GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

Local Government Engineering Department (LGED)

Local Government Division

Ministry of Local Government, Rural Development and Cooperatives

ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) REPORT FOR

Package No: RUTDP/MEH/ 2024-25/W-01
at
Meherpur Pourashava, Meherpur

Resilient Urban and Territorial Development Project (RUTDP)

Design, Supervision, and Management (DSM) Consultancy Services

Eptisa Servicios de Ingenieria, S.L (Eptisa), Madrid, Spain

Joint Venture with

AQUA Consultants & Associates Ltd., Bangladesh;
Dev Consultants Limited (DEVCON), Bangladesh;
Design, Planning & Management Consultants Ltd. (DPM), Bangladesh

SUMMARY OF ESA REPORT
Resilient Urban and Territorial Development Project (RUTDP)
Package No: RUTDP/MEH/2024-25/W-01 at Meherpur Pourashava, Meherpur

1. Subproject Overview

Location and Context:
Meherpur Pourashava, located in Khulna Division, is a Class-A municipality covering **18.39 sq km** with a population of about **70,000** (BBS 2022). It lies on the east bank of the **Bhairab River**, a distributary of the Padma–Ganges system, and is historically significant as the **gateway to Mujibnagar**, the birthplace of Bangladesh's provisional government in 1971.

Proposed Works:
The subproject will rehabilitate and replace:

- **2.869 km Bituminous Carpeting (BC) Roads**,
- **1.864 km RCC Drains** with footpaths,
- **Street lighting facilities**.

The specific locations are within **Wards 5 and 7**, including:

1. Chakrapara – Dighipara Math Road and link to Boro Bazar Mor;
2. Fire Service Road (Iyahiya Khan House to Fire Service Station) and link roads.

Objective:
To improve road connectivity, drainage, and urban amenities for better mobility, safety, and environmental health, while minimizing construction-related impacts through a comprehensive **Environmental and Social Management Plan (ESMP).**

Existing Condition
The proposed subproject area is located within **Wards No. 5 and 7 of Meherpur Pourashava**, covering peri-urban zones.

- The **existing roads** are severely **damaged**, with numerous **potholes, uneven surfaces**, and variable **pavement widths (2.0–5.0 m)**.
- The **drainage system** is **narrow, inadequate, and discontinuous**, with several damaged or silted-up RCC, brick, and earthen drains.
- **Solid waste blockages** and **lack of proper outfall** cause **poor stormwater discharge**, leading to **frequent drainage congestion and waterlogging**, particularly during monsoon seasons.
- **Footpaths and streetlights** are absent, affecting **traffic safety** and **security for pedestrians** at night.





2. Baseline Environmental and Social Conditions

Physical Environment

- **Geology and Soils:** Alluvial deposits of clay, silt, and fine sand; flat topography (7–21 m asl). Soils are fertile (pH ≈ 6.5) but some areas show **arsenic contamination** in shallow aquifers.
- **Climate:** Tropical monsoon with hot summers (max ≈ 35 °C), heavy monsoon rains (up to 430 mm/month in June), and mild winters (min ≈ 12 °C).
- **Hydrology:** The **Bhairab River** and small canals like **Gopalpur Khal** provide surface drainage, though many are silted and polluted. Groundwater is shallow and abundant but affected by **arsenic, iron, and manganese**.
- **Flooding and Drainage:** Poorly maintained and undersized drains cause frequent **waterlogging** during monsoon.
- **Air & Noise:** Generally good air quality; minor vehicular dust and horn noise. Construction may cause localized dust and vibration.
- **Solid Waste:** About **66 tons/day** generated; disposed at **Singer Math dumping station (Ward 7).**

Biotic Environment

- **Flora:** Dominated by cultivated species — mango, jackfruit, litchi, guava, jute, rice, bamboo, neem, etc.
- **Fauna:** Typical rural fauna — jackal, jungle cat, rodents, toads, lizards, and common birds (myna, magpie-robin, crow). Aquatic species inhabit ponds and Bhairab River.
- **Biodiversity Impact:** Minimal, as the area is urbanized and lacks sensitive habitats.

Socio-economic Environment

- **Population Benefited:** ≈ 15,600 directly (Wards 5 & 7).
- **Land Use:** Densely built residential and commercial zones.

- **Literacy:** 85.15 % (higher than national average 74.66 %).
- **Livelihoods:** Mixed — small business, agriculture, service, transport, and daily labor.
- **Cultural Heritage:** None of archaeological or religious significance within project area.
- **Land Acquisition: No private land required**; residents voluntarily agreed to remove minor roadside structures.

3. Environmental and Social Risks and Impacts

Risk Categorization

Component	ECR 2023 Category	WB ESF Risk Level
Road & Drain Works	Orange	Moderate
Street Lighting	Green	Low

Overall project risk: **Moderate**, site-specific, localized, and manageable with standard mitigation.

Potential Negative Impacts

Construction Phase
- Dust, noise, and vibration from excavation, earthwork, and machinery.
- Temporary water pollution from runoff or waste dumping.
- Occupational health and safety hazards.
- Limited tree cutting (~10 trees).
- Temporary traffic congestion and community disturbance.
- Minor risk from **labor influx** (social conflict, waste generation).

Operation Phase
- Noise and air pollution from traffic.
- Drain maintenance and solid-waste accumulation.

Social Aspects
- No displacement or resettlement needed.
- No Indigenous Peoples (ESS-7) present.
- Workers' and community safety, labor welfare, and GBV risk require monitoring.

4. Mitigation and Enhancement Measures

Construction-Phase Mitigation
- **Dust suppression:** Water spraying, covering loose materials, proper scheduling of transport.
- **Noise control:** Maintain equipment, use silencers, restrict to daytime operations.
- **Waste management:** Dispose of waste at designated dumping site (Singer Math).
- **Soil & water protection:** Avoid dumping near drains or riverbanks; store fuel and chemicals safely.
- **Occupational Safety:** Provide PPE, first aid kits, drinking water, sanitary toilets, and rest areas.
- **Tree Compensation:** Re-plant **60 native trees** (mango, neem, rain tree, kadam, etc.) with bamboo fencing and one-year care.
- **Traffic Management:** Section-wise work scheduling, signage, and coordination with local authorities.
- **Community Engagement:** Continuous liaison with ward leaders and residents to resolve grievances.

Operation-Phase Measures
- Routine maintenance of roads and drains.
- Regular cleaning of outfalls to prevent waterlogging.
- Community awareness on solid-waste disposal.
- Monitoring air, water, and noise quality as per ESMP.

5. Environmental and Social Management Plan (ESMP)
The **ESMP** provides site-specific actions, responsibilities, and monitoring indicators covering:

- **Institutional setup:** PMU-LGED (Environmental & Social Specialists), PIU-Pourashava, and DSM Consultant team.
- **Capacity building:** Training for contractor staff and Pourashava officials.
- **Monitoring:**
  - *Visual & analytical* monitoring of dust, noise, drainage, and worker safety.
  - Monthly progress reports to PMU and World Bank.
- **Grievance Redress Mechanism (GRM):**
  A three-tier system at site, Pourashava, and PMU levels to record and resolve public complaints.
- **Budget:** Separate ES enhancement cost included in BOQ (e.g., tree plantation, safety gear, awareness campaigns).

6. Public Consultation and Participation
Multiple consultations were held with **Pourashava officials, residents, business owners, and community groups**.

Key issues raised:

- Need for better drainage and lighting,
- Minimizing construction disturbance,
- Employment opportunities for locals,
- Proper waste management.

Feedback:
Participants unanimously supported the subproject, considering it vital for improving urban services and living standards. They urged the authority to ensure fair labor practices, environmental safeguards, and timely completion.

7. Conclusion and Recommendations

- The proposed **RUTDP/MEH/2024-25/W-01** subproject will **significantly improve road communication, drainage, and street safety** in Meherpur Pourashava.
- Environmental and social impacts are **minor, site-specific, temporary, and manageable** with the proposed ESMP.
- The project will **enhance resilience**, reduce waterlogging, improve traffic flow, and create short-term and long-term employment.
- No land acquisition, resettlement, or Indigenous Peoples impacts exist.
- The Pourashava, contractor, and DSM team must ensure:
  - Strict compliance with ESMP and ESHS guidelines,
  - Proper occupational health and safety,
  - Effective grievance redress and community communication, and
  - Post-construction maintenance and monitoring.

Overall Environmental and Social Outcome:
Environmentally sound, socially beneficial, and compliant with GOB ECR 2023 and World Bank ESF standards.