

People's Republic of Bangladesh

MUNICIPAL SERVICES PROJECT

BANGLADESH MUNICIPAL DEVELOPMENT FUND

**ENVIRONMENTAL IMPACT MANAGEMENT
FRAMEWORK
(EIMF)**

Draft

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LIST OF ABBREVIATIONS

BMDF	Bangladesh Municipal Development Fund
CBO	- Community Based Organization
CG	- Community Group
DEPC	- Department of Environmental Pollution Control
DOE	- Department of Environment
DPHE	- Department of Public Health Engineering
EA	- Environmental Assessment
ECA	- Environmental Conservation Act
ECC	- Environmental Clearance Certificate
ECR	- Environmental Conservation Rules
EIA	- Environmental Impact Assessment
EMP	- Environmental Management Plan
ES	- Environmental Screening
ESA	- Environmentally Sensitive Area
EIMF	- Environmental Impact Management Framework
ESS	- Environmental and Social Safeguards
GOB	- Government of Bangladesh
IEE	- Initial Environmental Examination
LEA	- Limited Environmental Assessment
MoEF	- Ministry of Environment and Forest
MSP	Municipal Services Project
NEMAP	- National Environmental Management Action Plan
NGO	- Non-Governmental Organization
NOC	No Objection Certificate
NSDWSSP	- National Safe Drinking Water Supply and Sanitation Policy
NWMP	- National Water Management Plan
OD	- Operational Directives (of the World Bank)
OP	- Operational Policies (of the World Bank)
OM	- Operational Manual
PAP	- Project Affected Peoples
PFS	- Project Feasibility Study
PSF	- Pond Sand Filter
SIMF	- Social Impact Management Framework
ULB	Urban Local Body, i.e. Pourashava or City Corporation
WB	World Bank

A. OVERVIEW: PRINCIPLES AND RESPONSIBILITIES

1. **Status.** The preparation and implementation of subprojects of the Municipal Services Project (MSP) are the responsibility of the Urban Local Bodies (ULBs) subject to review, appraisal, and support by the Bangladesh Municipal Development Fund (BMDF) and the World Bank. These responsibilities include the assessment and management of environmental and social impacts that may arise under subprojects financed through BMDF. This Environmental Impact Management Framework (EIMF) specifies the responsibilities, procedures, and models for dealing with environmental impacts of the subprojects financed through the BMDF. Together with the Social Impact Management Framework (SIMF) dated September 2007, this EIMF replaces the Environmental and Social Management Framework for MSP dated August 1998 for the BMDF-financed subprojects.

2. **Objectives.** The EIMF provides general policies, guidelines, and procedures for integration into selection, design, implementation, and monitoring of the subprojects. Its objective is to help ULBs and BMDF to ensure that activities under the project will:

- Enhance environmental outcomes of the activities implemented under individual subprojects;
- Identify and mitigate adverse impacts that subprojects might cause on the environment; and
- Ensure compliance with the relevant policies and regulations of the Government as well as the World Bank's environmental safeguard policies.

3. **Principles.** In view of these objectives, environmental assessment and mitigation of negative impacts shall be an integral part of the selection, design, implementation, and monitoring of subprojects. These include the following, for which standards, procedures, and responsibilities are specified in this EIMF.

- All proposed subprojects shall be subjected to environmental screening in order to identify all potential environmental issues, and appropriate assessment and mitigation measures should be undertaken appropriate for the potential issues thus identified.
- Alternatives shall be considered, including not undertaking the subproject, to evaluate environmental impacts along with other benefits and costs and to ensure that negative environmental impacts are minimized.
- No subprojects shall be undertaken without the approvals required under the relevant laws and rules of Bangladesh as well as the World Bank policy.
- ULBs will undertake community consultation about their objectives, scopes, and any temporary and permanent environmental implications when selecting and designing a subproject, and about the impacts and mitigation measures during the subproject implementation. Community consultation should in particular include the people who might be affected directly.
- The environmental impacts and mitigation measures should be an integral part of the

review and monitoring of subprojects through the reporting chain, involving the ULB, contractors, BMDF, and the World Bank.

- BMDF and its consultants should ensure the completeness and quality of environmental screening, assessment and management through subproject appraisal, supervision, and technical assistance processes.

B. RELEVANT POLICIES AND REGULATIONS

1. **Environmental Regulations of Bangladesh** that are most relevant to environmental management under MSP are Bangladesh Environmental Conservation Act (ECA), 1995 and its implementing regulation, Environment Conservation Rules (ECR), 1997. These need to be observed under MSP. Their salient features are described in some detail below.

2. **Environment Conservation Act 1995 (ECA 1995)** is currently the main act governing environmental protection in Bangladesh, which replaced the earlier environment pollution control ordinance of 1992 and provides the legal basis for Environment Conservation Rules, 1997 (ECR'97). The main objectives of ECA'95 are: conservation of the natural environment and improvement of environmental standards, and control and mitigation of environmental pollution. 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 continued or can not be initiated in the ecologically critical areas.
- Regulation in respect of vehicles emitting smoke harmful for the environment.
- Environmental clearance.
- Remedial measures for injury to ecosystem
- Regulation of the projects 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.

3. The Act is implemented by Department of Environment (DOE), under the Ministry of Environment and Forest. 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 10 years imprisonment or a maximum fine of Tk. 1000,000 or both.

4. **Environmental Conservation Rules 1997** consists of a set of the relevant rules to implement the ECA' 95, which specify:

- categorized list (green, orange and red) of the projects,
- procedure 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 projects.

5. **Environmental Categories.** ECR 97 classifies projects by potential environmental impact and assign different assessment and management requirements as follows:

Green List projects are those with positive environmental impacts or negligible negative impacts such as plantation and nursery. Clearance for these is obtained on the basis of project description, initial screening and No Objection Certificate (NOC) by the local authority.

Orange List projects fall into two categories.

Orange A projects are those with minor and mostly temporary environmental impacts for which there are standard mitigation measures, such as the installation of tube wells, pond sand filter (PSF), tank/reservoir, sanitary latrines etc. Application for DOE's environmental clearance requires general information, a feasibility report, a process flow diagram and schematic diagrams of facilities, environmental screening form, NOC from local authority.

Orange B projects are those with moderately significant environmental impacts for which mitigation measures are easily identified, such as construction/re-construction of earthen roads, culverts, community center, office building for general services, re-excavation of canal, repairing embankment, and school field, etc. These require Environmental Clearance Certificate from DOE, for which an Initial Environmental Examination (IEE) report, Environmental Management Plan, along with the information and papers specified for Category A projects.

Red List projects are those which may cause 'significant adverse' environmental impacts such as the construction of bridge, industrial factories, flood shelter, embankment, water control structure, etc. They require IEE report to obtain the Site Clearance Certificate, and subsequently a full EIA report for ECC, along with the information required for other Categories.

6. **Environmental standards** also promulgated under the Environment Conservation Rules 1997 are prescribed for varying water sources, ambient air, noise, odor, industrial effluent and emission discharges, vehicular emission, etc. with the main aim of limiting the volume and concentrations of pollution discharged into the environment. 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 and solid waste. Additionally specific parameters are specified such as phenol, cyanide, copper, zinc, chromium, various types of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds and other substances.

7. **World Bank's Environmental Safeguard Policy.** The Bank requires environmental assessment (EA) and Social Assessment of projects proposed for Bank financing to help ensure that they are both socially and environmentally sound and sustainable, and thus to improve decision making. The World Bank's environmental assessment policy and recommended

processing are described in **Operational Policy (OP)/Bank Procedure (BP) 4.01: Environmental Assessment**. This policy is considered to be the umbrella policy for the Bank's environmental "safeguard policies" which include policies on: Natural Habitats (OP 4.04), Forests (OP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), and Safety of Dams (OP 4.37).

8. **Environmental Assessment (OP 4.01)** is required of all projected financed by WB to identify, avoid, and mitigate the potential negative environmental impacts associated with Bank lending operations. In World Bank operations, the purpose of Environmental Assessment is to improve decision making, to ensure that project options under consideration are sound and sustainable, and that potentially affected people have been properly consulted. EA is seen as a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. EA takes into account the natural environment (air, water and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples and physical cultural resources); and transboundary and global environmental aspects. The borrower is responsible for carrying out the EA and the Bank advises the borrower on the Bank's EA requirements.

9. The Bank classifies the proposed projects into three major categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts as shown in the following Table.

Environmental Classification of Projects Supported by the World Bank

Category	Potential Environmental Impacts	EA Requirements
Category A	The project is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works	Full EA and EMP
Category B	The project has potential adverse environmental impacts on human populations or environmentally important areas—including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects.	EA is narrower than that of Category A EA. Like Category A EA, it examines the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.

Category C	The project is likely to have minimal or no adverse environmental impacts	Screening only
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C. APPLICATION OF ENVIRONMENTAL POLICIES AND RULES FOR MSP

10. **Project Description.** The subprojects which have been preliminarily appraised for support with the additional financing of MSP include the construction or upgrading of roads, piped water supply, water production tube wells, overhead tanks, pump house, drains, street lighting, kitchen markets, community centers, office buildings, children’s park, and a slaughter house in 56 municipalities at a total aggregate cost of about \$40 million. Kitchen markets consist of a shed or two for sorting and wholesale of mostly agricultural produce, and often large space for retailers who either sit in the open or in makeshift shelters. Most of the markets operate only during a limited period of time, a few times a week or a few hours each day. The proposed slaughter house rehabilitation involves one 9m by 7.3m at a cost of about \$5,000, but its environmental impacts needs further examination.

11. According to the initial screening, which is subject to review, all subprojects would fall under Orange A or Orange B category under ECR ’97 and World Bank’s environmental category B. However, some of the subprojects require further environmental examination and may be reclassified. For example, the children’s park may be classified as Green, and the slaughter house can have potential environmental impact that requires full EA and EMP.

12. ECR 1997 requires three tiers of EA:

- Screening: required of all projects;
- Initial Environmental Examination (IEE): required of Orange B and Red category projects; and
- (full) Environmental Impact Assessment (EIA): required of Red category projects.

13. **Environmental Screening.** As seen above, the screening has been conducted for most of the subprojects to be financed with the additional financing, but they would be reviewed by BMDF and WB before the final appraisal and approval of the subprojects. The Environmental Screening Form is provided in Annex 1.

14. **Initial Environmental Examination.** Under the ECR classification, many of the proposed subprojects such as tube-wells would be classified as Orange A, requiring no further EA. They would, however, be considered Category B under the WB environmental classification, and therefore will be required to conduct IEE which is similar to the “limited EA” required by the WB. A sample outline of the IEE report is attached as Annex 2.

15. **Environmental Impact Assessment.** While none of the currently identified subprojects appears to meet the standards to be considered as Red Category under ECR 97 or Category A under the WB classification, there is a possibility that IEE of some subprojects may prompt reclassification and requirement for full EIA. In view of the short implementation period, they would best be not considered for the additional financing.

16. **Environmental Management Plan.** For the subprojects under consideration, negative environmental impacts are likely to be minor and the mitigation measures are easily identified and standard; for example, construction of properly sized and located culverts when building a road. They will differ by subproject, and need to be identified as part of the IEE. However, all of the subprojects involve construction activities and likely to involve common temporary environmental impacts. Mitigation measures for these common environmental impacts of construction are listed in Annex 3, which need to be incorporated in construction contracts.

17. **Reporting and Monitoring.** Monthly report on the project progress shall be submitted by ULB including the compliance with the environmental management plan, and BMDF will submit a summary monthly report to WB within five weeks of the end of the month. The results will be used in a feedback loop to allow the involved agencies and the contractor to modify project implementation activities as and when required. BMDF will ensure that its supervision includes the verification of the monthly reports and monitoring of the environmental management activities. The WB supervision mission will include environmental specialists when visiting subprojects with significant potential environmental issues. Environmental audit should be conducted periodically (e.g., yearly) to review the effectiveness of environmental management.

D. CONSULTATION, DISCLOSURE, DISPUTES, AND APPROVAL

18. **Stakeholder Consultation.** During the subproject selection, design, and implementation ULBs should ensure to incorporate input from the community, especially the people who are directly affected, to reflect their preferences as well as utilize their local knowledge in designing and supervising the subproject. This includes environmental screening and examination as well as the implementation of mitigation measures.

19. **Disclosure.** In order to ensure the stakeholder consultation, full information of the subproject should be disclosed and made accessible in ULB offices. The designs and environmental mitigation measures should be publicly posted at the construction site as has been the practice in the past subprojects financed by BMDF. In addition, ULBs will authorize the BMDF and WB to make the same information accessible to the public. BMDF and WB will also disclose the EIMF at their offices and web sites.

20. **Grievance Redress.** ULBs will establish a procedure to answer subproject-related queries and address complaints, disputes, and grievances about any aspect of the subproject, including disagreements regarding the assessment and mitigation of environmental impacts. For the purpose, a Grievance Redress Committee (GRC) will be formed in each ULB with memberships (below) to ensure proper presentation of complaints and grievances, as well as impartial hearings and transparent decisions. Membership composition for GRCs in CHT municipalities will take into account any traditional conflict resolution arrangements that IP communities may practice.

Composition of Grievance Redress Committee:

ULB Chairman	Convenor
Representative of BMDF	Member
Representative of a Local/National NGO	Member
Headmaster of the local High School	Member
Headmaster of the local Primary School	Member
Representative of Municipal Business Community	Member
CEO/Secretary of the ULB	Member Secretary

If the complainant is female, the Committee will include a female Ward Commissioner.

21. If grievance resolution attempts at the ULB fail, the ULB will refer the complaints to BMDF along with the minutes of the hearings. BMDF will provide an independent arbitrator or expert to conduct further hearings, after obtaining agreement from both sides that the decision would be binding.
22. **Approval.** The implementing ULB will be required to obtain necessary environmental clearances and its annual renewal from DOE. BMDF consultants will provide assistance to ULB in ensuring inclusion of all necessary documents and quality of information.
23. EIMF and its revision will be subject to review and formal no objection by the Bank. Appraisal of environmental safeguard issues for each subproject as well as impact mitigation plans, wherever required and prepared, will be subject to review and clearance by BMDF and WB in accordance with the EIMF. Whenever requested, BMDF will provide the Bank with copies of the Environmental Screening Form and Appraisal Forms filled in for all subprojects by ULBs and the consultants.

ENVIRONMENTAL SCREENING FORM FOR SUBPROJECTS

[This form is to be filled in by ULBs and sent to BMDF with the subproject financing requests]

A. IDENTIFICATION

- 1. *Name of Municipality:* *Name of District:*.....
- 2. *Name/Location of Subproject:*
- 3. *Scope of Subproject:* New construction Improvement/Expansion Repair/Renovation
- 4. *Description of the physical works:*
.....
.....
.....
- 5. *Screening Date:*

B. PARTICIPATION IN SCREENING

- 6. *Names of ULB members & officials participated in this screening:*
.....
.....
- 7. *Names of Experts who participated in this screening*
- 8. *Names and address of community members, including would-be affected persons and businesses, participated in this screening:*
.....
.....
.....

C. POTENTIAL ENVIRONMENTAL IMPACTS

Potential Impacts

Yes/No/Temporary/Comment

Change or destroy natural environment, grass land or wetland

Take farm land

Involve tree cutting

Obstruct natural water flow

Produce waste that pollutes soil

Produce waste that pollutes water

Produce air pollution

Increase dusts

Discharge pathogens or chemicals to air or water

Other potential negative impacts

Environmental concerns expressed by communities/organizations about the works proposed under the under the subproject which are not included above:

.....
.....
.....
.....
.....
.....

.....

The community and organizations perceive the overall environmental outcomes of the subproject:

- Positive
- Negative
- Neither positive nor negative

This Screening Form has been filled in by:

Name: Designation:
 Signature: Date:

Name & Signature of Participants in Screening:

	Name	Signature	Date
1.
2.
3.
4.
5.
6.
7.

GUIDELINE FOR INITIAL ENVIRONMENTAL EXAMINATIONS

The Screening Form presented in Annex 1 filled in by ULB and checked by BMDF specialist will be the starting point of Initial Environmental Examination (IEE). The IEE should be conducted by environmental expert in consultation with local government and concerned residents and organizations. The examination will describe:

- The current situation – baseline
- Potential impacts of the proposed subproject, their extent and duration
- Recommended mitigation measures and likely costs

for each of the following environmental elements:

- Topography
- Climate
- Air, Dust and Noise (The air, dust and noise level of the project area should be within limits set by the Environmental Quality Standards for emission and noise pollution under the ECR, 1997.
- Soils. (Soil type, structure, and chemistry)
- Hydrology and Water Quality
- Ecological Environment

Trees and Vegetation

Fisheries

Terrestrial and other Aquatic Inhabitants

In particular, existence of endangered species in the general vicinity and the potential impacts on them have to be determined.

ENVIRONMENTAL SAFEGUARDS FOR CONSTRUCTION

1. Noise level at the construction sites will be strictly enforced for preventing excessive noise to acceptable noise standard (Government of Bangladesh standard for commercial zone namely L90 of 70dBA).
2. Provision will have been made to ensure that care will be taken during construction stage at nearby institution, hospital, mosque, other religious institution and settlement regarding dust, air and noise pollution.
3. Use working method that minimizes gaseous, dust, or other airborne discharges; avoid work during high wind.
4. Mechanical equipment and vehicles should be kept in good working order meeting emission and noise standards.
5. Regular water should be sprayed during earthworks, construction of embankment, over newly constructed dry embankment and roads.
6. Top soil from farm land should not be used as fill materials for earthworks.
7. Drainage congestion / water logging problems should be prevented or minimized.
8. Maintain cross-drainage at all times during construction.
9. Polluted surface water due to construction work will damage the fish resource to some extends. Direct disposal of solid and liquid wastage into nearby water bodies should be prohibited, if possible.
10. Cutting of trees should be only as permitted in advance.
11. No trees will be felled unless they are directly in the path of the project road, unless they caused a barrier to construction or unless they create a safety hazard to the future operation of roads.
12. Construction wastes, liquid or solid, should be collected and dumped in designated places according to pre-approved plan.
13. Chemical and fuel will be stored in an impervious container clearly marked within a secured area, located away from residential or commercial establishments.
14. Traffic congestion should be controlled by maintained free traffic flows always. Re-routing of traffic by construction of diversion roads (temporary bypass) may be maintained.
15. Visible cautionary signs, barriers, including red lamp signalling at night, signal and flag persons to control the traffic should be provided.
16. Personal Protective Equipment (PPE), e.g., ear protection gear, mask, goggles, safety shoes, etc. and First Aid Box should be provided to workers/project personnel, and no child labor (lower 14 years) personnel will be employed.
17. Provide safe drinking water and proper sanitation facilities on site.