



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/LAX/2024-25/W-01

at

Lakshmipur Pourashava, Lakshmipur



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

Summary of Environmental and Social Assessment (ESA)

Lakshmipur Pourashava, Cumilla

1. Introduction

Lakshmipur Pourashava, established in 1976, is an “A” grade municipality covering 28.26 sq. km with a population of around 150,154. It has 191.82 km of roads and 69 km of drains, many of which are now inadequate or damaged due to rapid urbanization.

The subproject under the Resilient Urban and Territorial Development Project (RUTDP) focuses on:

- Rehabilitation of **Bituminous Carpeting (BC) roads** (approx. 3.6 km total).
- **Reconstruction of RCC drains** with proper outfalls.
- **Street lighting and allied works** to improve safety and mobility.

Objective of ESA: Assess baseline environmental & social conditions, identify potential impacts, and propose a site-specific Environmental and Social Management Plan (ESMP).

2. Subproject Description

Activities

- **Activity 1:** 2000 m BC road + RCC drain + streetlights (ANM Fazlul Karim–Polytechnic Road via Trimohani).
- **Activity 2:** 1575 m BC road + RCC drain + streetlights (Mowlana Rehan Uddin Road + Ramgoti Road to Dhaka-Raipur Road).

Current Issues

- Roads: Narrow, damaged, potholed, and congested.
- Drains: Narrow, silted, damaged, no proper outfalls → frequent waterlogging.
- Safety: Lack of streetlights reduces traffic and pedestrian safety, especially at night.



Existing Road Condition with Drain

Justification

- Improves connectivity, drainage, and traffic flow in core municipal areas.
- Directly benefits ~7,500 residents of Ward-10, with wider indirect benefits.
- No private land acquisition required; minor voluntary clearance of roadside structures agreed with locals.

Classification

- **ECR 2023:** Orange category (road & drains); Green category (streetlights).
- **World Bank ESF:** Moderate risk (manageable with mitigation).

3. Baseline Environmental and Social Conditions

Physical Environment

- **Geology & Topography:** Flat deltaic floodplain, low-lying, prone to tidal influence.
- **Climate:** Tropical (avg. 25.4°C; annual rainfall 2062 mm). Wettest month July, driest January.
- **Hydrology:** Natural canals (Ramroder Khal, Rahamatkhali Khal) + ponds; groundwater available but arsenic/iron contamination reported.
- **Flood & Drainage:** Prone to seasonal waterlogging but not severe flooding.
- **Air & Noise:** Generally tolerable, but construction and traffic add dust/noise.
- **Solid Waste:** Improper disposal into khals/drains remains an issue.

Biotic Environment

- **Flora:** Rain tree, Mahogany, Mango, Coconut, Jackfruit, Bamboo, etc.
- **Fauna:** Local birds, fish, reptiles, amphibians; mongoose observed.
- **Impacts:** 85 roadside trees will be felled; compensatory plantation planned (200 saplings).

Socio-Economic Environment

- Dense mixed-use urban area with residential, commercial, religious, and educational facilities.
- **Literacy:** ~70% (higher than national average).
- **Livelihoods:** Small businesses, transport services, govt./NGO jobs.
- **Indigenous peoples:** None present.
- **Cultural heritage:** Motka Mosque identified; requires safeguarding.
- **Land & Resettlement:** No land acquisition; minor voluntary removal of small structures agreed.

4. Environmental and Social Impacts

Construction Phase (Temporary, Localized)

- **Air & Dust:** From excavation, asphalt plants, material transport.
- **Noise & Vibration:** From heavy machinery, risk of nuisance near schools/markets.
- **Water Quality:** Risk of contamination from waste disposal.
- **Vegetation Loss:** Felling of 85 trees.
- **Traffic Disruption:** Congestion during works in core areas.
- **Solid Waste:** Improper disposal may cause health hazards.
- **Occupational Health & Safety (OHS):** Risks from heat, dust, heavy machinery, accidents.
- **Social Risks:** Temporary disturbances, labor influx, GBV/SEA risks.

Operation Phase (Long-Term)

- **Positive Impacts:**
 - Improved mobility, drainage, urban services.
 - Reduced waterlogging, enhanced road safety.
 - Business growth and employment generation.
 - Enhanced night safety due to streetlights.
- **Potential Negative Impacts:**
 - Increased air/noise from traffic.
 - Solid waste disposal challenges.

- Safety risks if maintenance is poor.

5. Mitigation and ESMP

Key Measures

- **Air/Dust:** Water spraying, covering stockpiles, proper material handling.
- **Noise:** Schedule work in daytime, mufflers on machinery.
- **Water Pollution:** No dumping into khals; designated disposal sites at Kachari Bari.
- **Tree Felling:** Plant 200 compensatory saplings with bamboo fencing & monitoring.
- **Waste Management:** Provide bins, transport waste to municipal dumping sites.
- **Traffic Management:** Section-wise construction, warning signs, coordination with traffic police.
- **OHS:** PPE for workers, first-aid, hydration, accident compensation policy.
- **Labor & Social Risks:** Codes of conduct, awareness programs, GRM for grievances.

Institutional Setup

- **Implementing Agency:** LGED (PMU + Pourashava + DSM consultants).
- **Monitoring:** Regular site inspections, analytical monitoring of air/noise/water.
- **Capacity Building:** Training of staff, contractors, and local officials.
- **Emergency Preparedness:** Disaster response and risk reduction plans.
- **Budgeting:** Environmental & social enhancement costs included in BOQ.

6. Public Consultation

- Consultations held with Pourashava officials, local beneficiaries, and community members.
- **Concerns raised:** Drainage congestion, traffic disruption, dust/noise during construction.
- **Community feedback:** Strong support for road/drain improvements, requested streetlights, tree plantation, and safety measures.

7. Conclusion & Recommendations

The Lakshmipur Pourashava subproject will **significantly improve transport, drainage, and urban resilience**, directly benefiting ~7,500 residents of Ward-10.

- **Environmental risks:** Mostly temporary, site-specific, and manageable with proper ESMP.
- **Social risks:** No land acquisition; only voluntary clearance. No indigenous peoples affected.
- **Overall risk categorization:** **Moderate (WB) / Orange (ECR 2023).**

Recommendations:

1. Strict enforcement of ESMP and ES specification of each subproject during construction.
2. Ensure compensatory tree plantation and regular monitoring.
3. Maintain proper traffic management and OHS standards.
4. Strengthen waste management and awareness campaigns.
5. Continuous community engagement and transparent grievance redress.

Final Note: With effective mitigation and monitoring, the subproject will deliver long-term socio-economic and environmental benefits, enhancing resilience and quality of life in Lakshmipur Pourashava.