



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/FUL/2024-25/W-01

at

Fulbari Pourashava, Dinajpur



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

SUMMARY OF ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) REPORT

Package No: RUTDP/FUL/2024-25/W-01 at Fulbari Pourashava, Dinajpur

1. Introduction

Fulbari Pourashava, established in 1983 and currently graded as an “A” category municipality, spans 13.59 sq. km and has a population of ~55,850. With rapid urbanization and growing demand for infrastructure, this subproject under the Resilient Urban and Territorial Development Project (RUTDP) aims to rehabilitate critical roads, drains, and lighting systems in Wards 6, 7, and 8.

The ESA study objectives are:

- To assess baseline environmental and social conditions.
- To identify impacts from construction and operation phases.
- To propose an Environmental and Social Management Plan (ESMP) for mitigation, enhancement, and monitoring

Methodology included desktop studies, field surveys, consultations with stakeholders, and analysis of primary/secondary data.

2. Subproject Description

Key Components

- **Roads:** ~2.36 km BC Road (R1), 1.87 km BC Road (R2), and 0.46 km RCC Road (R3).
- **Drains:** Replacement of inadequate/damaged brick drains with RCC drains connected to outfalls at Barokona Culvert Canal, Katiher Bridge Drain, and Tin Pool Canal leading to the Choto Jamuna River.
- **Street Lighting:** Installation of GI poles, overhead conductors, meters, and waterproof LED lights for improved nighttime safety.
- **Allied Works:** Footpaths, site office, labor sheds, utility relocation, and tree plantation

Rationale

The existing roads are narrow (2–5m), damaged, and prone to potholes. Current drainage is inadequate, leading to waterlogging during monsoon. Absence of street lighting reduces safety. The subproject addresses these deficits and is expected to directly benefit ~13,200 residents.

The present situation of the subproject area is further elaborated in the following **Photographs:**



Photographs: Existing Road Condition at Road-2 of the Subproject Site



Photographs: Existing Road Condition at Road-3 of the Subproject Site



Photographs: Current Situation of the Outfalls at Subproject Site

Category

- **As per ECR 2023:** Orange category (roads & drains), Green category (street lights).
- **World Bank Risk Categorization:** Moderate Risk.
Thus, a full ESIA is not required; this ESA with ESMP suffices

3. Baseline Environmental and Social Conditions

Physical Environment

- **Topography & Geology:** Part of Barind Tract, with clay-rich soils; elevation ~21–26 m PWD. Lies in earthquake Zone-2.
- **Climate:** Warm, temperate climate; annual rainfall ~2,000 mm, concentrated May–October.
- **Hydrology:** Nearby canals and ponds; groundwater contains arsenic and iron; drinking water sourced from deep tube wells.
- **Flooding & Drainage:** Area is generally flood-free but suffers from poor stormwater drainage.
- **Air & Noise:** Air quality moderately affected by traffic and open waste burning; noise from vehicles and market activities, but mostly within tolerable levels.

Biotic Environment

- Vegetation includes rain tree, mango, mahogany, jackfruit, bamboo, banana, etc.
- Fauna: birds, reptiles, small mammals (e.g., mongoose). Some wetlands provide habitats for fish and migratory birds.

Socio-Economic Environment

- Land use: Dense residential and commercial mix.
- Literacy rate: ~62%, higher than national average.
- Livelihoods: Predominantly small businesses, services, and non-farm occupations.
- No indigenous communities present (no ESS7 triggers).
- No cultural or heritage sites within influence area.
- No private land acquisition required; only minor voluntary removal of roadside structures with consent

4. Environmental & Social Impacts and Mitigation

Construction Phase

- **Air & Dust:** Dust from earthworks, bitumen plants, vehicle emissions.
Mitigation: Sprinkling water, covering stockpiles, regular vehicle maintenance.
- **Noise & Vibration:** From heavy machinery, affecting nearby schools and residences.
Mitigation: Noise-abating gear, daytime work scheduling.
- **Water Quality:** Potential contamination from waste disposal into canals/rivers.
Mitigation: Proper waste management, prohibiting dumping in water bodies.
- **Soil & Solid Waste:** Improper disposal risks soil degradation.
- **Tree Felling:** ~60 roadside trees to be removed.
Mitigation: Planting 110 replacement trees (fruit, timber, medicinal species) with bamboo fencing and post-plantation care.
- **Occupational Health & Safety (OHS):** Risks from machinery, traffic, heat, dust, and accidents.
Mitigation: PPE, first aid, sanitation facilities, compensation policy.
- **Community Impacts:** Temporary congestion, risks to pedestrians, labor influx issues (GBV, health risks, social tensions).
Mitigation: Traffic management, awareness campaigns, monitoring of worker behavior, grievance redress system

Operation Phase

- **Positive Impacts:**
 - Improved mobility, reduced waterlogging, enhanced safety with lighting.
 - Economic growth through smoother trade and transport.
 - Employment during operation & maintenance.
- **Negative Impacts (manageable):**
 - Air/noise from traffic, solid waste generation, and road safety risks.
Mitigation: Regular maintenance, waste management, awareness programs.

5. Environmental and Social Management Plan (ESMP)

Key elements include:

- **Access to Information:** Public disclosure of project documents.
- **Institutional Arrangement:** Roles of LGED, PMU, PIU, DSM consultants, and contractors defined for compliance.
- **Capacity Building:** Training programs for contractors and municipal staff.
- **Emergency Response & Disaster Management:** Preparedness plans for accidents, fire, or natural disasters.
- **Monitoring:**
 - *Construction phase:* Dust, noise, water quality, waste disposal.
 - *Operation phase:* Drain performance, traffic safety, air quality.
- **Costing:** Budget allocations included in BOQ for tree plantation, OHS measures, and monitoring.
- **Grievance Redress Mechanism (GRM):** Multi-tier system with Grievance Redress Committee (GRC) at Pourashava and project levels

6. Public Consultation

Community members expressed support, citing expected benefits:

- Improved roads and drainage reducing flooding.
- Safer mobility and trade opportunities.
- Nighttime security through streetlights.

Concerns raised: temporary inconvenience, noise, dust, and traffic disruptions. Participants recommended:

- Proper scheduling of works.
- Engagement of local labor.
- Effective grievance handling.

These inputs have been integrated into the ESMP

7. Conclusions and Recommendations

The ESA concludes that:

- The subproject is environmentally and socially beneficial, addressing critical infrastructure needs of Fulbari Pourashava.
- Impacts are **localized, temporary, and manageable** through standard mitigation practices.
- No land acquisition or indigenous peoples' concerns are involved.
- With effective implementation of ESMP and GRM, the project can proceed as a **Moderate Risk** investment under WB standards.

Recommendations:

- Strict adherence to ESMP, especially on OHS, waste management, and traffic safety.
- Ensure compensatory plantation and long-term care of trees.
- Maintain strong community engagement and transparent grievance redress.
- Continuous environmental monitoring and reporting during both construction and operation phases.