephones.
4. Assembling and manufacturing of toys (plastic made items excluded).
5. Book-binding.
6. Rope and mats (made of cotton, jute and artificial fibers).
7. Photography (movie and x-ray excluded).
8. Production of artificial leather goods.
9. Assembling of motorcycles, bicycles and toy cycles.
10. Assembling of scientific and mathematical instruments (excluding manufacturing).
11. Musical instruments.
12. Sports goods (excluding plastic made items).
13. Tea packaging (excluding processing).
14. Re-packing of milk powder (excluding production).
15. Bamboo and cane goods.
16. Artificial flower (excluding plastic made items).
17. Pen and ball-pen.
18. Gold ornaments (excluding production) (shops only).

19. Candle.
20. Medical and surgical instrument (excluding production).
21. Factory for production of cork items (excluding metallic items).
22. Laundry (excluding washing).

Foot Notes:

(a) Units of all kinds of cottage industries other than those listed in this Schedule shall remain outside the purview of Environmental Clearance Certificate (Unit of cottage industry means all industrial units producing goods or services in which by full-time or part-time labour of family members are engaged and the capital investment of which does not exceed Taka 5 (five) hundred thousand).

(b) No industrial unit listed in this Schedule shall be located in any residential area.

(c) Industrial units shall preferably be located in areas declared as industrial zones or in areas where there is concentration of industries or in vacant areas.

(d) Industrial units likely to produce sound, smoke, odor beyond permissible limit shall not be acceptable in commercial areas.

(B) ORANGE-A Category

1. Dairy Farm, 10 (ten) cattle heads or below in urban areas and 25 cattle heads or below in rural areas.
2. Poultry (up to 250 in urban areas and up to 1000 in rural areas).
3. Grinding/husking of wheat, rice, turmeric, pepper, pulses (up to 20 Horse Power).
4. Weaving and handloom.
5. Production of shoes and leather goods (capital up to 5 hundred thousand Taka).
6. Saw mill/wood sawing.
7. Furniture of wood/iron, aluminum, etc.,(capital up to 5 hundred thousand Taka).
8. Printing Press.
9. Plastic & rubber goods (excluding PVC).
10. Restaurant.
11. Cartoon/box manufacturing/printing packaging.
12. Cinema Hall.
13. Dry-cleaning.

14. Production of artificial leather goods (capital up to 5 hundred thousand Taka).
15. Sports goods.
16. Production of salt (capital up to 10 hundred thousand Taka).
17. Agricultural machinery and equipment.
18. Industrial machinery and equipment.
19. Production of gold ornaments.
20. Pin, U Pin.
21. Frames of spectacles.
22. Comb.
23. Production of utensils and souvenirs of brass and bronze.
24. Factory for production of biscuit and bread (capital up to 5 hundred thousand Taka).
25. Factory for production of chocolate and lozenge. (capital up to 5 hundred thousand Taka).
26. Manufacturing of wooden water vessels.

(C) ORANGE-B Category

1. PVC items.
2. Artificial fiber (raw material).
3. Glass factory.
4. Life saving drug (applicable to formulation only).
5. Edible oil.
6. Tar.
7. Jute mill.
8. Hotel, multi-storied commercial & apartment building.
9. Casting.
10. Aluminum products.
11. Glue (excluding animal glue).
12. Bricks/tiles.

13. Lime.
14. Plastic products.
15. Processing and bottling of drinking water and carbonated drinks.
16. Galvanizing.
17. Perfumes, cosmetics.
18. Flour (large).
19. Carbon rod.
20. Stone grinding, cutting, polishing.
21. Processing fish, meat, food.
22. Printing and writing ink.
23. Animal feed.
24. Ice-cream.
25. Clinic and pathological lab.
26. Utensils made of clay and china clay/sanitary wares (ceramics).
27. Processing of prawns & shrimps.
28. Water purification plant.
29. Metal utensils/spoons etc.
30. Sodium silicate.
31. Matches.
32. Starch and glucose.
33. Animal feed.
34. Automatic rice mill.
35. Assembling of motor vehicles.
36. Manufacturing of wooden vessel.
37. Photography (activities related to production of films for movie and x-ray).
38. Tea processing.

39. Production of powder milk/condensed milk/dairy.
40. Re-rolling.
41. Wood treatment.
42. Soap.
43. Repairing of refrigerators.
44. Repairing of metal vessel.
45. Engineering works (up to 10 hundred thousand Taka capital.)
46. Spinning mill.
47. Electric cable.
48. Cold storage.
49. Tire re-treading.
50. Motor vehicles repairing works (up to 10 hundred thousand Taka capital).
51. Cattle farm: above 10 (ten) numbers in urban area, and above 25 (twenty five) numbers in rural area.
52. Poultry: Number of birds above 250 (two hundred fifty) in urban area and above 1000 (one thousand) in rural area.
53. Grinding/husking wheat, rice, turmeric, chilly, pulses – machine above 20 Horse Power.
54. Production of shoes and leather goods, above 5(five) hundred thousand Taka capital.
55. Furniture of wood/iron, aluminum, etc., above 5(five) hundred thousand Taka capital.
56. Production of artificial leather goods, above 5(five) hundred thousand Taka capital.
57. Salt production, above 10(ten) hundred thousand Taka capital.
58. Biscuit and bread factory, above 5 (five) hundred thousand Taka capital.
59. Factory for production of chocolate and lozenge, above 5(five) hundred thousand Taka capital.
60. Garments and sweater production.
61. Fabric washing.
62. Power loom.
63. Construction, re-construction and extension of road (feeder road, local road).

- 64. Construction, re-construction and extension of bridge (length below 100 meters).
- 65. Public toilet.
- 66. Ship-breaking.
- 67. G.I. Wire.
- 68. Assembling batteries.
- 69. Dairy and food.

Foot Notes:

- (a) No industrial unit included in this list shall be located in any residential area.
- (b) Industrial units shall preferably be located in areas declared as industrial zones or in areas where there is concentration of industries or in vacant areas.
- (c) Industrial units likely to produce sound, smoke, odor beyond permissible limit shall not be acceptable in commercial areas.

(D) RED Category

- 1. Tannery.
- 2. Formaldehyde.
- 3. Urea fertilizer.
- 4. T.S.P. Fertilizer.
- 5. Chemical dyes, polish, varnish, enamel.
- 6. Power plant.
- 7. All mining projects (coal, limestone, hard rock, natural gas, mineral oil, etc.)
- 8. Cement.
- 9. Fuel oil refinery.
- 10. Artificial rubber.
- 11. Paper and pulp.
- 12. Sugar.
- 13. Distillery.
- 14. Fabric dying and chemical processing.

15. Caustic soda, potash.
16. Other alkalis.
17. Production of iron and steel.
18. Raw materials of medicines and basic drugs.
19. Electroplating.
20. Photo films, photo papers and photo chemicals.
21. Various products made from petroleum and coal.
22. Explosives.
23. Acids and their salts (organic or inorganic).
24. Nitrogen compounds (Cyanide, Cyanamid etc.).
25. Production of plastic raw materials (PVC, PP/Iron, Polyesterin etc.)
26. Asbestos.
27. Fiberglass.
28. Pesticides, fungicides and herbicides.
29. Phosphorus and its compounds/derivatives.
30. Chlorine, fluorine, bromine, iodine and their compounds/derivatives.
31. Industry (excluding nitrogen, oxygen and carbon dioxide).
32. Waste incinerator.
33. Other chemicals.
34. Ordnance.
35. Nuclear power.
36. Wine.
37. Non-metallic chemicals not listed elsewhere.
38. Non-metals not listed elsewhere.
39. Industrial estate.
40. Basic industrial chemicals.

41. Non-iron basic metals.
42. Detergent.
43. Land-filling by industrial, household and commercial wastes.
44. Sewage treatment plant.
45. Life saving drugs.
46. Animal glue.
47. Rodenticide.
48. Refractories.
49. Industrial gas (Oxygen, Nitrogen & Carbon-dioxide).
50. Battery.
51. Hospital.
52. Ship manufacturing.
53. Tobacco (processing/cigarette/Biri-making).
54. Metallic boat manufacturing.
55. Wooden boat manufacturing.
56. Refrigerator/air-conditioner/air-cooler manufacturing.
57. Tyre and tube.
58. Board mills.
59. Carpets.
60. Engineering works: capital above 10 (ten) hundred thousand Taka.
61. Repairing of motor vehicles: capital above 10 (ten) hundred thousand Taka.
62. Water treatment plant.
63. Sewerage pipe line laying/relaying/extension.
64. Water, power and gas distribution line laying/relaying/extension.
65. Exploration/extraction/distribution of mineral resources.
66. Construction/reconstruction/expansion of flood control embankment, polder, dike, etc.

- 67. Construction/reconstruction/expansion of road (regional, national & international).
- 68. Construction/reconstruction/expansion of bridge (length 100 meter and above).
- 69. Murate of Potash (manufacturing).

Foot Notes:

- (a) No industrial unit included in this list shall be allowed to be located in any residential area.
- (b) Industrial units shall preferably be located in areas declared as industrial zones or in areas where there is concentration of industries or in vacant areas.
- (c) Industrial units likely to produce sound, smoke, odor beyond permissible limit shall not be acceptable in commercial areas.
- (d) After obtaining location clearance on the basis of Initial Environment Examination (IEE) Report, the Environmental Impact Assessment (EIA)

Report in accordance with the approved terms of reference along with design of ETP and its time schedule shall be submitted within approved time limit.

SCHEDULE-2 Standards for Air

SCHEDULE-3 Standards for Water

SCHEDULE-4 Standards for Sound

SCHEDULE-5 Standards for Sound originating from Motor Vehicles or Mechanized Vessels

SCHEDULE-6 Standards for Emission from Motor Vehicles

SCHEDULE-7 Standards for Emission from Mechanized Vessels

SCHEDULE-8 Standards for Odor

SCHEDULE-9 Standards for Sewage Discharge

SCHEDULE-10 Standards for Waste from Industrial Units or Projects waste

SCHEDULE-11 Standards for Gaseous Emission from Industries or Projects

SCHEDULE-12 Standards for Sector-wise Industrial Effluent or Emission

SCHEDULE-13 Fees for Environmental Clearance Certificate or Renewal

SCHEDULE-14 Fees to be realized by the Department of Environment for supplying various analytical information or data or test results of samples of water, effluent, air and sound.

ANNEX E- 4: ENVIRONMENTAL STANDARDS

Standards for Ambient Air

Schedule 2 of Environment Conservation Rule 1997 as amended by Government of the Peoples Republic of Bangladesh Ministry of Environment and Forests Planning Section-5 Notification dated 16 July 2005

AIR POLLUTANT	STANDARDS	AVERAGE TIME
1	2	3
Carbon Monoxide (CO)	10 (9 ppm) ^(Ka) mg/m ³	8-hour
	40 (35 ppm) ^(Ka) mg/m ³	1-hour
Lead (Pb)	0.5 µg/m ³	Annual
Oxides of Nitrogen (NO _x)	100 (0.053 ppm) µg/m ³	Annual
Suspended Particulate Matter (SPM)	200 µg/m ³	8-hour
PM ₁₀	50 µg/m ³ ^(Kha)	Annual
	150 µg/m ³ ^(Ga)	24-hour
PM _{2.5}	15 µg/m ³	Annual
	65 µg/m ³	24-hour
Ozone (O ₃)	235 (0.12 ppm) ^(Gha) µg/m ³	1-hour
	157 (0.08 ppm) µg/m ³	8-hour
Sulfur di Oxide (SO ₂)	80 (0.03 ppm) µg/m ³	Annual
	365 (0.14 ppm) ^(Ka) µg/m ³	24-hour

Abbreviation

ppm : Parts Per Million

Notes: *In this schedule Air Quality Standards means Ambient Air Quality Standards

(Ka) Not to be exceeded more than once per year

(Kha) Annual average value will be less than or equal to 50 microgram/cubic meter

(Ga) Average value of 24 hours will be less or equal to 150 microgram/cubic meter for one day each year.

(Gha) Maximum average value for every one hour each year will be equal or less than 0.12 ppm. “

Standards for Water

Schedule 3 of Environment Conservation Rule 1997

A. Standards for inland surface water

Sl. No.	Designated best use classification	Values			
		pH	BOD (mg/l)	DO (mg/l)	Total Coliform (number/100m l)
A.	Source of drinking water for supply only after disinfecting	6.5-8.5	2 or less	6 or above	50 or less
B.	Water usable for recreational activity	6.5-8.5	3 or less	5 or more	200 or less
C.	Source of drinking water for supply after conventional treatment	6.5-8.5	6 or less	6 or more	5000 or less
D.	Water usable by fisheries	6.5-8.5	6 or less	5 or more	----
E.	Water usable by various process and cooling industries	6.5-8.5	10 or less	5 or more	5000 or less
F.	Water usable for irrigation	6.5-8.5	10 or less	5 or more	1000 or less

Note:

1. In water used for pisciculture, maximum limit of presence of ammonia as Nitrogen is 1.2 mg/l. Limit of ammonia, as N in fishing water is 1.2 mg/l.

2. Values for irrigation water of parameters:

Electrical conductivity – 2250 $\mu\text{mhos/cm}$ (at a temperature of 25 °C), sodium – less than 26%, boron – less than 0.2%

Standards for drinking water

Sl. No.	Parameter	Unit	Value
1.	Aluminum	mg/l	0.2
2.	Ammonia (NH_3)	mg/l	0.5
3.	Arsenic	mg/l	0.05
4.	Barium	mg/l	0.01
5.	Benzene	mg/l	0.01
6.	BOD ₅ at 20 °C	mg/l	0.2
7.	Boron	mg/l	1.0
8.	Cadmium	mg/l	0.005
9.	Calcium	mg/l	75
10.	Chloride	mg/l	150 – 600 (for coastal area – 1000)
11.	Chlorinated alkanes		
	- carbon tetrachloride	mg/l	0.01
	- 1.1 dichloroethylene	mg/l	0.001
	- 1.2 dichloroethylene	mg/l	0.03
	- tetrachloroethylene	mg/l	0.03
	- trichloroethylene	mg/l	0.09
12.	Chlorinated phenols		
	- pentachlorophenol	mg/l	0.03
	- 2.4.6 trichlorophenol	mg/l	0.03
13.	Chlorine (residual)	mg/l	0.2
14.	Chloroform	mg/l	0.09
15.	Chromium (hexavalent)	mg/l	0.05
16.	Chromium (total)	mg/l	0.05
17.	COD	mg/l	4
18.	Coliform (fecal)	no/100 ml	0
19.	Coliform (total)	no/100ml	0
20.	Color	Hazen unit	15
21.	Copper	mg/l	1.0
22.	Cyanide	mg/l	0.1
23.	Detergents	mg/l	0.2
24.	Dissolved Oxygen	mg/l	6.0
25.	Fluoride	mg/l	1.0
26.	Hardness (as CaCO_3)	mg/l	200-500
27.	Iron	mg/l	0.3-1.0
28.	Kjeldahl nitrogen (total)	mg/l	1.0
29.	Lead	mg/l	0.05
30.	Magnesium	mg/l	30-35

Sl. No.	Parameter	Unit	Value
31.	Manganese	mg/l	0.1
32.	Mercury	mg/l	0.001
33.	Nickel	mg/l	0.1
34.	Nitrate	mg/l	10
35.	Nitrite	mg/l	<1
36.	Odor		Odorless
37.	Oil and grease	mg/l	0.01
38.	pH		6.5-8.5
39.	Phenolic compounds	mg/l	0.002
40.	Phosphate	mg/l	6.0
41.	Phosphorus	mg/l	0
42.	Potassium	mg/l	12.0
43.	Radioactive materials (gross alpha activity)	Bq/l	0.01
44.	Radioactive materials (gross beta activity)	Bq/l	0.1
45.	Selenium	mg/l	0.01
46.	Silver	mg/l	0.02
47.	Sodium	mg/l	200
48.	Suspended particulate matter	mg/l	10
49.	Sulfide	mg/l	0
50.	Sulfate	mg/l	400
51.	Total dissolved solids	mg/l	1000
52.	Temperature	°C	20-30
53.	Tin	mg/l	2.0
54.	Turbidity	JTU	10
55.	Zinc	mg/l	5.0

Standards for Sound

Schedule 4 of Environment Conservation Rule 1997

Sl. No.	Area Category	Standard Values (at dBa unit)	
		Day	Night
A.	Silent Zone	45	35
B.	Residential Area	50	40
C.	Mixed area (basically residential and also simultaneously used for commercial and industrial purposes)	60	50
D.	Commercial area	70	60
E.	Industrial area	75	70

Note:

1. Daytime is reckoned as the time between 6 a.m. and 9 p.m.
2. Nighttime is reckoned as the time between 9 p.m. and 6 a.m.
3. Area up to a radius of 100 meters around hospitals or educational institutions or special institutions/ establishments identified/to be identified by the Government is designated as Silent Zones where use of horns of vehicles or other audio signals, and loudspeakers are prohibited

Standards for Sound generating from Motor Vehicles or Mechanized Vessels

Schedule 5 of Environment Conservation Rule 1997

Parameters	Unit	Standards	Remarks
Motor Vehicles (all types)*	dBa	85	As measured at distance of 7.5 meters from the exhaust pipe
	dBa	100	As measured at distance of 0.5 meters from the exhaust pipe
Mechanized Vessels	dBa	85	As measured at 7.5 meters from the vessel which is not in motion, not loaded and is at two thirds of its maximum rotating speed.
		100	As measured at a distance of 0.5 meter from the vessel which is in the same condition as above.

Note:

* At the time of taking measurement, the motor vehicle shall not be in motion

and its engine conditions shall be as follows:-

(a) Diesel engine – maximum rotating speed.

(b) Gasoline engine –at two thirds of its maximum rotating speed and without any load.

(c) Motorcycle – If maximum rotating speed is above 5000 rpm; two-thirds of the speed, and if maximum rotating speed is less than 5000 rpm, three-fourth of the speed.

Emission standards for vehicles

Schedule 6 of Environment Conservation Rule 1997

Part- Ka

(Emission standards for diesel driven vehicles during registration)
Bangladesh 1 - Table I

Vehicle type	Emission Standards (gm/km)			Test Procedure
	CO	HC + NO _x	PM	
1	2	3	4	5
Light duty (Not more than 8 seats in addition to driver & max. weight upto 2.5 tons)				
New Type Approval (TA)	2.72	0.97	0.14	91/441/EEC
Conformity of Production (COP)	3.16	1.13	0.18	
Imported used	3.16	1.13	0.18	
Medium duty (More than 8 seats in addition to driver but less than 15 seats & weight more than 2.5 tons but upto 3.5 tons)				
New TA	6.9	1.7	0.25	93/59/EC
COP	8.0	2.0	0.29	
Imported used	8.0	2.0	0.29	

Bangladesh 1 - Table II

Vehicle type	Emission Standards (gm/kWh)				Test Procedure
	CO	HC	NO _x	PM*	
Heavy duty (More than 15 seats in addition to driver & weight more than 3.5 ton)					91/542/EEC and ECE R 49.02
New TA	4.5	1.1	8.0	0.36	
New COP	4.9	1.23	9.0	0.4	
Imported used	4.9	1.23	9.0	0.4	

*For the diesel engines with 85kW or less power the limit is to be multiplied by a factor of to 1.7.

Abbreviation:

EC : European Council

km : Kilometer

EEC : European Economic Community.

TA : Type Approval.

COP : Conformity of Production.

ECE : Economic Commission for Europe.

Part –Kha

(Emission standards for Petrol and CNG driven vehicles during registration)

Bangladesh-2 (Table-1)

Vehicle type	Emission Standards (gm/km)		Emissions due to Evaporation (g/test)	Test Procedure
	CO	HC + NO _x		
1	2	3	4	5
(2 and 3 wheeled) 4-stroke	4.5	3.0	-	ECE-40
Light duty (Not more than 8 seats in addition to driver & max. GVW. 2.5 tons)	2.2	0.5	2.0	94/12/EC
Medium duty (More than 8 seats in addition to driver but less than 15 seats & GVW more than 2.5 tons but max. 3.5 tons)	5.0	0.7	2.0	96/69/EC

Bangladesh-2 (Table-2)

Vehicle type	Emission Standards (gm/kW-hr)			Evaporation emissions (g/test)	Test Procedure
	CO	HC/ NMHC*	NO _x		
Heavy duty (More than 15 seats in addition to driver & GVW. more than 3.5 ton)					91/542/EEC and ECE R 49.02 and *13-mode test cycle
New TA (Petrol/ CNG)	4.5	1.1	8.0	2.0	
New COP(Petrol/ CNG)	4.9	1.23	9.0	2.0	

Imported used (Petrol/ CNG)	4.9	1.23	9.0	2.0	
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* Applicable for CNG driven vehicles

Abbreviation:

CNG : Compressed Natural Gas

COP : Conformity of Production

EC : European Council

EEC : European Economic Community

ECE : Economic Commission for Europe

TA : Type Approval

km : Kilometer

kW : Kilo Watt

Hr : Hour

Part- Ga

(Emission inspection standards during registration mentioned in Part-A and part-B)

Vehicle type	Parameter	Emission Standard
1	2	3
At least 3 wheeled petrol and CNG driven vehicles	Idle CO Idle HC	0.5 %v/v 1200 ppm
	No load, 2500-3000 RPM CO HC Lambda	0.3 %v/v 300 ppm 1± 0.03
	Visual check	3-Way catalytic converter fitted in the exhaust
Diesel naturally aspirated	Free acceleration smoke	1.2 m ⁻¹ smoke density (40 HSU)
Diesel turbo-charged	Free acceleration smoke	2.2 m ⁻¹ smoke density (61 HSU)

Abbreviation:

HSU : Hartridge Smoke Unit

ppm : Parts Per Million

m⁻¹ : Meter Inverse

Part- Gha

(Emission standards for In-use diesel vehicle registered before September 1, 2004.)

Vehicle Type	Test	Smoke Opacity		
		Effective 01 September, 2004-31 December, 2006	Effective 01 January, 2007-31 December, 2008	Effective 01 January, 2009
Buses	Free acceleration	80 HSU or 3.7 m ⁻¹	70 HSU or 2.8 m ⁻¹	65 HSU or 2.4 m ⁻¹
Trucks and all other diesel vehicles	Free acceleration	90 HSU or 5.3 m ⁻¹	80 HSU or 3.7 m ⁻¹	65 HSU or 2.4 m ⁻¹

Part- Umma

(Emission standards for petrol and CNG driven vehicles registered before September 1, 2004)

Vehicle Type	Test	CO (% by volume)	HC (ppm)
1	2	3	4
4-wheeled petrol vehicles	Idle Speed	4.5	1,200
All CNG driven vehicles	Idle Speed	3.0	-
Petrol driven 2-Stroke engine 2 and 3-wheelers	Idle Speed	7.0	12,000
Petrol driven 4-Stroke 2 and 3- wheelers	Idle Speed	7.0	3,000

Note: Idle Speed RPM to be specified by the manufacturer.

Part- Ch

(Emission Standards for vehicle registered after September 1, 2004)

Vehicle Type	Test	CO (% by	HC (ppm)	Lambda	Smoke
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		volume)		(□)	
1	2	3	4	5	6
4-wheeled petrol and CNG vehicles.	Idle Speed	1.0	1200	-	-
	No load, 2500-3000 RPM	0.5	300	1.0 ± 0.03	-
Petrol driven 4-Stroke 2 and 3-wheelers	Idle Speed	4.5	1200	-	-
CNG driven 3-wheelers	Idle Speed	3.0	-	-	-
Naturally aspirated diesel vehicles	Free acceleration	-	-	-	65 HSU or 2.5 m ⁻¹
Turbo-charged diesel vehicles	Free acceleration	-	-	-	72 HSU or 3.0 m ⁻¹

1. Note: Idle speed RPM to be specified by the manufacturer”.

Schedule 7

Standards for Emission from Mechanized Vessels [Please see Rule 12]

Parameter	Unit	Standard Limit
Black smoke	HSU (Hartridge smoke unit)	65

* As measured at two thirds of maximum rotating speed.

Schedule 8

2. Standards for Odor [Please see Rule 12]

Parameters	Unit	Values
Acetaldehyde	ppm	0.5-5.0
Ammonia	ppm	1.0-5.0
Hydrogen sulfide	ppm	0.02-0.02
Methyl disulfide	ppm	0.009-0.1
Methyl sulfide	ppm	0.01-0.2
Styrene	ppm	0.4-2.0

Trimethylamine	ppm	0.005-0.07
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Note:

1. Following regulatory limit shall be generally applicable to emission/exhaust outlet pipe of above 5 meter height:

$$Q = 0.108 \times H_e^2 C_m$$

Where, Q = Gas Emission rate Nm³/hour)

H_e = Height of exhaust outlet pipe (m)

C_m = Above mentioned limit (ppm)

3. (2) In cases where a special parameter has been mentioned, the lower limit shall be applicable for warning purposes, and the higher limit shall be applicable for prosecution purpose or punitive measure.

Schedule 9

Standards for Sewage Discharge [Please see Rule 13]

Parameters	Unit	Standard Limit
BOD	mg/l	40
Nitrate	mg/l	250
Phosphate	mg/l	35
Suspended Solids (SS)	mg/l	100
Temperature	°C	30
Coliforms	number/100ml	1000

Note:

- These standards shall be applicable to discharges into surface and inland water bodies.
- Sewage will be chlorinated before final discharge.

Schedule 10

Standards for Waste from Industrial Units or Projects Waste [Please see Rule 13]

Sl. No.	Parameter	Unit	Places for determination of standards		
			Inland surface water	Public sewerage system connected to treatment at second stage	Irrigated land
1.	Ammonical nitrogen (as elementary N)	mg/l	50	75	75
2.	Ammonia (as free ammonia)	mg/l	5	5	15
3.	Arsenic (as As)	mg/l	0.2	0.05	0.2
4.	BOD ₅ at 20 °C	mg/l	50	250	100
5.	Boron	mg/l	2.0	2.0	2.0
6.	Cadmium (as Cd)	mg/l	0.5	0.05	0.05
7.	Chloride	mg/l	600	600	600
8.	Chromium (as total Cr)	mg/l	0.5	1.0	1.0
9.	COD	mg/l	200	400	400
10.	Chromium (as hexavalent Cr)	mg/l	0.1	1.0	1.0
11.	Copper (as Cu)	mg/l	0.5	3.0	3.0
12.	Dissolved Oxygen (DO)	mg/l	4.5-8.0	4.5-8.0	4.5-8.0
13.	Electro-conductivity (EC)	µmho/cm	1,200	1,200	1,200
14.	Total dissolved solids	mg/l	2,100	2,100	2,100
15.	Fluoride (as F)	mg/l	2.0	15	10
16.	Sulfide (as S)	mg/l	1.0	2.0	2.0
17.	Iron (as Fe)	mg/l	2.0	2.0	2.0
18.	Total Kjeldahl nitrogen (as N)	mg/l	100	100	100
19.	Lead (as Pb)	mg/l	0.1	1.0	0.1
20.	Manganese (as Mn)	mg/l	5.0	5.0	5.0
21.	Mercury (as Hg)	mg/l	0.01	0.01	0.01
22.	Nickel (as Ni)	mg/l	1.0	2.0	1.0
23.	Nitrate (as elementary N)	mg/l	10.0	Not yet set	10.0
24.	Oil and Grease	mg/l	10	20	10
25.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	1.0	5.0	1.0

Sl. No.	Parameter	Unit	Places for determination of standards		
			Inland surface water	Public sewerage system connected to treatment at second stage	Irrigated land
26.	Dissolved Phosphorus (as P)	mg/l	8.0	8.0	15.0
27.	Radioactive substance		(To be specified by Bangladesh Atomic Energy Commission)		
28.	pH		6.0-9.0	6.0-9.0	6.0-9.0
29.	Selenium (as Se)	mg/l	0.05	0.05	0.05
30.	Zinc (as Zn)	mg/l	5	10	10
31.	Total Dissolved Solids	mg/l	2,100	2,100	2,100
32.	Temperature	°C			
		(summer)	40	40	40
		(winter)	45	45	45
33.	Suspended Solids	mg/l	150	500	200
34.	Cyanide	mg/l	0.1	2.0	0.2

Note:

1. These standards will be applicable for all industries other than those which are specified under 'industrial sector specific standards'.
2. These standards will have to be complied from the moment of trial production in case of industries and from the moment of the very beginning in cases of projects.
3. These standards will have to be met at any point of time and any sampling. In case of need for ambient environmental condition, these standards may be made stringent.
4. Inland surface water will include drains, ponds, tanks, water bodies, and ditches, canals, rivers, streams and estuaries.
5. Public sewer means leading to full-fledged joint treatment facility comprising primary and secondary treatment.
6. Land for irrigation means organized irrigation of selected crops on adequate land determined on the basis of quantum and characteristics of wastewater.
7. If any discharge is made into public sewer or on land, which does not meet the respective definitions in notes 5 and 6 above, then the inland surface water standards will apply.

Schedule 11

Standards for Industrial or Project Emission [Please see Rule 13]

Sl. No.	Parameter	Values in mg/m ³
1.	Particulate	
	(a) Power station of capacity of 200 MW or more	150
	(b) Power station of capacity of less than 200 MW	350
2.	Chlorine	150
3.	Hydrochloric acid vapor and mist	350
4.	Total fluoride (as F)	25
5.	Sulfuric acid mist	50
6.	Lead particulate	50
7.	Mercury particulate	10
8.	Sulfur dioxide	mg/ton acid
	(a) Sulfuric acid production (DCDA* process)	4
	(b) Sulfuric acid production (SCSA* process)	100
	(* DCDA: Double conversion, double absorption, SCSA: Single conversion single absorption)	
	Lowest height of stack for sulfur dioxide dispersion:	
	(a) Coal based power plant	
	(1) 500 MW or more	275 m
	(2) 200 MW – 500 MW	220 m
	(3) Less than 200 MW	14(Q) ^{0.3}
	(b) Boiler	
	(1) Steam per hour – up to 15 tons	11 m
	(2) Steam per hour – more than 15 tons (Q = SO ₂ emission in kg/hour)	14(Q) ^{0.3}
9.	Oxides of nitrogen	
	(a) Nitric acid production	3 kg/ton

Sl. No.	Parameter	Values in mg/m ³
10.	(b) Gas-based power stations	50 PPM
	(1) 500 MW or more	50 PPM
	(2) 200 MW – 500 MW	40 PPM
	(3) less than 200 MW	30 PPM
	(c) Metallurgical oven	200 PPM
	Kiln soot and dust	
	(a) Blast furnace	500
	(b) Brick kiln	1000
	(c) Coke oven	500
	(d) Lime kiln	250

Schedule 12

Industrial-sector-specific Standards

For Effluent and Emission [Please see Rule 13]

A. Fertilizer Plants -Nitrogenous fertilizer plant Effluent

Parameter	Values (unit mg/l)
As Nitrogen	50 (new) 100 (old)
Total Kjeldahl nitrogen	100 (new) 250 (old)
PH	6.5-8
Chromium (at the discharge point of chromate removal plant)	0.5
Hexavalent Chromium	0.1
Suspended solids	100
Oil and grease	10
Wastewater flow	10 cubic meters per ton of urea

Emission Source Parameter Values in mg/Nm³

Urea Prilling Tower Particulate 150 (dry de-dusting)

50 (wet de-dusting)

Phosphatic Effluent

Parameter	Values (unit mg/l)
Fluoride (as F) at the exhaust of the fluorid exhaust of the fluoride removal plant	10
Phosphate (as P)	5
Suspended solids	100
Chromium (at the discharge point of chromate removal plant) (as Cr)	0.5
Hexavalent Chromium	0.1
Oil and grease	10

Emission Source Parameter Values in mg/Nm³

Granulation, mixing and grinding section Particulate 150

Phosphoric acid preparation Total Fluoride (as F) 25

Sulfuric acid plant Sulfur dioxide

DCDA 4 kg/ton of sulfuric acid (100%)

SCSA 10 kg/ton of sulfuric acid (100%)

Sulfuric acid mist 50

B. Integrated Textile Plants and large processing (with investment of more than 3 crores)
Units Effluent

Parameter	Values (unit mg/l)
pH	6.5-9
Suspended solids	100
BOD ₅ at 20 °C	150*

Oil and grease	10
Total dissolved solids	2100
Wastewater flow	100 l/kg of fabric processed
Special Parameters based on dyes used	
Total Chromium (as Cr)	2.0
Sulfide (as S)	2.0
Phenolic compounds (as C ₆ H ₅ O ₆)	5

Note: * 150 mg/l implies only with physico-chemical processing.

C. Paper and pulp Effluent

Parameter	Large mills with production capacity of more than 50 tons per day	Small mills with production capacity of less than 50 tons per day
	Values (in mg/l except pH)	
pH	6.0-9.0	6.0-9.0
Suspended Solids	100	100
BOD ₅ at 20 °C	30	50
COD	300	400
Wastewater flow	200 m ³ /ton of paper production	For agri raw materials based plants 200 m ³ /ton of paper and for waste paper based plants 75 m ³ /ton of paper

D. Cement Industry Emission

1. Integrated cement plants

Source Parameter Values in mg/Nm³

All Sections Particulate 250

2. Clinker grinding

Source	Parameter	Values in mg/Nm ³
All Sections	Particulate	
	Capacity of more than 1000 t/day	200
	Capacity of 200-1000 t/day	300
	Capacity of less than 200 t/day	400

E. Standards for industry sector specific Effluent or Emission Standards for Industrial Boilers Emission

Sl. No.	Parameter	Values (in mg/Nm ³)
1.	Soot and particulate (fuel specific)	
	(a) Coal	500
	(b) Gas	100
	(c) Oil	300
2.	Oxides of nitrogen (fuel specific)	
	(a) Coal	600
	(b) Gas	150
	(c) Oil	300
	(d) Nitric acid plant	3 kg/ton of weak acid produced

F. Distillery Effluent

Parameter	Values (unit mg/l)
pH	6-9
Suspended solids	150
BOD ₅ at 20 °C	5000 (standards for two years transitional period) 500 (standards for 74 years transitional period)
Oil and grease	10

G. Sugar Industry Effluent

Parameter	Values (unit mg/l)
pH	6-9
Suspended solids	150
BOD ₅ at 20 °C	50
Oil and grease	10
Wastewater per ton of sugarcane crushing	0.5

Emission *Boiler using biogasse*

Particulate (mg/Nm³) Stepgrate 250

Pulsating Horse shoe 500

Spreader Stocker 800

H. Tannery Effluent

Parameter	Values (unit mg/l)
pH	6-9
Suspended solids	150
BOD ₅ at 20 °C	100
Sulfide (as S)	1.0
Total Chromium (as Cr)	2.0
Oil and grease	10
Total dissolved solids	2100
Wastewater per ton of hide	30 m ³

Note: Soak liquor should be separated from wastewater.

I. Bangladesh Standards for Food processing, Fish canning, Dairy, Starch and Jute industries

Parameter	Value	Unit
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Suspended Solids	6-9	
BOD ₅ at 20 °C	150	mg/l
Wastewater flow	100	
Starch	8	m ³ /ton of product
Jute Processing	1.5	m ³ /ton of product
Dairy Products	3	m ³ /ton of product

J. Crude Oil Refinery Emission

Parameter Source Value Unit

Sulfur dioxide Distillation 0.25 kg/ton

Catalytic Cracker 2.5 kg/ton

Effluent

Parameter	Values (in mg/l)
Suspended solids	10
BOD ₅ at 20 °C	30
Phenol	1
Sulfide (as S)	1
Oil and grease	10
Wastewater per 1000 ton of crude oil	700 m ³

Note:

1. All new industries will have to comply with these standards at the time of their execution.

All existing industries will have to install necessary treatment facilities within two years (if not otherwise directed) from the date of the notification of these rules. The Department may extend this timeframe based on justifiable basis.

2. These standards will apply irrespective of discharge/emission points.

3. These standards will have to be complied at all times of sampling. Based on the condition of the receiving medium these standards might be made stringent.

ANNEX E- 5: LEGAL ENFORCEMENT OF HEALTH AND SAFETY LAWS IN BANGLADESH

(Labour Code 2006 and Factories Act 1965 / Factories Rules 1979)

Duties of Employer To Report Incidents To Factory Inspectorate

80. Notice of certain accidents. -

(1) Where in any establishment an accident occurs which causes death, or any bodily injury or any explosion, fire, forceful entrance of water or fumes as a result of accident, the employer shall send notice thereof to the Inspector within two working days following the accident

(2) Where any person injured as a result of an accident as mentioned in sub-section (1) above, is prevented from resuming his work in the factory during the forty eight hours immediately following the accident this must be entered into a register prescribed by rules.

(3) A copy of the register referred to in sub-section (2) must be sent to the Chief Inspector within fifteen days following 31st December every year starting from 30th June.

Section 81. Notice of dangerous occurrences. -

Where in any establishment any dangerous occurrence specified by rules in this behalf occur, the employer shall send notice thereof to the inspector within three working days following the accident although no death or bodily injury had been caused to any person.

82. Notice of certain diseases. -

(1) Where any worker in an establishment contracts any disease specified in the Second Schedule, the employer or worker or any person appointed by him shall send notice thereof to the Inspector in such form and within such time as may be prescribed.

(2) If any medical practitioner attends on a person who is, or has been employed in a establishment and who is, or is believed by such medical practitioner to be suffering from any disease specified in the Second Schedule, the medical practitioner shall, without delay, send a report in writing to the Chief Inspector stating -

- (a) the name and full postal address of the patient;
- (b) the disease from which he believes the patient to be suffering;
- (c) the name and address of the establishment in which the patient is or was last employed.

(3) The Government may add to or subtract from the Schedule any disease by notification in the official Gazette.

Health and Hygiene

51. Cleanliness. -

- (1) Every establishment shall be kept clean and free from effluvia arising from any drain privy or other nuisance, and in particular, -
 - (a) accumulation of dirt and refuse shall be moved daily by sweeping or by any other effective method from the floors and benches of workrooms and from staircases and passages and disposed of in a suitable manner;
 - (b) the floor of every workroom shall be cleaned at least once in every week by washing, using disinfectant where necessary or by some other effective method;
 - (c) where the floor is liable to become wet in the course of any manufacturing process to such extent as is capable of being drained, effective means of drainage shall be provided and maintained;
 - (d) all inside walls and partitions, all ceilings or tops of rooms and walls, sides and tops of passages and staircases shall-
 - (i) where they are painted or varnished, be repainted or revarnished at least once in every five years;
 - (ii) where they are painted or varnished and have smooth impervious surfaces, be cleaned at least once in every fourteenth month, by such methods as may be prescribed;
 - (iii) in any other case, be kept white-washed or colour-washed and the white-washing or colour-washing shall be carried out at least once in every fourteen months; and
 - (e) the dates on which the processes required by clause (d) are carried out shall be entered in the prescribed register.

52. Ventilation and temperature. -

- (1) Effective measures shall be made in every establishment for securing and maintaining in every work-room adequate ventilation by the circulation of fresh air; and
- (2) Temperature in every room shall be kept in such conditions as will secure to workers therein reasonable conditions of comfort and prevent injury to health °
- (3) For the purpose of sub-section (2), the walls and roofs of rooms shall be of such material

and so designed that such temperature shall not be exceeded but be kept as low as practicable;

(4) where the nature of the work carried on in the establishment involves, or is likely to involve, the production of excessively high temperature, such adequate measures as are practicable, shall be taken to protect the workers therefrom by separating the process which produces such temperature from the work-room by insulating the hot parts or by other effective means.

(5) If it appears to the Government that in any establishment or class or description of factories excessively high temperature can be reduced by such methods as white-washing, spraying or insulating and screening outside walls or roofs or windows or by raising the level of the roof, or by insulating the roof either by an air space and double roof or by the use of insulating roofing materials, or by other methods, it may prescribe such of those or other methods to be adopted in the establishment

53. Dust and fume. -

- (1) In every establishment in which, by reason of the manufacturing process carried on, there is given off any dust or fumes or other impurity of such a nature and to such an extent as is likely to be injurious or offensive to the workers employed therein, effective measures shall be taken to prevent its accumulation in any work- room and its inhalation by workers, and if any exhaust appliance is necessary for this purpose, it shall be applied as near as possible to the point of origin of the dust, fumes or other impurity, and such point shall be enclosed so far as is possible.
- (2) In any establishment no stationary internal combustion engine shall be operated unless the exhaust is conducted into open air, and no internal combustion engine shall be operated in any room unless effective measures have been taken to prevent such accumulation of fumes therefrom as are likely to be injurious to the workers employed in the work-room.

54. Disposal of wastes -

- (1) Effective arrangements shall be made in every establishment for the disposal of wastes and effluents due to the manufacturing process carried on therein.

55. Artificial humidification. -

- (1) In any establishment in which the humidity of the air is artificially increased, the water used for the purpose shall be taken from a public supply, or other source of drinking water, or shall be effectively purified before it is so used.
- (2) If it appears to an Inspector that the water used in an establishment for increasing humidity which is required to be effectively purified under sub-section (1) is not effectively purified, he may serve on the Manager of the establishment an order in writing, specifying the

measures which in his opinion should be adopted, and requiring them to be carried out before a specified date.

56. Overcrowding

- (1) No work-room in any establishment shall be overcrowded to the extent that it is injurious to the health of the workers employed therein.
- (2) Without prejudice to the generality of the foregoing provisions, there shall be provided at least 9.5 cubic metre of space for every worker employed in a workroom

Explanation - For the purpose of this sub-section no account shall be taken of a space which is more than fourteen feet above the level of the floor of the room.

- (3) If the Chief Inspector by order in writing so requires, there shall be posted in each work-room of a establishment an establishment specifying the maximum number of workers who may, in compliance with the provisions of this section, be employed in the room.
- (4) The Chief Inspector may, by order in writing exempt, subject to the conditions as he may think fit to impose, any work- room from the provisions of this section if he is satisfied that compliance therewith in respect of such room is not necessary for the purpose of health of the workers employed therein.

57. Lighting. -

- (1) In every part of an establishment where workers are working or passing, there shall be provided and maintained sufficient and suitable lighting, natural or artificial, or both.
- (2) In every establishment all glazed windows and skylights used for the lighting of the work-room shall be kept clean on both the outer and inner surfaces and free from obstruction as far as possible under the rules framed under sub-section (3) of section 14.
- (3) In every establishment effective provision shall so far as is practicable, be made for the prevention of -
 - (a) glare either directly from any source of light or by reflection from a smooth or polished surface, and
 - (b) the formation of shadows to such an extent as to cause eye strain or risk of accident to any worker.

58. Drinking water. -

- (1) In every establishment effective arrangements shall be made to provide and maintain at a suitable point conveniently situated for all workers employed therein, a sufficient supply of wholesome drinking water.

- (2) All such points shall be legibly marked "Drinking Water" in Bengali language
- (3) In every establishment wherein more than two hundred and fifty workers are ordinarily employed, provision shall be made for cooling the drinking water during the hot weather by effective means and for distribution thereof.
- (4) Effective Arrangement shall be made for oral dehydration therapy for those worker who may lose water from their bodies for working near or around machineries producing excessive heat.

59. Latrines and urinals. -

- (1) In every establishment -
 - (a) sufficient latrines and urinals of prescribed types shall be provided conveniently situated and accessible to workers at all times while they are in the establishment;
 - (b) enclosed latrines and urinals shall be provided separately for male and female workers;
 - (c) such latrines and urinals shall be adequately lighted and ventilated and no latrine or urinal shall, unless specifically exempted in writing by the Chief Inspector, communicate with any work-room except through an intervening open space or ventilated passage;
 - (d) all such latrines and urinals shall be maintained in a clean and sanitary condition at all times with suitable detergents or disinfectants or with both;

21. Spittoons

- (1) In every establishment there shall be provided, at convenient places, a sufficient number of spittoons which shall be maintained in a clean and hygienic condition.
- (2) No person shall spit within the premises of an establishment except in the spittoons provided for the purpose.
- (3) A notice containing this provision and the penalty for its violation shall be prominently displayed at suitable places in the premises.

Fire Safety - Excerpt from the Bangladesh Labour Code, 2006

Section 62. Precautions in case of fire. -

- (1) Every establishment shall have an alternative stair connected to every stair connected to every floor as a means of escape in case of fire and be equipped with fire extinguisher as may be prescribed by the rules.
- (2) If it appears to the Inspector that any establishment is not provided with the means of escape prescribed under sub-section (1), he may serve on the employer of the establishment an order in writing specifying the measures which, in his opinion, should be adopted before a date specified in the order.
- (3) In every establishment the doors affording exit from any room shall not be locked or fastened so that they can be easily and immediately opened from inside while any person is within the room, and all such doors, unless they are of the sliding type, shall be constructed to open outwards, or where the door is between two rooms, in the direction of the nearest exit from the building and no such door shall be locked or obstructed while work is being carried on in the room.
- (4) In every establishment every window, door, or other exit affording means of escape in case of fire, other than the means of exit in ordinary use, shall be distinctively marked in red in Bengali language by some other effective and clearly understood sign.
- (5) In every establishment there shall be provided effective and clearly audible means of giving warning in case of fire to every person employed therein.
- (6) A free passage-way giving access to each means of escape in case of fire shall be maintained for the use of all workers in every room of the factory.
- (7) In every establishment wherein more than ten workers are ordinarily employed in any place above the ground floor, or explosives or highly inflammable materials are used or stored, effective measures shall be taken to ensure that all the workers are familiar with the means of escape in case of fire and have been adequately trained in the routine to be followed in such case.
- (8) In every establishment wherein fifty or more than fifty workers are employed a demonstration of fire extinguishing at least once a year must be held and the employer shall maintain a record book specified for this purpose.

Section 77. Precautions against dangerous fumes -

- (1) In any establishment no person shall enter or be permitted to enter any chamber, tank, vat, pit, pipe, flue or other confined space in which dangerous fumes are likely to be present to such an extent as to involve risks of persons being overcome thereby, unless it is provided with a manhole of adequate size or other effective means of egress.
- (2) No portable electric light of voltage exceeding twenty- four volts shall be permitted in any factory for use inside any confined space such as is referred to in sub-section (1) and where the fumes present are likely to be inflammable, lamp or light other than of flame proof construction shall be permitted to be used in such confined space.

(3) No person in any establishment shall enter or be permitted to enter any confined space such as is referred to in sub-section (1) until all practicable measures have been taken to remove any fumes which may be present and to prevent any ingress of fumes and unless either -

(a) a certificate in writing has been given by a competent person, based on a test carried out by himself, that the space is free from dangerous fumes and fit for persons to enter, or

(b) the worker is wearing suitable breathing apparatus and a belt securely attached to a rope, the free end of which is held by a person standing outside the confined space.

(4) Suitable breathing apparatus, reviving apparatus and belts and ropes shall, in every factory, be kept ready for instant use beside any such confined space as aforesaid which any person has entered, and all such apparatus shall be periodically examined and certified by a competent person to be fit for use; and a sufficient number of persons employed in every factory shall be trained and practised in the use of all such apparatus and in the method of restoring respiration.

(5) No person shall be permitted to enter in any factory, any boiler furnace, boiler, flue chamber, tank, vat, pipe or other confined space for the purpose of working or making any examination therein until it has been sufficiently cooled by ventilation or otherwise declared to be safe for persons to enter.

(6) The Government may make rules prescribing the maximum dimensions of the manholes referred to in sub-section (1) and may, by order in writing, exempt, subject to such conditions as it may think fit to impose, any factory or class or description of factories from compliance with any of the provisions of this section.

Section 63. Fencing of machinery. -

(1) In every establishment the following shall be securely fenced by safeguards of substantial construction which shall be kept in position while the part of machinery required to be fenced are in motion or in use, namely -

(a) every moving part of a prime mover, and every fly wheel connected to a prime mover;

(b) the head-race and tail-race of every water wheel and water turbine;

(c) any part of a stock-bar which projects beyond the head stock of a lathe; and

(d) unless they are in such position or of such construction as to be as safe to every person employed in the factory as they would be if they were securely fenced -

(i) every part of an electricity generator, a motor or rotary convertor;

(ii) every part of transmission machinery; and

(iii) every dangerous part of any machinery:

Provided that, for the purpose of determining whether any part of machinery is in such position or is of such construction as to be safe as aforesaid, account shall not be taken of any occasion when it being necessary to make an examination of the machinery in accordance with the provisions of section 64.

(2) Without prejudice to any other provision of this Act relating to the fencing of machinery, every set screw, bolt and key on any revolving shaft, spindle wheel or pinion and all spur, worm and other toothed or friction gearing in motion with which a worker would otherwise be liable to come into contact, shall be securely fenced, to prevent such contact.

Section 64. Work on or near machinery in motion. -

(1) Where in any establishment it becomes necessary to examine any part of machinery referred to in section 63 while the machinery is in motion, or as a result of such examination, to carry out any mounting or shipping of belts, lubrication or other adjusting operation while the machinery is in motion, such examination or operation shall be made or carried out only by a specially trained adult male worker wearing tight fitting clothing whose name has been recorded in the register prescribed in this behalf and while he is so engaged such worker shall not handle a belt at a moving pulley unless the belt is less than six inches in width and unless the belt-joint is either laced or flush with the belt.

(3) The Government may, by notification in the official Gazette, prohibit, in any specified establishment the cleaning, lubricating or adjusting by any person, of specified parts of machinery when those parts are in motion.

Section 65. Striking gear and devices for cutting off power. -

(1) In every establishment - -

(a) suitable striking gear or other efficient mechanical appliances shall be provided and maintained and used to move driving belts to and from fast and loose pulleys which form part of the transmission machinery, and such gear or appliances shall be so constructed, placed and maintained as to prevent the belt from cropping back on the first pulleys;

(b) driving belts when not in use shall not be allowed to rest or ride upon shafting in motion.

(2) In every establishment suitable devices for cutting off power in emergencies from running machinery shall be provided and maintained in every work-room.

Section 66. Self-acting machines. -

No traversing part of a self-acting machine in any establishment and no material carried thereon shall, if the space over which it runs is a space over which any person is liable to pass whether in the course of his employment or otherwise, be allowed to run on its outward or inward traverse within a distance of 45 centimeters from any fixed structure which is not part of the

machine:

Provided that the Chief Inspector may permit the continued use of a machine installed before the commencement of this Code which does not comply with the requirements of this section on such conditions for ensuring safety as he may think fit to impose.

Section 67. Casing of new machinery. -

- (1) In all machinery driven by power and installed in any establishment after the commencement of this Code -
- (a) every set screw, belt or key or any revolving shaft, spindle, wheel or pinion shall be so sunk, encased or otherwise effectively guarded as to prevent danger; and
 - (b) all spur, worm and other toothed or friction gearing which does not require frequent adjustment while in motion, shall be completely encased unless it is so situated as to be as safe as it would be if it were completely encased.

Section 68. Cranes and other lifting machinery. -

- (1) The following provisions shall apply in respect of cranes and all other lifting machinery, other than hoists and lifts, in any factory -
- (a) every part thereof, including the working gear, whether fixed or movable, ropes and chains and anchoring and fixing appliances shall be -
 - (i) of good construction, sound material and adequate strength;
 - (ii) properly maintained;
 - (iii) thoroughly examined by a competent person at least once in every period of twelve months, and a register shall be kept containing the prescribed particulars of every such examination;
 - (b) no such machinery shall be loaded beyond the safe working load which shall be plainly marked thereon; and
 - (c) while any person is employed or working on or near the wheel-track of a travelling crane in any place where he would be liable to be struck by the crane, effective measures shall be taken to ensure that the crane does not approach within twenty feet of that place.

Section 69. Hoists and lifts. -

- (1) In every establishment-

- (a) every hoist and lift shall be -
 - (i) of good mechanical construction, sound material and adequate strength,
 - (ii) properly maintained
 - (iii) shall be thoroughly examined by a competent person at least once in every period of six months, and a register shall be kept containing the prescribed particulars of every such examination;
- (2) every hoistway and liftway shall be sufficiently protected by an enclosure fitted with gates, and the hoist or lift and every such enclosure shall be so constructed as to prevent any person or thing from being trapped between any part of the hoist or lift and any fixed structure or moving part;
- (3) the maximum safe working load shall be plainly marked on every hoist or lift, and no load greater than such load shall be carried thereon;
- (4) the cage of every hoist or lift used for carrying persons shall be fitted with a gate on each side from which access is afforded to a landing;
- (5) every gate referred to in clause (2) or clause (4) shall be fitted with interlocking or other efficient device to secure the gate so that it cannot be opened except when the cage is at the landing and to ensure that the cage cannot be moved unless the gate is closed.
- (6) the following additional requirements shall apply to hoists and lifts used for carrying persons and installed or reconstructed in a factory after the commencement of this Act, namely-
 - (a) where the cage is supported by rope or chain there shall be at least two ropes or chains separately connected to the cage and balance weight, and each rope or chain with its attachments shall be capable of carrying the whole weight of the cage together with its maximum load;
 - (b) efficient devices shall be provided and maintained capable of supporting the cage together with its maximum load in the event of breakage of the ropes, chains or attachments;
 - (c) an efficient automatic device shall be provided and maintained to prevent the cage from over-running.
- (3) The Chief Inspector may permit the continued use of a hoist or lift installed in a factory before the commencement of this Act which does not fully comply with the provisions of sub-section (1) upon such conditions for ensuring safety as he may think fit to impose.
- (4) The Government may, if, in respect of any class or description of hoist or lift, it is of the opinion that it would be unreasonable to enforce any requirement of sub-sections (1) and (2), by order direct that such requirement shall not apply to such class or description of hoist or lift.

Section 70. Revolving machinery. -

- (1) In every room in an establishment in which the process of grinding is carried on, there shall be permanently affixed to, or placed near, each machine in use a notice indicating
- (a) the maximum safe working peripheral speed of every grind stone or abrasive wheel, t
 - (b) the speed of the shaft or spindle upon which the wheel is mounted and
 - (c) the diameter of the pulley upon such shaft or spindle necessary to secure safe working peripheral speed.
- (2) The speeds indicated in notices under sub-section (1) shall not be exceeded.
- (3) Effective measures shall be taken in every establishment to ensure that the safe working peripheral speed of every revolving vessel, cage, basket, flywheel, pulley disc or similar appliance driven by power is not exceeded.

Section 71. Pressure plant.-

- (1) If in any factory any part of the plant or machinery used in a manufacturing process is operated at a pressure above atmospheric pressure, effective measures shall be taken to ensure that the safe working pressure of such part is not exceeded.

Section 72. Floors, stairs and means of access. -

In every establishment -

- (a) all floors, stairs, passages and gangways shall be of sound construction and be properly maintained and where it is necessary to ensure safety, steps, stairs, passages and gangways shall be provided with substantial handrails; and
- (b) there shall, so far as is reasonably practicable, be provided and maintained safe means of access to every place at which any person is, at any time, required to work.

Section 73. Pits, sumps, openings in floors, etc. -

- (1) In every factory, every fixed vessel, sump, tank, pit or opening in the ground or in a floor which, by reason of its depth, situation, construction or contents, is or may be a source of danger, shall be either securely covered or securely fenced.

Section 75. Excessive weights. -

- (1) No person shall be employed in any factory to lift, carry or move any load so heavy as to be likely to cause him injury.

Section 78. Explosive or inflammable dust, gas, etc. -

- (1) Where in any factory any manufacturing process produces dust, gas, fume or vapour of such character and to such extent as to be likely to explode on ignition, all practicable measures shall be taken to prevent any such explosion by -
 - (a) effective enclosure of the plant or machinery used in the process;
 - (b) removal or prevention of the accumulation of such dust, gas, fume or vapour;
 - (c) exclusion or effective enclosure of all possible sources of ignition.
- (2) Where in any factory the plant or machinery used in a process such as is referred to in sub-section (1) is not so constructed as to withstand the probable pressure which such an explosion as aforesaid would produce, all practicable measures shall be taken to restrict the spread and effects of the explosion by the provision in the plant or machinery of chokes, baffles, vents or other effective appliances.
- (3) Where any part of the plant or machinery in an establishment contains any explosive or inflammable gas or vapour under pressure greater than atmospheric pressure, that part shall not be opened except in accordance with the following provisions, namely -
 - (a) before the fastening of any joint of any pipe connected with the part of the fastening of the cover of any opening into the part is loosened, any flow of the gas or vapour into the part or any such pipe shall be effectively stopped by a stop-valve or other means;
 - (b) before any such fastening as aforesaid is removed, all practicable measures shall be taken to reduce the pressure of the gas or vapour in the part or pipe to atmospheric pressure;
 - (c) where any such fastening, as aforesaid, has been loosened or removed, effective measures shall be taken to prevent any explosive or inflammable gas or vapour from entering the part or pipe until the fastening has been secured; or, as the case may be, securely replaced:

Provided that the provisions of this sub-section shall not apply in the case of plant or machinery installed in the open air.

- (4) No plant, tank or vessel, which contains or has contained any explosive or inflammable substance shall be subjected in any factory to any welding, brazing soldering or cutting operation which involves the application of heat unless adequate measures have first been taken to remove such substance and any fumes non- explosive or non-inflammable, and no such substance shall be allowed to enter such plant, tank or vessel after any such operation until the metal has cooled sufficiently to prevent any risk of igniting the substance.

ANNEX E- 6: ADB SPS SAFEGUARD REQUIREMENTS – 1: ENVIRONMENT (TERMS OF REFERENCE OF EIA)

A. Introduction

1. Safeguard Requirements 1 outlines the requirements that borrowers/clients are required to meet when delivering environmental safeguards for projects supported by the Asian Development Bank (ADB). It discusses the objectives and scope of application, and underscores the requirements for undertaking the environmental assessment process. These requirements include assessing impacts, planning and managing impact mitigations, preparing environmental assessment reports, disclosing information and undertaking consultation, establishing a grievance mechanism, and monitoring and reporting. The document also includes particular environmental safeguard requirements pertaining to biodiversity conservation and sustainable management of natural resources, pollution prevention and abatement, Occupational and community health and safety, and conservation of physical cultural resources. The applicability of particular requirements is established through the environmental assessment process and compliance with the requirements is achieved through implementation of environmental management plans agreed to by ADB and the borrower/client.

B. Objectives

2. The objectives are to ensure the environmental soundness and sustainability of projects, and to support the integration of environmental considerations into the project decision-making process.

C. Scope of Application

3. The requirements apply to all ADB-financed and/or ADB-administered sovereign and non- sovereign projects, and their components regardless of the source of financing, including investment projects funded by a loan; and/or a grant; and/or other means, such as equity and/or guarantees (hereafter broadly referred to as projects).

D. Requirements

1. Environmental Assessment

4. Environmental assessment is a generic term used to describe a process of environmental analysis and planning to address the environmental impacts and risks associated with a project. At an early stage of project preparation, the borrower/client will identify potential direct, indirect, cumulative and induced environmental impacts on and risks to physical, biological, socioeconomic, and physical cultural resources and determine their significance and scope, in consultation with stakeholders, including affected people and concerned NGOs. If potentially adverse environmental impacts and risks are identified, the borrower/client will undertake an environmental assessment as early as possible in the project cycle. For projects with potentially significant adverse impacts that are diverse, irreversible, or unprecedented, the borrower/client will examine alternatives to the project's location, design, technology, and components that would avoid, and, if avoidance is not possible, minimize adverse

environmental impacts and risks. The rationale for selecting the particular project location, design, technology, and components will be properly documented, including, cost-benefit analysis, taking environmental costs and benefits of the various alternatives considered into account. The "no project" alternative will be also considered.

5. The assessment process will be based on current information, including an accurate project description, and appropriate environmental and social baseline data. The environmental assessment will consider all potential impacts and risks of the project on physical, biological, socioeconomic (occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media [Appendix 2, para. 6]) and physical cultural resources in an integrated way. The project's potential environmental impacts and risks will be reviewed against the requirements presented in this document and applicable laws and regulations of the jurisdictions in which the project operates that pertain to environmental matters, including host country obligations under international law.

6. Impacts and risks will be analyzed in the context of the project's area of influence. This area of influence encompasses (i) the primary project site(s) and related facilities that the borrower/client (including its contractors) develops or controls, such as power transmission corridors, pipelines, canals, tunnels, access roads, borrow pits and disposal areas, and construction camps; (ii) associated facilities that are not funded as part of the project (funding may be provided separately by the borrower/client or by third parties), and whose viability and existence depend exclusively on the project and whose goods or services are essential for successful operation of the project; (iii) areas and communities potentially affected by cumulative impacts from further planned development of the project, other sources of similar impacts in the geographical area, any existing project or condition, and other project-related developments that are realistically defined at the time the assessment is undertaken; and (iv) areas and communities potentially affected by impacts from unplanned but predictable developments caused by the project that may occur later or at a different location. The area of influence does not include potential impacts that might occur without the project or independently of the project. Environmental impacts and risks will also be analyzed for all relevant stages of the project cycle, including preconstruction, construction, operations, decommissioning, and postclosure activities such as rehabilitation or restoration.

7. The assessment will identify potential transboundary effects, such as air pollution, increased use or contamination of international waterways, as well as global impacts, such as emission of greenhouse gases and impacts on endangered species and habitats.

8. The environmental assessment will examine whether particular individuals and groups may be differentially or disproportionately affected by the project's potential adverse environmental impacts because of their disadvantaged or vulnerable status, in particular, the poor, women and children, and Indigenous Peoples. Where such individuals or groups are identified, the environmental assessment will recommend targeted and differentiated measures so that adverse environmental impacts do not fall disproportionately on them.

9. Depending on the significance of project impacts and risks, the assessment may comprise a full-scale environmental impact assessment (EIA) for category A projects, an initial Environmental examination (IEE) or equivalent process for category B projects, or a desk Review. An EIA report includes the following major elements: (i) executive summary, (ii) Description of the project, (iii) description of the environment (with comprehensive baseline Data), (iv) anticipated environmental impacts and mitigation measures, (v) analysis of Alternatives, (vi) environmental management plan(s), (vii) consultation and information

Disclosure, and (viii) conclusion and recommendations. The annex to this appendix provides further details. An IEE, with its narrower scope, may be conducted for projects with limited impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.

10. When the project involves existing activities or facilities, relevant external experts will perform environmental audits to determine the existence of any areas where the project may cause or is causing environmental risks or impacts. If the project does not foresee any new major expansion, the audit constitutes the environmental assessment for the project. A typical environmental audit report includes the following major elements: (i) executive summary; (ii) facilities description, including both past and current activities; (iii) summary of national, local, and any other applicable environmental laws, regulations, and standards; (iv) audit and site investigation procedure; (v) findings and areas of concern; and (vi) corrective action plan that provides the appropriate corrective actions for each area of concern, including costs and schedule.

11. When the project involves the development of or changes to policies, plans, or programs that are likely to have significant environmental impacts that are regional or sectoral, strategic environmental assessment will be required. A strategic environmental assessment report will include (i) an analysis of the scenario, (ii) an assessment of long-term and indirect impacts, (iii) a description of the consultation process, and (iv) an explanation of option selection

2. Environmental Planning and Management

12. The borrower/client will prepare an environmental management plan (EMP) that addresses the potential impacts and risks identified by the environmental assessment. The EMP will include the proposed mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Where impacts and risks cannot be avoided or prevented, mitigation measures and actions will be identified so that the project is designed, constructed, and operated in compliance with applicable laws and regulations and meets the requirements specified in this document. The level of detail and complexity of the environmental planning documents and the priority of the identified measures and actions will be commensurate with the project's impacts and risks. Key considerations include mitigation of potential adverse impacts to the level of "no significant harm to third parties", the polluter pays principle, the precautionary approach, and adaptive management.

13. If some residual impacts are likely to remain significant after mitigation, the EMP will also include appropriate compensatory measures (offset) that aim to ensure that the project does not cause significant net degradation to the environment. Such measures may relate, for instance, to conservation of habitat and biodiversity, preservation of ambient conditions, and greenhouse gas emissions. Monetary compensation in lieu of offset is acceptable in exceptional circumstances, provided that the compensation is used to provide environmental benefits of the same nature and is commensurate with the project's residual impact.

14. The EMP will define expected outcomes as measurable events to the extent possible and will include performance indicators or targets that can be tracked over defined periods. It will be responsive to changes in project design, such as a major change in project location or route, or in technology, unforeseen events, and monitoring results.

15. At times, a third party's involvement will influence implementation of the EMP. A third party may be, inter alia, a government agency, a contractor, or an operator of an associated facility. When the third-party risk is high and the borrower/client has control or influence over the actions and behavior of the third party, the borrower/client will collaborate with the third party to achieve the outcome consistent with the requirements for the borrower/client. Specific actions will be determined on a case-by-case basis.

16. The borrower/client will use qualified and experienced experts to prepare the environmental assessment and the EMP. For highly complex and sensitive projects, independent advisory panels of experts not affiliated with the project will be used during project preparation and implementation.

3. Information Disclosure

17. The borrower/client will submit to ADB the following documents for disclosure on ADB's website:

- i. a draft full EIA (including the draft EMP) at least 120 days prior to ADB Board consideration, and/or environmental assessment and review frameworks before project appraisal, where applicable;
- ii. the final EIA/IEE;
- iii. a new or updated EIA/IEE and corrective action plan prepared during project implementation, if any; and
- iv. the environmental monitoring reports.

18. The borrower/client will provide relevant environmental information, including information from the documents in para. 17 in a timely manner, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. For illiterate people, other suitable communication methods will be used.

4. Consultation and Participation

19. The borrower/client will carry out meaningful consultation with affected people and other concerned stakeholders, including civil society, and facilitate their informed participation. Meaningful consultation is a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle;²⁶ (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. Consultation will be carried out in a manner commensurate with the impacts on affected communities. The consultation process and its results are to be documented and reflected in the environmental assessment report.

5. Grievance Redress Mechanism

²⁶ For environment category A projects, such consultations will necessarily include consultations at the early stage of EIA field work and when the draft EIA report is available during project preparation, and before project appraisal by ADB.

20. The borrower/client will establish a mechanism to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the project's environmental performance. The grievance mechanism should be scaled to the risks and adverse impacts of the project. It should address affected people's concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people at no costs and without retribution. The mechanism should not impede access to the country's judicial or administrative remedies. The affected people will be appropriately informed about the mechanism.

6. Monitoring and Reporting

21. The borrower/client will monitor and measure the progress of implementation of the EMP. The extent of monitoring activities will be commensurate with the project's risks and impacts. In addition to recording information to track performance, the borrower/client will undertake inspections to verify compliance with the EMP and progress toward the expected outcomes. For projects likely to have significant adverse environmental impacts, the borrower/client will retain qualified and experienced external experts or qualified NGOs to verify its monitoring information. The borrower/client will document monitoring results, identify the necessary corrective actions, and reflect them in a corrective action plan. The borrower/client will implement these corrective actions and follow up on these actions to ensure their effectiveness.

22. The borrower/client will prepare periodic monitoring reports that describe progress with implementation of the EMP and compliance issues and corrective actions, if any. The borrower/client will submit at least semiannual monitoring reports during construction for projects likely to have significant adverse environmental impacts, and quarterly monitoring reports for highly complex and sensitive projects. For projects likely to have significant adverse environmental impacts during operation, reporting will continue at the minimum on an annual basis. Such periodic reports will be posted in a location accessible to the public. Project budgets will reflect the costs of monitoring and reporting requirements.

7. Unanticipated Environmental Impacts

23. Where unanticipated environmental impacts become apparent during project implementation, the borrower/client will update the environmental assessment and EMP or prepare a new environmental assessment and EMP to assess the potential impacts, evaluate the alternatives, and outline mitigation measures and resources to address those impacts.

8. Biodiversity Conservation and Sustainable Natural Resource Management

24. The borrower/client will assess the significance of project impacts and risks on biodiversity²⁷ and natural resources as an integral part of the environmental assessment process specified in paras. 4–10. The assessment will focus on the major threats to biodiversity, which include destruction of habitat and introduction of invasive alien species, and on the use of natural resources in an unsustainable manner. The borrower/client will need to identify measures to avoid, minimize, or mitigate potentially adverse impacts and risks and, as a last resort, propose compensatory measures, such as biodiversity offsets, to achieve no net loss or a net gain of the affected biodiversity

²⁷ The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

a. Modified Habitats

25. In areas of modified habitat, where the natural habitat has apparently been altered, often through the introduction of alien species of plants and animals, such as in agricultural areas, the borrower/client will exercise care to minimize any further conversion or degradation of such habitat, and will, depending on the nature and scale of the project, identify opportunities to enhance habitat and protect and conserve biodiversity as part of project operations.

b. Natural Habitats

26. In areas of natural habitat,²⁸ the project will not significantly convert or degrade²⁹ such habitat, unless the following conditions are met:

- i. No alternatives are available.
- ii. A comprehensive analysis demonstrates that the overall benefits from the project will substantially outweigh the project costs, including environmental costs.
- iii. Any conversion or degradation is appropriately mitigated.

27. Mitigation measures will be designed to achieve at least no net loss of biodiversity. They may include a combination of actions, such as post project restoration of habitats, offset of losses through the creation or effective conservation of ecologically comparable areas that are managed for biodiversity while respecting the ongoing use of such biodiversity by Indigenous Peoples or traditional communities, and compensation to direct users of biodiversity.

c. Critical Habitats

28. No project activity will be implemented in areas of critical habitat³⁰ unless the following requirements are met:

- i. There are no measurable adverse impacts, or likelihood of such, on the critical habitat which could impair its high biodiversity value or the ability to function.
- ii. The project is not anticipated to lead to a reduction in the population of any recognized endangered or critically endangered species³¹ or a loss in area of the habitat concerned such that the persistence of a viable and representative host ecosystem be compromised.

²⁸ Land and water areas where the biological communities are formed largely by native plant and animal species, and where human activity has not essentially modified the area's primary ecological functions.

²⁹ Significant conversion or degradation is (i) the elimination or severe diminution of the integrity of a habitat caused by a major, long-term change in land or water use; or (ii) the modification of a habitat that substantially reduces the habitat's ability to maintain viable populations of its native species. Significant conversion may include, for example, land clearing; replacement of natural vegetation (for example, by crops or tree plantations); permanent flooding (by a reservoir for instance); drainage, dredging, filling, or canalization of wetlands; or surface mining.

³⁰ Critical habitat is a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value, including habitat required for the survival of critically endangered or endangered species; areas having special significance for endemic or restricted-range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregatory species; areas with unique assemblages of species or that are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic, or cultural importance to local communities. Critical habitats include those areas either legally protected or officially proposed for protection, such as areas that meet the criteria of the World Conservation Union classification, the Ramsar List of Wetlands of International Importance, and the United Nations Educational, Scientific, and Cultural Organization's world natural heritage sites.

³¹ As defined by the World Conservation Union's Red List of Threatened Species or as defined in any national legislation.

iii. Any lesser impacts are mitigated in accordance with Para. 27.

29. When the project involves activities in a critical habitat, the borrower/client will retain qualified and experienced external experts to assist in conducting the assessment.

d. Legally Protected Areas

30. In circumstances where some project activities are located within a legally protected area, in addition to the requirement specified in para. 28, the borrower/client will meet the following requirements:

- i. Act in a manner consistent with defined protected area management plans.
- ii. Consult protected area sponsors and managers, local communities, and other key stakeholders on the proposed project.
- iii. Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area.

e. Invasive Alien Species

31. The borrower/client will not intentionally introduce any new alien species (that is, species not currently established in the country or region of the project) unless carried out in accordance with the existing regulatory framework for such introduction, if such a framework is present, or unless the introduction is subject to a risk assessment (as part of the environmental assessment) to determine the potential for invasive behavior. Under no circumstances must species known to be invasive be introduced into new environments. The borrower/client will undertake assessment of the possibility of accidental or unintended introduction of such invasive alien species and identify measures to minimize the potential for release.

f. Management and Use of Renewable Natural Resources

32. Renewable natural resources will be managed in a sustainable manner. Sustainable resource management is management of the use, development, and protection of resources in a way, or at a rate, that enables people and communities, including Indigenous Peoples, to provide for their current social, economic, and cultural well-being while also sustaining the potential of those resources to meet the reasonably foreseeable needs of future generations. This includes safeguarding the life-supporting capacity of air, water, and soil ecosystems. Where possible, the borrower/client will demonstrate the sustainable management of resources through an appropriate system of independent certification.

9. Pollution Prevention and Abatement

33. During the design, construction, and operation of the project the borrower/client will apply pollution prevention and control technologies and practices consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's *Environment, Health and Safety Guidelines*.³² These standards contain performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project

³² World Bank Group, 2007. *Environmental, Health, and Safety General Guidelines*. Washington, DC.

circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in this document

a. Pollution Prevention, Resource Conservation, and Energy Efficiency

34. The borrower/client will avoid, or where avoidance is impossible, will minimize or control the intensity or load of pollutant emission and discharge. In addition the borrower/client will examine and incorporate in its operations resource conservation and energy efficiency measures consistent with the principles of cleaner production. When the project has the potential to constitute a significant source of emissions in an already degraded area, strategies that help improve ambient conditions, such as evaluating alternative project locations and considering emissions offsets, will be introduced.

b. Wastes

35. The borrower/client will avoid, or where avoidance is not possible, will minimize or control the generation of hazardous and nonhazardous wastes and the release of hazardous materials resulting from project activities. Where waste cannot be recovered or reused, it will be treated, destroyed, and disposed of in an environmentally sound manner. If the generated waste is considered hazardous, the client will explore reasonable alternatives for its environmentally sound disposal considering the limitations applicable to its transboundary movement.³³ When waste disposal is conducted by third parties, the borrower/client will use contractors that are reputable and legitimate enterprises licensed by the relevant regulatory agencies.

c. Hazardous Materials

36. The borrower/client will avoid the manufacture, trade, and use of hazardous substances and materials subject to international bans or phaseouts because of their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer³⁴ and will consider the use of less hazardous substitutes for such chemicals and materials.

d. Pesticide Use and Management

37. The environmental assessment will ascertain that any pest and/or vector management activities related to the project are based on integrated pest management approaches and aim to reduce reliance on synthetic chemical pesticides in agricultural and public health projects. The borrower/client's integrated pest/vector management program will entail coordinated use of pest and environmental information along with available pest/vector control methods, including cultural practices, biological, genetic and, as a last resort, chemical means to prevent unacceptable levels of pest damage. The health and environmental risks associated with pest management should be minimized with support, as needed, to institutional capacity development, to help regulate and monitor the distribution and use of pesticides and enhance the application of integrated pest management.

38. The borrower/client will not use products that fall in World Health Organization Recommended Classification of Pesticides by Hazard Classes Ia (extremely hazardous) and Ib

³³ Consistent with the objectives of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes.

³⁴ Consistent with the objectives of the Stockholm Convention on Persistent Organic Pollutants and the Montreal Protocol on Substances that Deplete the Ozone Layer.

(highly hazardous) or Class II (moderately hazardous), if the project host country lacks restrictions on distribution and use of these chemicals, or if they are likely to be accessible to personnel without proper training, equipment, and facilities to handle, store, apply and dispose of these products properly. The borrower/client will handle, store, apply and dispose of pesticides in accordance with international good practice such as the Food and Agricultural Organization's International Code of Conduct on the Distribution and Use of Pesticides.

e. Greenhouse Gas Emissions

39. The borrower/client will promote the reduction of project-related anthropogenic greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. During the development or operation of projects that are expected to or currently produce significant quantities of greenhouse gases,³⁵ the borrower/client will quantify direct emissions from the facilities within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. The borrower/client will conduct quantification and monitoring of greenhouse gas emissions annually in accordance with internationally recognized methodologies.³⁶ In addition, the borrower/client will evaluate technically and financially feasible and cost-effective options to reduce or offset project-related greenhouse gas emissions during project design and operation, and pursue appropriate options

10. Health and Safety

a. Occupational Health and Safety

40. The borrower/client will provide workers³⁷ with a safe and healthy working environment, taking into account risks inherent to the particular sector and specific classes of hazards in the borrower's/client's work areas, including physical, chemical, biological, and radiological hazards. The borrower/client will take steps to prevent accidents, injury, and disease arising from, associated with, or occurring during the course of work by (i) identifying and minimizing, so far as reasonably practicable, the causes of potential hazards to workers; (ii) providing preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; (iii) providing appropriate equipment to minimize risks and requiring and enforcing its use; (iv) training workers and providing them with appropriate incentives to use and comply with health and safety procedures and protective equipment; (v) documenting and reporting occupational accidents, diseases, and incidents; and (vi) having emergency prevention, preparedness, and response arrangements in place.

41. The borrower/client will apply preventive and protective measures consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's *Environment, Health and Safety Guidelines* (footnote 7).

b. Community Health and Safety

³⁵ Even though the significance of a project's contribution to greenhouse gas emissions varies between industry sectors, the significance threshold to be considered for these requirements is generally 100,000 tons of carbon dioxide equivalent per year for the aggregate emissions of direct sources and indirect sources associated with electricity purchased for own consumption.

³⁶ Estimation methodologies are provided by the Intergovernmental Panel on Climate Change (IPCC), various international organizations, and relevant host country agencies.

³⁷ Including nonemployee workers engaged by the borrower/client through contractors or other intermediaries to work on project sites or perform work directly related to the project's core functions.

42. The borrower/client will identify and assess the risks to, and potential impacts on, the safety of affected communities during the design, construction, operation, and decommissioning of the project, and will establish preventive measures and plans to address them in a manner commensurate with the identified risks and impacts. These measures will favor the prevention or avoidance of risks and impacts over their minimization and reduction. Consideration will be given to potential exposure to both accidental and natural hazards, especially where the structural elements of the project are accessible to members of the affected community or where their failure could result in injury to the community. The borrower/client will avoid or minimize the exacerbation of impacts caused by natural hazards, such as landslides or floods that could result from land use changes due to project activities.

43. The borrower/client will inform affected communities of significant potential hazards in a culturally appropriate manner. The borrower/client will be prepared to respond to accidental and emergency situations. This preparation will include response planning document(s) that addresses the training, resources, responsibilities, communications, procedures, and other aspects required to respond effectively to emergencies associated with project hazards. Appropriate information about emergency preparedness and response activities, resources, and responsibilities will be disclosed to affected communities.

44. When structural elements or components, such as dams, tailings dams, or ash ponds, are situated in high-risk locations and their failure or malfunction may threaten the safety of communities, the borrower/client will engage qualified and experienced experts, separate from those responsible for project design and construction, to conduct a review as early as possible in project development and throughout project design, construction, and commissioning

. 11. Physical Cultural Resources

45. The borrower/client is responsible for siting and designing the project to avoid significant damage to physical cultural resources.³⁸ Such resources likely to be affected by the project will be identified, and qualified and experienced experts will assess the project's potential impacts on these resources using field-based surveys as an integral part of the environmental assessment process specified in paras. 4–10.

46. When a project may affect physical cultural resources, the borrower/client will consult with affected communities who use, or have used them within living memory, for long-standing cultural purposes to identify physical cultural resources of importance and to incorporate the views of the affected communities on such resources into the borrower's/client's decision making process. Consultation will also involve relevant national or local regulatory agencies that are entrusted with protecting physical cultural resources. The findings are disclosed as part of, and in the same manner as, the environmental assessment report, except when such disclosure would compromise or jeopardize the safety or integrity of the physical cultural resources

47. When the project is likely to have adverse impacts on physical cultural resources, the borrower/client will identify appropriate measures for avoiding or mitigating these impacts as part of the environmental planning process specified in paras. 12–16. These measures may range from avoidance to full site protection to selective mitigation, including salvage and documentation, in cases where a portion or all of the physical cultural resources may be lost.

³⁸ Defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings and may be above or below ground or under water. Their cultural interest may be at the local, provincial, national, or international level.

48. When the proposed location of a project is in areas where physical cultural resources are expected to be found as determined during the environmental assessment process, chance finds procedures will be included in the EMP. Chance finds shall not be disturbed until an assessment by a competent specialist is made and actions consistent with these requirements are identified.

49. The project will not remove any physical cultural resources unless the following conditions are met:

- i. No alternatives to removal are available.
- ii. The overall benefits of the project substantially outweigh the anticipated cultural heritage loss from removal.
- iii. Any removal is conducted in accordance with relevant provisions of national and/or local laws, regulations, and protected area management plans and national obligations under international laws, and employs the best available techniques.

PART A: OUTLINE OF AN ENVIRONMENTAL IMPACT ASSESSMENT REPORT

This outline is part of the Safeguard Requirements 1. An environmental assessment report is required for all environment category A and B projects. Its level of detail and comprehensiveness is commensurate with the significance of potential environmental impacts and risks. A typical EIA report contains the following major elements, and an IEE may have a narrower scope depending on the nature of the project. The substantive aspects of this outline will guide the preparation of environmental impact assessment reports, although not necessarily in the order shown.

A. Executive Summary

This section describes concisely the critical facts, significant findings, and recommended actions.

B. Policy, Legal, and Administrative Framework

This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

C. Description of the Project

This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

D. Description of the Environment (Baseline Data)

This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area

of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

E. Anticipated Environmental Impacts and Mitigation Measures

This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media [Appendix 2, para. 6]), and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, transboundary, and cumulative impacts as appropriate.

F. Analysis of Alternatives

This section examines alternatives to the proposed project site, technology, design, and operation—including the no project alternative—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

G. Information Disclosure, Consultation, and Participation

This section:

- i. describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;
- ii. summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and
- iii. describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

H. Grievance Redress Mechanism

This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

I. Environmental Management Plan

This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental

impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

(i) Mitigation:

- a. identifies and summarizes anticipated significant adverse environmental impacts and risks;
- b. describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and
- c. provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project.

(ii) Monitoring:

- a. describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
- b. describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.

(iii) Implementation arrangements:

- a. specifies the implementation schedule showing phasing and coordination with overall project implementation;
- b. describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and
- c. estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.

(iv) Performance indicators: describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

J. Conclusion and Recommendation

This section provides the conclusions drawn from the assessment and provides Recommendations

ANNEX E- 7: EQUIVALENCE IN E&S SAFEGUARDS OF GOVERNMENT OF BANGLADESH AND ADB (SPS JANUARY 2010)

ADB	GOB's ESS Requirements ^[1]	Equivalent	Differences Between ADB and GOB's ESS	Application in ESSF (May 2014)
<p>Screening</p> <p>Screening of each proposed development project should be carried out as early as possible, to determine the appropriate extent and type of environmental assessment so that appropriate studies are undertaken commensurate with the significance of potential impacts and risks</p> <ul style="list-style-type: none"> Screening and categorization determines (i) the significance of potential impacts or risks that a project might present; (ii) the level of assessment and institutional resources required for the safeguard measures; and (iii) disclosure requirements.A – EIA Required B- IEE Required C – No EIA/IEE required. Environmental implications are still reviewed 	<p>The Department of Environment (DOE) ECA (1995 amended in 2009) and ECR (1977) has set out screening criteria to categorize the projects into Green, Orange A, Orange B and Red. These screening criteria are generally based on project type only irrespective of its scale and location. In some cases, order of investment is indicated to reflect on the magnitude of the impact.</p> <p>Categorization decides the level of EIA or environmental examination. Green category projects do not require Initial Environmental Examination (IEE) or EIA. No site clearance is required and project proponent can directly seek Environmental Clearance Certificate (ECC).</p> <p>Orange A category projects do not require IEE and EIA but site clearance is required prior seeking ECC. Orange B projects require IEE in addition to site clearance and</p>	<p>Moderate.</p> <p>Screening criteria does not factor project size and project location.</p> <p>Programmatic, Regional, Sectoral and Strategic EIAs are not triggered through the screening process.</p>	<p>Both ADB and GOB screening and classification procedure be applied and more stringent classification be followed.</p>	

^[1] These requirements have been primarily based on ECA (1995), ECR (1997 and EIA Guidelines for Industrial Projects and information on DOE's website

ADB	GOB's ESS Requirements ^[1]	Equivalent	Differences Between ADB and GOB's ESS	Application in ESSF (May 2014)
		Red Category projects require both IEE and Environmental Impact Assessment (EIA) conducted in tier. For Green and Orange A categories ECC is granted at the regional office of DOE. The ECC for Orange B and Red category projects are processed at Central office of DOE. List of industries under Green, Orange – A, Orange-B and Red categories is not updated since 1997. GOB has prescribed 8 locations as Environmentally Critical Areas but these have not been factored in screening.		
Conduct an environmental assessment to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic (including impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues), and physical cultural resources in the context of the project's area of influence. Assess potential transboundary and global impacts, including climate change. Use strategic environmental assessment where appropriate. Environmental impacts and risks will also be analyzed for all relevant stages of the project cycle, including preconstruction, construction, operations, decommissioning, and postclosure activities such as rehabilitation or restoration.	The impacts assessed in the GOB's EIA system include components such as Air, Noise, Land, Water, Biological and Socio-Economic aspects. Scoping is however not a requirement under the law and is not an identified milestone in the EC process. EIA Guidelines consider IEE as the milestone where scoping is to be carried out.		Moderate It is not mandatory that TOR for EIA are drawn from IEE Stakeholder consultation process is not explicitly asked in the process of scoping or IEE Trans-boundary and global concerns, greenhouse gas emissions are not factored.	ESSMU will assist in preparation of TOR for EIA based on IEE Web disclosure on IDCOLs intent to finance and subsequent feedback mechanism will be used to obtain comments/suggestions

ADB	GOB's ESS Requirements ^[1]	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>Alternatives</p> <p>Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed.</p> <p>Also consider the no project alternative.</p> <p>Do not implement project activities in areas of critical habitats, unless (i) there are no measurable adverse impacts on the critical habitat that could impair its ability to function, (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and (iii) any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area.</p> <p>In an area of natural habitats, there must be no significant conversion or degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantially outweigh the environmental costs, and (iii) any conversion or degradation is appropriately mitigated.</p> <p>Use a precautionary approach to the use, development, and management of renewable natural resources.</p>	<p>ECA (1995) and ECR (1977) do not explicitly ask for identification and assessment of alternatives.</p> <p>EIA Guidelines however include identification and assessment of alternatives under IEE (page 12 of EIA Guidelines for Industrial Projects).</p> <p>In the preparation of EIA, alternatives (site/routes/process/raw materials) are looked at as part of the mitigation measures (page 28 of EIA Guidelines for Industrial Projects)</p>	<p>Minor</p>	<p>ESSMU will encourage sponsor to consider alternatives – especially on technologies and waste management</p>
<p>Assessment of Potential impacts</p> <p>The assessment process will be based on</p>	<p>GOB's EIA guidelines describe</p>		<p>For existing projects</p>

ADB	GOB's ESS Requirements ^[1]	Equivalent	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>current information, including an accurate project description, and appropriate environmental and social baseline data.</p> <p>The environmental assessment will consider all potential impacts and risks as listed under Scoping</p> <p>The project's potential environmental impacts and risks shall be reviewed against the requirements presented in this document and applicable laws and regulations of the jurisdictions in which the project operates that pertain to environmental matters, including host country obligations under international law.</p> <p>Impacts and risks will be analyzed in the context of the project's area of influence.</p> <p>The area of influence encompasses (i) the primary project site(s) and related facilities such as power transmission corridors, pipelines, canals, tunnels, access roads, borrow pits and disposal areas, and construction camps;</p> <p>(ii) associated facilities that are not funded as part of the project (funding may be provided separately by the borrower/client or by third parties), and whose viability and existence depend exclusively on the project and whose goods or services are essential for successful operation of the project;</p> <p>(iii) areas and communities potentially affected by cumulative impacts from further planned development of the project, other sources of similar impacts in the geographical area, any existing project or condition, and</p>	<p>approach for impact identification, prediction and assessment.</p> <p>Explicit focus on impacts during projects construction and operation phases is however not given, stressing project life cycle. Similarly, consideration of cumulative impacts is no emphasized.</p> <p>Quantitative approaches to prediction & assessment are encouraged.</p> <p>Reporting of certainly around prediction is encouraged as per the EIA Guidelines.</p>	<p>Minor.</p> <p>The EC process does not explicitly ask for Environmental Audit (Site Assessment) in the case of projects entailing expansion/modernization, brown-field development, mergers/closures as a part of the EIA study.</p>	<p>entailing expansion/modernization, ESSMU will follow due diligence approach as outlined in the ESSF</p> <p>In impact prediction and assessment, project life cycle approach will be stressed.</p> <p>In financing power generation projects, scenario of coal usage will be factored in case gas supply is not available.</p>	

ADB	GOB's ESS Requirements ^[1]	Equivalent	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>other project-related developments that are realistically defined at the time the assessment is undertaken; and</p> <p>(iv) areas and communities potentially affected by impacts from unplanned but predictable developments caused by the project that may occur later or at a different location.</p>				
<p>Standards</p> <p>During the design, construction, and operation of the project the borrower/client will apply pollution prevention and control technologies and practices consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's Environment, Health and Safety Guidelines.</p> <p>When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent.</p> <p>If less stringent levels or measures are appropriate in view of specific project circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in this document.</p>	<p>GOB has issued emission as well as ambient standards under ECA and ECR. These standards are in general at par with the international standards and in some cases even stricter. The workspace or occupational standards are directed under the Factories Act.</p> <p>DOE has updated their air quality (only ambient air quality) standards and set some new standards for motor vehicles emission on July 2005 by a GOB Gazette notification.</p>	<p>Minor</p>		<p>Where applicable to the type of project being supported, apply international standards with special reference to World Bank's Pollution, Prevention and Abatement Handbook.</p> <p>Alternative accepted standards and approaches may be allowed to best reflect national or local conditions, if they are justified and recommended in the EIA report.</p>
<p>Environmental Management Plan (EMP)</p> <p>Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and</p>	<p>DOE requires Environmental Management Plan (EMP) as an outcome of EIA. Under the guidelines, DOE prescribes conduct</p>	<p>Minor.</p> <p>EMP should include training and capacity development and</p>		<p>In addition to the recommendations under</p>

ADB	GOB's ESS Requirements ^[1]	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>management.</p> <p>Prepare an environmental management plan (EMP) that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators.</p> <p>Key considerations for EMP preparation include mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.</p> <p>Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.</p> <p>Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.</p> <p>Where unanticipated environmental impacts become apparent during project implementation, the borrower/client will update the environmental assessment and</p>	<p>of special studies as relevant. These studies include aspects such as Risk analyses (when there is storage and handling of hazardous and toxic substances), Resettlement and Rehabilitation (when more than 1000 people are displaced), Compensatory Afforestation (when deforestation involves more than 5 ha area), Severance etc. Prevention and recycling are to be followed as the first options. (Pages 29 and 30 of EIA Guidelines for Industrial Projects)</p> <p>In addition to this EMP must be supplied with the work plan, implementation schedule and monitoring requirements (Page 31 of EIA Guidelines for Industries) monitoring plan and project scheduling.</p>	<p>may ideally follow EMS approach to ensure responsive and adaptive mitigations throughout projects life cycle. These aspects are not adequately emphasized in the Law, Rules as well as Guidelines</p>	<p>GOB and ADB, ESSMU will stress training and capacity development at project sponsor to ensure satisfactory implementation of the EMP.</p>

ADB	GOB's ESS Requirements ^[1]	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>EMP or prepare a new environmental assessment and EMP to assess the potential impacts, evaluate the alternatives, and outline mitigation measures and resources to address those impacts.</p> <p>The borrower/client will not intentionally introduce any new alien species (that is, species not currently established in the country or region of the project) unless carried out in accordance with the existing regulatory framework for such introduction, if such a framework is present, or unless the introduction is subject to a risk assessment (as part of the environmental assessment) to determine the potential for invasive behavior.</p> <p>The borrower/client will avoid, or where avoidance is not possible, will minimize or control the generation of hazardous and nonhazardous wastes and the release of hazardous materials resulting from project activities. Where waste cannot be recovered or reused, it will be treated, destroyed, and disposed of in an environmentally sound manner.</p> <p>The borrower/client will avoid the manufacture, trade, and use of hazardous substances and materials subject to international bans or phaseouts because of their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer and will consider the use of less hazardous substitutes for such chemicals and materials.</p> <p>The borrower/client will not use products that</p>			

ADB	GOB's ESS Requirements ^[1]	Equivalent	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>fall in World Health Organization Recommended Classification of Pesticides by Hazard Classes Ia (extremely hazardous) and Ib (highly hazardous) or Class II (moderately hazardous), if the project host country lacks restrictions on distribution and use of these chemicals, or if they are likely to be accessible to personnel without proper training, equipment, and facilities to handle, store, apply and dispose of these products properly. The borrower/client will handle, store, apply and dispose of pesticides in accordance with international good practice such as the Food and Agricultural Organization's International Code of Conduct on the Distribution and Use of Pesticides.</p> <p>The borrower/client will promote the reduction of project-related anthropogenic greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. During the development or operation of projects that are expected to or currently produce significant quantities of greenhouse gases, the borrower/client will quantify direct emissions from the facilities within the physical project boundary and indirect emissions associated with the off-site production of power used by the project.</p>				
<p>Information Disclosure and Community Engagement</p> <p>Carry out meaningful consultation with affected people and facilitate their informed participation.</p> <p>Ensure women's participation in consultation.</p>	<p>The EIA Guidelines of DOE states that a Not technical Summary should be prepared for the purpose of communication to public (Page 32 of EIA Guidelines for Industries).</p>	<p>Moderate It is necessary to explicitly include public consultation and disclosure as a requirement in the ECR</p>	<p>ESSMU will disclose the summary of IEE/EIA report on its website (in English as well as in Bangla) prior to</p>	

ADB	GOB's ESS Requirements ^[1]	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment.</p> <p>Establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.</p> <p>The borrower/client will submit to ADB the following documents for disclosure on ADB's website:</p> <ul style="list-style-type: none"> (i) a draft full EIA (including the draft EMP) at least 120 days prior to ADB Board consideration, and/or environmental assessment and review frameworks before project appraisal, where applicable; (ii) the final EIA/IEE; (iii) a new or updated EIA/IEE and corrective action plan prepared during project implementation, if any; and (iv) the environmental monitoring reports. <p>The borrower/client will provide the above in a timely manner, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders.</p> <p>For illiterate people, other suitable communication methods will be used.</p>	<p>Section 4.11 of the Guidelines encourages Public Participation in EIA.</p> <p>However as per ECA (1995) or ECR (1997), public consultation and participation is not mandatory. No records are asked.</p> <p>No time-frames are however fixed for prior disclosure of EIA to the public.</p> <p>No Grievance mechanism facility is mentioned in the regulations</p> <p>The DOE makes the minutes of the meetings on Environmental Clearance available at its website (http://www.doe-bd.org/minutes.php)</p>	<p>(1997).</p>	<p>the Loan Agreement.</p> <p>The 120 days prior disclosure requirement of ADB will be followed for category A and sensitive B category projects.</p> <p>Feedback received will be considered prior to loan disbursement.</p>

ADB	GOB's ESS Requirements ^[1]	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>Monitoring and Reporting The extent of monitoring activities, including their scope and periodicity, will be commensurate with the project's risks and impacts.</p> <p>Borrowers/clients are required to implement safeguard measures and relevant safeguard plans, as provided in the legal agreements, and to submit periodic monitoring reports on their implementation performance. ADB will require borrowers/clients to:</p> <ul style="list-style-type: none"> (i) establish and maintain procedures to monitor the progress of implementation of safeguard plans, (ii) verify the compliance with safeguard measures and their progress toward intended outcomes, (iii) document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic monitoring reports, (iv) follow up on these actions to ensure progress toward the desired outcomes, (v) retain qualified and experienced external experts²⁸ or qualified NGOs to verify monitoring information for projects with significant impacts and risks, (vi) use independent advisory panels to monitor project implementation for highly complex and sensitive projects, and (vii) submit periodic monitoring reports on safeguard measures as agreed with ADB. ADB will carry out the following 	<p>EIA Guidelines for Industrial Projects recommend preparation of a Post-Project Monitoring Programme. This programme is to be included in the EIA report and on review gets reflected as a condition in granting ECC.</p> <p>There is a process of renewable of ECC that requires monitoring and assessment.</p> <p>DOE has the responsibility of follow up and monitoring of ECC conditions. DOE makes the proponent compliance reports available on its website to the public</p> <p>There are no formal provisions to obtain independent assessment of EIA report if found necessary. There is also no formal mechanism or a programme at DOE that conducts independent audit of approved projects.</p> <p>EC states that sponsor must inform DOE and update the EC if any changes take place of project activity, plant capacity etc after implementation of the project. This is however not a legal requirement. ECC sometimes specifies condition for building institutional set up (in house monitoring capacity etc) to project sponsor. No penalties are however levied if there is a non-compliance.</p>	<p>Minor related to independent assessment and audit.</p> <p>Results of monitoring are not made available to the public.</p>	<p>ESSMU will monitor compliance to agreed EMP prior disbursement of the loan.</p> <p>Post-disbursement monitoring will be carried out to ensure all necessary permits and renewals are in place.</p> <p>For select Red category or Category A (per ADB) projects or where non-compliance is observed, field monitoring will be carried out through third party agencies. Results of monitoring will be reported to ADB on annual basis.</p>

ADB	GOB's ESS Requirements ^[1]	Differences Between ADB and GOB's ESS	Application in ESSF (May 2011)
<p>monitoring actions to supervise project implementation:</p> <p>(i) conduct periodic site visits for projects with adverse environmental or social impacts;</p> <p>(ii) conduct supervision missions with detailed review by ADB's safeguard specialists/officers or consultants for projects with significant adverse social or environmental impacts;</p> <p>(iii) review the periodic monitoring reports submitted by borrowers/clients to ensure that adverse impacts and risks are mitigated as planned and as agreed with ADB;</p> <p>(iv) work with borrowers/clients to rectify to the extent possible any failures to comply with their safeguard commitments, as covenanted in the legal agreements, and exercise remedies to reestablish compliance as appropriate; and</p> <p>(v) prepare a project completion report that assesses whether the objective and desired outcomes of the safeguard plans have been achieved, taking into account the baseline conditions and the results of monitoring.</p>	<p>Third party monitoring is recommended through approved laboratories.</p> <p>GOB passed The Environment Court Act, 2000 (Act No. 11 of 2000) to allow making of appeals from public on non-compliance with the ECA (1995) and ECR (1977).</p>		

ANNEX E- 8: COMPARISON BETWEEN BANGLADESH BANK ERM AND IDCOL ESSF (AUGUST 2011)

Bangladesh Bank ERM (January 2011)		IDCOL ESSF (August 2011)
GENERAL		
Applicability	<p>Guidelines for Banks and FIs in Bangladesh</p> <p>Guidelines should necessarily be used for all individual customers (corporate, institutional, personal, small and medium enterprise) whose aggregate facilities are above the following financing thresholds:</p> <ol style="list-style-type: none"> 1. For Small and Medium Enterprises (SMEs), financing > BDT 2.5 million 2. For Corporate, financing > BDT 10 million. and 3. For real estate financing > BDT 10 million. <p>These Guidelines should be used for both financing required for new, green field projects as well as those pertaining to existing facilities, e.g. renovation and expansion</p>	<p>The ESSF is composed of the Environmental Management System (EMS) Framework and the Social Safeguards Framework (SSF).</p> <p>The ESSF is applicable for all Components and subprojects financed from ADB resources by IDCOL as well as other IDCOL funds, through direct lending and refinance operations and to both public and private sector companies. The ESSF will apply at the project-level for Components A and B and at a programmatic level for biogas and biomass power plants financed under Component C.</p> <p>i. <u>Component A</u>: Financing of Private Sector sponsored large infrastructure subprojects (to be funded from ADB's OCR loan)</p> <p><u>Component B</u>: Small and Medium Sized Infrastructure subprojects – SMIP (to be financed out of ADF loan).</p> <p>ii. <u>Component C</u>: Renewable Energy subprojects (to be financed out of the ADF loan).</p>
Purpose	To understand and manage risks that arise from environmental concerns	<p>The Environmental Management System (EMS) framework defines policy procedures, roles, and responsibilities for managing adverse environmental impacts/risks generated by subprojects that are financed by IDCOL.</p> <p>This ESF has been prepared as part of IDCOL's commitment to comply with Government of Bangladesh (GOB) environmental policies, law and regulations as well as with environmental safeguard policy requirements of ADB and development partners.</p>
Approach	<ul style="list-style-type: none"> • Banks/FIs should be able to ascertain risks arising out of environmental issues. • The practice should focus on environmental 	<p>ESSF has been structured to reflect the following:</p> <p>(a). Integrated Environmental & Social policy</p> <p>(b). Screening</p>

Bangladesh Bank ERM (January 2011)		IDCOL ESSF (August 2011)
Item		
	<p>problem that is causing the risks.</p> <ul style="list-style-type: none"> The practice needs to be value adding to the borrower and should not be “policing” in nature. Banks/FIs should use ERM to strengthen the relationship with the borrower and not to create unease. Environmental Risk Management should focus on managing risks and not on avoiding risks. This is intended for inculcating responsible financing practices and not for discouraging / reducing financing. However, if there are business activities that are inherently irresponsible and managing these risks are not feasible, the Bank/FI should avoid financing. 	<ul style="list-style-type: none"> i. Project Screening based on List of Prohibited activities ii. E&S Risk Rating for the Project (c). Operational Procedures for Risk Mitigation and Control (d). Institutional structure for operation of the ESSF including allocation of roles and responsibilities (e). Advisory Panel of Experts to guide the ESSMU (f). Capacity development plan at IDCOL for continued strengthening (g). Annual E&S auditing and reporting (h). Updating of the ESSF based on feedback and experience of its application to projects
Updates	<p>In case of any significant change to the environmental conditions, laws and practices Guidelines shall be revised at least once in every 3 years</p>	<p>The ESSF will be reviewed on an annual basis or as and when necessary subject to changes in externalities, especially after the results of <u>annual environmental and social internal audit</u> that will be conducted by IDCOL through external or independent consultant/s.</p> <p>Based on the experience gained and considering further changes, if any, in GOBs environmental policy and regulatory framework or in the Environmental and Social Safeguards of ADB, the ESSF document will be appropriately updated.</p>
ORGANIZATIONAL REQUIREMENTS		
A. Policy	<p>All Banks and FIs should make an “in principle” commitment to ERM in general and to the following in specific:</p> <ol style="list-style-type: none"> Integration of Environmental Risk Management in their credit policies and procedures. Building awareness and providing Constant training and capacity building of their staff 	<p>IDCOL has a mandate of bridge financing for developing medium to large-scale infrastructure and renewable energy projects in Bangladesh.</p> <p>IDCOL recognizes the significance of environmental, health / safety and social considerations in infrastructure development and believes in sustainable development.</p>

Bangladesh Bank ERM (January 2011)		IDCOL ESSF (August 2011)
Item	<p>relevant to Environmental Risk Management.</p> <p>3. Adoption of a value adding approach to Environmental Risk Management with their potential borrower and aim to facilitate the borrower in addressing environmental issues that could lead to risks.</p>	<p>In order to achieve this, IDCOL is committed to:</p> <ul style="list-style-type: none"> i. Mainstream environmental, health / safety and social (E&S) considerations in appraising and financing infrastructure projects to avoid / minimize adverse impacts and risks to the environment and people that may be affected ii. Ensure compliance with all relevant E&S policy and legislative requirements and laws of the lands with which it engages and remain responsive to the E&S requirements of international best practices iii. Avoid / minimize land acquisition and resettlement through selection of appropriate locations and design of projects iv. Compensate replacement value of such acquired land/property will be paid before displacement or replace with land having equal value and quality together with other facilities such as housing and basic infrastructure facilities. v. Ensure protection of vulnerable groups, such as the economically and socially disadvantaged, women, children, physically handicapped and adibasi populations
Requirements	<p>All Banks and FIs should pass a Resolution of the Board or appropriate top & senior management committee on the adoption of these Guidelines and acceptance of the above principles.</p> <p>On an annual basis, all Banks/FIs should undertake a top management review to determine whether ERM is being effectively practiced in its operations.</p>	<p>The Environmental and Social Policy of the ESSF has been approved by IDCOL Board.</p> <p>Updates requirements have been specified under General section of this Table.</p> <p>The revised IDCOL ESSF (August 2011) will be placed before the IDCOL Board.</p>
B. Roles, Responsibilities and Authorities		
Organizational Structure	Environmental risk management is a part of the credit risk management, the same organizational structure is	IDCOL has set up an Environmental and Social Safeguards Management Unit (ESSMU). Currently the ESSMU features under the Investment branch of the organizational structure of

Item	Bangladesh Bank ERM (January 2011)	IDCOL ESSF (August 2011)
	to be used.	<p>IDCOL and is proposed to be reconfigured under the Legal branch (which is closely involved in the due diligence and overall legal compliance in project transactions).</p> <p>The ESSMU may be headed by an Assistant Director (ESSMU) reporting to Director (Legal). The Assistant Director (ESSMU) shall be supported by Senior E&S Safeguards Specialists.</p> <p>The environmental safeguards specialist will have a master level qualification in environmental science/ engineering/ planning with at least 7 years of experience in conducting/ reviewing environmental assessments. The social safeguards specialist will have a masters level qualification and at least 7 years of experience in resettlement and tribal issues and social assessments. The safeguard specials shall also be familiar with GOB regulations and procedures of ADB and other multilateral donor agencies.</p>
Responsibilities	<p>Key responsibilities in different functions have been identified. The functions include:</p> <ul style="list-style-type: none"> • Relationship banking/ marketing • Credit processing and approval • Credit administration • Credit monitoring • Overall responsibility 	<p>The environmental safeguards specialist shall deliver the following services:</p> <ol style="list-style-type: none"> (a). Participate in the KYC meetings with client (b). Advise project proponent on completing the Environmental section of the Loan Application Form (c). Review of Loan Application Form to draw indicative term sheet (d). Categorization of project (e). Prepare PEAR (f). Issue Terms of Reference (ToR) for conduct of EIA/IEE/EDD/CAP (g). Review EIA/ IEE/EDD/ CAP submitted for a project (h). Coordinate (including hiring consultants) conduct of monitoring of implementation of EMP/ CAP of select High risk projects (i). Review half-yearly monitoring reports of the compliance and effectiveness of the EMP/ CAP (j). Report progress of projects annually to ADB (k). Submit EIA of High risk projects to ADB for approval

Item	Bangladesh Bank ERM (January 2011)	IDCOL ESSF (August 2011)
		<p>(l). Forward EIA/ IEE/ EDD/ CAP/ monitoring reports to ADB for disclosure and information</p> <p>The social safeguards specialist will deliver the following services:</p> <ul style="list-style-type: none"> (a). Participate in the KYC meetings with client (b). Advise project proponent on completing the Social section of Loan Application Form (c). Conduct review of Loan Application Form to draw indicative term sheet (d). Categorization of project (e). Issue ToR for conduct of SIA and RP/IPP (f). Review SIA and RP/ADP submitted for a project (g). Coordinate (including hiring consultants) conduct of monitoring of implementation of RP/IPP of select High risk projects (h). Review half-yearly monitoring reports of the compliance and effectiveness of the RP/IPP (i). Report on the progress of projects annually to ADB (j). Forward SIA and RP/ADP monitoring reports to ADB for disclosure (k). Submit RP/ADP of High risk projects to ADB for approval (l). Ensure financial commitment by the project proponent for RP/ADP implementation prior to loan disbursement (m). Review monitoring report submitted by PP/IA <p>The common services that ESMU shall deliver are:</p> <ul style="list-style-type: none"> (a). Coordinate conduct of independent annual audit of IDCOL's ESSF. (b). Implementation of CAP for operations of IDCOL's ESSF. (c). Prepare annual E&S performance report to be submitted to ADB. (d). Coordinate with training specialists to conduct awareness and training program at IDCOL, project proponents on implementation and monitoring of EMPs, GOB's E&S Policy and Regulatory Framework, ADB safeguard policies, and IDCOL's ESSF (e). Update ESF/SSF based on operational experience. (f). Maintain ESSF page of IDCOL's website, respond to

Bangladesh Bank ERM (January 2011)		IDCOL ESSF (August 2011)
Item		feedback received and factor the feedback as appropriate in project processing and monitoring as well towards the improvement of ESSF.
C. Procedures		
Environmental Risk Rating	<p>The main determinants of environmental risk are the nature of a borrower's business activity and the vulnerability of the location of the business activity.</p> <p>The Environmental Due- Diligence (EDD) checklist and the Environmental Risk Rating (EnvRR) are to be completed prior to forwarding the proposed financing to the credit risk management for consideration.</p> <p>Classify business activities as 'High', 'Moderate' or 'Low' as per the sector specific EDD checklist</p>	<p>The risk rating criteria for ESSF harmonizes requirements of:</p> <p>(a). GOB' ECR-97 Green, Orange-A, Orange-B and Red categories</p> <p>(b). BB's ERM risk rating approach customized for IDCOL's investment focus sectors</p> <p>(c). Criteria for classifying projects as Category A/B/C according to ADB's SPS</p> <p>(d). Capacity of the project proponent to manage E&S risks</p> <p>Sector specific checklists have been prepared for IDCOL focus sectors identifying specific issues that should be mitigated for the project.</p>
Environmental Risk Covenants	<p>While approving the financing, additional condition / covenant have to be included wherever EnvRR is "High"</p> <p>All credit agreements should include the standard condition / covenant about meeting the regulatory requirements</p>	<p>E&S obligations of the client shall be included in the Loan agreement. For activities to be outsourced to contractors, the client shall develop contract documents keeping these conditions in mind so that sub-contractors can be obligated to follow necessary E&S requirements during implementation.</p>
Credit Administration	<p>Prior to the disbursement where EnvRR is "High", Banks/FIs have to verify that the conditions / covenants (e.g. obtaining environmental clearance certificate) is met prior to disbursement. Documented evidence of adhering to the conditions / covenants should be provided.</p>	<p>Obtain ADB's approval for all High risk subprojects (including all Resettlement and Adibasi Development Plans, prior to the issue of Loan Sanction Letter).</p>
Credit Monitoring	<ul style="list-style-type: none"> Banks/FIs should carry out periodic inspections to ensure that proper environmental management is being adopted. EDD checklists should be used as guidance for these inspections as well. Where specific technical expertise is required, Banks/FIs should use external consultants. 	<ul style="list-style-type: none"> The project proponent shall quarterly/ semi-annually/ annually conduct an E&S monitoring report on the compliance with and effectiveness of the EMP/ RP/ ADP/ CAP to ESSMU For High risk projects, ESSMU or hired independent E&S consultants shall visit the site to monitor implementation of EMP/ CAP/ RP/ ADP

Item	Bangladesh Bank ERM (January 2011)	IDCOL ESSF (August 2011)
	<ul style="list-style-type: none"> Evidence of the periodic monitoring should be maintained. Banks/FIs should follow-up with the borrower on the findings of the inspections. Borrower should send written documentation on the action taken and Banks/FIs should maintain record of the same. Banks/FIs should take cognizance of the commitment to follow-up on these findings in taking decisions to deal with the borrower. 	<ul style="list-style-type: none"> ESSMU shall hire independent E&S consultants for conduct of annual audit of IDCOL's ESSF IDCOL shall establish and maintain a database of non-performing loans due to environmental reasons, either in partial or full.
Database on non-performing loans	Banks/FIs should establish and maintain a database of NPLs that are due to environmental reasons, either in partial or full.	IDCOL shall establish and maintain a database of non-performing loans due to environmental reasons, either in partial or full.
Reporting System	Banks/FIs are required to have a reporting system, with a view to intimating management, shareholders, and other stakeholders on the use of these Guidelines. This reporting should be done on an annual basis and should form a part of their Annual Report.	<ul style="list-style-type: none"> The project proponent shall quarterly/ semi-annually/ annually submit an E&S monitoring report on the compliance with and effectiveness of the EMP/ RP/ ADP/ CAP to ESSMU The ESSMU shall prepare an annual E&S performance report. A CAP shall be prepared to address the gaps identified. An evaluation shall be carried out at the end of each project by the ESSMU through independent consultants to understand the final outcome of implementation of the project and E&S safeguards.
D. Technical Manual	Listing of environmental regulations that have to be followed General and 10 sector specific EDD checklists to and a guidance matrix Approval of financing 'High' EnvRR projects is required from Executive Committee/Board of the Bank. Other projects shall follow business as usual.	<p>The environmental regulations of Govt. of Bangladesh have been briefed in the ESSF.</p> <p>ADB Safeguards Policy Statement and required operations is also elaborated in the ESSF</p> <p>The annex of the ESSF comprises of EDD checklist, categorization criteria as well as content of the different reporting required to meet environmental and social requirements.</p>

ANNEX E- 9: SITE VISIT CHECKLIST – ENVIRONMENTAL SAFEGUARDS

A. For Greenfield Projects

A reconnaissance visit should be conducted to observe the:

1. Current landuse of project site
2. Landuse of adjoining areas
3. Topography of the site & average levels of the site
4. Traces of pollution (land, air, water)

An interview should be organized with the local authority to identify significant issues related to the project site as listed below:

5. Distance from designated Protected Areas/ National Parks/ Wildlife Sanctuaries
6. Distance from designated Ecologically Critical Areas (as declared by DoE)
7. Whether the site/adjoining properties has any history of industrial pollution? Any action has been initiated against the present/past land owner due to the pollution?
8. Is the site located near³⁹ any river/ stream/ perennial nallah? Do the local people located downstream from the site depend on this for their domestic & agricultural water needs?
9. Do local fishermen use this stream/ river for their livelihood?
10. Is the site prone to flooding? Has there been any major flooding in the last 10 years?
11. Will the construction of the project change the natural drainage pattern of the site and affect any river / stream/ perennial nallah?
12. Any chances of major severance (approach road, water body, access road to farm lands, school, healthcare, mosque etc.)
13. Does the site have any major trees? Approximately how many of these are to be cut due to project?
14. Is the area known for having rare/endangered/ migratory species?
15. Is the site & surrounding area known for having unique fragile ecosystem?
16. Whether there are any structures of cultural/historical/religious importance near the site or any designated archaeological sites/ remnants?
17. The main economic activities in the nearby town/city/villages that may be altered by the construction and /or the operation of the project?
18. Whether there are any tourist attractions near the site, which may be affected due to this project?

³⁹ Words like 'near', 'close' to and /or 'vicinity' etc. all refer to distance, whether the distance is significant for the project under question is left to the judgment of the person carrying on site visit

B. Brownfield Projects

The checklist of questions for Greenfield projects shall also be applicable for Brownfield projects. In additions the questions listed below shall also be applicable.

19. Nos. & types of structures at site (detailed description & possible age of structure)
20. Adjacent landuse and structures on them
21. What was the previous land use? If industrial landuse, what was the type of industry? What was being manufactured?
22. Does the present landuse involve hazardous waste generation & storage and /or use of petroleum products (barring any natural gas)?
23. Does the past land use involve hazardous waste generation & storage and /or use of petroleum products (barring any natural gas)?
24. Source of utilities to site (gas, electricity, water supply and sewage)?
25. Are there any pits/ponds/ lagoons in the existing structure?
26. Are there any storage tanks (above and/or underground) in the property? if yes, please note the details of their capacity, content and age)
27. Are there any visible stains, marks or corrosions (of spillage) in the existing structure or on the ground/ soil/pavement?
28. Are vegetation in and/or near the project appear to be stressed (discoloration and/or necrosis of leaves, droopiness of the structure or death of plant)?⁴⁰
29. Presence of apparently filled/graded with non natural material or solid waste
30. Is there any presence of friable asbestos?
31. Is there any presence of lead based paints?
32. Are there any transformer oil stored within site that contains Poly-chlorinated Biphenyls (PCB)?
33. Presence of any of the following within or in the close vicinity of the site:
 - a. Borewell
 - b. Injection well / recharge well
 - c. Septic tank
 - d. Sewers / Drains / sumps
 - e. Effluent Treatment Plant (ETP)

(Signature of Investment Officer, IDCOL)

Name:

Date:

(Signature of ESSMU Manager, IDCOL)

Name:

Date:

⁴⁰ Note only when there is sufficient reason to believe that it is not due to inadequate watering

ANNEX E- 10: PRELIMINARY ENVIRONMENTAL APPRAISAL REPORT

Date	
Project Id and Title:	
Project Categorization as per IDCOL's ESSF	
Environmental Category of the Project as per ADB and DOE	
Project Description: (location, components, cost)	
Application of GOB environmental regulations/ Permits required, if any	
Status of clearances and permits: Location Clearance Certificate ToR for EIA Environmental Clearance Certificate Factories Inspectorate license	
Environmental Implications (summary of sector specific checklist, permits required under GOB regulations)	
Positive impacts:	
Recommended E&S covenants by ESSMU for loan documentation	
Attach filled in formats listed below: 1. E&S Risk Rating checklist 2. Sector specific checklist for the project	

<i>(Signature of Investment Officer, IDCOL)</i> Name:	<i>(Signature of ESSMU Manager, IDCOL)</i> Name:
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ANNEX E- 11: SECTOR SPECIFIC CHECKLISTS FOR DETAILED ENVIRONMENTAL REVIEW

This Review may be used for the following purposes

- Assigning of the environmental category for the project
- Finalizing Terms of Reference for Environmental Due Diligence (EDD), Initial Environmental Examination (IEE), Environmental Impact Assessment (EIA), Corrective Action Plan (CAP)
- Reviewing reports of Environmental Due Diligence (EDD), Initial Environmental Examination (IEE), Environmental Impact Assessment (EIA), Corrective Action Plan (CAP)

(a) - Water Supply					
	Date:	Project Id and Title:			
	Process	Checklist	Yes	No	Comments/Information
1.	Water Withdrawal	Have the potential adverse effects of withdrawal of surface water on downstream ecosystems been evaluated?			
		Has appropriate environmental flow assessment been conducted to determine acceptable withdrawal rates?			
		Does the raw water supply have a source of pollution at the upstream like industries, agriculture, and sewage and soil erosion? Are adequate measures taken to treat these?			
		Does the project pose a hazard of land subsidence due to excessive ground water pumping?			
2.	Water Treatment	Does the treated water meet national and sponsors standards?			
		Have adequate measures been taken to reduce the solid waste residual generated through the treatment process?			
		Does the effluent from the treatment process like filter backwash, reject streams from membrane filtration processes, and brine streams from ion exchange or demineralization processes meet country and sponsors standards?			

		Are adequate measures taken to prevent and control hazards during storage and use of hazardous chemicals like chlorine gas?			
		Will the emissions from the treatment process adversely affect the ambient air quality? Have measures been taken to mitigate these impacts?			
		Is the water treatment facility located in designated protected areas? Will the project activities cause any damage to these?			
		Is the water treatment facility located in a densely populated area or an area with heavy developmental activities?			
		Is sufficient buffer maintained around the pumping and treatment plants to alleviate noise and other possible nuisances and project facilities?			
3.	Water Distribution	Does the design of the distribution system include checks and measures to minimize leaks and loss of pressure?			
		Is the water used for flushing the water pipes disposed in accordance to country and sponsors requirements?			
4.	Supporting facilities	Is the increase in water supply supported by adequate sewerage network and sewage treatment facility?			
		Are the impairments associated with transmission lines and access roads adequately addressed?			
5.	Health and safety	Are adequate measures taken to prevent, minimize and mitigate health and safety hazards to workers from management of chlorine used for disinfection and other contaminants?			
		<div style="text-align: center;"> <i>(Signature of Investment Officer, IDCOL)</i> Name: </div>	<div style="text-align: center;"> <i>(Signature of ESSMU Manager, IDCOL)</i> Name: </div>		

(b) - Sewerage and Sanitation					
Date	Project ID and Title				
	Process	Checklist	Yes	No	Comments/Information
1.	On-site systems	Are suitable facilities for storage, handling and treatment of fecal sludge from septic systems provided?			
2.	Sewerage system	Does the design of the sewerage system meet country and sponsors standards?			
		Are adequate measures taken to prevent and minimize leaks from the sewerage system into the ground?			
3.	Sewage Treatment	Is the sewage adequately treated before release into aquatic systems? Do they meet country and sponsors standards?			
		Is the sludge generated from the treatment plant disposed as per country and sponsors specifications?			
		Are adequate measures taken to minimize odor from the treatment facility?			
		Does the effluent from the treatment facility meet country and sponsors standards for disposal into aquatic systems?			
		Are adequate measures taken to prevent and control hazards during storage and use of hazardous chemicals?			
		Are adequate measures taken to prevent overflows and flooding of neighboring properties with raw sewage?			
		Is the water treatment facility located in designated protected areas? Will the project activities cause any damage to these?			
		Is the water treatment facility located in a densely populated area or an area with heavy developmental activities?			
		Is sufficient buffer maintained around the pumping and treatment plants to alleviate noise and other possible nuisances and project facilities?			

4.	Industrial wastewater	Is the wastewater adequately treated before release into sewerage system or aquatic systems? Do the effluents meet country and sponsors standards?			
5.	Occupational Health and Safety	Are adequate measures taken to prevent accidents and injuries to workers while working in open water, trenches, slippery walkways, working at heights, energized circuits, and heavy equipment?			
		Are adequate measures taken to prevent chemical hazards during handling and storage of hazardous chemicals?			
		Are protective equipments and training provided to workers against exposure to bioaerosols, endotoxins?			
	(Signature of Investment Officer, IDCOL) Name:		(Signature of ESSMU Manager, IDCOL) Name:		

(c) Municipal Solid Waste					
	Date:	Project Id and Title:			
	Process	Checklist	Yes	No	Comments/Information
1.	Collection and Transport	Are adequate Litter bins and refuse collection services available to prevent littering and clandestine dumping? Are adequate measures taken to mitigate air emissions like dust, bio-aerosols, odors, and vehicle emissions?			
2.	Waste Receipt, Unloading, Processing, and Storage	Are adequate measures taken to prevent migration of leachate into soil, surface water and groundwater? Are adequate measures taken to prevent, minimize, and control litter? Are adequate measures taken to mitigate noise and vibration from truck traffic, loading equipment (e.g., cranes, wheeled loaders), stationary compactors, balers, grinders, and other treatment and conveyance systems?			
3.	Biological treatment	Are adequate measures taken to control leachate and runoff from waste storage and processing areas? Will the ambient air quality be adversely affected by direct stack emissions, fugitive emissions and emissions from burning of biogas? Do these emissions meet country and sponsors standards for ambient air emissions?			
4.	MSW Incineration Facilities	Are adequate measures taken to prevent combustion of waste during aerobic degradation or anaerobic digestion? Do emissions from incinerators meet country and sponsors standards? Is the ambient air quality adversely affected by emissions from incinerators? What are the measures taken to mitigate these? Are adequate measures taken to prevent, minimize, and control solid waste from incineration?			

		Are ash and other residuals disposed in accordance to country and sponsors specifications?			
		Is the flue gas from incineration treated and disposed in accordance to country and sponsors specifications?			
		Is the ambient noise levels adversely affected by exhaust fans, cooling system and turbine generators? Are measures taken to mitigate these?			
5.	Land filling	Is the landfill site located in accordance to country and sponsors specifications?			
		Are adequate measures taken for collection, treatment and disposal of leachate from landfill?			
		Is the quantity of leachate generated regularly monitored?			
		Is a landfill gas collection system designed and operated in accordance with applicable national requirements and sponsors standards?			
		Are adequate measures taken to prevent, minimize, and control dispersal of litter?			
		Is adequate buffer zone maintained around the landfill to alleviate nuisances?			
6.	Health and Safety	Are adequate measures taken to minimize and mitigate health and safety hazards to workers from toxic gases and hazardous materials on site?			
		Are adequate measures taken to protect the public and neighborhood from odor, smoke from fire, diseases transmitted by flies, rodents, insects and birds etc?			
		<div style="display: flex; justify-content: space-between;"> <div> <i>(Signature of Investment Officer, IDCOL)</i> Name: </div> <div> <i>(Signature of ESSMU Manager, IDCOL)</i> Name: </div> </div>			

(d) - Roads					
	Date:	Project Id and Title:			
	Environmental Component	Check list		Yes	No
1.	Ecology	<p>Does the project lie in proximity to or cut across any designated Protected Area?</p> <p>Does the project or its activities cause disruption of terrestrial and aquatic habitats? If yes which of the following impacts does it cause</p> <ul style="list-style-type: none"> fragmentation of forested habitat; loss of nesting sites of listed rare, threatened, or endangered species and / or high biodiversity / sensitive habitat; disruption of watercourses; creation of barriers to wildlife movement; visual and auditory disturbance due to the presence of machinery, construction workers, and associated equipment <p>Does the project involve regular maintenance of vegetation within road right-of-way causing likelihood of the establishment of invasive species?</p>			
2.	Hydrology	Would the alteration of topography and installation of project components like tunnels adversely affect surface and ground water flows?			
3.	Topography and Geology	Does the project involve activities that have a likelihood of causing slope failures and landslides?			
4.	Storm water	Does the project or its activities cause increase in rate of surface water runoff?			
5.	Waste	<p>Does the project or its activities lead to generation of the following types of waste</p> <ul style="list-style-type: none"> solid waste may be generated during construction and maintenance animal carcasses 			

		<ul style="list-style-type: none"> • vegetation waste from right-of-way maintenance • sediment and sludge from storm water drainage system maintenance (including sediment traps and oil /water separation systems) • paint waste generated from road and bridge maintenance 			
6.	Noise and Vibration	Do the ambient noise levels generated due to vehicle movement meet host country standards?			
		Will the noise and vibration due to blasting and other civil works affect the neighborhood areas?			
7.	Air Quality	Is the ambient air quality within the host country's standards for most of the times?			
		Are air polluting industries located in the vicinity of the project area. Will the project add to the air pollution load in the area?			
		Will the project cause increased local air pollution due to rock crushing, cutting and filling works and chemicals from asphalt processing?			
8.	Water Quality	Would the surface runoff from cut and fill areas cause degradation of water quality in the downstream water bodies?			
		Would the surface runoff from roads contaminate surrounding water sources and / or ground water?			
9.	Public Health	Will the project lead to creation of temporary breeding habitats for mosquito vectors of disease?			
		Are there accident risks associated with increased vehicular traffic, leading to loss of life?			
10.	Occupational Health and Safety	Are adequate measures taken to prevent physical hazards while operating machinery, from moving vehicles and working at elevation on bridges and overpasses			
		Are adequate measures taken to prevent chemical hazards from construction and paving activities, exhaust emissions from heavy equipment and motor vehicles during all construction and maintenance activities?			
		Are adequate measures taken to prevent exposure to extremely			

		high levels of noise from heavy equipment operation and from working in proximity to vehicular traffic?			
		(Signature of Investment Officer, IDCOL) Name:	(Signature of ESSMU Manager, IDCOL) Name:		

(e) - Housing					
	Date:	Project Id and Title:			
	Environmental Component	Checklist	Yes	No	Comments/Information
1.	Ecology	Will the project alter the micro-climate of the area due to building design? does the project require large scale felling of trees? Have measures been planned to transplant these trees?			
2.	Energy	Are passive solar architecture features being used in the building to optimize energy consumption?			
3.	Land	Have adequate measures been planned to prevent land degradation due to dumping of construction waste and excavation spoil? Have designated locations been identified by the local body for dumping of such waste? Is material for construction like sand and aggregate sourced from authorized quarries? Does the project require conversion of landuse from industrial to residential? Has the soil been tested for contamination before commencement of excavation? Will the housing facility impact the existing facilities adjacent to the site? (Such as open spaces, community facilities, details of the existing landuse, disturbance to the local ecology).			
		Have measures been planned for solid waste management from the housing facility after occupation?			
		Have adequate parking spaces been provided also considering the rise in social status?			
4.	Natural drainage	Has the main natural drainage of the site been retained and incorporated in the master planning to prevent future flooding? Have adequate measures been planned to prevent obstruction to natural drainage due to dumping of construction waste and			

		excavation spoil?				
5.	Air Quality	Is the ambient air quality within the host country's standards for most of the times? Are air polluting industries located in the vicinity of the project area. Will the project add to the air pollution load in the area? Will the project cause increased local air pollution especially SPM and RSPM levels due to rock crushing, cutting and filling works and fugitive dust emissions from stockpile, construction camps, haul roads? Is the exhaust from equipments used during construction like diesel generator sets, crushers etc within limits prescribed by State Pollution Control Boards? Would the surface runoff from cut and fill areas cause degradation of water quality in the downstream water bodies and ground water? Does the project or its activities cause increase in rate of surface water runoff? Will the runoff from construction activities, stockpile areas for debris and excavation spoil affect water quality of surrounding water bodies? Have measures been planned for conveyance of sewerage? Has a sewage treatment facility been installed for the housing facility?				
6.	Water Quality	How is the water demand been met for construction? Will the drawal of ground water for construction affect the water availability to existing habitations? Have adequate provisions been made for water supply to the housing facility after occupancy? Is ground water development of the area in critical zone?				
7.	Water Demand	Will the project lead to creation of temporary breeding habitats for mosquito vectors of disease?				
8.		Has the housing facility and amenities provided been planned in accordance to fire hazard regulations? Has a fire fighting system been installed?				
9.	Public Health					
10.						

11.	Occupational Health and Safety	Are adequate measures taken to prevent physical hazards while operating machinery, from working at elevation on scaffolding, from collapse of slabs and such structural members?				
		Are the labour provided clean water for consumption and cooking?				
		Have adequate sanitation facilities been provided at labour camps?				
	(Signature of Investment Officer, IDCOL) Name:		(Signature of ESSMU Manager, IDCOL) Name:			

(f) - Health Care Facilities					
	Date:	Project Id and Title:			
	Environmental Component	Checklist	Yes	No	Comments/Information
1.	Waste Management	<p>Is a health care waste management system (HWMS) established, operated and maintained?</p> <p>Are practices and procedures adopted to minimize waste generation through avoiding products containing hazardous materials?</p> <p>Is waste identified and segregated at the point of generation?</p> <p>Are the waste bags identified and labeled appropriately before removal?</p> <p>Does the waste handling, collection, transport, storage, treatment and disposal meet national and sponsors standards?</p> <p>Are appropriate waste disposals strategies employed for different streams of waste such as infectious waste, sharps, pharmaceutical waste, chemical waste, radioactive waste etc?</p> <p>Are adequate measures taken at treatment and disposal facilities to maintain ambient air quality within standards prescribed by national regulatory authority or sponsors?</p>			
2.	Air quality				
3.	Wastewater	<p>Is the contaminated wastewater from medical wards and operating theaters adequately treated before discharge?</p>			
4.	Occupational Health and safety	<p>Are adequate safety measures adopted to prevent and control exposure to infections and diseases?</p> <p>Are adequate measures taken to prevent, minimize and control fire hazards during storage, handling, and presence of chemicals, pressurized, gases, boards, plastics, and other flammable substrates?</p> <p>Are adequate measures taken to prevent, minimize and control occupational radiation exposure from equipment emitting X-rays and gamma rays (e.g. CT scanners), radiotherapy machines, and</p>			

		equipment for nuclear medicine activities?			
		(Signature of Investment Officer, IDCOL) Name:		(Signature of ESSMU Manager, IDCOL) Name:	

(g) Ports and Harbors					
	Date:	Project Id and Title			
	Environmental Component		Checklist	Yes	No
					Additional information/comments
1.	Biodiversity		Would the construction and maintenance dredging activity, disposal of dredge spoil, construction of piers, wharves, breakwaters along with water-side structures, and erosion disturb important aquatic habitats such as feeding, breeding, calving, and spawning areas?		
			Is the project site located in proximity to designated protected areas? Will the project or its activities affect the protected areas?		
2.	Hazardous Waste		Is the dredged material contaminated by historical deposition and accumulation of hazardous materials, whether due to on-site or off-site activities?		
			Are measures taken to prevent discharge or dumping of hazardous waste to surrounding water areas?		
3.	Wastes		Are wastes from ships and ancillary facilities treated and disposed as per national and sponsors standards?		
			Does the off shore dumping of dredged materials meet national and sponsors specifications?		
4.	Water Quality		Are measures taken to prevent spills and discharge of oils and hazardous materials to surrounding water areas?		
			Do effluents from ships and ancillary facilities comply with national and sponsors standards for ambient water quality and effluent discharge?		
			Do general effluents from port facilities meet national and sponsors discharge standards?		
			Will any of the project components or activities cause oceanographic changes reducing sea water exchange rates?		

		For projects involving reclamation of land, are measures taken to prevent contamination of surface water, sea water and ground water by leachate from reclamation areas?			
5.	Air Quality	Do air pollutants like Sulfur dioxide, nitrogen oxides, soot dust, VOC's emitted from ships, vehicles and ancillary facilities meet country and sponsors emission and ambient air quality standards? Are there any odor causing sources? Are adequate measures taken to prevent odors?			
6.	Noise	Do the noise levels caused due to cargo handling, vehicular traffic, loading / unloading containers and ships meet country and sponsors standards?			
7.	Topography and Geology	Will the installation of port and harbor facilities cause large scale alteration of topographic and geological features in surrounding areas or elimination of natural beaches?			
8.	Occupational Health and Safety	Are adequate measures taken to prevent physical hazards during cargo handling and use of associated machinery and vehicles? Are adequate measures taken to prevent chemical hazards in cases when the workers are in contact with fuels and chemicals? Are confined space entry procedures applied for workers working in cargo handling, ship cargo holds, silos, sewage tanks and water tanks?			
	(Signature of Investment Officer, IDCOL) Name:		(Signature of ESSMU Manager, IDCOL) Name:		

(h) Telecommunications					
	Date:	Project Id and Title:			
	Environmental Component	Checklist	Yes	No	Comments/Information
1.	Biodiversity	Are the towers located along important bird migratory paths?			
		Are the towers and transmission lines in proximity to critical terrestrial and aquatic habitats?			
2.	Aesthetics	Have the number of towers been optimized so as to minimize visual impacts?			
		Are the towers located against landscape views, environmental and community features? Have measures been taken to disguise the towers?			
3.	Air quality	Do the emissions from operation of vehicle fleets, use of backup power generators and use of cooling and fire suppression systems meet country and sponsors standards?			
4.	Occupational health and safety	Are preventive and control measures adopted for ensuring electrical safety and optical fiber safety?			
		Have adequate measures been taken to prevent and minimize electromagnetic field exposure to workers?			
		Have adequate safety measures been incorporated for workers while working at elevated heights and for overhead work?			
		Have confined space entry procedures been adopted for underground work?			
5.	Community and public health	Are measures taken to restrict public access to antennae towers ?			
		Are the towers located away from public access areas?			
		Are the towers located in proximity to airports?			

	(Signature of Investment Officer, IDCOL) Name:	(Signature of ESSMU Manager, IDCOL) Name:
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(g) Thermal Power Plant					
	Date:	Project Id and Title			
	Environmental Component	Checklist	Yes	No	Comments/Information
1.	Air Quality	Is the plant planned and designed to control emissions of sulfur dioxide (SO ₂), nitrogen oxides (NO _x), particulate matter (PM), carbon monoxide (CO), and greenhouse gases, such as carbon dioxide (CO ₂), heavy metals, halide compounds, unburned hydrocarbons and other volatile organic compounds? Does the ambient air quality near the facility meet national and sponsors standards? Are adequate measures taken to avoid, minimize, and offset emissions of carbon dioxide? Are adequate measures taken to conservatively use water for the facility? Is wastewater recycling practiced to reduce the consumption of water?			
2.	Water resource				
3.	Biodiversity	Does the facility intake water from critical aquatic habitats like spawning areas of aquatic species Is the plant located in proximity to a Protected Area?			
4.	Water quality	Does the thermal discharge meet national and sponsors standards for disposal? Is the wastewater from various streams treated before discharge into surface water bodies?			

		Does the discharged wastewater meet national and sponsors standards for disposal?			
5.	Solid waste	Are adequate measures taken to prevent, minimize, and control the volume of solid wastes from thermal power plants?			
		Are the coal combustion wastes like fly ash, bottom ash, and boiler slag recycled in uses such as cement and other concrete products, construction fills etc?			
6.	Hazardous materials	Are adequate measures taken to prevent accidental release and minimize leaks during storage and handling of fuels and chemicals?			
7.	Noise	Is a considerable distanced maintained between the location of the plant and receptors such as residential areas?			
		Have noise control measures been employed for machines and structures?			
		Do the ambient noise levels meet national and sponsors standards?			
8.	Occupational health and safety	Are adequate measures taken to prevention and control measures to workers address heat exposure at thermal power plants?			
		Have adequate measures been taken to prevent and minimize electromagnetic field exposure to workers?			
		Are preventive and control measures adopted for ensuring electrical safety to workers?			
		Have measures been incorporated to prevent, minimize, and control occupational noise exposures?			
		Have confined space entry procedures been adopted for coal ash containers, turbines, condensers, and cooling water towers?			
		Have adequate measures been taken to prevent, minimize and control fire and explosion hazards?			
		Are adequate measures taken to prevent, minimize and control chemicals hazards?			
9.	Community health and safety	Have adequate measures been taken to ensure that the project does not compromise the availability of water for personal hygiene, agriculture, recreation, and other community needs?			

		Are practices adopted to prevent and control of increased traffic-related injuries to the public?		
	(Signature of Investment Officer, IDCOL) Name:		(Signature of ESSMU Manager, IDCOL) Name:	

(h) Electric Power Transmission and Distribution					
	Date:	Project Id and Title			
	Environmental Component	Checklist	Yes	No	Comments/Information
1.	Biodiversity	Are the towers located along important bird migratory paths?			
		Are the towers and transmission lines in proximity to critical terrestrial and aquatic habitats?			
		Have existing transport and utility corridors been used to prevent and minimize vegetation clearing?			
		Is the right-of way vegetation regularly monitored for fire risk?			
2.	Air quality	Do the emissions from operation of vehicle fleets, use of backup power generators and use of cooling and fire suppression systems meet country and sponsors standards?			
3.	Hazardous materials	Are adequate measures adopted for storage and handling of oils / gases (e.g. Polychlorinated Biphenyls [PCB] and sulfur hexafluoride [SF6], pesticides and other chemicals?			
4.	Occupational health and safety	Are adequate Prevention and control measures adopted associated with live power lines?			
		Have adequate measures been adopted to prevent and control occupational exposures to chemicals such as PCB in transformers			

		and pesticides?			
		Have adequate measures been taken to prevent and minimize electromagnetic field exposure to workers?			
		Have adequate safety measures been incorporated for workers while working at elevated heights and for overhead work?			
5.	Community and public health	Have adequate signs and barriers been used to prevent public contact with potentially dangerous equipment?			
		Have adequate measures been adopted to minimize electromagnetic interference to neighboring residential areas?			
		Are the towers located in proximity to airports?			
		Have the number of towers been optimized so as to minimize visual impacts?			
		Are the towers located against landscape views, environmental and community features? Have measures been taken to disguise the towers?			
		Is the right-of-way located away from human receptors to avoid noise from transformers and emission of ozone?			
	(Signature of Investment Officer, IDCOL) Name:		(Signature of ESSMU Manager, IDCOL) Name:		

ANNEX E- 12: SCOPE FOR ANNUAL ENVIRONMENTAL MONITORING REPORT FOR SUBPROJECT COMPANIES

A. Subproject Name and Summary Information

- (i) Location
- (ii) Scale/size/capacity
- (iii) Reporting period covered by this monitoring report (month/year)
- (iv) Specification of subproject stage (design, construction, operation or closure stage)
- (v) Key developments and any major changes in subproject location and design, if any

B. Relevant Environmental Permits or Compliance Certificates

- (i) Issued by government agency(ies) (include name of agency)
- (ii) Issuance dates and duration of validity
- (iii) Permit conditions and renewal requirements
- (iv) Other standards and/or certificates (e.g., ISO 14000 Environmental Management Systems and Pollution Control Standards)

C. Grievance Redress Mechanism

- (i) Date established and description of organizational arrangements
- (ii) Complaints, grievance, or protests received from local communities, recorded dates and organizations involved, actions taken to resolve grievances; any outstanding issues and proposed measures for resolution

D. Occupational and Community Health and Safety

- (i) Training programs carried out
- (ii) Incidents recorded, including date, scale of damage and injury⁴⁰, if any; authorities in charge of investigation/recording, and media or community reactions, if any; action taken to respond to the incident; and any outstanding issues and proposed measures
- (iii) Other health and safety events or out-reach activities

E. Environmental Management Capacity

- (i) Number of staff, qualifications and experience in environmental management
- (ii) Awareness of: (i) environmental issues, (ii) health and safety, (iii) national environmental laws and regulations, and (iv) applicable ADB's environmental safeguard requirements
- (iii) Training programs carried out
- (iv) Assessment of environmental management capacity needs (including planned Capacity building programs)

F. Stakeholder Consultation

- (i) Details of information disclosure and consultations, if any, with affected people, local communities, civil society groups, and other stakeholders
- (ii) Details of approach/methodology on addressing the concerns and issues raised at consultations

G. Compliance with Applicable Environmental Safeguard Requirements as Defined in IDCOL's ESSF

Implementation of EMP (citing changes in the EMP, where warranted) at construction or operation phase, focusing on mitigation measures and monitoring program. Attach copies of monitoring reports. If standards or thresholds are exceeded, specify the corrective actions implemented or to be implemented.

H. Other Information and Feedback

Please list any other information that the Bank should be aware of. This may relate to broader environmental matters, community initiatives within your company, positive media or NGO attention, training activities, management system initiatives or cost savings through process efficiency, environment-friendly processes.

I. Summary of Conclusion and Recommendation

J. Follow-up Actions

Name and Signature

Name:

Date:

Position:

Phone:

Sign:

E-mail

ANNEX E- 13: GUIDELINES FOR CONTENTS OF IEE

I. Outline of an IEE Report

- A. Introduction
- B. Description of the Project
- C. Description of the Environment
- D. Screening of Potential Environmental Impacts and Mitigation Measures
- E. Institutional Requirements and Environmental Monitoring Plan
- F. Public Consultation and Information Disclosure
- G. Findings and Recommendation
- H. Conclusions

A. Introduction

This section usually includes the following:

- (i) purpose of the report, including (a) identification of the project and project proponent; (b) brief description of the nature, size, and location of the project and of its importance to the country; and (c) any other pertinent background information; and
- (ii) Extent of the IEE study: scope of study, magnitude of effort, person or agency performing the study, and acknowledgement.

B. Description of the Project

Furnish sufficient details to give a brief but clear picture of the following (include only applicable items):

- (i) type of project;
- (ii) category of Project;
- (iii) need for project;
- (iii) location (use maps showing general location, specific location, and project site);
- (iv) size or magnitude of operation;
- (v) proposed schedule for implementation; and

(vi) descriptions of the project, including drawings showing project layout, and project components. This information should be of the same type and extent as is included in feasibility reports for proposed projects to give a clear picture of the project and its operations.

C. Description of the Environment

16. Furnish sufficient information to give a brief but clear picture of the existing environmental resources in the area affected by the project, including the following (to the extent applicable):

(i) Physical Resources: (e.g.)

- atmosphere (e.g. air quality and climate)
- topography and soils,
- surface water
- groundwater
- geology/seismology

(ii) Ecological Resources: (e.g.)

- fisheries
- aquatic biology
- wildlife
- forests
- rare or endangered species
- protected areas
- coastal resources

(iii) Economic Development: (e.g.)

- industries
- infrastructure facilities (e.g. water supply, sewerage, flood control)
- transportation (roads, harbors, airports, and navigation)
- land use (e.g. dedicated area uses)
- power sources and transmission
- agricultural development, mineral development, and tourism facilities

(iv) Social and Cultural Resources: (e.g.)

- population and communities (e.g. numbers, locations, composition, employment)
- health facilities
- education facilities
- socio-economic conditions (e.g. community structure, family structure, social well being)
- physical or cultural heritage

- current use of lands and resources for traditional purposes by Indigenous Peoples
- structures or sites that are of historical, archaeological, paleontological, or architectural significance.

D. Screening of Potential Environmental Impacts and Mitigation Measures

Using the checklist of environmental parameters for different sector projects, this section will screen out “no significant impacts” from those with significant adverse impact by reviewing each relevant parameter according to the following factors or operational stages. Mitigation measures, where appropriate, will also be recommended environmental problems due to project location, and related to project design, construction, and operations. Potential environmental enhancement measures and additional considerations will also be covered.

E. Institutional Requirements and Environmental Monitoring Plan

This section should state the impacts to be mitigated, and activities to implement the mitigation measures, including how, when, and where they will be implemented. Institutional arrangements for implementation should be described. The environmental monitoring plan will describe the impacts to be monitored, and when and where monitoring activities will be carried out, and who will carry them out. The environmental management and monitoring costs should also be described.

F. Public Consultation and Information Disclosure

This section will describe the process undertaken to involve the public in project design and recommended measures for continuing public participation; summarize major comments received from beneficiaries, local officials, community leaders, NGOs, and others, and describe how these comments were addressed; list milestones in public involvement such as dates, attendance, and topics of public meetings; list recipients of this document and other project related documents; describe compliance with relevant regulatory requirements for public participation; and summarize other related materials or activities, such as press releases and notifications. This section will provide of summary of information disclosed to date and procedures for future disclosure.

G. Findings and Recommendations

This section will include an evaluation of the screening process and recommendation will be provided whether significant environmental impacts exist needing further detailed study or EIA. If there is no need for further study, the IEE itself, which at times may need to be supplemented by a special study in view of limited but significant impacts, becomes the completed environmental assessment for the project and no follow-up EIA will be needed. If an EIA is needed, then this section will include a brief terms of reference (TOR) for the needed follow-up EIA, including approximate descriptions of work tasks, professional skills required, time required, and estimated costs. The Bank's Environment Guidelines provides a guide for preparing the TOR for different projects.

H. Conclusions

This section will discuss the result of the IEE and justification, if any, of the need for additional study or EIA. If an IEE, or an IEE supplemented by a special study, is sufficient for the project, then the IEE with the recommended institutional and monitoring program becomes the completed EIA.

II. Summary Initial Environmental Examination Report

The summary IEE (SIEE) report is the executive summary of the IEE report. It describes the significant findings of the IEE report, and recommendations to manage them. The SIEE report should be presented clearly and concisely as a stand-alone document for submission to the Board and disclosure to the public.

Box 15.1: Outline of SIEE Report

A. Introduction (1/2 page)

This section will include the purpose of the report, extent of the IEE study and brief description of any special techniques or methods used.

B. Description of the Project (1/2 page)

This section will include the type of and need for the project; and project location, size or magnitude, operation and proposed schedule for implementation.

C. Description of the Environment (2 pages)

This section will include the physical and ecological resources, human and economic development, and quality of life values.

D. Forecasting Environmental Impacts and Mitigation Measures (2-4 pages)

This section will identify "no significant impacts" from those with significant adverse impacts and will discuss the appropriate mitigation measures, where necessary.

E. Institutional Requirements and Environmental Monitoring Plan (1 page)

This section will describe the impacts to be mitigated, and activities to implement the mitigation measures, including how, when, and where they will be implemented. The environmental monitoring plan will describe the impacts to be monitored, and when and where monitoring activities will be carried out, and who will carry them out.

F. Public Consultation and Disclosure

This section will describe the process undertaken to involve the public in project design and recommended measures for continuing public participation; summarize major comments received from beneficiaries, local officials, community leaders, NGOs, and others, and describe how these comments were addressed; list milestones in public involvement such as dates, attendance, and topics of public meetings; list recipients of this document and other project related documents; describe compliance with relevant regulatory requirements for public participation; and summarize other related materials or activities, such as press releases and notifications.

This section will provide of summary of information disclosed to date and procedures for future disclosure.

G. Findings and Recommendations (1-2 pages)

This section will include an evaluation of the screening process, and recommendation will be provided whether significant environmental impacts exist needing further detailed study or EIA. If there is no need for further study, the IEE itself, which at times may need to be supplemented by a special study in view of some small significant impacts, becomes the completed EIA for the project and no follow-up EIA will be needed.

If further additional study is needed, then this section will include a brief terms of reference (TOR) for the needed follow-up EIA, including approximate descriptions of work tasks, professional skills required, time

required, and estimated costs. The Bank's Environment Guidelines provides a guide for preparing the TOR for different projects.

H. Conclusions (1/2 page)

This section will discuss the result of the IEE and justification if any of the need for additional study or EIA. If an IEE or an IEE supplemented by a special study is sufficient for the project, then the IEE with the recommended institutional requirements and monitoring program become the completed EIA.

ANNEX E- 14: GENERIC OUTLINE FOR ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan (EMP) outlines the specific programs proposed by the Project Sponsor that will avoid, mitigate or compensate for anticipated environmental effects of the proposed project. The EMP is designed to provide a complete description of the various measures proposed by the Sponsor to avoid significant effects to the environment and provide the framework for monitoring and managing the effectiveness of the various mitigation and compensation measures. The EMP also provides a summary of the anticipated costs for implementing the measures and monitoring the effectiveness of those measures. The EMP provides an assessment of the potential risks that the mitigation measures are not effective and the responsibilities for remedying the adverse effects. Also, the EMP provides a framework for mitigating un-anticipated environmental effects or unexpected effects of environmental catastrophes, statutory changes, etc. A suggested outline for the EMP follows.

Suggested Outline for Environmental Mitigation and Management Plan:

1. Summary of Impacts

This section should summarize the predicted adverse environmental and social impacts that must be mitigated.

2. Description of Proposed Mitigation Measures

This section should set out clear and achievable targets, and quantitative indicators of the level of mitigation required. Each measure should be briefly described in relation to the impact and conditions under which it is required. These should be referred to designs, development activities, equipment descriptions, and operating procedures and implementation responsibilities.

3. Description of Monitoring Programs and Parameters

This section should outline the specific monitoring protocols, parameters, and expected frequencies. It should identify objectives and specify the type of monitoring required; it also describes environmental performance indicators which provide linkages between impacts and mitigation measures identified in the EIA/IEE report – parameters to be measured, methods to be used, sampling location and frequency of measurements detection limits and definition of thresholds to signal the need for corrective actions.

4. Description of the Responsibilities for Mitigation and Monitoring Requirements

This section should specify the institutional arrangements for implementation – taking account of the local conditions. Responsibilities for mitigation and monitoring shall be defined along with arrangements for information flow, and for coordination between agencies responsible for mitigation. EMP specifies the organizations and individuals that will

be responsible for undertaking the mitigating and monitoring measures, e.g., for enforcement of remedial actions, monitoring, training, and financing. The EMP may propose institutional strengthening activities including establishment of appropriate organization arrangements, and appointment of key staff and consultants.

5. Preliminary Cost Estimates

To ensure that mitigation measures and monitoring are adequately funded, the EMP should contain preliminary cost estimates. This section should also specify that the implementing agency needs to prepare detailed costs of implementation which shall include initial and recurring expenses for implementing all measures defined in the EMP integrated into the total project costs. All costs— including administrative design and consultancy, and operational and maintenance costs— resulting from meeting required standards or modifying project design should be captured. A budgeting plan should be attached to resolve the issues of how those costs are to be met.

6. Project Feedback and Adjustment

The section should outline the procedures and mechanisms that will be used to modify and reshape the project in the light of monitoring results. A feedback mechanism, with proposed timing and procedures, should be included in the EMP to provide for modifications to the Project, and the executing agencies.

ANNEX E- 15: GUIDANCE FOR INCORPORATING EMP INTO CONTRACT DOCUMENTS

Environmental requirements in the pre-bid document

- The project implementing agency or any other Requiring Agency issue the pre-bid documents to shortlist a few (usually six) contractors, based on their expression of interest and capability. Details on environmental requirements are not required at the pre-bid stage. The qualification criteria should include only contractor's with ISO 140001 and OHSAH 18001 certification.

Incorporating EMP in the bid document

- The project implementing agency issues the bid document to the pre-qualified contractors. The bid documents would be based on Central Public Works Department (PWD) contract documents in India. The bid documents contain separate volumes for (i) general conditions of contract (ii) technical specifications (iii) Bill of Quantities (iv) drawings. The parts of the EMP must be included in the relevant locations of the bid documents in the following manner:
 - *Mitigation / enhancement measures and monitoring requirements tables:* the cross-reference to these tables should be included in the "Conditions of particular application" or COPA, which is part of the General Conditions of Contract. As a standard practice, there is overall reference to laws that have to be followed in this section / item. The relevant laws need to be mentioned here. In addition, the adherence to the mitigation / enhancement measures and monitoring requirement tables should be included. The two tables will have to be added as annexes or the EMP (without cost) as a whole must be attached. Either the annexes or the appropriate section in the EMP should be cross-referenced in the description of this item.
 - *Modifications / additions to the technical specifications:* Due to the mitigation / enhancement measures included in the EMP, there may be (i) additions / alterations required to the specifications and (ii) some new specifications. These are to be referred to in the section "Supplementary Specifications" in the Technical Specifications Volume of the bid documents. If MoRTH specifications are being followed for BRTS and such other projects, generally, the MoRTH specifications are taken as followed and are not repeated in the bid documents. The section on "Supplementary Specifications" should also include additional technical specifications related to the EMP or should provide a cross-reference to the specific section of the EMP.
 - *Cost table:* All the items in the EMP cost table relevant to the contractor have to be referred to in the Bill of Quantities table, which is a separate volume of the bid documents. It is to be noted that this table includes various tasks to be done by the contractor under different categories. Against each task the contractor will have to indicate a unit rate while completing the bid documents.
 - *Drawings:* Due to the mitigation / enhancement measures included in the EMP, (a) there may be changes required to the drawings (b) new drawings. All of these are to be

reflected in the bid documents under a separate Drawings Volume. If the drawings are included in the EMP, then a cross-reference should be provided in the Drawings Volume

Developing the EMP to suit the bid /contract documents

- As one of the intentions is to integrate the EMP requirements in to the bid document / contract agreement, the EMP should be developed keeping the following in mind:
 - *Mitigation/enhancement measures table - description*: in this table, the text describing each measure should not include / repeat what is already covered under the technical specification which is being cross-referenced. The text should be short and clear. The description must focus on the “what” and “where” of the mitigation/enhancement measures, as the “how” has already been covered under the specification.
 - *Monitoring requirements table*: there are certain monitoring requirements for the contractor. While developing this table, those that apply to the contractor must be clearly separated
 - *Technical specifications*: Additional specifications for implementation of mitigation measures must be separately listed. These should be included as Annexes in the EMP. They should be adequately detailed to avoid problems (including those of interpretation) at the site
 - *Drawings*: The modifications to the drawings as well as additional drawings must be included as annexes in the EMP. It is important to note that all such drawings should be “execution drawings” detailed as per the requirement of the particular item so as to execute at the site with adequate quality control and workmanship. (Also, it is important to note that the quality of the Bill of Quantities or cost estimate and technical specifications part of the contract document depends on the degree of detailing in the drawings
 - *Cost table*: The items pertaining to the contractor should be clearly separated from those that are to be implemented by the project implementing agency, supervision consultant or any other agency. The contractors’ cost table should also not be attached to the bid / contract documents
 - *Timing for finalising the EMP*: It is best to finalise the EMP before finalising the bid documents. This is required to fully reflect the sections of the EMP relevant to the contractor in the bid documents and to ensure full integration

Other notes

Variation orders: Once the completed bids have been received from prospective contractors, the project implementing agency takes a decision based on the costs and technical merit of the bids. Following the decision, the project implementing agency and the contractor sign the completed bid documents. It becomes the contract agreement thereafter. If issues have been missed in the bid documents it cannot be amended at the time of signing the contract agreement, unless there is a really strong justification for the same. If there is an EMP cost item that is not reflected in the Bill of Quantities of the signed contract agreement, the supervision consultant may issue a variation order. The contractor will quote a rate and the task gets done. The issue of variation orders is a standard practice and is generally used. However, the intent of good contracting practices is to minimise variation orders

ANNEX E- 16: POLICY GUIDELINES REGARDING DISPOSAL OF WARRANTY EXPIRED BATTERIES - RURAL ELECTRIFICATION AND RENEWABLE ENERGY DEVELOPMENT (PV COMPONENT) (RERED) PROJECT

Preamble

The objective of this report is to set-forth policy guidelines for environment friendly and efficient disposal of warranty expired batteries used under IDCOL solar program.

Under Rural Electrification and Renewable Energy Development Project ("REREDP"), IDCOL will finance 50,000 Solar Home Systems ("SHS") through its ten Partner Organizations ("POs") in 5 years time starting from January 2003. As of 31 May 2005, POs have installed 42,699 SHSs in remote rural areas of Bangladesh.

Battery is an integral part of Solar Home System. All the battery manufacturers must meet warranty conditions and technical specifications set by Technical Standards Committee ("TSC") of IDCOL before being eligible for the program. TSC has determined the warranty period to be 5 years and set the technical specifications considering the life of a battery to be five years. It should be mentioned that the trade terms are fixed by mutual understanding between battery manufacturers and POs.

Solar batteries use some non-biodegradable materials such as lead, acid, plastic etc. If the batteries are dumped indiscriminately in the rural areas of Bangladesh, it may create serious environmental hazard. To ensure safe and environment friendly disposal of warranty expired and faulty batteries, all the battery manufacturer will be required to take environmental clearance from the Department of Environment (DOE) for recycling and follow the guidelines outlined in this report. This policy will be equally applicable to all the existing manufacturers as well as the would be manufacturers who wish to join the program in future.

Solar Battery Hardware Description

Industrial batteries are used as a component of SHSs, and in this report, these batteries are termed as solar batteries. The hardware configuration of a typical solar battery is described below:

Positive Tubular Plates: These plates are made of Tubular Gauntlet construction, build up of a number of antimonial lead spines, held in a vertical frame at the top and at the base by a molded plastic bar. The spines are each surrounded by synthetic tubes. The active material is then filled into the cavity by highly sophisticated process evenly and uniformly through the length of the tubes. The electrolyte formation that follows makes a positive plate.

Pasted Negative Plates: The lead-antimony cast negative plates are of pasted construction, designed to match the power and lifetime of the positive plate.

Separator: Micro-porous corrugated separators are used for electrical separation between the plates. They are highly acid resistant, low internal electrical resistance, free from organic elements and maintain the required property throughout the life of the battery.

Container: Moduled Poly Propylene and Styren Acrylonitrile containers are normally used.

Exhaust Plug: The exhaust plugs filter the gas generated inside the battery.

Terminal Post: The terminal post is cast of lead antimonial alloy and a construction that withstands against severe load condition.

Sealing: The joint between the container and the cover shall be sealed acid tight through heat sealing.

Electrolyte: The electrolyte shall be of the battery grade of dilute sulphuric acid and shall be free from arsenic, iron, platinum and other impurities.

Disposal of Batteries

Proper disposal of batteries will require active participation from all the parties such as consumers, POs and the battery manufacturers.

Customer Notification:

POs will notify the consumer before 3 months of the warranty expiration date and advice him/her to replace the battery. The consumer is free to continue using the existing battery after warranty period if he/she wants to do so. However, the consumer will inform the PO's representative when he/she would stop using the battery after the expiration of warranty period. The consumer will submit the battery to the POs and under no circumstances will keep it with them or sell it to any third party. Clauses outlining these conditions should be clearly written in the lease agreement and articulated to the consumers by PO representative at the time of sale. A memorandum of understanding will be signed between the customers and the POs regarding the salvage amount that will be received by the customers during returning of expired batteries.

Collection of Batteries by POs:

PO representatives will make arrangement to collect the batteries from the consumer and store it in the local offices. POs will take necessary measures to ensure safe storage of the batteries. The batteries must be collected within 30 days after the consumers stop using it. The PO representative will ensure that no component/part of the battery is left behind and the acid does not spill out of the battery during transportation. POs will send the warranty expired batteries within 30 days to any of the six central locations, designated by manufacturers, at Dhaka, Chittagong, Jessore, Bogra, Sylhet and Barisal.

Collection of Batteries by Manufacturers:

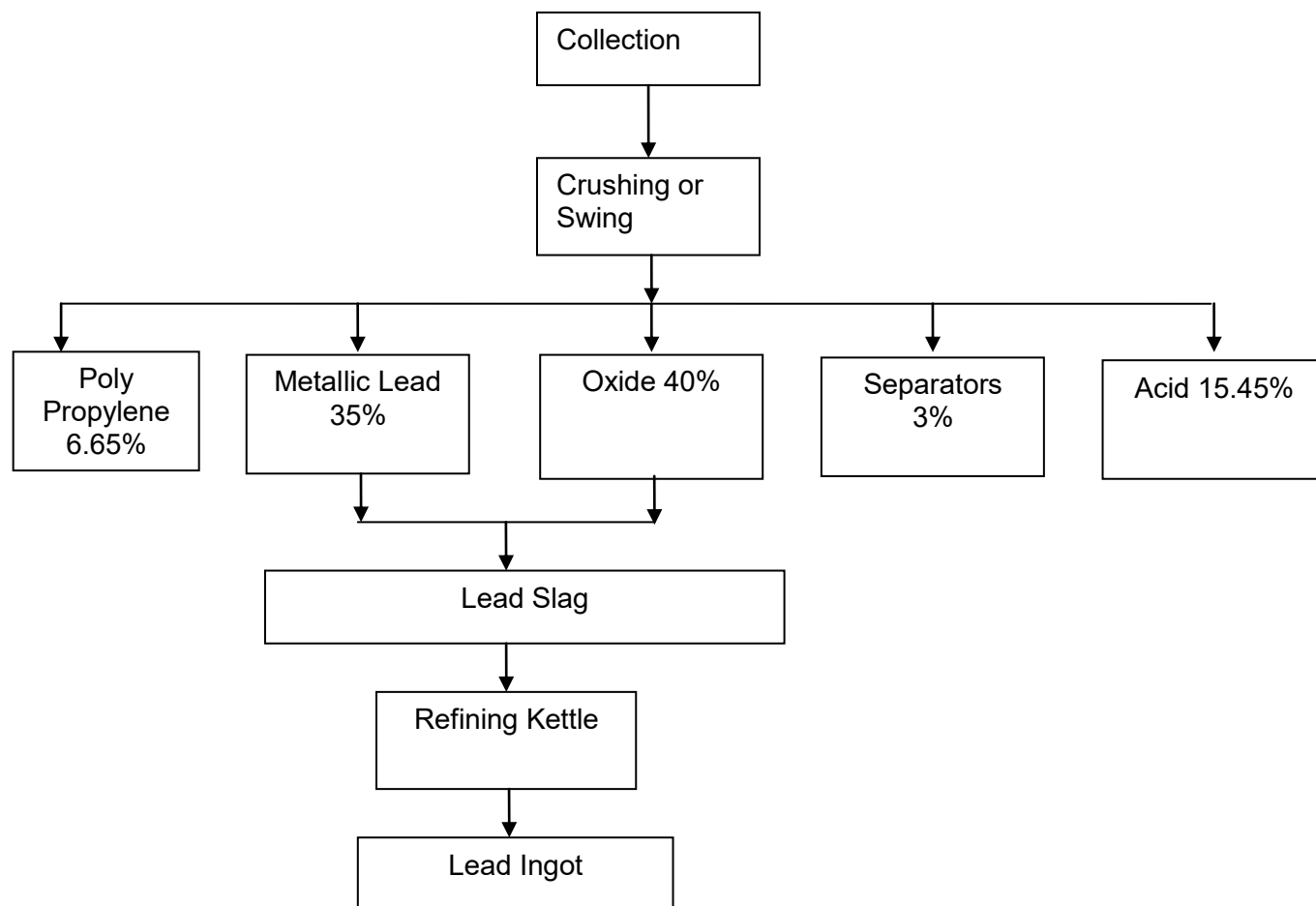
Battery manufacturer will be required to take environmental clearance from the Directorate of Environment for recycling. Battery manufacturers will collect the batteries from the central locations and ensure safe transportation of the batteries to the site where the batteries will be recycled. 80% of Salvage value of expired batteries should be paid to customers by POs during collection time and manufacturer will reimburse this salvage value to the POs at the time of depositing to the central location. 20% of salvage value should be retained by the POs as transportation cost. POs and manufacturers will mutually decide on cost sharing of collection and transportation of expired batteries as per Memorandum of Understanding signed among them.

Recycling Procedure:

Usually an expired battery contains the following environment hazardous ingredients:

- Polypropylene (6.55%)
- Metallic Lead (35%)
- Oxides (40%)
- Separators (3%)
- Acid (15.45%)

A typical battery recycle procedure has shown in the flowchart below.



The used battery will be crushed in a crushing range to separate the different components. After separation, metallic lead and oxide will be put into a rotary furnace to melt them. The outputs of this process are lead and slag. After that the lead will go through the process of refining. The acid will be neutralized by alkaline and will be discharged. The polypropylene will be reused. The slag (2-4% of lead) will be dumped in a designated area ensuring environmental safety.

The outcome of the recycling process will be:

- 96-98% recovery of combined metallic lead and lead oxide fraction
- Recovery of particulate of Polypropylene
- Lead free environment
- Neutralized acid
- Safe dumping of slag

The batteries must be recycled within 60 days after collecting those from central locations.

Disposal Procedure:

Manufacturers will ensure that the batteries are disposed in a particular designated area ensuring environmental safety. Manufacturers will also comply with the government regulations, if any, regarding disposal of any of the components used in the battery.

Conclusion

POs and battery manufacturers together will inform IDCOL after completion of the disposal/recycling procedure. Batteries should be recycled to reuse some of its components, especially metallic lead, to manufacture batteries. If a battery manufacturer does not have recycling facility, they will be allowed to outsource the service but the responsibility of ensuring conformity to the policy will still lie with the battery manufacturer.

This policy will be equally applicable for the batteries that will be replaced within the warranty period due to manufacturing fault or reasons outlined in warranty conditions. Battery manufacturers will buy-back the warranty expired batteries at an agreed upon price, depending on the size, from the POs. POs in turn will pay the same to the respective customer.

ANNEX E- 17: INSPECTION CHECKLIST ON LAB AND CFL FOR COMPONENT C

(LAB – Lead Acetate Batteries, CFL – Compact Fluorescent Lamps)

1. Are you aware of IDCOL's LAB Recycling Guidelines?
2. Did you replace the LAB? How many? When? Provide records of the dispatch
3. Did you send the used LAB for recycling? If yes, provide details of the LAB recycler and dispatch details. If not, reasons?
4. Did you replace the CFL? How many? Provide records of the dispatch
5. Where did you dispose the used CFL? Do you have records of the dispatch / disposal?

SUMMARY REPORT ACROSS THE PROGRAMME TO BE SUBMITTED ON ANNUAL BASIS

1. Any improvements made in the specifications of LAB to reduce adverse environmental impact?
2. Any improvements made in the specifications of CFLs?
3. Average mercury content in the CFL's supplied
4. Total number of LABs financed
5. Total number of LABs that got recycled
6. Total number of CFLs financed
7. Total number of CFLs that got recycled

(Signature of Investment Officer, IDCOL)

Name:

Date:

(Signature of ESSMU Manager, IDCOL)

Name:

Date:

ANNEXES - SOCIAL SAFEGUARDS

ANNEX S- 1: SPECIAL GUIDELINES ON INVOLUNTARY RESETTLEMENT

A. Key Principles of ADB

1. ADB's Policy on Involuntary Resettlement was adopted in 2009 and became operational in January 2010. The Policy requires that **involuntary resettlement** be an integral part of project design, dealt with from the earliest stages of the project cycle.
2. The Policy aims to
 - avoid involuntary resettlement wherever feasible
 - minimize resettlement where population displacement is unavoidable by exploring all viable project options.
 - help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.
3. If, nonetheless, individuals or communities must lose their land, means of livelihood, social support systems, or way of life they should be
 - compensated for lost assets at replacement value and loss of income and livelihood
 - assisted in relocation of persons and communities
 - assisted so that their economic and social future will generally be at least as favorable with the project as without it
 - provided with appropriate land, housing, infrastructure, and other compensation, comparable to the without-project situation
 - fully informed and closely consulted on resettlement and compensation options
4. The Policy further requires that ADB assist the government and other project sponsors to
 - adopt and implement the objectives and principles of the Policy within their own policy, legal, administrative and institutional frameworks
 - build and strengthen developing member countries' (DMC) capacities and national frameworks for resettlement.
5. The Policy requires the government of the borrowing country, or private project sponsor to submit a satisfactory Resettlement Plan with time-bound actions and budgets before loan appraisal. This applies to every project that involves any form of involuntary resettlement, either through

- physical displacement of people from homes, lands, other assets, resources or services, or
- loss of income and livelihood

6. In sum, the following principles of the ADB Involuntary Resettlement Policy apply:

1. Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
2. Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
3. Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.
4. Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
5. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.

6. Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
7. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.
8. Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
9. Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.
10. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
11. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
12. Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

B. Guidelines for Private Purchase from the “National Policy on Involuntary Resettlement and Rehabilitation, 2008”

1. Acquisition of land through the use of eminent domain right of the state will be used in the case of large (i.e., 50 acres or more) public sector projects. In all other cases, direct purchase through negotiation on a willing-buyer and willing-seller basis will be encouraged. Since open market purchases can pose risks to people with no information and experience on negotiated price, a committee consisting of representatives from the EA/project proponent, concerned ministry (if applicable), district administration, union *parishad* chairman, local experts and NGOs shall be formed to assist in land purchasing in a transparent and manner acceptable to the buyer as well as seller. The open market purchase includes right to rehabilitation and other forms of support. [para. 40]

2. Similarly, private sector projects, industries and PPP projects will purchase land on a negotiated price along with provision for resettlement of affected/displaced households, where required. Further, opportunities for benefit-sharing will be explored as a mechanism for restoration of incomes and livelihoods of those affected. In the case of extractive industries such as mining, the Government may acquire land through the use of eminent domain right only under a joint venture agreement with the Government of Bangladesh and the developer. In such instances, all operational aspects/procedures for development-induced displacement will apply. Further, the private investors and/or corporations have to ensure compliance with internationally established norms such as equator principles and IFC performance standards IFC is the private sector wing of the World Bank. It's *Environmental and Social Standards* (2006) policies aim at minimizing project impacts on environment and on affected communities concerning land acquisition and resettlement of affected persons. [para. 41].

C. Paying Replacement Value

(i) Replacing what is lost

3. If individuals or a community must lose all or part of their land, means of livelihood, or social support systems so that a project might proceed, they will be compensated and assisted to replace lost land, housing, infrastructure, resources, income sources, and services in cash or kind so that their economic and social circumstances will be at least restored to the pre-project level. If the residual of an asset taken is not economically viable, compensation and other assistance are provided as for the entire asset. Non-land-based options may be used where land is not the preferred option of the affected people or where land of similar quality and quantity is not available.
4. All compensation is based on the principle of replacement cost. Replacement cost means the method of valuing assets to replace the loss at market value or its nearest equivalent plus any transaction costs such as administrative charges, taxes, registration, and titling costs. Where GOI regulations do not meet this standard, the replacement cost will be supplemented as necessary. Replacement cost is based on market value before the project or dispossession, whichever is higher. In the absence of functioning markets, a compensation structure is required that enables affected people to restore their livelihoods to levels at least equivalent to those maintained at the time of dispossession, displacement, or restricted access. Replacement cost of an affected asset is equivalent to the amount required to replace the asset in its existing condition. The replacement cost of structures should be equal to the cost of constructing/purchasing a new structure, without making any deductions for depreciation.
5. To assist in the determination of how "replacement cost" will be determined, the sub-borrower will finance the formation of compensation committees, with due AP representation, to help the relevant land acquisition agency arrive at the replacement price. If the statutory compensation is lower than the replacement value, it is mandatory to pay the difference as a form of "resettlement assistance" to each AP.

(ii) Land Acquisition Agency

6. Land acquisition for a public purpose or for a company is done by the government authorities as per the Land Acquisition Act. The required payment for such acquisition, known as the 'circle rate,' is decided by the acquiring officer and district collector. Although the 'circle rate' is expected to be the 'market value', often it is not the case. Therefore, what is necessary is to have a compensation committee which reviews the land market in the area and decides in consultation with affected persons the current market value of land which is also the replacement value of such land. If the circle rate is less than the replacement value, the land acquisition agency will also have to pay the difference so that APs get the market value (replacement value) of the land lost. This applies to structures, houses, and commercial buildings.

(iii) Civil Works and Resettlement Assistance

7. The draft National Rehabilitation Policy (2006) recognizes that displacement and other project impacts make it difficult for affected families to continue their livelihood. The policy proposes that a project provide each affected family 'on replacement cost basis' agricultural land or cultivable wasteland, if government land is available for distribution. This benefit would also be available to affected families who have as a consequence of land acquisition been reduced to the status of marginal farmers.
8. In addition to receiving replacement value of all acquired property prior to physical displacement and commencement of physical works of a project, each AP is entitled to economic rehabilitation. A comprehensive economic rehabilitation plan together with allocated funds to implement it should be ready before the project is approved. As economic rehabilitation programs could take long period to complete, the project Sponsor should make necessary arrangements to monitor and evaluate the adequacy and relevance of such programs. As part of the economic rehabilitation programs, local skill development and income generation programs should be examined and priority registration in such programs should be given to APs.

ANNEX S- 2: REVIEW OF POLICY AND LEGAL FRAMEWORK

A. Legislation on Land Acquisition in Bangladesh

1. Whenever it appears to the Government that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, the property is acquired using eminent domain. Land acquisition by eminent domain for infrastructure projects is governed by the *Acquisition and Requisition of Immovable Property Ordinance II (1982)* amended as of 1994. The ordinance supersedes earlier laws including the Land Acquisition Law of 1894 and others that have been in force between 1947 and 1982. In addition to the Ordinance, acquisition of any land or forest area, in Chittagong Hill-Tracts (CHT) districts require consent under the Chittagong Hill-Tracts (Land Acquisition) Regulation (1958), the CHT Regional Council Act 1998 and the Forest Act (1927).
2. Forest reserves, natural water-bodies, archeological sites and historical places are not acquired for development projects. Under the Ordinance the DC is entrusted to acquire land for any public infrastructure project. The requiring body, after getting approval of the administrative ministry, requests DC to undertake acquisition of the required land as per its proposal.

1. Constitution of Bangladesh

3. The fundamental rights under the Constitution indicate the general guidelines for a policy on resettlement/rehabilitation of citizens adversely affected (whatever be the mechanism) due to any activity of the State. Article 40 of the constitution states categorically that every citizen has the right to practice any lawful occupation which implies that anything that impedes such right (a) should not be done or (b) there should be supplementary measures to make good the losses incurred by the citizen. Resettlement and rehabilitation of adversely affected people due to infrastructure projects very clearly falls within this requirement for supplementary measures. However, as per Article 42, sub-clause 2, no law with provision of compensation for acquisition of land can be challenged in a court on the ground that such compensation has been inadequate.

2. The Acquisition and Requisition of Immovable Property Ordinance II (1982)

4. This Ordinance is the basic instrument governing land acquisition in Bangladesh. It is restricted to “legal” owners of property as supported by records of ownership such as deeds, title or agreements to compensating for land as well as any business, structure, trees and crops on the land. The owners of acquired land receive cash compensation at market value with a premium of 50 per cent on the assessed price. The law specifies methods for calculation of market value of property based on recorded prices obtained from relevant Government departments such as Registrar (land), Public Works Department (structures), Department of Forest (trees), Department of Agriculture (crops) and Department of Fisheries (fish stock).

5. The Ministry of Land (MOL) is authorized to deal with land acquisition. The MOL delegates some of its authority to the Commissioner at Divisional level and to the Deputy Commissioner at the District level. The Deputy Commissioners (DCs) are empowered by the MOL to process land acquisition under the Ordinance and pay compensation to the legal owners of the acquired property. Khas (government owned land) lands should be acquired first when a project requires both khas and private land. If a project requires only khas land, the land will be transferred through an inter-ministerial meeting following the acquisition proposal submitted to DC or MOL as the case may be. The DC is empowered to acquire a maximum of 50 standard bigha (16.67 acre) of land without any litigation where the Divisional Commissioner is involved for approval. Acquisition of land more than 50 standard bigha is approved from the central land allocation committee (CLAC) headed by the chief executive of the Government of Bangladesh proposed by the MOL.
6. The land owner needs to establish ownership by producing record-of-rights in order to be eligible for compensation under the law. The record of rights prepared under Section 143 or 144 of the State Acquisition and Tenancy Act 1950 (revised 1994) are not always updated and as a result legal land owners have faced difficulties trying to “prove” ownership. The affected person (AP) has also to produce rent receipt or receipt of land development tax, but this does not assist in some situations as a person is exempted from payment of rent if the area of land is less than 25 *bighas* (3.37 ha).

3. The East Bengal State Acquisition and Tenancy Act, 1950 (Revised 1994)

7. The State Acquisition and Tenancy Act (Sections 86 & 87) also define the ownership and use right of alluvion (*payosti* or reformation *in situ* or original site) and diluvion land (*nadi sikosti*) in the country. In legal terms, eroded lands (sikosti) inside the alluvion-diluvion (AD) line (i.e. including submerged land or underwater land) are considered khas land once declared by demarcating the AD Line.⁴¹ However, the "original" owner(s) can claim the land if it reappears through natural process within 30 years.

B. Draft National Policy on Involuntary Resettlement and Rehabilitation, 2008

8. The Government has recently prepared a draft national policy on involuntary resettlement and rehabilitation, which is consistent with the general policy of the Government that the rights of those displaced by development projects, river erosion and bastee eviction shall be fully respected, and that those displaced shall be treated with dignity and assisted in such a manner that safeguards their welfare and livelihoods irrespective of title, gender, and ethnicity. The proposed Policy on involuntary resettlement recognizes that
 - i. All those displaced involuntarily by either projects or non-project impacts like erosion and eviction must be resettled and rehabilitated in a productive and sustainable manner.
 - ii. People who are resettled must be able, through their own efforts and/or with support as may be required, to restore or improve upon their level of living.

⁴¹ The Assistant Commissioner of Lands (AC Land) in respective districts demarcates the AD Line each year in areas where rivers frequently erode their banks. According to law, if the land classified by an AD Line re-appears within 30 years from the date of erosion, the original owner(s) can claim the land.

- iii. Cash compensation shall be paid in development projects at replacement value to those displaced for land and other assets acquired based on established prior ownership and/or user rights. In addition to cash compensation and resettlement, a benefit sharing will be considered where feasible.
 - iv. Cultural and customary rights of people affected by projects are to be protected, particularly those belonging to adibasis (indigenous people) and ethnic minorities.
 - v. Gender equality and equity in all stages and processes of resettlement and rehabilitation will be fully respected.
 - vi. Affected persons will be informed and consulted in a transparent manner, including formal disclosure of project impacts and mitigation measures.
 - vii. Vulnerable groups, including landless, adibasis, poor women headed households, physically challenged people, elderly and those falling below the nationally defined poverty line (by the government) displaced by project or non-project impacts, are entitled to additional benefits and assistance in a manner that addresses their specific needs related to socio-economic vulnerability.
 - viii. Similarly, affected persons and/or businesses on government leased land will be eligible for compensation for loss of access to land and sites.
9. The draft Policy was submitted to the Government in November 2007. It was approved by the Ministry of Land on 1st January 2008, then reviewed by the Council of Advisors in February 2008 and was placed before the Cabinet later in the year.
10. After cabinet approval, the Government will undertake further work towards legislative changes to safeguard resettlement rights by law. The Policy, when adopted, will be applicable to (i) public sector projects irrespective of sources of funding; (ii) private sector and also projects under public-private partnership (PPP); and (iii) displacement due to river erosion and periodic eviction. Each of the infrastructure agencies will prepare and adopt their own handbook on planning and management of involuntary resettlement.

C. ADB's Involuntary Resettlement Policy

11. The three important elements of the IR policy are (i) compensation to replace lost assets, livelihood, and income; (ii) assistance for relocation, including provision of relocation sites with appropriate facilities and services; and (iii) assistance for rehabilitation to achieve at least the same level of well-being with the project as without it. Some or all of the elements may be present in a project involving IR.

D. Laws and Policies on Adibasi/Ethnic Minority in Bangladesh

1. Constitutional Provision

12. In the context of People's Republic of Bangladesh, the Constitution of Bangladesh does not mention the existence of the cultural and ethnic minorities in Bangladesh. The only protective provision for the ethnic minorities that the policy makers often refer to in the context is Article 28 (4) which states that: Nothing shall prevent the state from making special provision in favour of women and children or for the advancement of any backward section of the citizens. The above provision is an ambiguous one and it does not define who or what constitutes "backward". However, the Government recognizes existence of "tribal peoples" and the need for special attention and in general tribal people are essentially viewed as backward, poor and socio-economically & culturally inferior. Towards this end a special program was initiated in 1996-97 by the Prime Minister's Secretariat aimed at improving the socio-economic situation of the indigenous people of Bangladesh, resident outside the Chittagong Hill Tracts.

2. The Chittagong Hill Tracts Regulation 1900

13. The Chittagong Hill Tracts Regulation, 1900 (Regulation I of 1900) is the regulatory framework for State sovereignty over the traditional rights of the *adibasis* living in the Chittagong Hill Tracts (CHTs) region.⁴² They are governed through Revenue Circle Chiefs⁴³ who are local revenue collectors vide an *amalnama* (authorization by the Government). The Deputy Commissioner and the Commissioner from the Central Government reserve the authority to settle land to the hill-men or non-hill residents or lease out land (non-transferable) for rubber plantation or establishing industries in the CHTs. The regulation provides the right to possessing plough cultivable land up to 5 acres by hill men or non-hill residents. The headman is responsible for the conservation of the resources of his mouza through exercising his authority to (i) prohibit the removal of forest produces by residents of respective mouzas other than for their domestic purposes or by non-residents for any purpose, (ii) exclude any area or areas in his mouzas from the jhuming (shifting cultivation), (iii) prevent new comers from cutting jhums in his mouza, and (iv) prevent a person from grazing cattle in his mouza.

3. The Forest Act, 1927 (Act XVI of 1927)

14. The Act revised as of 2000 deals with Reserved Forest, Village Forest, Protected Forest, control over forests on lands not being the property of Govt. the duty on timber and other forest produce in transit, collection of drift and stranded timber, penalties and procedure, cattle trespass, forest officers, subsidiary rules, miscellaneous. The law applies all over the country, but its application in the CHT region is subject to the extent of its consistency with the CHT Regulation, 1900 and the rules framed there under. According to the CHT Local Govt. Councils Act of 1989, the hill district councils of the CHT also have an advisory prerogative with regard to legislation.

⁴² The CHT districts comprise the reserved forests, the circle of the three Chiefs, viz. the Chakmas Chief, the Bohmong Chief and Mogh Chief and the Maini Valley (rule 35).

⁴³ The Circle Chiefs form an Advisory Council to the Deputy Commissioner (DC) for administration of their respective circles and exercise their authority as Chiefs in the prompt enforcement in the mouzas of their circles of all orders of the DC.

4. The Chittagong Hill –Tracts (Land Acquisition) Regulation, 1958

15. The Chittagong Hill Tracts (CHT) region has been enjoying the status of a special region since British period. Most of the land in CHT belongs to the Government either as reserve forest or as unclassified state forest. The CHT Regulation I of 1900 was the sole legal instrument for the governance and administration of the Hill Tracts. Under the regulation, the DC could resume land even though settlement of the same might have been given earlier. The rule prescribed payment of compensation for various interests as in the case of land acquisition. It was expedient to provide for the acquisition of land in CHT the Government made the Chittagong Hill-Tracts (Land Acquisition) Regulation, 1958. This regulation has provision for payment of compensation for requisitioned property. The compensation may be fixed by agreement or by rules framed on this behalf.

5. The CHT Regional Council Act, 1998

16. The National Parliament of Bangladesh in 24 May 1998 passed the Peace Accord 1997 as the “Chittagong Hill Tracts Regional Council Act, 1998 (Act 12 of 1998). In addition to re-establishing peace, the Accord recognized the ethnic people’s right to land, culture, language, and religion. The Accord set out detailed provisions for strengthening the system of self-governance in the CHT, and redressing the most urgent land-related problems including resolution of land disputes by a commission on land, the transfer of authority for land administration to the hill district councils (HDCs), the cancellation of lease granted to non-residents during the conflict period, the distribution of land to ethnic or “tribal” villages, and the strengthening of customary land rights.
17. Within the meaning of the Act 12 of 1998, no lands, hills and forests within the control and jurisdiction of the HDCs shall be acquired or transferred by the government without consultation and consent of the Regional Council. No law will be executed in the region which is not developed and enacted in consultation and agreement with the CHT adibasis. A ministry on CHT Affairs was established by appointing a Minister from among the adibasis of hill districts. An Advisory Council from the CHT region assists this ministry. However, there is a demand for extending the scope of the CHT Affairs Ministry to include the adibasis in other areas of the country.

6. Adibasi/Ethnic Minority Rights in PRSP 2005

18. Relevant strategic suggestions in the PRSP 2005 to preserve the cultural, social and economic identity and interests of the adibasi/ ethnic populations in and outside CHT are as follows:
- i. Effective recognition of adibasi/ethnic minority communities and their specific needs in all relevant government policies and programs towards improving the socio-economic conditions of these communities.
 - ii. Proper actions for protecting the rights of adibasi/ ethnic minority people, particularly their rights to land and forests.

- iii. Transfer of land administration in CHT to the hill districts councils in accordance with the 'Hill District Councils Acts of 1989'.
- iv. Provide education to adibasi/ ethnic minority people with a curriculum that allows learning in their own language at the primary level.
- v. Strengthen their competence in job markets through affirmative actions at higher levels of education and skill training to promote their inclusion in mainstream economic life.
- vi. Scale-up efforts to provide health care, clean water and sanitation facilities to adibasi/ethnic minority areas in general and to the more disadvantaged groups among them in particular.
- vii. Increase and utilize properly the fund available in the Prime Minister's office for the development of the adibasi/ethnic minority people of the plain lands.
- viii. Provide wider access to electrification and telecommunications for adibasi/ethnic minority communities, particularly in the Hill Tracts.

ANNEX S- 3: ADB SPS SAFEGUARDS REQUIREMENT-2: INVOLUNTARY RESETTLEMENT

A. Introduction

1. ADB experience indicates that involuntary resettlement under development projects, if unmitigated, could give rise to severe economic, social, and environmental risks: production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable, and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost. ADB therefore seeks to avoid involuntary resettlement wherever possible; minimize involuntary resettlement by exploring project and design alternatives; enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and improve the standards of living of the affected poor and other vulnerable groups.

2. Safeguard Requirements 2 outlines the requirements that borrowers/clients are required to meet in delivering involuntary resettlement safeguards to projects supported by the Asian Development Bank (ADB). It discusses the objectives, scope of application, and underscores the requirements for undertaking the social impact assessment and resettlement planning process, preparing social impact assessment reports and resettlement planning documents, exploring negotiated land acquisition, disclosing information and engaging in consultations, establishing a grievance mechanism, and resettlement monitoring and reporting.

B. Objectives

3. The objectives are to avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons⁴⁴ in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups.

C. Scope of Application

4. The requirements apply to all ADB-financed and/or ADB-administered sovereign and non-sovereign projects, and their components regardless of the source of financing, including investment projects funded by a loan; and/or a grant; and/or other means, such as equity and/or guarantees (hereafter broadly referred to as projects). The requirements also cover involuntary resettlement actions conducted by the borrower/client in anticipation of ADB support.

5. The involuntary resettlement requirements apply to full or partial, permanent or temporary physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) resulting from (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. Resettlement is considered involuntary when displaced individuals or communities do not have the right to refuse land

⁴⁴ In the context of involuntary resettlement, displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

acquisition that results in displacement. This occurs in cases where (i) lands are acquired through expropriation based on eminent domain; and (ii) lands are acquired through negotiated settlements, if expropriation process would have resulted upon the failure of negotiation.

6. If potential adverse economic, social, or environmental impacts from project activities other than land acquisition (including involuntary restrictions on land use, or on access to legally designated parks and protected areas) are identified, such as loss of access to assets or resources or restrictions on land use, they will be avoided, or at least minimized, mitigated, or compensated for, through the environmental assessment process. If these impacts are found to be significantly adverse at any stage of the project, the borrower/client will be required to develop and implement a management plan to restore the livelihood of affected persons to at least pre-project level or better.

D. Requirements

1. Compensation, Assistance and Benefits for Displaced Persons

7. Displaced persons in a project area could be of three types: (i) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The involuntary resettlement requirements apply to all three types of displaced persons.

8. The borrower/client will provide adequate and appropriate replacement land and structures or cash compensation at full replacement cost for lost land and structures, adequate compensation for partially damaged structures, and relocation assistance, if applicable, to those persons described in para. 7(i) and 7(ii) prior to their relocation. For those persons described in para. 7(iii), the borrower/client will compensate them for the loss of assets other than land, such as dwellings, and also for other improvements to the land, at full replacement cost. The entitlements of those under para. 7(iii) is given only if they occupied the land or structures in the project area prior to the cutoff date for eligibility for resettlement assistance.

9. Preference will be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. These strategies may include resettlement on public land, or on private land acquired or purchased for resettlement. Whenever replacement land is offered, displaced persons are provided with land for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the land taken. If land is not the preferred option of the displaced persons, or sufficient land is not available at a reasonable price, non-land-based options built around opportunities for employment or self-employment should be provided in addition to cash compensation for land and other assets lost. The lack of land will be demonstrated and documented to the satisfaction of ADB.

10. The rate of compensation for acquired housing, land and other assets will be calculated at full replacement costs. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any. Where market conditions are absent or in a formative stage, the borrower/client will consult with the displaced persons and host populations to obtain adequate information about recent land transactions, land value by types,

land titles, land use, cropping patterns and crop production, availability of land in the project area and region, and other related information. The borrower/client will also collect baseline data on housing, house types, and construction materials. Qualified and experienced experts will undertake the valuation of acquired assets. In applying this method of valuation, depreciation of structures and assets should not be taken into account.

11. In the case of physically displaced persons, the borrower/client will provide (i) relocation assistance, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, and civic infrastructure and community services as required; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) opportunities to derive appropriate development benefits from the project.

12. In the case of economically displaced persons, regardless of whether or not they are physically displaced, the borrower/client will promptly compensate for the loss of income or livelihood sources at full replacement cost. The borrower/client will also provide assistance such as credit facilities, training, and employment opportunities so that they can improve, or at least restore, their income-earning capacity, production levels, and standards of living to predisplacement levels. The borrower/client will also provide opportunities to displaced persons to derive appropriate development benefits from the project. The borrower/client will compensate economically displaced people under paragraph 7(iii) for lost assets such as crops, irrigation infrastructure, and other improvements made to the land (but not for the land) at full replacement cost. In cases where land acquisition affects commercial structures, affected business owners are entitled to (i) the costs of reestablishing commercial activities elsewhere; (ii) the net income lost during the transition period; and (iii) the costs of transferring and reinstalling plant, machinery, or other equipment. Business owners with legal rights or recognized or recognizable claims to land where they carry out commercial activities are entitled to replacement property of equal or greater value or cash compensation at full replacement cost.

13. Involuntary resettlement should be conceived of and executed as part of a development project or program. In this regard, the best strategy is to provide displaced persons with opportunities to share project benefits in addition to providing compensation and resettlement assistance. Such opportunities would help prevent impoverishment among affected persons, and also help meet the ethical demand for development interventions to spread development benefits widely. Therefore borrowers/clients are encouraged to ascertain specific opportunities for engaging affected persons as project beneficiaries and to discuss how to spread such opportunities as widely as possible among affected persons in the resettlement plan.

14. The borrower/client will ensure that no physical displacement or economic displacement will occur until (i) compensation at full replacement cost has been paid to each displaced person for project components or sections that are ready to be constructed; (ii) other entitlements listed in the resettlement plan have been provided to displaced persons; and (iii) a comprehensive income and livelihood rehabilitation program, supported by an adequate budget, is in place to help displaced persons improve, or at least restore, their incomes and livelihoods. While compensation is required to be paid before displacement, full implementation of the resettlement plan might take longer. If project activities restrict land use or access to legally designated parks and protected areas, such restrictions will be imposed in accordance with the timetable outlined in the resettlement plan agreed between the borrower/client and ADB.

2. Social Impact Assessment

15. The borrower/client will conduct socioeconomic survey(s) and a census, with appropriate socioeconomic baseline data to identify all persons who will be displaced by the project and to assess the project's socioeconomic impacts on them. For this purpose, normally a cut-off date will be established by the host government procedures. In the absence of such procedures, the borrower/client will establish a cut-off date for eligibility. Information regarding the cutoff date will be documented and disseminated throughout the project area. The social impact assessment (SIA) report will include (i) identified past, present and future potential social impacts, (ii) an inventory of displaced persons⁴⁵ and their assets,⁴⁶ (iii) an assessment of their income and livelihoods, and (iv) gender-disaggregated information pertaining to the economic and sociocultural conditions of displaced persons. The project's potential social impacts and risks will be assessed against the requirements presented in this document and applicable laws and regulations of the jurisdictions in which the project operates that pertain to involuntary resettlement matters, including host country obligations under international law.

16. As part of the social impact assessment, the borrower/client will identify individuals and groups who may be differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status. Where such individuals and groups are identified, the borrower/client will propose and implement targeted measures so that adverse impacts do not fall disproportionately on them and they are not disadvantaged in relation to sharing the benefits and opportunities resulting from development.

3. Resettlement Planning

17. The borrower/client will prepare a resettlement plan, if the proposed project will have involuntary resettlement impacts. The objective of a resettlement plan is to ensure that livelihoods and standards of living of displaced persons are improved, or at least restored to pre-project (physical and/or economic) levels and that the standards of living of the displaced poor and other vulnerable groups are improved, not merely restored, by providing adequate housing, security of land tenure and steady income and livelihood sources. The resettlement plan will address all relevant requirements specified in Safeguard Requirements 2, and its level of detail and comprehensiveness of the resettlement plan will be commensurate with the significance of involuntary resettlement impacts. An outline of resettlement plan is provided in this annex as Part A.

18. A resettlement plan will be based on the social impact assessment and through meaningful consultation with the affected persons. A resettlement plan will include measures to ensure that the displaced persons are (i) informed about their options and entitlements pertaining to compensation, relocation, and rehabilitation; (ii) consulted on resettlement options and choices; and (iii) provided with resettlement alternatives. During the identification of the impacts of resettlement and resettlement planning, and implementation, the borrower/client will pay adequate attention to gender concerns, including specific measures addressing the need of

⁴⁵ A population record of all displaced persons by their residence based on the census. If a census is not conducted prior to project appraisal and the resettlement plan is based on a sample survey, an updated resettlement plan will be prepared based on a census of displaced persons after the detailed measurement survey has been completed but before any land acquisition for the project.

⁴⁶ The asset inventory is a preliminary record of affected or lost assets at the household, enterprise, or community level.

female headed households, gender-inclusive consultation, information disclosure, and grievance mechanisms, to ensure that both men and women receive adequate and appropriate compensation for their lost property and resettlement assistance, if required, as well as assistance to restore and improve their incomes and living standards.

19. The borrower/client will analyze and summarize national laws and regulations pertaining to land acquisition, compensation payment, and relocation of affected persons in the resettlement plan. The borrower/client will compare and contrast such laws and regulations with ADB's involuntary resettlement policy principles and requirements. If a gap between the two exists, the borrower/client will propose a suitable gap-filling strategy in the resettlement plan in consultation with ADB.

20. All costs of compensation, relocation, and livelihood rehabilitation will be considered project costs. To ensure timely availability of required resources, land acquisition and resettlement costs may be considered for inclusion in ADB financing. Resettlement expenditure is eligible for ADB financing if incurred in compliance with ADB's safeguard policy statement and with ADB-approved resettlement planning documents. If ADB funds are used for resettlement costs, such expenditure items will be clearly reflected in the resettlement plan.

21. The borrower/client will include detailed measures for income restoration and livelihood improvement of displaced persons in the resettlement plan. Income sources and livelihoods affected by project activities will be restored to pre-project levels, and the borrower/client will make every attempt to improve the incomes of displaced persons so that they can benefit from the project. For vulnerable persons and households affected, the resettlement plan will include measures to provide extra assistance so that they can improve their incomes in comparison with pre-project levels. The resettlement plan will specify the income and livelihoods restoration strategy, the institutional arrangements, the monitoring and reporting framework, the budget, and the time-bound implementation schedule.

22. The information contained in a resettlement plan may be tentative until a census of affected persons has been completed. Soon after the completion of engineering designs, the borrower/client will finalize the resettlement plan by completing the census and inventories of loss of assets. At this stage, changes to the resettlement plan take the form of revising the number of displaced persons, the extent of land acquired, the resettlement budget, and the timetable for implementing the resettlement plan. The entitlement matrix of the resettlement plan may be updated at this stage to reflect the relevant changes but the standards set in the original entitlement matrix cannot be lowered when the resettlement plan is revised and finalized. The borrower/client will ensure that the final resettlement plan (i) adequately addresses all involuntary resettlement issues pertaining to the project, (ii) describes specific mitigation measures that will be taken to address the issues, and (iii) ensures the availability of sufficient resources to address the issues satisfactorily.

23. Projects with significant involuntary resettlement impacts will need adequate contingency funds to address involuntary resettlement impacts that are identified during project implementation. The borrower/client will ensure that such funds are readily available. Moreover, the borrower/client will consult with displaced persons identified after the formulation of the final resettlement plan and inform them of their entitlements and relocation options. The borrower/client will prepare a supplementary resettlement plan, or a revised resettlement plan, and will submit it to ADB for review before any contracts are awarded.

24. The borrower/client will use qualified and experienced experts to prepare the social impact assessment and the resettlement plan. For highly complex and sensitive projects,

independent advisory panels of experts not affiliated with the project will be used during project preparation and implementation.

4. Negotiated Land Acquisition

25. Safeguard Requirements 2 does not apply to negotiated settlements, unless expropriation would result upon the failure of negotiations. Negotiated settlements help avoid expropriation and eliminate the need to use governmental authority to remove people forcibly. The borrower/client is encouraged to acquire land and other assets through a negotiated settlement wherever possible, based on meaningful consultation with affected persons, including those without legal title to assets. A negotiated settlement will offer adequate and fair price for land and/or other assets. The borrower/client will ensure that any negotiations with displaced persons openly address the risks of asymmetry of information and bargaining power of the parties involved in such transactions. For this purpose, the borrower/client will engage an independent external party to document the negotiation and settlement processes. The borrower/client will agree with ADB on consultation processes, policies, and laws that are applicable to such transactions; third-party validation; mechanisms for calculating the replacement costs of land and other assets affected; and record-keeping requirements.

5. Information Disclosure

26. The borrower/client will submit the following documents to ADB for disclosure on ADB's website:

- i. a draft resettlement plan and/or resettlement framework endorsed by the borrower/client before project appraisal;
- ii. (ii) the final resettlement plan endorsed by the borrower/client after the census of affected persons has been completed;
- iii. (iii) a new resettlement plan or an updated resettlement plan, and a corrective action plan prepared during project implementation, if any; and
- iv. (iv) the resettlement monitoring reports.

27. The borrower/client will provide relevant resettlement information, including information from the documents in para. 26 in a timely manner, in an accessible place and in a form and language(s) understandable to affected persons and other stakeholders. For illiterate people, suitable other communication methods will be used.

6. Consultation and Participation

28. The borrower/client will conduct meaningful consultation with affected persons, their host communities, and civil society for every project and subproject identified as having involuntary resettlement impacts. Meaningful consultation is a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. Consultation will be carried out in a manner commensurate with the impacts on affected communities. The borrower/client will pay particular attention to the need of disadvantaged or vulnerable groups, especially those below the poverty line, the landless, the elderly, female headed households, women and children, Indigenous Peoples, and those without legal title to land.

7. Grievance Redress Mechanism

29. The borrower/client will establish a mechanism to receive and facilitate the resolution of affected persons' concerns and grievances about physical and economic displacement and other project impacts, paying particular attention to the impacts on vulnerable groups. The grievance redress mechanism should be scaled to the risks and adverse impacts of the project. It should address affected persons' concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to the affected persons at no costs and without retribution. The mechanism should not impede access to the country's judicial or administrative remedies. The borrower/client will inform affected persons about the mechanism.

8. Monitoring and Reporting

30. The borrower/client will monitor and measure the progress of implementation of the resettlement plan. The extent of monitoring activities will be commensurate with the project's risks and impacts. In addition to recording the progress in compensation payment and other resettlement activities, the borrower/client will prepare monitoring reports to ensure that the implementation of the resettlement plan has produced the desired outcomes. For projects with significant involuntary resettlement impacts, the borrower/client will retain qualified and experienced external experts or qualified NGOs to verify the borrower's/client's monitoring information. The external experts engaged by the borrower/client will advise on safeguard compliance issues, and if any significant involuntary resettlement issues are identified, a corrective action plan will be prepared to address such issues. Until such planning documents are formulated, disclosed and approved, the borrower/client will not proceed with implementing the specific project components for which involuntary resettlement impacts are identified.

31. The borrower/client will prepare semiannual monitoring reports that describe the progress of the implementation of resettlement activities and any compliance issues and corrective actions. These reports will closely follow the involuntary resettlement monitoring indicators agreed at the time of resettlement plan approval. The costs of internal and external resettlement monitoring requirements will be included in the project budget.

9. Unanticipated Impacts

32. If unanticipated involuntary resettlement impacts are found during project implementation, the borrower/client will conduct a social impact assessment and update the resettlement plan or formulate a new resettlement plan covering all applicable requirements specified in this document.

10. Special Considerations for Indigenous Peoples

33. The borrower/client will explore to the maximum extent possible alternative project designs to avoid physical relocation of Indigenous Peoples that will result in adverse impacts on their identity, culture, and customary livelihoods. If avoidance is impossible, in consultation with ADB, a combined Indigenous Peoples plan and resettlement plan could be formulated to address both involuntary resettlement and Indigenous Peoples issues. Such a combined plan will also meet all relevant requirements specified under Safeguard Requirements 3.

PART A: OUTLINE OF A RESETTLEMENT PLAN

This outline is part of the Safeguard Requirements 2. A resettlement plan is required for all projects with involuntary resettlement impacts. Its level of detail and comprehensiveness is commensurate with the significance of potential involuntary resettlement impacts and risks. The substantive aspects of the outline will guide the preparation of the resettlement plans, although not necessarily in the order shown.

A. Executive Summary

This section provides a concise statement of project scope, key survey findings, entitlements and recommended actions.

B. Project Description

This section provides a general description of the project, discusses project components that result in land acquisition, involuntary resettlement, or both and identify the project area. It also describes the alternatives considered to avoid or minimize resettlement. Include a table with quantified data and provide a rationale for the final decision.

C. Scope of Land Acquisition and Resettlement

This section:

- i. discusses the project's potential impacts, and includes maps of the areas or zone of impact of project components or activities;
- ii. describes the scope of land acquisition (provide maps) and explains why it is necessary for the main investment project;
- iii. summarizes the key effects in terms of assets acquired and displaced persons; and
- iv. provides details of any common property resources that will be acquired.

D. Socioeconomic Information and Profile

This section outlines the results of the social impact assessment, the census survey, and other studies, with information and/or data disaggregated by gender, vulnerability, and other social groupings, including:

- i. define, identify, and enumerate the people and communities to be affected;
- ii. describe the likely impacts of land and asset acquisition on the people and communities affected taking social, cultural, and economic parameters into account;
- iii. discuss the project's impacts on the poor, indigenous and/or ethnic minorities, and other vulnerable groups; and
- iv. identify gender and resettlement impacts, and the socioeconomic situation, impacts, needs, and priorities of women.

E. Information Disclosure, Consultation, and Participation

This section:

- i. identifies project stakeholders, especially primary stakeholders;
- ii. describes the consultation and participation mechanisms to be used during the different stages of the project cycle;

- iii. describes the activities undertaken to disseminate project and resettlement information during project design and preparation for engaging stakeholders;
- iv. summarizes the results of consultations with affected persons (including host communities), and discusses how concerns raised and recommendations made were addressed in the resettlement plan;
- v. confirms disclosure of the draft resettlement plan to affected persons and includes arrangements to disclose any subsequent plans; and
- vi. describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for consultation with affected persons during project implementation

F. Grievance Redress Mechanisms

This section describes mechanisms to receive and facilitate the resolution of affected persons' concerns and grievances. It explains how the procedures are accessible to affected persons and gender sensitive.

G. Legal Framework

This section:

- i. describes national and local laws and regulations that apply to the project and identify gaps between local laws and ADB's policy requirements; and discuss how any gaps will be addressed.
- ii. describes the legal and policy commitments from the executing agency for all types of displaced persons;
- iii. outlines the principles and methodologies used for determining valuations and compensation rates at replacement cost for assets, incomes, and livelihoods; and set out the compensation and assistance eligibility criteria and how and when compensation and assistance will be provided.
- iv. describes the land acquisition process and prepare a schedule for meeting key
- v. procedural requirements.

H. Entitlements, Assistance and Benefits

This section:

- i. defines displaced persons' entitlements and eligibility, and describes all resettlement assistance measures (includes an entitlement matrix);
- ii. specifies all assistance to vulnerable groups, including women, and other special groups; and.
- iii. outlines opportunities for affected persons to derive appropriate development benefits from the project.

I. Relocation of Housing and Settlements

This section:

- i. describes options for relocating housing and other structures, including replacement housing, replacement cash compensation, and/or self-selection (ensure that gender concerns and support to vulnerable groups are identified);

- ii. describes alternative relocation sites considered; community consultations conducted; and justification for selected sites, including details about location, environmental assessment of sites, and development needs;
- iii. provides timetables for site preparation and transfer;
- iv. describes the legal arrangements to regularize tenure and transfer titles to resettled persons;
- v. outlines measures to assist displaced persons with their transfer and establishment at new sites;
- vi. describes plans to provide civic infrastructure; and
- vii. explains how integration with host populations will be carried out.

J. Income Restoration and Rehabilitation

This section:

- i. identifies livelihood risks and prepare disaggregated tables based on demographic data and livelihood sources;
- ii. describes income restoration programs, including multiple options for restoring all types of livelihoods (examples include project benefit sharing, revenue sharing arrangements, joint stock for equity contributions such as land, discuss sustainability and safety nets);
- iii. outlines measures to provide social safety net through social insurance and/or project special funds;
- iv. describes special measures to support vulnerable groups;
- v. explains gender considerations; and
- vi. describes training programs.

K. Resettlement Budget and Financing Plan

This section:

- i. provides an itemized budget for all resettlement activities, including for the resettlement unit, staff training, monitoring and evaluation, and preparation of resettlement plans during loan implementation.
- ii. describes the flow of funds (the annual resettlement budget should show the budget-scheduled expenditure for key items).
- iii. includes a justification for all assumptions made in calculating compensation rates and other cost estimates (taking into account both physical and cost contingencies), plus replacement costs.
- iv. includes information about the source of funding for the resettlement plan budget.

L. Institutional Arrangements

This section:

- i. describes institutional arrangement responsibilities and mechanisms for carrying out the measures of the resettlement plan;
- ii. includes institutional capacity building program, including technical assistance, if required;
- iii. describes role of NGOs, if involved, and organizations of affected persons in resettlement planning and management; and
- iv. describes how women's groups will be involved in resettlement planning and management,

M. Implementation Schedule

This section includes a detailed, time bound, implementation schedule for all key resettlement and rehabilitation activities. The implementation schedule should cover all aspects of resettlement activities synchronized with the project schedule of civil works construction, and provide land acquisition process and timeline.

N. Monitoring and Reporting

This section describes the mechanisms and benchmarks appropriate to the project for monitoring and evaluating the implementation of the resettlement plan. It specifies arrangements for participation of affected persons in the monitoring process. This section will also describe reporting procedures.

ANNEX S- 4: ADB SPS SAFEGUARDS REQUIREMENT-3: INDIGENOUS PEOPLE

A. Introduction

1. The United Nations Declaration on the Rights of Indigenous Peoples was adopted by the United Nations General Assembly in September 2007. Many countries in Asia and the Pacific have voted in favor of this nonbinding declaration. The Asian Development Bank (ADB) recognizes the rights of Indigenous Peoples to direct the course of their own development. Indigenous Peoples do not automatically benefit from development, which is often planned and implemented by those in the mainstream or dominant population in the countries in which they live. Special efforts are needed to engage Indigenous Peoples in the planning of development programs that affect them, in particular, development programs that are supposedly designed to meet their specific needs and aspirations. Indigenous Peoples are increasingly threatened as development programs infringe into areas that they traditionally own, occupy, use, or view as ancestral domain.

2. Safeguard Requirements 3 outlines the requirements that borrowers/clients are required to meet in delivering Indigenous Peoples safeguards to projects supported by ADB. It discusses the objectives and scope of application, and underscores the requirements pertaining to (i) undertaking the social impact assessment and planning process; (ii) preparing social impact assessment reports and planning documents; (iii) disclosing information and undertaking consultation, including ascertaining consent of affected Indigenous Peoples community to selected project activities; (iv) establishing a grievance mechanism; and (v) monitoring and reporting. This set of policy requirements will safeguard Indigenous Peoples' rights to maintain, sustain, and preserve their cultural identities, practices, and habitats and to ensure that projects affecting them will take the necessary measures to protect these rights.

B. Objectives

3. The objective is to design and implement projects in a way that fosters full respect for Indigenous Peoples' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the Indigenous Peoples themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of projects, and (iii) can participate actively in projects that affect them.

C. Scope of Application

4. The requirements apply to all ADB-financed and/or ADB-administered sovereign and non- sovereign projects, and their components regardless of the source of financing, including investment projects funded by a loan; and/or a grant; and/or other means, such as equity and/or guarantees (hereafter broadly referred to as projects). The requirements also cover actions conducted by the borrower/client in anticipation of ADB projects.

5. Within Asia and the Pacific, individual indigenous communities reflect tremendous diversity in their cultures, histories, and current circumstances. The contexts in which such peoples live are varied and changing and no universally accepted definition of Indigenous Peoples exists. Indigenous Peoples may be referred to in different countries by such terms as indigenous ethnic minorities, indigenous cultural communities, aboriginals, hill tribes, minority

nationalities, scheduled tribes, or tribal groups. Such groups can be considered Indigenous Peoples for operational purposes when they possess the characteristics listed in para. 6.

6. For operational purposes, the term Indigenous Peoples is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees:

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

7. In considering these characteristics, national legislation, customary law, and any international conventions to which the country is a party will be taken into account.

8. A group that has lost collective attachment to geographically distinct habitats or ancestral territories in the project area because of forced severance remains eligible for coverage under this policy.

9. The Indigenous Peoples safeguards are triggered if a project directly or indirectly affects the dignity, human rights, livelihood systems, or culture of Indigenous Peoples or affects the territories or natural or cultural resources that Indigenous Peoples own, use, occupy, or claim as their ancestral domain.

D. General Requirements

1. Consultation and Participation

10. The borrower/client will undertake meaningful consultation with affected Indigenous Peoples to ensure their informed participation in (i) designing, implementing, and monitoring measures to avoid adverse impacts on them or, when avoidance is not possible, to minimize, mitigate, and compensate for such effects; and (ii) tailoring project benefits that accrue to them in a culturally appropriate manner. Meaningful consultation is a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. Consultation will be carried out in a manner commensurate with the impacts on affected communities. The consultation process and its results will be documented and reflected in the Indigenous Peoples plan (IPP).

11. To carry out meaningful consultation with affected Indigenous Peoples, the borrower/client will establish a context-specific strategy for inclusive and participatory consultation, including approaches of identifying appropriate Indigenous Peoples representatives, and consultation methods appropriate to the social and cultural values of the affected Indigenous Peoples communities. The borrower/client will pay special attention to the concerns of indigenous women and youth.

12. When the borrower/client and the affected Indigenous Peoples have serious differences and disagreements in relation to the project, its components, or the IPP, the borrower/ client will undertake good faith negotiations to resolve such differences and disagreements.

2. Social Impact Assessment

13. When screening by ADB confirms likely impacts on Indigenous Peoples, the borrower/client will retain qualified and experienced experts to carry out a full social impact assessment (SIA), and if impacts on Indigenous Peoples are identified, the borrower/client will prepare an IPP in conjunction with the feasibility study. The project's potential social impacts and risks will be assessed against the requirements presented in this document and applicable laws and regulations of the jurisdictions in which the project operates that pertain to Indigenous Peoples matters, including host country obligations under international law.

14. Based on the screening, a field-based SIA will be conducted either as part of the feasibility study or as a stand-alone activity. The SIA will, in a gender-sensitive manner, in consultation with Indigenous Peoples communities, identify the project-affected Indigenous Peoples and the potential impacts of the proposed project on them. The SIA will provide a baseline socioeconomic profile of the indigenous groups in the project area and project impact zone; assess their access to and opportunities to avail themselves of basic social and economic services; assess the short- and long-term, direct and indirect, and positive and negative impacts of the project on each group's social, cultural, and economic status; assess and validate which indigenous groups will trigger the Indigenous Peoples policy principles; and assess the subsequent approaches and resource requirements for addressing the various concerns and issues of projects that affect them.

15. The level of detail and comprehensiveness of the SIA will be proportional to the complexity of the proposed project and commensurate with the nature and scale of the proposed project's potential effects on Indigenous Peoples, whether positive or negative.

3. Indigenous Peoples Planning

16. If the screening and SIA indicate that the proposed project will have impacts, positive and/or negative, on Indigenous Peoples, the borrower/client will prepare an IPP in the context of the SIA and through meaningful consultation with the affected Indigenous Peoples communities. The IPP will set out the measures whereby the borrower/client will ensure (i) that affected Indigenous Peoples receive culturally appropriate social and economic benefits; and (ii) that when potential adverse impacts on Indigenous Peoples are identified, these will be avoided to the maximum extent possible. Where this avoidance is proven to be impossible, based on meaningful consultation with indigenous communities, the IPP will outline measures to minimize, mitigate, and compensate for the adverse impacts. The level of detail and comprehensiveness of IPPs (PART A of this annex) will vary depending on the specific project and the nature of impacts to be addressed. The borrower/client will integrate the elements of the IPP into the project's design.

17. If Indigenous Peoples are the sole or the overwhelming majority of direct project beneficiaries,¹ and when only positive impacts are identified, the elements of an IPP could be included in the overall project design in lieu of preparing a separate IPP. In such cases, the project document will include a summary of about how the project complies with Indigenous Peoples safeguards. In particular, it will explain how the requirements for meaningful consultation are fulfilled and how the accrual of benefits has been integrated into the project design.

18. The borrower/client will update the IPP following the completion of detailed engineering design and detailed measurement surveys. The updated IPP will closely follow the award of contract packages and the implementation time schedules of each project component or subproject. Mitigating measures to avoid adverse impacts on Indigenous Peoples and measures to enhance culturally appropriate development benefits will be adjusted, but the agreed outcomes as specified in the draft IPP will not be lowered or minimized. If new groups of Indigenous Peoples are identified prior to submission of the final IPP to ADB, meaningful consultation will be undertaken with them also.

19. The borrower/client will use qualified and experienced experts to prepare the social impact assessment and IPP. For highly complex and sensitive projects, independent advisory panels of experts not affiliated with the project will be used during project preparation and implementation. Any highly complex and sensitive projects affecting Indigenous Peoples will require an Indigenous Peoples expert on the advisory panel.

4. Information Disclosure

20. The borrower/client will submit to ADB the following documents to disclose on ADB's website:

- i. a draft IPP and/or Indigenous Peoples planning framework, including the social impact assessment, endorsed by the borrower/client, before appraisal;
- ii. the final IPP upon completion;
- iii. a new or updated IPP and a corrective action plan prepared during implementation, if any; and
- iv. the monitoring reports.

21. The borrower/client will provide relevant information, including information from the above documents in a timely manner, in an accessible place and in a form and language(s) understandable to the affected Indigenous Peoples and other stakeholders. If the Indigenous Peoples are illiterate, other appropriate communication methods will be used.

5. Grievance Redress Mechanism

22. The borrower/client will establish a mechanism to receive and facilitate resolution of the affected Indigenous Peoples communities' concerns, complaints, and grievances. The grievance mechanism will be scaled to the impacts of the project. It should address concerns and complaints promptly, using an understandable and transparent process that is culturally appropriate, gender responsive, and accessible to the affected Indigenous Peoples communities at no cost and without retribution. The mechanism should not impede access to the country's judicial or administrative remedies. The affected Indigenous Peoples communities will be appropriately informed about the mechanism.

6. Monitoring and Reporting

23. The borrower/client will monitor and measure the progress of implementation of the IPP. The extent of monitoring activities will be commensurate with the project's risks and impacts. In addition to recording information to track performance, the borrower/client should use dynamic mechanisms, such as inspections and audits, to verify compliance with requirements and progress toward achieving the desired outcomes. For projects with significant adverse impacts on Indigenous Peoples, the borrower/client will retain qualified and experienced external experts or qualified NGOs to verify monitoring information. The external experts engaged by the borrower/client will advise on compliance issues, and if any significant Indigenous Peoples

issues are found, the borrower/client will prepare a corrective action plan or an update to the approved IPP. The borrower/client will implement the corrective actions and follow up on these actions to ensure their effectiveness.

24. The borrower/client will prepare periodic monitoring reports on the progress of IPP implementation, highlighting compliance issues and corrective actions, if any. The borrower/client will submit semiannual monitoring reports. The costs of monitoring requirements will be reflected in project budgets.

7. Unanticipated Impacts

25. If unanticipated impacts on Indigenous Peoples become apparent during project implementation, such as a change in the project's footprint, the borrower/client will carry out a social impact assessment and update the IPP or formulate a new IPP covering all applicable requirements specified in this document.

E. Special Requirements

1. Ancestral Domains and Lands and Related Natural Resources

26. Indigenous Peoples are closely tied to land, forests, water, wildlife, and other natural resources, and therefore special considerations apply if the project affects such ties. In this situation, when carrying out the social impact assessment and preparing the IPP, the borrower/client will pay particular attention to the following:

- i. the customary rights of the Indigenous Peoples, both individual and collective, pertaining to ancestral domains, lands, or territories that they traditionally own or customarily use or occupy, and where access to natural resources is vital to the sustainability of their cultures and livelihood systems;
- ii. the need to protect such ancestral domains, lands, and resources against illegal intrusion or encroachment;
- iii. the cultural and spiritual values that the Indigenous Peoples attribute to such lands and resources;
- iv. the Indigenous Peoples' natural resources management practices and the longterm sustainability of such practices; and
- v. the need to rehabilitate the livelihood systems of Indigenous Peoples who have been evicted from their lands.

27. If the project involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, such as land titling projects, or the acquisition of such lands, the borrower/client will integrate an action plan for the legal recognition of customary rights to such lands, territories, and ancestral domains in the IPP. The action plan is normally carried out before project implementation, but in some cases it may need to be formulated concurrently with the project itself. Such legal recognition may take the following forms:

- i. full legal recognition of existing customary land tenure systems of Indigenous Peoples, or
- ii. conversion of customary usage rights to communal and/or individual ownership rights.

28. If neither option is possible under national law, the IPP will include an action plan for legal recognition of perpetual or long-term renewable custodial or user rights.

29. In addition, for projects with potential impacts on Indigenous Peoples, the borrower/client will ensure their meaningful consultation and facilitate their informed participation on matters affecting them directly, such as proposed mitigation measures, sharing of project benefits and opportunities, and implementation arrangements.

2. Consent of Affected Indigenous Peoples Communities

30. Indigenous Peoples may be particularly vulnerable when project activities include (i) commercial development of the cultural resources and knowledge of Indigenous Peoples; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of Indigenous Peoples. In deciding whether to proceed with a project involving such project activities, the borrower/client will seek the consent of affected Indigenous Peoples communities.

31. For purposes of policy application, consent of affected Indigenous Peoples communities refers to a collective expression by the affected Indigenous Peoples communities, through individuals and/or their recognized representatives, of broad community support for the project activities listed in para. 30. Such broad community support may exist even if some individuals or groups object to the project activities.

32. Where broad community support has been ascertained, the borrower/client will provide documentation that details the process and outcomes of consultations with Indigenous Peoples and Indigenous Peoples' organizations, including (i) the findings of the SIA; (ii) the process of meaningful consultation with the affected Indigenous Peoples communities; (iii) the additional measures, including project design modification, that may be required to address adverse impacts on the Indigenous Peoples and to provide them with culturally appropriate project benefits; (iv) the recommendations for meaningful consultation with and participation by Indigenous Peoples communities during project implementation, monitoring, and evaluation; and (v) the content of any formal agreements reached with Indigenous Peoples communities and/or Indigenous Peoples' organizations. The borrower/client will submit documentation of the engagement process to ADB for review and for ADB's own investigation to assure itself of the existence of broad community support for the project activities. ADB will not finance the project if such support does not exist.

33. When the borrower/client and the affected Indigenous Peoples have major disagreements relating to the design, the IPP, or the implementation of the activities relating to commercial development of the cultural resources, physical displacement of Indigenous Peoples, and/or to commercial development of natural resources, the borrower/client will adopt a process of good faith negotiations for resolving such differences and disagreements

34. Commercial Development of Cultural Resources. If the project involves the commercial development of Indigenous Peoples' cultural resources and knowledge, the borrower/client will ensure that the affected communities are informed of (i) their rights to such resources under statutory and customary law; (ii) the scope and nature of the proposed commercial development and the parties interested or involved in such development; and (iii) the potential effects of such development on Indigenous Peoples' livelihoods, environment, and use of such resources. The IPP will reflect the nature and content of agreements and will include arrangements to ensure that Indigenous Peoples receive an equitable share of the benefits to be derived from such commercial development in a culturally appropriate way.

35. Physical Displacement of Indigenous Peoples. The borrower/client will explore to the

maximum extent possible alternative project designs to avoid physical displacement of Indigenous Peoples that will result in adverse impacts on their identity, culture, and customary livelihoods. In exceptional circumstances, when avoidance is impossible, the borrower/client will prepare an IPP that could be combined with a resettlement plan. Such a combined plan needs to be compatible with the Indigenous Peoples' cultural preferences and will include a land-based resettlement strategy. Where possible, the plan will allow the affected Indigenous Peoples to return to the lands and territories they traditionally owned or customarily used or occupied if the reasons for their relocation cease to exist. The plan should include provisions to rehabilitate such lands, if needed.

36. Commercial Development of Natural Resources. If the project involves the commercial development of natural resources (such as minerals, hydrocarbons, forests, water, or hunting or fishing grounds) within customary lands under use by Indigenous Peoples, the borrower/client will ensure that the affected communities are informed of (i) their rights to such resources under statutory and customary law; (ii) the scope and nature of the proposed commercial development and the parties interested or involved in such development; and (iii) the potential effects of such development on the Indigenous Peoples' livelihoods, environment, and use of such resources. The borrower/client will include in the IPP arrangements to enable the Indigenous Peoples to receive in a culturally appropriate manner an equitable share of the benefits to be derived from such commercial development that is at least equal to or higher than that of any other affected landowners.

3. Indigenous Peoples and Development

37. In furtherance of the objectives to benefit Indigenous Peoples, developing member countries can ask ADB to support them in their development planning and poverty reduction strategies by providing financial assistance for a variety of initiatives, such as the following:

- i. strengthen local legislation to establish legal recognition of the customary or traditional land tenure systems of Indigenous Peoples;
- ii. enhance participation by Indigenous Peoples in the development process by incorporating their perspectives into the design of development programs and poverty reduction strategies and providing them with opportunities to benefit more fully from development programs through policy and legal reforms, capacity building, and meaningful consultations, participation, and empowerment;
- iii. support the development priorities of Indigenous Peoples through programs developed by governments in cooperation with Indigenous Peoples;
- iv. address the gender and intergenerational issues that exist among many Indigenous Peoples, including the special needs of indigenous women, youth, and children;
- v. prepare participatory profiles of Indigenous Peoples to document their culture, demographic structure, gender and intergenerational relations, and social organization, institutions, production systems, religious beliefs, and resource use patterns;
- vi. strengthen the capacity of Indigenous Peoples communities and Indigenous Peoples' organizations to prepare, implement, monitor, and evaluate
- vii. development programs;
- viii. strengthen the capacity of government agencies responsible for providing development services to Indigenous Peoples;
- ix. preserve and respect indigenous knowledge, including strengthening intellectual property rights; and
- x. facilitate partnerships among the government, Indigenous Peoples' organizations, civil society organizations, and the private sector to promote Indigenous Peoples' development programs.

PART A: OUTLINE OF AN INDIGENOUS PEOPLES PLAN

This outline is part of the Safeguard Requirements 3. An Indigenous Peoples plan (IPP) is required for all projects with impacts on Indigenous Peoples. Its level of detail and comprehensiveness is commensurate with the significance of potential impacts on Indigenous Peoples. The substantive aspects of this outline will guide the preparation of IPPs, although not necessarily in the order shown.

A. Executive Summary of the Indigenous Peoples Plan

This section concisely describes the critical facts, significant findings, and recommended actions.

B. Description of the Project

This section provides a general description of the project; discusses project components and activities that may bring impacts on Indigenous Peoples; and identify project area.

C. Social Impact Assessment

This section:

- i. reviews the legal and institutional framework applicable to Indigenous Peoples in project context.
- ii. provides baseline information on the demographic, social, cultural, and political characteristics of the affected Indigenous Peoples communities; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.
- iii. identifies key project stakeholders and elaborate a culturally appropriate and gender-sensitive process for meaningful consultation with Indigenous Peoples at each stage of project preparation and implementation, taking the review and baseline information into account.
- iv. assesses, based on meaningful consultation with the affected Indigenous Peoples communities, the potential adverse and positive effects of the project. Critical to the determination of potential adverse impacts is a gender-sensitive analysis of the relative vulnerability of, and risks to, the affected Indigenous Peoples communities given their particular circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to those available to other social groups in the communities, regions, or national societies in which they live.
- v. includes a gender-sensitive assessment of the affected Indigenous Peoples' perceptions about the project and its impact on their social, economic, and cultural status.
- vi. identifies and recommends, based on meaningful consultation with the affected Indigenous Peoples communities, the measures necessary to avoid adverse effects or, if such measures are not possible, identifies measures to minimize, mitigate, and/or compensate for such effects and to ensure that the Indigenous Peoples receive culturally appropriate benefits under the project

D. Information Disclosure, Consultation and Participation

This section:

- i. describes the information disclosure, consultation and participation process with the affected Indigenous Peoples communities that was carried out during project preparation;
- ii. summarizes their comments on the results of the social impact assessment and identifies concerns raised during consultation and how these have been addressed in project design;
- iii. in the case of project activities requiring broad community support, documents the process and outcome of consultations with affected Indigenous Peoples communities and any agreement resulting from such consultations for the project activities and safeguard measures addressing the impacts of such activities;
- iv. describes consultation and participation mechanisms to be used during implementation to ensure Indigenous Peoples participation during implementation; and
- v. confirms disclosure of the draft and final IPP to the affected Indigenous Peoples Communities.

E. Beneficial Measures

This section specifies the measures to ensure that the Indigenous Peoples receive social and economic benefits that are culturally appropriate, and gender responsive.

F. Mitigative Measures

This section specifies the measures to avoid adverse impacts on Indigenous Peoples; and where the avoidance is impossible, specifies the measures to minimize, mitigate and compensate for identified unavoidable adverse impacts for each affected Indigenous Peoples Groups.

G. Capacity Building

This section provides measures to strengthen the social, legal, and technical capabilities of (a) government institutions to address Indigenous Peoples issues in the project area; and (b) Indigenous Peoples organizations in the project area to enable them to represent the affected Indigenous Peoples more effectively.

H. Grievance Redress Mechanism

This section describes the procedures to redress grievances by affected Indigenous Peoples communities. It also explains how the procedures are accessible to Indigenous Peoples and culturally appropriate and gender sensitive.

I. Monitoring, Reporting and Evaluation

This section describes the mechanisms and benchmarks appropriate to the project for monitoring, and evaluating the implementation of the IPP. It also specifies arrangements for participation of affected Indigenous Peoples in the preparation and validation of monitoring, and Evaluation reports.

J. Institutional Arrangement

This section describes institutional arrangement responsibilities and mechanisms for carrying out the various measures of the IPP. It also describes the process of including relevant local organizations and NGOs in carrying out the measures of the IPP.

K. Budget and Financing

This section provides an itemized budget for all activities described in the IPP.

ANNEX S- 5: GAP ANALYSIS--GOB VS. ADB INVOLUNTARY RESETTLEMENT

1. There are differences between GOB law and the ADB's policy on involuntary resettlement. For projects funded by the ADB, the chart below sets out the additional measures needed to achieve equivalency and which are encompassed in the IDCOL ESSF.

LAR Issues	GOB Provisions	Measures needed to comply with ADB Requirements
A. Assessment of losses and identification of owner(s)		
1. Land and physical property on the acquired area	<p>The DCs conduct joint verification with RBs and categorize land by types, any assets thereon as well as identify the legal owners of physical assets.</p> <p>The joint verification also identifies current tenants of land (structure, tree, crops, perennials) under legally executed agreements.</p>	<p>The RBs with assistance from an independent agency prepare a population record at the earliest stage of project preparation (to be updated at detailed design stage) and social impact assessment (SIA) of identified households to assess the losses and identify owner(s) of acquired assets.</p> <p>The population record recognizes any PAP without legal title to the land they use.</p> <p>In addition, an independent NGO as a member of Joint Verification Team confirms the joint verification data of physical property for implementation adequacies.</p>
2. Livelihood and income opportunities	The DCs conduct joint verification with the RB on site to identify legal owners of business only, if operated on titled land.	Loss of employment, income and livelihood opportunities is identified through census and SIA conducted by independent agency.
3. Non-titled owners (incl. squatters and illegal occupants)	The DCs conduct joint verification with RB and may recognize owners of structures on non-titled land within acquisition proposal but do not recognize illegal occupants on land owned by RBs.	<p>Lack of title does not bar APs from compensation and rehabilitation assistance.</p> <p>Squatters and illegal occupants are recognized as owners of assets such as structures, crops or trees etc (but not for land) through census conducted by an independent NGO/agency and confirmed</p>

LAR Issues	GOB Provisions	Measures needed to comply with ADB Requirements
		at subsequent stages through joint verification by RB and NGO.
4. Social dislocation and vulnerability	No provision for social dislocation as a result of acquisition or vulnerability caused by it.	Social and emotional disturbance due to dislocation from original place of residence and physical, gender aspects, social and economic vulnerability are identified and mitigated.
B. Assessment of compensation and valuation		
5. Land (agricultural, homestead and commercial)	<p>The market value of land is determined from the average value of sold property of similar description in the vicinity during twelve months preceding the date of publication of the notice u/s 3 from the office of the Sub-Register. The award includes an additional 50% as premium on the assessed price due to compulsory acquisition.</p> <p>The value of ponds shall be 2/3 rd of the value of land with digging cost to be determined by PWD.</p> <p>The compensation is shared with lease holders/ tenants as per terms of any lease/tenancy agreement.</p>	<p>A market price appraisal is conducted by independent agency through structured survey and consultation for assessing the current market prices/values for land and assets.</p> <p>A Property Valuation Advisory Team (PVAT) recommends a replacement value, and additional payments, required to meet replacement value made directly to owner(s) of acquired property.</p>
6. Tree, crops, perennials	<p>Price of trees is determined at the rate fixed by the Department of Forest (DOF) and that of crops from the District Marketing Officer of the Department of Agricultural Extension (DAE).</p> <p>One percent (1%) of the value of pond is further added for loss of fishes and income.</p>	<p>The DC price is reviewed and additional value is added to ensure the market price.</p> <p>The PVAT recommends the market price of trees and crops.</p>
7. Structures &	Market price of structure is	The PWD price for different types of

LAR Issues	GOB Provisions	Measures needed to comply with ADB Requirements
other assets	determined at the rate fixed by the Public Works Department (PWD). An additional 50% is added to the rate for compensation.	structures is reviewed and the PVAT also conducts valuation surveys to determine market price so that structures are compensated at replacement cost.
C. Compensation Entitlements		
8. Loss of land, structure, tree, crops, etc.	<p>Assessed market price of land and other immovable property plus a 50% premium for legal owners.</p> <p>Removal cost @ 12.5% of the assessed value of movable assets.</p> <p>Compensation for trees/ crops to legal owners and tenants/sharer-croppers with legal agreements with land owner as per terms of the agreement.</p> <p>The value of ponds @ 2/3 rd of the value of land with digging cost.</p> <p>One percent (1%) of the value of pond for loss of fishes.</p> <p>The DC receives assessed market price of eroded land (khas) without the 50% premium.</p> <p>The DC auctions of the salvaged materials.</p>	<p>Market price, without any depreciation or deductions, of land, structure and tree at replacement cost assessed by PVAT is ensured through additional payment to the owner(s) identified by census by an independent agency.</p> <p>Stamp duty and registration costs are reimbursed for purchase of replacement land.</p> <p>Assistance is given for shifting and reconstruction of structures.</p> <p>An additional shifting allowance is given to the affected female-headed households.</p> <p>Price of trees/crops is paid to share croppers, tenants or sharers, as applicable, either having a lease agreement or not as recognized in census, as per agreed terms.</p> <p>Replacement price to previous owners of eroded land if acquired and char land, if eroded due to the project are given directly to the owners as recommended by the PVAT.</p> <p>PAP are permitted to salvage materials free of cost.</p>
9. Livelihood and income opportunities	Compensation of business on titled land shall be 1/4 of annual income in the case of income tax payee and for non-payee of	Cash assistance for subsistence during relocation and cash assistance for loss of business/farm and rental income.

LAR Issues	GOB Provisions	Measures needed to comply with ADB Requirements
	income tax 1/4 of that year's income or 1/4 of non-taxable income whichever is less. No provision for loss of livelihood, income and employment.	Training, credit support for income-generation and employment in civil works to poor and vulnerable PAP.
10. Informal settlers and squatters (non-titled users and owners)	No provision for loss of structure of informal settlers or squatters other than on khas land.	<p>Replacement price of structure and alternative housing assistance will be provided to the owners identified through census by an independent agency confirmed by RB/ implementing NGO joint verification.</p> <p>Shifting and reconstruction assistance is provided to structure owners;</p> <p>Training and credit are facilitated for income-generation and employment to civil works.</p>
11. Social dislocation and vulnerability	No provisions to cover this.	<p>Options for relocation of the PAP are considered for resettlement;</p> <p>Renovation and extension of community facilities in host areas are also provided where needed.</p> <p>Special assistance is provided to female-headed households and other vulnerable households</p> <p>Income restoration assistance is provided to vulnerable AHs and PAP</p>
D. Disclosure and Participation		
12. Avoid or minimize land acquisition	<p>Land acquisition proposal must contain a certificate of minimum requirement of land from executing agencies for consideration in the DLAC.</p> <p>After serving notice under</p>	<p>Project design, its benefits and land acquisition and resettlement impacts are disclosed to all likely PAP and consultation and information disclosure continue in subsequent project cycles.</p> <p>The likely PAP and their community</p>

LAR Issues	GOB Provisions	Measures needed to comply with ADB Requirements
	<p>Section 3, decisions are taken through resolution of complaints from aggrieved persons likely to be affected.</p> <p>The DC is not bound to consult APs affected by acquisition.</p> <p>Aggrieved persons cannot resist land acquisition if approved by Government.</p>	<p>participate in identification of design alternatives for minimizing land acquisition and resettlement effects, and formulation of resettlement policy consistent with ADB policy.</p>
13.Determining replacement price of land and property	<p>After serving notice under Section 6, DC and RB determine market price of land and other property based on records.</p>	<p>PAP and their community participate in determination of replacement price of land and assets. The price ensures current market value of land and property at replacement cost.</p>
14. Grievance resolution and conflict management	<p>Any litigation on ownership rights is referred to court for settlement, this can take a long time and normally cannot be settled within the project period.</p> <p>Any aggrieved persons upon fixation of compensation under law can produce complaints, if the price seems to be low or inadequate; it can be enhanced by 10% only, if the claim is established through verification.</p>	<p>The likely PAP and their community participate in grievance resolution process.</p> <p>The likely PAP and their community participate in conflict management in the process of implementation of resettlement plans.</p>

ANNEX S- 6: INVOLUNTARY RESETTLEMENT SCREENING

This screening criteria can be used to identify impacts on affected persons. The Screening Criteria for assigning risk given in the main text could be used for identifying overall project risk.

A. ILLUSTRATIVE RESETTLEMENT SCREENING CHECKLIST

Impact	Not Known	Yes	No	Indication of scope (no. of affected people, land area, land use, structures, etc.)
Is the prospective subproject company (SPC) undertaking or likely to undertake any land acquisition?				
Is the SPC acquiring land through willing buyer to willing seller transactions?				
Does the SPC have any agreements or is it likely to enter into agreements with the government for provision of sites or land or rights to land?				
Is any of the land used by the SPC (or likely to be used by the SPC) compulsorily acquired?				
Will any SPC activities involve restrictions of use on adjoining land?				
Are the sites for land acquisition known?				
What is the ownership status of the land?				
Are non-titled persons present?				
Will tenants, lessees, share farmers, or other third party users be affected?				
Will there be loss of housing?				
Will there be loss of crops, trees, and other fixed assets?				

Will there be loss of incomes and livelihoods?				
Will access to facilities, services, or resources be lost?				
Will there be loss of businesses or enterprises?				
Will any social or economic activities be affected by land use related changes?				
If involuntary resettlement impacts are expected:				
Are local laws and regulations compatible with ADB's involuntary resettlement policy?				
Will land be acquired through the government or by the SPC?				
Do SPC agreements with the government (if any) specify involuntary resettlement will be conducted in accordance with international standards?				
Does the government executing agency/SPC have sufficient skilled resources for resettlement planning and implementation?				
Are training and capacity-building required prior to resettlement planning and implementation?				
Any estimate of the likely number of those affected by the project? No () Yes () There are no IR impacts and no APs.				
If yes, approximately how many?				
Any estimate of the severity of impact at the household level?				
If yes, what?				
Any of these people poor, indigenous, or vulnerable to poverty risks? No () Yes ()				
If yes, how?				

DECISION ON CATEGORIZATION

- ☐ 200 or more people will be severely affected (displaced from housing or losing 10% or more of their productive/income-generating assets. Should be categorized as an A project/subproject. A resettlement plan is required.
- ☐ Less than 200 people will be affected. Should be categorized as a B project/subproject. A resettlement plan is required.
- ☐ No person is affected. Should be categorized as a C project/subproject.

Signature:

Screening Checklist Prepared By:

Name and Signature

Position:

Date Prepared:

B. INVOLUNTARY RESETTLEMENT CATEGORIZATION GUIDELINES

1. Subprojects are assigned an involuntary resettlement category depending on the significance of the probable involuntary resettlement impacts.

a. Involuntary Resettlement Category A: Significant

2. "Significant" means 200 or more people will experience major impacts, which are defined as
 - i. being physically displaced from housing, or
 - ii. losing 10% or more of their productive assets (income generating).
3. Category A subprojects require a Resettlement Plan including assessment of social impacts. Some of these subprojects may require a resettlement framework prior to the Resettlement Plan.

b. Involuntary Resettlement Category B: Not Significant

4. Category B subprojects include involuntary resettlement impacts that are not deemed significant and require a Resettlement Plan including assessment of social impacts.. Some of these subprojects may require a resettlement framework prior to the Resettlement Plan.

c. Involuntary Resettlement Category C

5. No involuntary resettlement effects are foreseen in category C subprojects. They do not require a resettlement plan.
6. A subproject's involuntary resettlement category is determined by the category of its most resettlement-sensitive component.

d. Involuntary Resettlement Category FI

7. Category FI includes projects or subproject involves the investment of ADB funds to, or through, a financial intermediary. In the case of financial intermediaries, the term 'project' is used to mean ADB's transactions with the financial intermediary, whereas 'subproject' means business activities financed by the financial intermediary.
8. Where the subprojects financed by the financial intermediary using ADB funds, through either credit-line, other loans, equity, guarantee, or other financing instrument, will likely be classified as category A for any of environment, IR or Adibashi/indigenous peoples impacts, the ESSF incorporates relevant provisions that such subprojects meet ADB's requirements specified in Safeguard Requirements 1-3 in addition to national laws and standards.
9. If a financial intermediary is likely to generate environmental and social impacts, the project team undertakes an in-depth assessment of its current ESSF, and identifies areas where improvements are needed.

ANNEX S- 7: SCREENING OF SUBPROJECT EFFECTS ON ADIBASIS

This screening criteria can be used to identify impacts on Adibasis. The Screening Criteria for assigning risk given in the main text could be used for identifying overall project risk.

A. Effects on Adibasis Screening Checklist

Impact on Adibasis	Not Known	Yes	No	Remarks or identified problems, if any
Are there tribal groups present in project locations?				
Do they maintain distinctive customs or economic activities that may make them vulnerable to hardship?				
Will the subproject restrict their economic and social activity and make them particularly vulnerable in the context of project?				
Will the subproject change their socioeconomic and cultural integrity? ⁴⁷				
Will the subproject disrupt their community life?				
Will the subproject positively affect their health, education, livelihood, or social security status?				
Will the subproject negatively affect their health, education, livelihood, or social security status?				
Will the subproject alter or undermine the recognition of their knowledge, preclude customary behaviors, or undermine customary institutions?				

⁴⁷ That is, undermine their production systems and the maintenance and transmission of their cultural patterns.

In case there is no disruption of tribal community life as a whole, will there be loss of housing, loss of land, crops, trees, and other fixed assets owned or controlled by individual tribal households?				
--	--	--	--	--

Decision on Categorization

Based on the information above, it is recommended that:

- ☐ Should be categorized as an A project, a Adibashi Development Plan (ADP) or an Indigenous Peoples Plan (IPP) is required
- ☐ Should be categorized as a B project, a specific action favourable to Adibashi or indigenous peoples/ethnic minority is required and addressed through a Resettlement Action Plan, a Gender Action Plan or a general Community Participatory Plan
- ☐ Should be categorized as a C project, no IPP or specific action required

Signature:

Screening Checklist Prepared By:

Name and Signature

Position:

Date Prepared:

b. CATEGORIZATION OF SUBPROJECT Effects ON ADIBASIS

a) Summary of Categorization

1. Categorization of subproject effects on adibasis depends on the nature and magnitude of the subproject's potential positive and negative impacts on such peoples, which may result from its location, the type and scale of the project, and sensitivity of adibasi issues.

Category A - Adibasi Development Plan required

Category B - Adibasi Development Plan required

Category C - No impact

b) Definition of Categories

Category A

2. A proposed subproject is classified as Category A if it is likely to have significant positive or negative impacts on adibasis. A Full Adibasi Development Plan (ADP) is required for Category A subprojects to avoid negative effects and ensure appropriate benefits. The circumstances where an intervention is considered having a significant impact on adibasis include:
 - i. positive or negative effects on their customary rights of use and access to land and natural resources;
 - ii. positive or negative effects on their socioeconomic and cultural integrity;
 - iii. positive or negative effect on their health, education, livelihood, and social security status;
 - iv. impacts that may alter or undermine indigenous knowledge, preclude customary behaviors or undermine customary institutions;
 - v. subproject will be located in, or pass through, areas of significant adibasi settlement and/or use; and
 - vi. subproject proposes to specifically target adibasis in one or more of its main activities; or is anticipated to have significant negative effects on adibasis.
3. In terms of community impacts, the impact area may be considerably broader than the immediate area physically affected by a subproject. Category A applies to the subproject and its impact area where adibasis maintain distinctive customs or economic activities that may make them particularly vulnerable to hardship. It also applies to subprojects that are likely to adversely affect or disrupt community life. A Full ADP should include specific deliverables, budget and schedules.

Category B

4. A proposed subproject is classified as Category B if it will have limited impacts on adibasis or when there is a risk that the subproject may not bring the intended benefits to the affected adibasis within a specific plan. Specific action in favor of adibasis as spelled out in a Short ADP is required in order to ensure appropriate benefits and mitigate adverse impact, which action is not necessarily within the framework of a Full Adibasi Development Plan. The Short ADP also requires specific deliverables, budget and schedules; it can, however, be embedded in a Resettlement Action Plan.

Category C

5. A subproject is classified as Category C if it is likely to have very minimal or no adverse or significant impact on adibasis. For this category of subproject, no ADP is required although subproject effects on adibasis still need to be properly reviewed.

Category FI

6. Category FI includes projects or subproject involves the investment of ADB funds to, or through, a financial intermediary. In the case of financial intermediaries, the term 'project' is used to mean ADB's transactions with the financial intermediary, whereas 'subproject' means business activities financed by the financial intermediary.
7. Where the subprojects financed by the financial intermediary using ADB funds, through either credit-line, other loans, equity, guarantee, or other financing instrument, will likely be classified as category A for any of environment, IR or Adibashi/indigenous peoples impacts, the ESSF incorporates relevant provisions that such subprojects meet ADB's requirements specified in Safeguard Requirements 1-3 in addition to national laws and standards.
8. If a financial intermediary is likely to generate environmental and social impacts, the project team undertakes an in-depth assessment of its current ESSF, and identifies areas where improvements are needed.

ANNEX S- 8: RESETTLEMENT ENTITLEMENTS MATRIX

This Matrix recognizes potential types of losses that are envisioned under IDCOL projects. Types of losses and application of the policy and entitlements are derived from the guidelines discussed elsewhere in the ESSF. In brief, this compensation matrix covers all types of losses at replacement cost. In addition, resettlement assistance for lost income and livelihoods for titleholder and non-titleholder, and those identified as vulnerable groups, are given below as well as referred to elsewhere in this framework.

This matrix is guidance for project-specific entitlements which will vary based on the type of project and the type of losses incurred.

“Vulnerable Groups” are defined as project affected people living below the poverty line, adibasis, women-headed households, the elderly and the disabled.

Type of Loss/ Category of Entitlement	Application	Definition of APs	Entitlement	Result of Measures
1. Loss of agricultural, commercial and homestead land	Land acquired	Legal owner(s) of land	<ul style="list-style-type: none"> • Compensation as per 1982 Ordinance, if applicable • Replacement value of land at fair market price to be determined by PVAT • Refund of registration cost incurred for replacement land purchase at the replacement value determined by a legally constituted body (PVAT) 	Replacement of land or the value to the APs
2. Loss of residential /commercial structure	Structure	Legal Titleholder Owner(s) of structures	<ul style="list-style-type: none"> • Replacement value of structure without depreciation • Transfer grant • Reconstruction 	Reconstruction of structure at a new site

Type of Loss/ Category of Entitlement	Application	Definition of APs	Entitlement	Result of Measures
			<p>grant</p> <ul style="list-style-type: none"> • Salvaged materials free of cost • For PAP unable to buy homestead land, a plot at resettlement site to be provided by project sponsor. 	
3. Loss of residential /commercial structure	Structure	Informal settlers / squatters / non-tilted APs identified by the SES losing residential and commercial structure	<ul style="list-style-type: none"> • Replacement value of structure without depreciation • Transfer grant • Reconstruction grant • Salvaged materials free of cost • For APs unable to buy homestead land, a plot at resettlement site to be provided by project sponsor. 	Reconstruction of structure at a new site
4. Loss of residential / commercial structure by renters	Structure	Renters of Residential and commercial structures	<ul style="list-style-type: none"> • Rental assistance for 6 months at the rate paid by AP 	Alternate rental arrangement.
5. Loss of trees, crops, perennials	Standing crops, trees	Legal owners of land	<ul style="list-style-type: none"> • Compensation at the rate determined by the Forest Department and the Agriculture Extension Department • Salvaged trees, crops, 	Compensation for standing crops and trees

Type of Loss/ Category of Entitlement	Application	Definition of APs	Entitlement	Result of Measures
			perennials free of cost	
6. Loss of access by tenants / sharecroppers to agricultural land for crop production and commercial land	Agricultural and commercial plots	Tenants / licensees of the land as identified by the Social Impact Assessment report (SIA)	<ul style="list-style-type: none"> • Crop compensation to titled sharecropper and lessees. • Cash grant for non-titled sharecroppers and licensees of agricultural land and • Cash grant for non-titled commercial lessees. 	Compensation for loss of access to farm land
7. Loss of income and work days due to displacement	Households identified	Head of households / employees / wage earners identified by the SIA	<ul style="list-style-type: none"> • Grant per poor household as subsistence allowance for lost work days for households • Allowance for loss of business by affected traders • Transitional income support allowances to employees, daily wage earners for a fixed period for the transitional period 	Subsistence and income in post-displaced period
8. Special assistance to poor and vulnerable	Vulnerable households (both titled and non-titled)	Poor and vulnerable households including informal settler, squatters / non-titled APs identified by SIA	<ul style="list-style-type: none"> • Additional cash grants for affected women headed households and other vulnerable households. • Training and cash grant under income generation program (IGP); 	Poverty reduction measures and development

Type of Loss/ Category of Entitlement	Application	Definition of APs	Entitlement	Result of Measures
			<ul style="list-style-type: none"> • Employment in the project construction work, if available 	
9. Displacement of Community structure	Community structure, if removed for project interest	Community representative as identified by the SIA	<ul style="list-style-type: none"> • Replacement value of structure at market price • Transfer grant for relocation of the structure • Dismantling and reconstruction cash assistance as per assessed value by PVAT 	Restoration of community structure for common benefits
10. Access to community/civic facilities at relocated sites	All households if they relocate in group	Households identified by SES/Joint Verification	<ul style="list-style-type: none"> • Community infrastructure facilities like access roads, plantation, tube-wells and sanitary latrines and drainage. 	Development of cluster settlements assisted by EA; people in new areas have access to replacement civic infrastructure
11. Temporary impact during construction	Land required for burrows and other construction purposes	Community / Individual	<ul style="list-style-type: none"> • The contractor shall bear the cost of any impact on structure or land due to movement of machinery and in connection with collection and transportation of burrow materials. • All temporary use of lands to be through written approval of the landowner and 	Land returned and restored to original preferably better standard.

Type of Loss/ Category of Entitlement	Application	Definition of APs	Entitlement	Result of Measures
			contractor. • Land will be returned to owner rehabilitated to original preferably better standard.	
12. Unforeseen impact	Any impact recognized at the detailed design stage	Unforeseen impacts will be assessed on case by case basis and suitable compensation/ assistance will be paid as deemed fit by the Executive Agency.		

Notes on Valuation of Affected Assets

1. To ensure that the Project Affected People (PAP) can replace the lost property, the transacted price, recorded price, existing price and expected prices are considered in determining a Maximum Allowable Replacement Value (MARV). For Valuation of affected properties, a legal body called Property Valuation Advisory Team (PVAT), with representatives from acquiring body (AB), requiring body (RB), and NGO will be formed by the appropriate Ministry.
2. PVAT will have representatives from the RB as the chairman, representative from the implementing NGO as the member secretary and representatives from the DCs. A land and property valuation survey by the NGO, based on the price recorded from formal and informal sources, will determine the MARV of land and structure and be recommended by PVAT to the Ministry. RB will pay the difference between MARV and Cash Compensation under Law (CCL). Land purchase can't be a bar in paying the difference. Stamp duty and land registration fees will be paid to the AP, if replacement land purchase is confirmed. Further, the implementing agency/NGO will assist in all possible ways, including finding land for purchasing replacement land, etc. In the event that land is acquired under terms of the 1982 Ordinance, after issuance of notice under section 3 by the DC and census cut-off date for nontitleholders or a similar designated date declared by RB, joint verification of the acquired properties will be carried-out by the requiring and acquiring bodies. The Joint Verification Team records the quality and quantity of the affected properties and identifies the structure owner on the spot. A representative of the Implementing NGO will also be present in the JVT as a member of the team. The NGO will computerize the Joint Verification data to be used for payment of compensation/resettlement benefits.

3. After payment of compensation, APs would be allowed to take away the materials salvaged from their dismantled houses and shops and no charges will be levied upon them for the same. A notice to that effect will be issued intimating that APs can take away the materials. Payment of compensation will be made at least 6 months prior to the actual possession of the acquired lands and removal of the structures from the areas purchased so that they have sufficient time to dismantle and remove all salvageable material for rebuilding of houses and re-establishment of businesses. RB will provide satisfactory evidences of payment of compensation and assistances prior to displacement and possession of assets or 6 months prior to commencement of civil works.

ANNEX S- 9: FORMAT FOR MONITORING IMPLEMENTATION OF RP/ADP

I. Format for Monthly Progress Report

1. Work Done by Implementation Agency in Month of.....

Date/Venue (if required)	Work items/ Activities	Activity Details
		[Write 2-3 lines of what has been done for the respective work items. Explanations can be annexed].

2. Status of RAP implementation

Task	Status
I. Verification of PAPs	(give the status in terms of the following in a tabular format) <ul style="list-style-type: none"> village name, start and end date of verification for every village, number of PAFs verification completed versus number of PAFs in the village name of the investigator
II. Issue of I.D. cards	(give the status in terms of the following in a tabular format) <ul style="list-style-type: none"> Name of PAF/PAP I.D. card number
III. Income Generation Scheme (IGS) Implementation	
i. Building awareness on IGS schemes	(give the status in terms of the following in a tabular format) <ul style="list-style-type: none"> Awareness drives Date of conduct
ii. Holding consultation for choice of IGS	(give the status in terms of the following in a tabular format) <ul style="list-style-type: none"> Name of PAF

Task	Status
	<ul style="list-style-type: none"> IGS option finalized/ shortlisted Date of consultation
iii. Implementation of IGS options	<p>(give the status in terms of the following in a tabular format)</p> <ul style="list-style-type: none"> IGS Option Name of the PAF/PAP Details like type of IGS, numbers etc Date of disbursement Provisions made to ensure sustainability of IGS disbursed Signed acceptance of the PAP/PAF
IV. Disbursement of Compensation	<p>(give the status in terms of the following in a tabular format)</p> <ul style="list-style-type: none"> Name of PAF/PAP Compensation as per RAP Cash / Cheque details
V. Allocation of land/structure in Resettlement sites	<p>(give the status in terms of the following in a tabular format)</p> <ul style="list-style-type: none"> Name of PAF/PAP Address of the allotted land/structure Signed acceptance of the PAP/PAF
VI. Relocation/Restoration of CPRs	<p>(give the status in terms of the following in a tabular format)</p> <ul style="list-style-type: none"> CPR- name Type (govt. /private) Name of owner, if any Relocated Location Comments on securing / allocation of site for relocation
VII. Creation of Grievance Redress Committees	<p>(give the status in terms of the following in a tabular format)</p> <ul style="list-style-type: none"> GR Committee (name or no.) Complaint received from (name and date) Time taken (no. of rounds) Complaints addressed (give details)

3. Action Points for the following Month

[This section can be related to Work Plan of Implementation Agency along with Tasks or Actions required monthly either by Project Authority or M&E as per the decisions taken in meetings.]

4. **Special Cases**

[Highlight special cases with identification number about any PAP that the Implementation Agency feels should be reported about. Any limitation/difficulty that they come across should also be exclusively reported.]

5. **Annexure**

- Minutes of the meetings in chronological order
- [Any other explanation]

III. **Appendixes**

- a) Record of consultations with various stakeholders including local agencies and affected people
- b) Verification database
- c) List of experts- individuals and organizations hired/ consulted for training

ANNEX S- 10: DRAFT TOR FOR AN EXTERNAL AGENCY FOR MONITORING AND EVALUATION

A. Objective/Purpose of the Assignment

1. Monitoring and Evaluation (ME) is an integral part of both the resettlement process and of a Adibasi Development Plan (ADP). The lead bank/sponsor/borrower will be involved in ongoing monitoring of resettlement implementation and/or of a ADP. The objectives of external ME are to review implementation and assess the (i) achievement of resettlement and/or ADP objectives, (ii) changes in living standards and livelihoods and restoration of economic and social base of the APs, (iii) the effectiveness, impact, and sustainability of entitlements, and (iv) the need for further mitigation measures, if any. External ME should also enable the lead bank/sponsor/borrower to make timely decisions on corrective (Corrective Plan) measures needed to implement resettlement and/or the ADP effectively and learn strategic lessons for future policy formulation and planning.

B. Qualifications

2. The selected organization should be of high professional standing and have a strong track record in the field of social development, resettlement, and tribal development. It should also have a proven record in project monitoring and be able to demonstrate adequate resources.

C. Scope of Work

3. The major tasks expected from the external monitor are
 - i. Review and verify internal monitoring systems and findings.
 - ii. Conduct independent investigations of project implementation, including PIUs, local offices, and consultations with village leaders, NGOs, and affected people, especially women and vulnerable groups.
 - iii. Prepare independent reports based on monitoring visits.
 - iv. Suggest major recommendations for remedial actions.
 - v. Identify lessons learned.
 - vi. Maintain database of independent surveys.
 - vii. Suggest remedial actions with time-based outputs.
 - viii. Certify compliance with requirements of RP and/or ADP
 - ix. Share the major lessons from the process both in terms of success and failure.

D. Detailed Tasks

4. The entire task of ME should be based on the ESSF Section S. However, the process can be summarized as described below. Prior to commencement, prepare a monitoring and evaluation plan giving details on:
 - (i) Aim and scope of monitoring system
 - Setting up the objectives of monitoring
 - Defining the monitoring system and monitoring cycle
 - Defining the scope of monitoring
 - (ii) **Monitoring strategy.** The general approach to be used to monitor activities and results ensuring participation of all stakeholders, especially women and vulnerable groups.
 - (iii) **Project results.** A summary of the major project activities, expected results, and the indicators to be used to monitor the progress and achievement of results.
 - (iv) Defining and selecting indicators
 - Identify key indicators to be monitored
 - Indicators for each stage of project implementation
 - Gender-disaggregated indicators

- Select only those which are simple, specific, and verifiable
 - (v) Collection and Analysis of Data
- Method of data collection
- Sampling (20% of affected people)
- Analysis
 - (vi) Verify the internal monitoring process and reporting by executing agency (EA) through field visits and independent investigations.
 - (vii) Assess the extent to which the resettlement plan and/or ADP is being followed and objectives being met.
- Institutional arrangements
- Adequacy of the Management Information System
- Payment of compensation, adequacy of budget, and timeliness of payment
- Land readjustments
- Consultation and information dissemination
- Preparation and adequacy of resettlement sites
- House construction
- Provision of employment, its adequacy, and income levels
- Training
- Gender impacts
- Rehabilitation of vulnerable groups
- Infrastructure repair, relocation, or replacement
- Enterprise relocation, compensation, and its adequacy
- Transition allowances
- (viii) Monitor the different stages of the project with specific and need based framework.
- (ix) Monitor the quality, effectiveness, efficiency, and sustainability of the resettlement and/or ADP efforts.
- (x) Monitor the process undertaken by sub-borrower for implementing resettlement and/or ADP and develop a framework for process monitoring.
- (xi) Highlight the major problems being faced and limitations of implementing the RAP and/or ADP and identify corrective measures needed to implement resettlement and/or the ADP effectively.

E. Methodology

The methodology of ME for external agency too equal as stated in the ESSF Section S. However, the process of external ME can be further described as follows:

- i. Study the baseline data on income and expenditure, occupational and livelihood patterns, arrangements for use of common property, social organization, leadership patterns, community organizations, and cultural parameters from the available reports.
- ii. Identify an appropriate set of indicators for gathering and analyzing information on resettlement and/or ADP impacts, the indicators shall include but not be limited to issues such as payment of compensation, relocation, and resettlement assistance, delivery of entitlement packages, restoration of income, and living standards, level of satisfaction by the affected persons, and the quality of resettlement operations.
- iii. Review results of internal monitoring and verify claims through random checking at the field level to assess whether resettlement and/or ADP objectives have been generally met. Involve the affected people and community groups in assessing the impact of resettlement for monitoring and evaluation purposes.
- iv. Conduct both individual and community level impact analysis through the use of formal and informal surveys, key informant interviews, focus group discussions, community public meetings, and in-depth case studies of affected people from various social classes (e.g.

scheduled caste, scheduled tribes, other backward castes) to assess the impact of resettlement.

- v. Identify the strengths and weaknesses of the resettlement and/or ADP objectives and approaches, implementation strategies, including institutional issues, and provides suggestions for improvements in future ADB-funded resettlement planning and implementation.

F. Reporting Requirements

- i. Monitoring and Evaluation Plan
- ii. Quarterly reports for large-scale projects reducing over time
- iii. A baseline survey data report prior to commencement
- iv. A semi-annual or annual report during resettlement implementation
- v. Annual evaluation reports for at least 2 years or until resettlement has been declared successfully completed, if there is no ADP
- vi. Final ME Report

ANNEX S- 11: SCOPE OF ANNUAL SOCIAL MONITORING REPORT FOR SUBPROJECT COMPANIES

A. Introduction

- (i) Brief subproject description

B. Physical Progress of Subproject Components with Resettlement and Indigenous Peoples Impacts

- (i) List of subproject components with resettlement and indigenous peoples impacts and progress updates (including engineering progress, and ground clearing, land acquisition and structure demolition progress)

C. Scope of Resettlement Impacts and and/or Impacts on Indigenous Peoples

- (i) Actual scope of land acquisition and resettlement (including the methodology to determine the actual scope of land acquisition and resettlement, and comparison with the scope of impacts in resettlement plan(s))
- (ii) Actual impacts on Indigenous Peoples (including the methodology to determine the actual scope of impacts on Indigenous Peoples, and comparison with the scope of impacts in Indigenous Peoples plan(s))

D. Institutional Arrangements

- (i) Key organizations involved in resettlement plan and/or IPP implementation
- (ii) Progress of activities implemented by other organizations
- (iii) Specific implementation arrangements for Indigenous Peoples

E. Compensation Rates, Payment and Assistance Delivery

- (i) Compensation rates for land, resettlement subsidies, standing crops, and trees
- (ii) Compensation for buildings and allowances for relocation
- (iii) Allocation and utilization of resettlement compensation
- (iv) Payment delivery to affected village groups and individuals
- (v) Assistance delivery to affected Indigenous Peoples

F. Status of Land Acquisition, Resettlement, and Reconstruction

- (i) Housing relocation and reconstruction
- (ii) Provision of replacement agricultural and/or commercial land
- (iii) Restoration of affected public infrastructure and facilities
- (iv) Restoration of land used for construction-related activities
- (v) Implementation progress of income restoration activities
- (vi) Support to vulnerable groups
- (vii) Implementation progress of specific measures for affected Indigenous Peoples

G. Status of Provisions for Indigenous Peoples

- (i) Culturally appropriate beneficial measures for each affected IP groups
- (ii) Mitigative measures for each affected IP groups
- (iii) Capacity Building measures for IP communities in the subproject area
- (iv) Broad community support, where required

H. Consultation and Disclosure Activities and Grievance Procedures

- (i) Consultations on compensation standards and fees, relocation options, etc.
- (ii) Specific consultations conducted with Indigenous Peoples on the subproject, its impacts and assistance to Indigenous Peoples
- (iii) Any good faith negotiation to resolve major disagreements with Indigenous Peoples
- (iv) Grievances received and actions taken to address them

H. Grievance Redress Mechanism

- (i) Date established and description of organizational arrangements
- (ii) Grievances reported and resolution processes (e.g., nature of grievance, recorded dates and organizations involved, actions taken to resolve grievances, and media or community reactions (if any))

I. Compliance with Applicable Social Safeguard Requirements as Defined in the Section II B of [Name of Bank]'s ESMS

J. Concerns and Work Plan

- (i) Concerns encountered, solutions provided and good practices established
- (ii) Work plan (staffing, training, and work schedules)

Name and Signature

Name:

Date:

Position:

Phone:

Signature:

E-mail

ANNEX S- 12: SAMPLE METHODOLOGY FOR PLANNING SOCIAL MONITORING AND EVALUATION

1. The EA or consultant/firm should be ensured the study and thorough knowledge of following project documents before commence the ME process. They are;
 - (a). Project feasibility study
 - (b). Project designed document/s
 - (c). Environment Impact Assessment and GOB clearance certificate and site clearance certificate (including conditions applied)
 - (d). Initial Poverty and Social Assessment (IPSA)/Social Impact Assessment (SIA)
 - (e). IDCOL Environment and Social Safeguard Framework (ESSF)
 - (f). Resettlement Framework (when there are subprojects)
 - (g). Indigenous People Framework (when there are subprojects)
 - (h). Baseline Survey
 - (i). Resettlement Plan (RP)
 - (j). Indigenous People Plan (IPP)
 - (k). Mid-year ME reports (if applicable)
 - (l). GOB legislative enactments and policies
2. The ME process should constituted with quantitative and qualitative methods and techniques as described below. They are;
 - (a). Survey method using a standardized household questionnaire technique
 - (b). Case study method using a checklist
 - (c). Focus group discussion using a checklist
 - (d). Key-informant interviews using a checklist
3. Apart from these different methods and techniques used in the process of ME, the consultant/s should be examined all available government statistics (Bangladesh Bureau of Statistics). In addition, the consultant should prepare a logical framework for the process of ME on the basis of TOR given by the project sponsor under the supervision of ESSMU of IDCOL and careful observation of project related documents (listed above). The ME objective should be given very clearly under the TOR. A format of logical framework is given below.

Logical Framework for the Process of ME

Objective	Indicator	Variable	Means of verification	Type of data
Explanation: Refer TOR	Explanation: Refer monitoring indicators mentioned in Annex S-11 above	Explanation: Refer monitoring indicators mentioned in Annex S-11 above	Explanation: Consultant should identify on the basis of methodology emphasized above	Explanation: Consultant should identify such as primary or secondary

**ANNEXES COMMON TO
ENVIRONMENTAL AND SOCIAL SAFEGUARDS**

ANNEX ES- 1: ADB'S PROHIBITED ACTIVITIES LIST

The following do not qualify for Asian Development Bank financing:

1. production or activities involving harmful or exploitative forms of forced labor¹ or child labor²
2. production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phaseouts or bans, such as (a) pharmaceuticals³, pesticides and herbicides⁴, (b) ozone-depleting substances⁵, (c) polychlorinated biphenyls⁶ and other hazardous chemicals⁷, (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora⁸, and (e) trans-boundary trade in waste or waste products⁹
3. production of or trade in weapons and munitions, including paramilitary materials¹⁰
4. production of or trade in alcoholic beverages, excluding beer and wine¹⁰
5. production of or trade in tobacco¹⁰
6. gambling, casinos, and equivalent enterprises¹⁰
7. production of or trade in radioactive materials¹¹, including nuclear reactors and components thereof
8. production of, trade in, or use of unbonded asbestos fibers¹²
9. commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests
10. marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats

1. Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty. <http://www.ilo.org/ilolex/english/convdisp1.htm> (scroll down for Convention No. 29)
2. Child labor means the employment of children whose age is below the host country's statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 "Minimum Age Convention" <http://www.ilo.org/ilolex/english/convdisp1.htm>
3. A list of pharmaceutical products subject to import / export and phase-out / ban is available at <http://www.who.int/medicines/publications/restrictions/en/>
4. A list of pesticides and herbicides subject to phaseouts or bans is available on the website of the Rotterdam Convention at <http://www.pic.int/home.php?type=s&id=30&sid=30>
5. A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phaseout dates.

Information is available at http://www.unep.ch/ozone/Publications/MP_Handbook/MP-Handbook-2009.pdf and

6. A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.
7. A list of hazardous chemicals is available at <http://www.pic.int>
8. A list is available at <http://www.cites.org>
9. As defined by the Basel Convention; see <http://www.basel.int>
10. This 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 sub-borrowers primary operations.
11. This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.
12. This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

ANNEX ES- 2: ADB SAFEGUARD POLICY STATEMENTS

1. *Environmental Safeguards*

Objectives: To ensure the environmental soundness and sustainability of projects and to support the integration of environmental considerations into the project decision-making process.

Scope and Triggers: Environmental safeguards are triggered if a project is likely to have potential environmental risks and impacts.

Policy Principles:

1. Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment so that appropriate studies are undertaken commensurate with the significance of potential impacts and risks.
2. Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic (including impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues), and physical cultural resources in the context of the project's area of influence. Assess potential transboundary and global impacts, including climate change. Use strategic environmental assessment where appropriate.
3. Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.
4. Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an environmental management plan (EMP) that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Key considerations for EMP preparation include mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.
5. Carry out meaningful consultation with affected people and facilitate their informed participation. Ensure women's participation in consultation. Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment. Establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.
6. Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders.

7. Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.

8. Do not implement project activities in areas of critical habitats, unless

- (i) there are no measurable adverse impacts on the critical habitat that could impair its ability to function,
- (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and
- (iii) any lesser impacts are mitigated.

If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless

- (i) alternatives are not available,
- (ii) the overall benefits from the project substantially outweigh the environmental costs, and
- (iii) any conversion or degradation is appropriately mitigated.

Use a precautionary approach to the use, development, and management of renewable natural resources.

9. Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials subject to international bans or phaseouts. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.

10. Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.

11. Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.

2. Involuntary Resettlement Safeguards

1. The objectives of ADB's Safeguard Policy Statement with regard to involuntary resettlement are: (i) to avoid involuntary resettlement wherever possible; (ii) to minimize involuntary resettlement by exploring project and design alternatives; (iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and (iv) to improve the standards of living of the displaced poor and other vulnerable groups⁴⁸.

2. ADB's SPS covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers displaced persons whether such losses and involuntary restrictions are full or partial, permanent or temporary.

3. For any ADB operation requiring involuntary resettlement, resettlement planning is an integral part of the project design, to be dealt with from the earliest stages of the project cycle, taking into account the following basic principles⁴⁹:

- i) Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a census and socioeconomic surveys of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- ii) Carry out meaningful consultations⁵⁰ with affected persons, host communities, and concerned non-government organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- iii) Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.

⁴⁸ Vulnerable Groups include (i) those below poverty line, (ii) the landless, (iii) the elderly, (iv) female headed households, (v) women and children, (vi) Indigenous Peoples, and (vii) those without legal title to land [Source: *ADB Safeguard Policy Statement, 2009, Appendix-2 para 28*]

⁴⁹ Source: *ADB Safeguard Policy Statement, 2009, page 17*

⁵⁰ Meaningful consultation is a process that should: (i) begin early in the preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provide timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) be undertaken in an atmosphere free of intimidation or coercion; (iv) be gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) incorporate all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

- iv) Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- vi) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- viii) Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- ix) Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.
- x) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- xi) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
- xii) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

3. *Indigenous Peoples Safeguards*

1. The important elements of the indigenous peoples policy are: to design and implement projects in a way that fosters full respect for Indigenous Peoples' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the Indigenous Peoples themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of projects, and (iii) can participate actively in projects that affect them.

2. The Indigenous Peoples safeguards are triggered if a project directly or indirectly affects the dignity, human rights, livelihood systems, or culture of Indigenous Peoples or affects the territories or natural or cultural resources that Indigenous Peoples own, use, occupy, or claim as an ancestral domain or asset.

3. The term Indigenous Peoples is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees: (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; (iii) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and (iv) a distinct language, often different from the official language of the country or region. In considering these characteristics, national legislation, customary law, and any international conventions to which the country is a party will be taken into account. A group that has lost collective attachment to geographically distinct habitats or ancestral territories in the project area because of forced severance remains eligible for coverage under this policy.

4. For any ADB operation involving impact to indigenous peoples, indigenous peoples planning is an integral part of project design, to be dealt with from the earliest stages of the project cycle, taking into account the following basic principles

- i) Screen early on to determine (i) whether Indigenous Peoples are present in, or have collective attachment to, the project area; and (ii) whether project impacts on Indigenous Peoples are likely.
- ii) Undertake a culturally appropriate and gender-sensitive social impact assessment or use similar methods to assess potential project impacts, both positive and adverse, on Indigenous Peoples. Give full consideration to options the affected Indigenous Peoples prefer in relation to the provision of project benefits and the design of mitigation measures. Identify social and economic benefits for affected Indigenous Peoples that are culturally appropriate and gender and intergenerationally inclusive and develop measures to avoid, minimize, and/or mitigate adverse impacts on Indigenous Peoples.
- iii) Undertake meaningful consultations with affected Indigenous Peoples communities and concerned Indigenous Peoples organizations to solicit their participation (i) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) in tailoring project benefits for affected Indigenous Peoples communities in a culturally appropriate manner. To enhance Indigenous Peoples' active participation, projects affecting them will provide for culturally appropriate and gender inclusive capacity development. Establish a culturally

appropriate and gender inclusive grievance mechanism to receive and facilitate resolution of the Indigenous Peoples' concerns.

- iv) Ascertain the consent of affected Indigenous Peoples communities to the following project activities: (i) commercial development of the cultural resources and knowledge of Indigenous Peoples; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of Indigenous Peoples. For the purposes of policy application, the consent of affected Indigenous Peoples communities refers to a collective expression by the affected Indigenous Peoples communities, through individuals and/or their recognized representatives, of broad community support for such project activities. Broad community support may exist even if some individuals or groups object to the project activities.
- v) Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources. Where avoidance is not possible, ensure that the affected Indigenous Peoples communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that their benefits are equitably shared.
- vi) Prepare an Indigenous Peoples plan (IPP) that is based on the social impact assessment with the assistance of qualified and experienced experts and that draw on indigenous knowledge and participation by the affected Indigenous Peoples communities. The IPP includes a framework for continued consultation with the affected Indigenous Peoples communities during project implementation; specifies measures to ensure that Indigenous Peoples receive culturally appropriate benefits; identifies measures to avoid, minimize, mitigate, or compensate for any adverse project impacts; and includes culturally appropriate grievance procedures, monitoring and evaluation arrangements, and a budget and time-bound actions for implementing the planned measures.
- vii) Disclose a draft IPP, including documentation of the consultation process and the results of the social impact assessment in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected Indigenous Peoples communities and other stakeholders. The final IPP and its updates will also be disclosed to the affected Indigenous Peoples communities and other stakeholders.
- viii) Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains when the project involves (i) activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, or (ii) involuntary acquisition of such lands.
- ix) Monitor implementation of the IPP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the IPP's objective and desired outcome have been achieved, taking into account the baseline conditions and the results of IPP monitoring. Disclose monitoring reports.

ANNEX ES- 3: ENVIRONMENTAL AND SOCIAL SECTION IN THE LOAN APPLICATION FORM

To be filled in by Senior Investment Officers under the guidance of ESSMU for each Project transaction at the time of initial project formulation

Date of Entry:

Information on Environmental and Social Setting and Status on Compliance

1. Environmental Category of the Project as per

- ADB SPS - _____
- DOE - _____

2. Provide brief justification for the category assigned, in each case

3. Project location on a map showing site boundaries and land use around 5 kms

A Google Earth image will be useful to show all essential layers of information

4. Presence of any sensitive and endangered eco-system or habitat within 5 km of the project site – If yes, provide description including species affected and their status as per IUCN

5. Total land that may get deforested in ha

6. Is the project located in the immediate vicinity (likely to cause adverse impact) of environmentally critical areas (national parks, wetlands, wildlife habitats, important bird areas, and protected areas)?

7. Does the project construction and/or operation lead to environmental impacts that are diverse, irreversible and / or unprecedented in nature?

8. Total land acquisition for the project in ha;

9. Are the sites for land acquisition known?

10. What is the ownership status of the land?

11. Are non-titled persons present?

12. Was there any involuntary resettlement, loss of economic assets, and/or rehabilitation of people involved? (This includes period during the five years prior to loan application).

13. Will any subproject sponsor activities involve restrictions of use on adjoining land?

14. Will tenants, lessees, share farmers, or other third party users be affected? If yes, describe process of land acquisition for project, including time frame and estimated affected persons. Were any adibasis involved among the affected people?

15. Key hazards and risks involved during the construction and operation of the project (in terms of occupational health and safety impacts for staff / workers and local community)

16. Are adibasis present among the general population in the project area? If yes, estimate of number and percentage of adibasis.

17. Does the project location displace more than 200 persons of people?

18. Is the project site on or in immediate vicinity of Adibasi owned or occupied land?

19. Is the project vulnerable to climate change related impacts?
20. Does the Borrower have a documented Policy on E&S Performance?
21. Does the Borrower have dedicated human resources to address E&S performance?
22. Has the Borrower established and implemented Environmental, Health & Safety Management Systems for the Project SPV or in the parent company ?

Status on Statutory Approvals (as applicable)

Procedural step	Status as on date	Next steps / Target dates
Location Clearance		
IEE		
EIA		
Factories Inspectorate		
ECC		

Wherever documents are available the same should be attached along with this form

<p><i>(Signature of Investment Officer, IDCOL)</i></p> <p>Name:</p>	<p><i>(Signature of ESSMU Manager, IDCOL)</i></p> <p>Name:</p>
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ANNEX ES- 4: OUTLINE OF ENVIRONMENTAL AND SOCIAL DUE DILIGENCE REPORT

A. Introduction

1. Subproject description: title, type of subproject, location and setting, amount, size (production capacity, number of staff, etc.).
2. Environmental and social categorization and rationale.
3. Applicable Environmental and Social Requirements. See Section II B of [Name of Bank]'s ESMS).

B. Scope of Review and Methodology

1. Documents reviewed (e.g., environmental assessment reports, involuntary resettlement plan, Indigenous Peoples plan, or environmental and social compliance audit reports, copies of permits/licenses, etc.).
2. Methodology adopted (e.g. site visit, inspection report, etc.).

C. Compliance and Liability (by relevant safeguard requirements applicable for the specific subproject, examine environmental and social issues and compliance)

1. Examine issues in terms of environmental, involuntary resettlement and indigenous peoples impacts, mitigation measures to address these issues (or corrective action plan for existing facilities) and compliance status with applicable ADB environmental and social safeguard requirements and national laws, regulations, and standards:

(i) Environmental Safeguards

- a. appropriate identification of major anticipated environmental impacts and risks;
- b. adequacy of environmental assessment (for category A subprojects, including the adequacy of alternative analysis);
- c. compliance status with applicable requirements on (i) information disclosure, (ii) consultation with affected people and other stakeholders, (iii) occupational and community health and safety, biodiversity conservation and sustainable natural resource management, and physical cultural resources; and
- d. adequacy of mitigation measures and EMP (mitigation measures, monitoring and reporting, institutional arrangement, budget), or corrective action plan for existing facilities, if any.

(ii) Involuntary Resettlement Safeguards

- a. appropriate identification of major anticipated involuntary resettlement impacts and risks (including both physical displacement and economic displacement);
- b. adequacy of assessment of social impacts, information disclosure and consultation with affected people and other stakeholders;
- c. adequacy of compensation and benefits for displaced persons

- d. adequacy of resettlement plan (measures to enhance or restore the livelihoods of displaced persons, monitoring and reporting, institutional arrangement, budget), or corrective action plan for existing facilities, if any; and
- e. Private sector responsibilities under government-manages resettlement.

(iii) Indigenous Peoples Safeguards

- (a) appropriate identification of major anticipated impacts on Indigenous Peoples (including potential impacts on traditional or customary lands under use; relocation of Indigenous Peoples from traditional and customary lands, and impacts on cultural resources);
- (b) adequacy of information disclosure and meaningful consultation;
- (c) broad community support, where applicable;
- (d) adequacy of measures to avoid adverse impacts; and
- (e) adequacy of Indigenous Peoples plan (benefit sharing, measures to mitigate and minimize adverse impacts, monitoring and reporting, institutional arrangement, budget), or corrective action plan for existing facilities, if any.

(iv) Adequacy of grievance redress mechanism arrangements

- 1 Recommend mitigation measures, or corrective action plans, if gaps are identified
- 2 For existing facilities including subprojects under construction, examine whether the subproject company paid pollution charges or fines/penalties for non-compliance in the last two years in accordance with national laws, whether the subproject company is exposed to potentially significant liabilities, such as those arising from known or suspected land/groundwater contamination, major accidents and incidents related to the company's past or ongoing operations, and state further actions required/planned by the subproject, in particular actions to address any non-compliance problems and liabilities. Also examine whether there are complaints from the public or local communities regarding the subproject company's environmental and social performance.
- 3 State any risk control or mitigation measures to be taken by the subproject, such as conditions, loan covenants or monitoring and reporting requirements

D. Other Subproject Specific Issues, if any

E. Conclusion and Recommendations

F. FORMAT FOR CORRECTIVE ACTION PLAN

Name of Sub-Project						Date of Audit:	
Documents reviewed:							
Sr. No.	Identified Non-Compliances	Recommended Corrective Actions	Timeframe	Action completion indicator	Means of Evaluation	Name of Responsible person	Remarks

(Signature of Environmental Safeguards Specialist)
Name: _____

ANNEX ES- 5: FORMAT FOR ANNUAL ENVIRONMENTAL AND SOCIAL PERFORMANCE REPORT TO ADB

I. INTRODUCTION

1. Fund's investment profile and description of sub-Project(s)/activity(ies) financed.
2. The purpose of the Environmental and Social Performance Report (ESPR) is to report on implementation of the agreed Environmental and Social Management System (ESSF) and applicable environmental management practices for sub-Project(s)/activity(ies). The annual ESPR encompasses implementation by (name of fund) of all phases of the sub-Project(s)/activity(ies). It includes:
 - (i) Contact information for responsible individuals;
 - (ii) Compliance by (fund) with applicable environmental requirements for the sub-Project(s)/activity(ies);
 - (iii) Environmental and social aspects of sub-Project(s)/activity(ies) under implementation;
 - (iv) Occupational health and safety performance and significant incidents; and
 - (v) Sustainable development initiatives and community relations.

II. ENVIRONMENTAL AND SOCIAL MANAGEMENT

A. ESPR Preparer

Report prepared by: (name and title)

Telephone: E-mail:

Signature: Report date:

B. Environmental and Social Responsibility

3. The individual(s) below hold responsibility for environmental and social performance in the sub-Project(s)/activity(ies) financed by the Fund:

(Senior) Manager(s) with responsibility for environment and social matters (name and title)

C. Environmental and Social Management

4. [Confirm the continuous assignment of a suitably qualified individual(s) who is/are responsible for implementing the ESSF, and monitoring and reporting on environmental and social management practices and compliance issues of the sub-Project(s)/activity(ies).]
5. [Describe the current environmental and social management assignment and deployment of staff and procedural capacity for oversight over specific sub-Project(s)/activity(ies) and their compliance with relevant safeguard requirements.]

III. COMPLIANCE BY FUND WITH THE ENVIRONMENTAL AND SOCIAL REQUIREMENTS

A. Compliance with Country Requirements

6. [Confirm that all sub-Projects / investments are compliant with applicable national and local environmental, occupational health and safety laws and regulations, and summarize any areas of non-compliance together with relevant corrective action plans / measures.]
7. [Describe any instance of inspection or review of environmental and safety compliance provisions for the sub-Project(s)/activity(ies), and occasions of non-compliance in which significant fines or penalties have been imposed, operations closed down, or other actions related to sub-Project(s)/activity(ies)' performance.]
8. [Highlight any new or emerging environmental issues, such as pending regulations, that could affect the environmental performance of sub-Project(s)/activity(ies).]

B. Compliance with ADB's Safeguards Requirements

9. [Confirm that all sub-Project(s)/activity(ies) are currently in compliance with relevant ADB environmental and social policies and guidelines, and summarize any areas of non-compliance together with relevant corrective action plans / measures.]

IV. PROGRESS OF ONGOING SUBPROJECTS/ACTIVITIES

A. Investment Pipeline

10. [Provide a list reflecting the forthcoming investment pipeline and identify which Projects are expected to have environment, Involuntary Resettlement, and Indigenous Peoples/ethnic minority impacts. Describe the status of preparation of environmental and social assessments conducted, including the preparation of resettlement plans and Indigenous Peoples plans as required. If prior land acquisition and resettlement were undertaken, describe the process and indicate if there are outstanding issues that may undermine the Project and pose a reputational risk to the Fund and to ADB.]

B. Active Investments

1. Environmental Progress

11. [Provide a summary of the progress of implementation of the sub-Project(s)/activity(ies), including description, status, and completion timetable for environment-related items. Describe the status of permits and approvals. Summary information should include:

- (i) Overview of the sub-Project(s)/activity(ies), including progress against schedule;
- (ii) Design changes to the sub-Project(s)/activity(ies) adopted during the reporting period and reasons for those changes;
- (iii) Environmental issues and complaints arising during the reporting period;
- (iv) Information on any unanticipated environmental impacts, and remedial actions that have been taken;
- (v) Any unresolved environmental issues or grievances; and
- (vi) Status of compliance with environmental requirements (national, local, ADB or instances of non-compliance.];
- (vii) Findings on the implementation of EMP

2. Social Progress

12. [Provide a summary of the progress of implementation of the sub-Project(s)/activity(ies), including description, status, and completion timetable for social-related items. Summary information should include:

- (i) Overview of the sub-Project(s)/activity(ies) including progress against schedule;
- (ii) Alternative designs considered to avoid or minimize Involuntary Resettlement impacts and impacts to Indigenous Peoples/ethnic minorities;
- (iii) Social issues and complaints arising during the reporting period;
- (iv) Information on any unanticipated impacts, and remedial actions that have been taken;
- (v) Any unresolved social issues or grievances; and
- (vi) Status of compliance with social requirements (national, local, Strategic Investors') or instances of non-compliance.]

V. SUMMARY OF SAFETY PERFORMANCE AND ANY CORRECTIVE ACTIONS

13. [Provide a summary for the overall sub-Project(s)/activity(ies) of the following:

- (i) Worker health and occupational safety: describe status of worker health and safety programs and training, any work-related accidents at the sub-Project(s)/activity(ies) sites, actions taken to reduce accidents, etc.
- (ii) Accidents, fires, and other emergencies: provide a summary of any significant accidents, fires, or explosions, or major accidental releases to the environment. Include response measures taken and any improvements made to equipment or procedures as a result.]

VI. SUSTAINABLE DEVELOPMENT INITIATIVES AND COMMUNITY RELATIONS

14. [Describe any initiatives undertaken by the Fund Manager to improve environmental performance in its activities or at the corporate level. Describe progress in formulating and implementing sustainable development initiatives in its operations. Describe any outreach or cooperative programs with the community, NGOs, etc. in the sub-Project(s)/activity(ies) areas.]

VII. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

VIII. FOLLOW UP ACTIONS

ANNEX ES- 6: TERMS OF REFERENCE FOR ESSF ANNUAL AUDIT

IDCOL was licensed by Bangladesh Bank as a Non-Bank Financial Institution (NBFI) and is playing a major role in bridging the financing gap for developing medium and large-scale infrastructure and renewable energy projects in Bangladesh. IDCOL acts as a catalyst for attracting private debt financing in infrastructure projects.

The IDCOL is governed by an Environmental and Social Management System (ESSF) and is seeking suitable auditing agencies to assess the ESSF implementation.

Terms and Conditions for Contract

Objective of Assignment

The objective of the assignment is to carry out an independent assessment of the ESSF for IDCOL and provide an assurance certificate based on the audit findings.

Scope of Work

In accordance with the objective of the assignment, the scope of work for the assignment is as mentioned below:

1. Review of IDCOL's ESSF through examination of key documents (see below an indicative list) as provided by IDCOL:
 - a. Environmental and Social Safeguard Framework document
 - b. ESSF Procedures
 - c. Sampling from a pool of select case studies where ESSF has been applied and checking of documents / records to establish objective evidence of effective ESSF application
2. The auditing agency will rely on the documents prepared by consultants appointed by IDCOL and their own subject expertise.

Qualifications of the Auditing Agency

The auditing agency should field a two member team specializing in Environmental Assessment. Each Team member must have a minimum of post graduate qualification in the environment management sector with at least 10 years of experience in Environmental Impact Assessment (EIA). At least one member of the team should also be familiar with requirements of Social Impact Assessment (Resettlement action planning, Indigenous people development planning).

Understanding of country environmental and social policy, laws and regulations is essential. Familiarity of work with E&S safeguards of multilateral development banks is a must, especially on E&S frameworks for Category FI (Financing Intermediary).

Based on the above review, the agency will prepare a short report to reflect the following:

- How and to what extent does the ESSF address E&S externalities and requirements relevant to the business environment of IDCOL?
- How appropriate and comprehensive are the key elements of ESSF such as Screening, Risk Rating Schema and procedures in the selected (*as in clause 1b above*) companies of IL&FS?
- How appropriate is the arrangement for institutional capacity building in implementing ESSF?

The report will include a one page summary report reflecting the key questions earlier stated. The same would be discussed with IDCOL prior to the submission of the finalized report. The agency will subsequently make a presentation to IDCOL on the above to discuss the findings and recommendations on the path forward.

While preparing response on the above, the agency should also record observations for further improvement and make specific recommendations.

Time Schedule: Audit commencement to report submission approximately 15 days