

Punjab Municipal Services Improvement Project (PMSIP)
Terms of Reference for EIAs

INTRODUCTION

The Punjab Municipal Development Fund Company (PMDFC) has been set up to finance various urban infrastructure sub-projects under PMSIP including Water Supply, Sewerage and Drainage, Link Roads, Solid Waste Management, Street Lighting, Firefighting Services, Slaughterhouses, Parks and Other Municipal Services. The scope of operations for PMDFC includes urban infrastructure sub-projects sponsored by Tehsil Municipal Administrations (TMAs). PMDFC believes that each of its sub-projects will improve living standards and the environment of urban populations in and around its sub-project locations. PMDFC will promote environmentally sound, socially acceptable and commercially viable urban infrastructure sub-projects. PMDFC has reflected its environmental and social commitments through detailed operational procedures detailed in its Environmental and Social Framework (ESF). All sub-projects financed by PMDFC should be in consonance with its ESF. To facilitate the process laid down within its ESF, PMDFC intends to empanel corporate consultants to assist in developing, appraising and monitoring environmentally and socially sensitive projects.

All sub-projects financed under the PMSIP are required to comply with World Bank Operational and Safeguard Policies, in addition to conformity with the environmental legislation of Government of Pakistan. Thus all sub-projects are required to conform to:

- (a) The Environmental and Social Framework (ESF) adopted by PMDFC and
- (b) The terms of the Environmental Protection Agency (EPA) as mandated by the Pakistan Environmental Protection Act 1997.

According to the Environmental and Social Framework (ESF), environmental and social categorization of sub projects and requirements to deal with their environmental and social issues are as under:

- E-1 :** with significant environmental impacts, Environmental Assessment Reports (EARs) required
- E-2 :** with moderate environmental impacts, Environmental Management Plans (EMPs) required
- E-3 :** with minimal or no adverse environmental impacts, Compliance with the environmental technical specifications (Initial Environmental Examination (IEE) will be conducted)
- S-1 :** having resettlement of more than 40 households or with significant negative social impacts, Social Assessment Report (SAR) + Resettlement and Rehabilitation Action Plan (RAP) required
- S-2 :** having resettlement of less than 40 households, Social Assessment Report (SAR) + Social Management Plan (SMP) required
- S-3 :** having no significant adverse social impacts, Social Assessment Report (SAR) required

(The Bank's screening process determines a project's Category A, B or C classification which equates to ESF categories E-1/S-1, E-2/S-2 and E-3/S-3 projects respectively).

OBJECTIVE

The objective of this assignment is for the Consultant to prepare the full Environmental Impact Assessment (EIA) (covering environmental, social and occupational health & safety issues) and Resettlement and Rehabilitation Action Plan (RAP) for E-1 & S-1 category sub-projects respectively. The consultant will also be required to follow up the case according to the environmental clearance conditions of the Pakistan Environmental Protection Agency (EPA) and/ the Punjab Environmental Protection Department as the case may be.

The objective of the EIA is to give environmental considerations adequate weight in project selection, siting, and design decisions by evaluating the project's potential environmental risks and impacts; examining project alternatives; and identifying ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts. The EIA also includes the supervision of processes to mitigate and manage adverse environmental impacts throughout project implementation.

The Consultant Team is expected to have an interdisciplinary team of specialists in technical, environmental, social, occupational health, public participation and communications, safety and technical topics that may arise from urban infrastructural development projects, The World Bank's safeguard policies, environmental standards and guidelines of Pak EPA and environmental legislative and administrative frame work of Pakistan etc.

METHODOLOGY

It is expected that the following tasks be undertaken under the EIA:

Task #1- Stakeholder identification.

Identify stakeholders in the project's area of influence and assess their interests, goals, behaviors, and incentives. Among stakeholders, the EA must include government officials, non-governmental organizations (NGOs), private organizations, trade unions, community organization of residents in the projects's area of influence, and other key stakeholders to obtain their opinions and concerns. Stakeholder identification should focus on the most vulnerable groups ad disadvantaged groups, as well as those that may oppose to the project. The assessment of stakeholder's interests, goals, and incentives should provide insights into ways to constructively engage key groups in the preparation of the EIA and removing obstacles to their participation in public consultations.

Task #2- Consultation of Draft Terms of Reference (TORs).

Consult draft TORs of EIA with identified stakeholders. Consultations should include invitation and notification to participate in the consultation, as well as the provision of relevant, easily understandable material in a timely manner. Consultations should include a brief explanation of the project objectives, the potential project alternatives, the EIA, and the different mechanisms that will be used to collect public input. Consultation should further encourage an exchange of ideas and discussion between stakeholders and consultants.

Environmental priority concerns from communities should serve as the basis of EIA scope. Comments should be recorded and a written response should be attached to minutes of public consultation meetings.

In addition, the consultant should elaborate records of public consultations, documenting methods for obtaining the informed views of affected people and local NGOs. The record should specify any means other than consultations (e.g., surveys) that were used to obtain the views of affected groups and local NGOs.

Task #3- Incorporation of comments into EIA Terms of Reference.

Adjust TORs based on comments from public consultations. The EIA scope should emphasize the analysis of environmental priority concerns from potentially affected communities, as well as from vulnerable or disadvantaged groups.

Task #4- Preparation of Draft EIA Report

Based on the adjusted TORs, the report should include the following:

- *The Executive summary* concisely discusses significant findings and recommended actions. The summary should be written in easily understood language. The maximum length of this summary should be 7 pages.
- *The baseline data section* assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the subproject commences. The baseline assessment should identify, among other factors, environmentally sensitive areas, environmental health risks, and actual supply and demand of environmental services (i.e. access to water supply and sanitation). The section should also take into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigatory measures. The section should indicate the accuracy, reliability, and sources of the data.
- *The section of analysis of alternatives* systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the “without project” situation—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability to local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, the analysis should quantify the environmental impacts to the extent possible, and should attach economic values where feasible. The analysis also should state the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement
- *The project description section* provides a comprehensive description of the project area and different development activities listed above, noting areas to be reserved for construction, areas to be preserved in their existing state, as well as activities and features which will introduce risks or generate impact (negative and positive) on the environment. This should involve the use of maps, site

plans, aerial photographs and other graphic aids and images, as appropriate, and include information on location, general layout, size, ancillary buildings and buildings of historical and cultural importance, as well as pre-construction, construction, and post construction plans. All phases should be clearly defined, and the relevant time schedules, phase maps, diagrams and appropriate visual aids should be included. The plans for utilities that will provide services such as waste treatment and disposal, sewage treatment and effluent disposal, and rain/storm water collection and disposal should also be outlined. The architectural design of identified buildings should be addressed, considering their historical importance and integration with the character of the area. The section also concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, water supply, and product storage facilities). This section should also indicate the scope of the resettlement plan and detailed maps showing the project's site and the project's area of influence.

- The *Environmental impacts section* predicts and assesses the selected alternative's likely positive and negative impacts, in quantitative terms to the extent possible, particularly for air pollution, noise, water pollution, traffic congestions and other negative impacts from this kind of projects. This section should also identify mitigation measures and any residual negative impacts that cannot be mitigated; explore opportunities for environmental enhancement, and identify and estimate the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.
- *The section with the stakeholder analysis* identifies stakeholders and quantifies the costs and benefits of the project for each stakeholder group. Based on an assessment of stakeholders' interests, goals, and incentives, this section should identify the groups that are likely to be affected/benefited by the project, and based on the estimated distributional impact, should assess the stakeholders' behavior about the project.
- *The policy, legal, and administrative framework* section discusses the policy, legal, and administrative framework of Pakistan, Punjab and the municipalities in the project's influence area within which the EIA is carried out. The framework should include all policies, legislation, acts, laws, rules, regulations and standards governing environmental quality, cultural heritage conservation, safety and health, protection of sensitive areas, protection of biological species, siting and land use control at the national, provincial and local levels. The examination of the legal and regulatory framework should include at minimum
- The National Environmental Quality Standards (NEQS), Building Codes and Standards, and Development Plans. In addition, the section should also explain the environmental safeguards of the World Bank triggered by this project, particularly the Involuntary Resettlement Policy and Physical Cultural Resources. The section should also identify institutional gaps and organizational weaknesses that may reduce the ability to anticipate or respond to the project's potential environmental impacts, as well as recommendations to address them.

Task #5- Preparation of Environmental Management Plan.

Preparation of environmental management plan (EMP), including a set of mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The EMP should include the following components. *Mitigation, Monitoring, Capacity Development and Training, Implementation Schedule and Cost Estimates, and Integration of EMP with Project.*

Mitigation

The EMP identifies feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient. Specifically, the EMP:

- (a) Identifies and summarizes all anticipated significant adverse environmental impacts (including those involving forestry resources, international waters, cultural patrimony or involuntary resettlement);
- (b) describes—with technical details—each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
- (c) estimates any potential environmental impacts of these measures; and
- (d) provides linkage with any other mitigation plans (e.g., for involuntary resettlement, or cultural property) required for the project.

Monitoring

Environmental monitoring during project implementation provides information about key environmental aspects of the project, particularly the environmental impacts of the project and the effectiveness of mitigation measures. Such information enables the implementing agencies to evaluate the success of mitigation as part of project supervision, and allows corrective action to be taken when needed. Therefore, the EMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the EA report and the mitigation measures described in the EMP.

Specifically, the monitoring section of the EMP provides:

- (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and
- (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

Capacity Development and Training

To support timely and effective implementation of environmental project components and mitigation measures, the EMP draws on the EIA's assessment of the existence, role, and capability of the implementing agencies. If necessary, the EMP recommends the establishment or expansion of such units, and the training of staff, to allow implementation of EA recommendations. Specifically, the EMP provides a specific description of institutional arrangements—who is responsible for carrying out the mitigatory and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental management capability in the agencies responsible for implementation, the EMP of the following additional topics: (a) technical assistance programs, (b) procurement of equipment and supplies, and (c) organizational changes.

Implementation Schedule and Cost Estimates

For all three aspects (mitigation, monitoring, and capacity development), the EMP provides: (a) an implementation schedule for measures that must be carried out as part of the proposed project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the EMP. These figures are also integrated into the total project cost tables.

Integration of EMP with Project

The decision to proceed with a project is predicated in part on the expectation that the EMP will be executed effectively. Consequently, the EMP must be specific in its description of the individual mitigation and monitoring measures and its assignment of institutional responsibilities, and it must be integrated into the project's overall planning, design, budget, and implementation. Such integration is achieved by establishing the EMP within the project so that the plan will receive funding and supervision along with the other components.

Deliverables

Final TORs for EIA, after incorporating comments from public consultations will be submitted to the PMDFC office in 3 copies for review and comments. Minutes and records from public consultations will be attached to the TORs. The feedback from public consultations will enable the consultants to scope the EIA and set the future course of action.

A draft EIA will be submitted to PMDFC within 45 days of the start of the consultancy services. The consultant will provide hard and soft copies to the PMDFC and the Bank, and 3 hard copies and one soft copy of the draft EIA for public consultations.

After incorporation of public and Bank comments, a 2nd draft will be submitted to PMDFC and the same will be shared with the general public and key stakeholder as per Environmental Protection Agency, Punjab and World Bank requirements of public consultation /disclosure of EIA. After incorporating all public and key stakeholders concerns, 3 hard copies and one soft copy both in Urdu and English of final EIA will be disclosed publicly.

Consultancy Firm Profile

The professional profile of the consultants need to conduct the EIA should be at least that of:
Environmental engineer with expertise in air pollution control, wastewater engineering and storm water management.

Occupational health and safety specialist

Social scientist with extensive experience in stakeholder analysis, public consultations, and resettlement plans.

Environmental specialist with expertise in preparation and implementation of environmental management plans.

Resettlement Specialist (If needed)

Urban development specialist (If needed)

Regional Development Specialist Urban (If needed)

Biologist and/or Natural Habitat Specialist (If needed)

Traffic management specialist (If needed)

Environmental Lawyer (If needed)

The consultant firm must have at least 15 year experience in preparation of EIAs and supervision of EMPs of similar studies.

Time and Budget

Total time period for the consultancy service is 03 months.

Stakeholder identification	15 days
Public consultation of draft TORs	7 days
Incorporation of public comments in final TORs	7 days
Draft EIA report	15 days
Public consultation of draft EIA report	7 days
Incorporation of comments in final EIA report	7 days
Disclosure of EIA report	7 days
Final EIA report	10 days
Supervision of EMP implementation and periodic public consultation of EMP progress	Will be decided as per visit basis on completion of EMPs

CONTENTS OF EIA REPORT

The contents of the report may vary for sector wise assignments but it may contain but not limited to;

Executive Summary

- A. Introduction
- B. Objectives
- C. Policy, Legal and Administrative Framework
- D. Study Area and Scope of Work
- E. Scooping and Base Line Data
- F. Analysis of Alternatives (In Case of Landfill Site and Treatment Plants etc)
- G. Public Consultation and Disclosure
- H. Assessment of The Potential (Environmental & Social) Impacts and Mitigation Measures
- I. Environmental Monitoring and Management Plan
- J. Conclusions and Recommendations
- K. References