

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/GHO/ 2024-25/W-01 at Ghoraghat Pourashava, Dinajpur



Resilient Urban and Territorial Development Project (RUTDP)
Sub-Project Preparation Team, RUTDP, LGED

SUMMARY OF ESA REPORT

Package No: RUTDP/GHO/2024-25/W-01, Ghoraghat Pourashava, Dinajpur

1. Introduction

Background

Ghoraghat Pourashava, established in 2005, is a "C" grade Pourashava covering 18.63 km² with a population of around 27,450. Due to increasing population and urbanization, the town faces infrastructure deficiencies, particularly in roads, drainage, and street lighting. The subproject under RUTDP aims to rehabilitate and replace **RCC pavements and BC roads**, and construct **RCC drains with street lighting and allied works** within Ward No. 2 of the Pourashava.

Objectives

The ESA aims to:

- Assess the existing environmental and social baseline.
- Identify potential environmental and social impacts during construction and operation.
- Develop a mitigation and management plan to enhance positive and minimize negative impacts.

Methodology

The study involved:

- **Desktop review** of existing data, policies, and secondary sources.
- **Field investigations** including site inspections, consultations, and photographic documentation.
- **Data analysis** for environmental and social impact identification, followed by report preparation.

2. Subproject Description

Location and Components

The subproject focuses on **1,920 meters** of BC road and RCC drain construction from Motin Chatal to Nayapara, with street lighting along the route. The primary outfall for drainage is **Jomilapur Canal**, which connects to **Bangali (Korotoa)** and **Jamuneswari Rivers**.

Current Situation and Need

- Existing BC roads are severely damaged, narrow, and waterlogged during monsoon.
- There are **no proper drainage system** and **no street lighting**, causing safety and mobility issues.
- The project will enhance traffic flow, drainage efficiency, and night-time safety.



Justification

The subproject was selected through a **Feasibility Study and Capital Investment Plan (CIP)**. No private land acquisition is required, and local communities support the intervention. Around **2,900 people** will directly benefit from improved access, drainage, and safety.

Key Activities

- Site office and labor shed setup.
- Earthwork, sand filling, and RCC construction.
- Installation of streetlights and associated electrical fittings.
 Materials: sand, bricks, cement, reinforcement, bitumen, diesel, GI poles, etc.
 Equipment: excavators, compactors, asphalt plant, concrete mixers, rollers, dump trucks.

Environmental Categorization

- As per ECR 2023: Orange Category (Moderate impact).
- As per World Bank ESF: Moderate Risk subproject.
- Streetlight component: Green Category (Low risk).
 Thus, a detailed ESA with site-specific ESMP suffices (no full ESIA needed).

3. Baseline Environmental and Social Conditions

i. Physical Environment

- **Geology & Soils:** The area is part of the Barind Tract (old alluvium), with undulating terrain and red loamy soil.
- **Climate:** Four distinct seasons; average temperatures range from 17.8°C (winter) to 28.9°C (monsoon).
- Rainfall: 70–100 inches annually; highest in July.
- **Hydrology:** Local canals and ponds, mainly Jomilapur Canal; groundwater depth 5–7.6 m, with arsenic and iron contamination.
- **Flooding & Drainage:** Generally, flood-free, though occasional monsoon stagnation occurs due to poor drainage.
- Air & Noise: Air quality is fair but impacted by vehicle emissions and dust; noise mainly from traffic and machinery.
- **Solid Waste:** Improper disposal in lowlands and drains causes health hazards; a dumping site exists near Ucha Para Korotoa River.

ii. Biotic Environment

- Common tree species: Rain tree, Mahogany, Mango, Jackfruit, Neem, Kadam, etc.
- Local fauna includes birds, reptiles, amphibians, and some IUCN-listed vulnerable species like *Herpestes javanicus palustris* (mongoose).

iii. Socio-Economic Environment

- Densely populated residential and commercial area.
- Literacy rate: 49.7% (below national average).
- Major livelihoods: trade, services, small enterprises, and transport.
- No indigenous or tribal communities are present.
- No cultural heritage or archaeological sites found.
- No land acquisition required; some minor structure removal will occur with community consent.

4. Environmental and Social Impacts and Mitigation Measures

i. Overall Risk Level

The project is **moderate-risk** with impacts being **localized**, **temporary**, **and manageable**. Key concerns include dust, noise, waste disposal, and occupational safety.

ii. Key Impacts and Mitigation

Activity/Impact	Potential Effects	Mitigation Measures
Site Clearing & Earthworks	Dust, noise, improper waste disposal	Spray water, cover stockpiles, proper disposal at designated site
Tree Felling	Minor vegetation loss	Compensatory plantation of 190 native trees (fruits, shade, ornamental) with bamboo fencing and regular maintenance
Construction Works	Dust, air & noise pollution, water contamination	Sprinkling water, using covered trucks, maintenance of equipment, and controlled material handling
Asphalt Plant Operation	Air pollution, waste disposal issues	Operate in compliance with environmental standards; dispose wastes at Ucha Para dumping site
Occupational Health & Safety	Heat exposure, accidents, hygiene	PPEs, first aid boxes, safe working hours, proper sanitation, compensation for accidents
Labor Influx	Pressure on utilities, possible social tension	Employ locals where possible, awareness programs, code of conduct enforcement
Traffic Movement	Temporary congestion	Traffic signs, off-peak delivery scheduling, section-wise work execution
Community Impacts	Noise, temporary inconvenience	Continuous liaison with residents, maintain access, and provide grievance channels

5. Environmental and Social Management Plan (ESMP)

iii. Implementation Structure

- PMU (LGED): Oversight, reporting, and coordination with the World Bank.
- PIU (Ghoraghat Pourashava): Day-to-day supervision.
- **DSM Consultants:** Technical support, monitoring, and capacity building.
- Contractor: Implementation of mitigation and safety measures.

iv. Capacity Building

MSU-LGED will organize training on ESMP implementation, monitoring, and community awareness. Manuals will be updated and tailored for Pourashava staff and contractors.

v. Emergency & Disaster Management

Preparedness plans will address potential natural or operational emergencies (floods, heat, accidents). The Pourashava will prioritize immediate response and coordination with local authorities

vi. Monitoring and Reporting

- Monthly and quarterly reports on ES compliance submitted to the World Bank.
- Visual and analytical monitoring (air, water, noise) during construction.
- Regular site inspections to ensure compliance with ESCoPs.

vii. Grievance Redress Mechanism (GRM)

A structured GRM will be in place at the Pourashava level to handle community complaints, ensuring timely resolution and transparency.

6. Public Consultation and Community Participation

Consultations were held with Pourashava officials, engineers, and residents through **FGDs and individual interviews**.

Key issues raised: poor drainage, water logging, sanitation, waste management, and communication network gaps.

Community feedback:

- Strong support for project implementation.
- Demand for quality construction and job opportunities for locals.
- Emphasis on minimizing dust, noise, and waste.
- Recommendations for awareness campaigns and training programs.

7. Conclusion and Recommendations

- The subproject is **environmentally and socially feasible**.
- No significant or irreversible impacts are expected.
- The impacts are manageable through standard ESCoPs and ESMP implementation.
- The project will enhance mobility, reduce flooding, improve sanitation and night safety, and generate local employment.

viii. Key Recommendations

- 1. Strict adherence to the ESMP and safety measures during all phases.
- 2. Timely plantation and maintenance of compensatory trees.
- 3. Continuous environmental monitoring and public engagement.
- 4. Periodic reporting to LGED and the World Bank.
- 5. Maintain community liaison to sustain positive perception and cooperation.

Overall Assessment:

The proposed RUTDP subproject at Ghoraghat Pourashava presents **moderate environmental and low social risks**, outweighed by **strong socio-economic and urban resilience benefits** for the local population.