

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/JOY/ 2024-25/W-01 at Joypurhat Pourashava, Joypurhat





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

Summary of ESA Report – Joypurhat Pourashava, Joypurhat Package No: RUTDP/JOY/2024-25/W-01

1. Subproject Overview

Location & Background:

Joypurhat Pourashava, established in 1975, is an "A" type municipality with an area of 20.72 sq. km and a population of approximately 106,729. The existing drainage system is inadequate, with silted drains, encroachments, and poor outfalls causing waterlogging during heavy rainfall. The subproject aims to rehabilitate and upgrade essential urban infrastructure.

Proposed Works:

- Construction and rehabilitation of RCC and BC roads (~9.2 km total).
- Development of RCC drains with footpaths and street lighting.
- Two major alignments:
 - Road-1: Gulshanmore–Jamalgonj via Teghar Railgate (~2.08 km).
 - Road-2: Gulshanmore–Kutibari Bridge via Khaonjjonpur Registry Office (~2.7 km + 3 link roads).

Objectives:

- Assess potential environmental and social impacts.
- Formulate an Environmental and Social Management Plan (ESMP).
- Recommend mitigation measures and enhancement strategies.

Current Situation:









Category:

- ECR 2023: Orange Category.
- World Bank (ESF): Moderate Risk Subproject.

2. Baseline Environmental Condition

a) Physical Environment

- Topography & Geology: Flat terrain (Barind Tract), elevation ~25m above sea level.
- Soils: Barind clay and floodplain soils; earthquake Zone-II.
- **Climate:** Tropical, warm summers and mild winters. Annual average temperature 24.4°C; rainfall ~1800 mm/year, mainly during June—September.
- **Hydrology:** Numerous ponds and canals, including *Railway Canal* and Jamuneswari River; groundwater depth 7–9m; arsenic detected in shallow aquifers.
- **Flooding:** Area is generally flood-free but vulnerable to flash floods; poor drainage causes temporary waterlogging.
- Air & Noise: Air is mostly clean but affected by vehicular emissions and dust. Noise within tolerable limits.

b) Biotic Environment

- Flora includes Rain Tree, Mahogany, Coconut, Mango, Jackfruit, Kadam, Neem, etc.
- Fauna includes birds, mongooses, reptiles, and fish.
- No endangered or protected areas nearby.

c) Socio-economic Environment

- **Population:** ~24,000 people directly benefit (Wards 1, 2 & 5).
- Livelihoods: Small business, transport, and service jobs dominate.
- Housing: Pucca/semi-pucca/tin-shed houses.
- **Education:** Literacy rate 77.9%, higher than national average.
- Cultural Heritage: No archaeological or religious sites affected.
- Land Acquisition: Not required; voluntary clearance of a few roadside structures agreed by owners.

3. Environmental & Social Impacts and Mitigation

a) Key Construction Impacts

Impact	Description	Mitigation
Dust, Air & Noise Pollution		Water spraying, covering materials, scheduling transport in off-peak hours
Soil & Water Pollution		Designated waste dumping (Koroi Kadipur Landfill), safe fuel storage
Tree Felling	~20 trees to be cut	Compensatory plantation of 110 local species trees (Rain Tree, Mango, Jackfruit, Neem, etc.)
Labor & Occupational Safety	1	PPE, first aid, clean labor sheds, safe working conditions
Traffic Disruption	. , ,	Section-wise construction, diversion routes, cautionary signage
Blockage	camps	Waste bins, proper disposal and awareness among laborers
Community Health & Safety	Risks of accidents, pollution	Safety barriers, community liaison, awareness meetings

b) Social Impacts

- No land acquisition or resettlement required.
- **Positive impacts:** Employment generation, improved accessibility, better drainage, and reduced waterlogging.

• **Negative impacts:** Temporary inconvenience during construction, minor traffic delays, and labor influx issues—manageable through monitoring and stakeholder communication.

c) Labor Influx Risks

- Potential for social tension, communicable diseases, or GBV.
- **Mitigation:** Engage local workers, awareness training, liaison with community leaders, monitor worker behavior, ensure proper sanitation and waste management.

4. Environmental and Social Management Plan (ESMP)

Key Components

1. Institutional Arrangement:

- PMU (LGED), PIU (Pourashava), DSM consultants responsible for ES compliance.
- Dedicated Environmental & Social Focal Points at Pourashava level.

2. Mitigation and Enhancement Measures:

- Tree plantation, dust suppression, safe material storage, waste disposal, PPE use.
- Section-wise construction scheduling to minimize public inconvenience.

3. Monitoring Plan:

- Construction Phase: Visual and analytical monitoring of air, noise, and water.
- Operation Phase: Monitoring of traffic safety, drainage functionality, and solid waste management.

4. Grievance Redress Mechanism (GRM):

- Multi-tier GRCs (Pourashava → PMU → LGED HQ).
- Complaint register, resolution timeframe within 15 days, with record keeping.

5 Capacity Building:

• Training for Pourashava staff, contractors, and workers on ESMP, OHS, and community engagement.

6. Cost Estimates:

• Budget included in BOQ for ESMP implementation (environmental enhancement, monitoring, and tree plantation).

5. Public Consultation and Participation

Consultation Conducted:

FGD and meetings with Pourashava Mayor, officials, local stakeholders, and residents.

Key Issues Raised:

- Drainage congestion, poor sanitation, and waste management.
- Expectation of better roads, improved livelihoods, and employment opportunities.
- Demand for quality control and adherence to environmental safeguards.

Community Feedback:

- Strong support for the project.
- Suggestions to ensure quality construction, avoid dust and noise, and maintain traffic flow.
- Requested capacity-building programs and community monitoring of contractors' work.

6. Conclusions and Recommendations

- The subproject will **significantly improve drainage and transport infrastructure** in Joypurhat Pourashava.
- No major environmental or social risks identified; impacts are site-specific, temporary, and manageable.
- Positive impacts include enhanced urban mobility, flood resilience, and employment.

Key recommendations:

- > Implement ESMP strictly and monitor regularly.
- Maintain coordination between PMU, DSM, PIU, and contractors.
- > Conduct awareness programs on waste management and traffic safety.
- > Ensure compensatory plantation and continuous maintenance of drainage networks.

Overall Summary:

The ESA concludes that the Joypurhat subproject is environmentally and socially feasible, with moderate risks well within the mitigation capacity of the implementing agencies. The project will deliver substantial long-term benefits through improved connectivity, urban resilience, and community well-being.