



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/BIL/2024-25/W-01

at

Birol Pourashava, Dinajpur



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

SUMMARY OF ESA REPORT
Package No: RUTDP/BIL/2024-25/W-01, Birol Pourashava, Dinajpur

1. Project Background and objectives

Birol Pourashava, established in 2011, is a “C” grade municipality covering 5.30 sq. km with a population of about 156,971. Rapid urbanization has created urgent needs for improved infrastructure. The subproject under RUTDP focuses on:

- **Rehabilitation and replacement of RCC pavements and BC roads**
- **Construction of RCC drains with footpaths**
- **Street lighting and allied works**

Objectives

- Assess environmental and social baseline conditions.
- Identify potential impacts of construction and operation.
- Develop an Environmental and Social Management Plan (ESMP).

Methodology

- **Desktop study:** review of baseline data, legal framework, technical processes.
- **Field investigation:** site walks, consultations, photo documentation.
- **Analysis:** data synthesis, stakeholder feedback, impact identification, and mitigation planning

2. Subproject Description

Location & Scope

- Situated in Wards 2, 3, and 4 of Birol Pourashava.
- **Activities include:**
 - **3495m RCC drain with footpath and streetlights (Bakultola More to Tolai River).**
 - **3500m RCC drain with footpath and streetlights (Birol Upazila Road to Rupali Jute Mill).**

Current Situation

- **No existing drainage network.**
- **Frequent waterlogging** during monsoon due to poor stormwater discharge.
- **Absence of street lighting** compromises safety.



Benefits

- Drainage improvements will reduce waterlogging.
- Streetlights will enhance traffic safety and community security.
- Approx. **6,900 people directly benefited**, with wider indirect benefits

Subproject Category

- **ECR 2023:** *Orange* category (moderate impacts).
- **World Bank (WB):** *Moderate risk*.
- No private land acquisition required; mostly Pourashava-owned land

Physical Environment

- **Geology:** Barind Clay, Holocene floodplains.
- **Elevation:** 20.73–26.33m PWD.
- **Climate:** Annual rainfall ~1998 mm; hot summers, cool winters.
- **Hydrology:** Linked to Tolai Bill, Kori Bill, Lona & Tolai Rivers.
- **Hazards:** Zone-II seismic risk; occasional flood history.
- **Air/Noise:** Generally acceptable, with localized vehicular pollution and noise

Biotic Environment

- Native flora: mango, jackfruit, rain tree, bamboo, mahogany.
- Fauna: birds, reptiles, amphibians; occasional IUCN-listed mongoose species.
- Marshlands and ponds support fish biodiversity

Socio-Economic & Cultural Environment

- **Population:** Mixed residential-commercial area.
- **Literacy rate:** ~49% (below national average).
- **Livelihoods:** Predominantly small businesses, transport, and service jobs.
- **Land acquisition:** None required, though small structures will be voluntarily removed.
- **Cultural heritage:** None affected.
- **Indigenous communities:** None present

4. Environmental & Social Impacts

Key Impacts During Construction

- **Air & Dust Pollution:** From excavation, transport, RCC works.
- **Noise & Vibration:** Localized from machinery.
- **Tree Felling:** About 160 roadside trees to be cut.
- **Waste & Effluents:** Improper disposal may pollute water and soil.
- **Traffic Congestion:** Temporary, localized.
- **Occupational Health & Safety (OHS):** Risks include accidents, dust exposure, dehydration.
- **Community Impacts:** Minor displacement of temporary roadside structures; increased risks from labor influx

Positive Impacts

- Employment generation (skilled/unskilled labor, supply chains).
- Improved business activities and property values.
- Strengthened governance and municipal service delivery

5. Mitigation & Enhancement Measures

Environmental

- **Dust control:** Water spraying, cover stockpiles.
- **Noise:** Mufflers on equipment, schedule noisy works in daytime.
- **Waste management:** Designated disposal sites at Sakhdhoa.
- **Tree replacement:** 785 new trees (fruit, medicinal, ornamental) to be planted with bamboo fencing.

Social

- **Traffic safety:** Section-wise work, diversion roads, signage.
- **Voluntary structure removal:** Agreements signed; monitored under RPF.
- **Labor influx management:** Use local workers, monitor behavior, liaise with community leaders.

- **Grievance Redress Mechanism (GRM):** Established with Pourashava and community representatives

Occupational Health & Safety

- PPE (helmets, gloves, masks, boots).
- First-aid kits and emergency medical support.
- Safe handling of hazardous materials.
- Sanitation and waste bins at labor camps

6. Environmental and Social Management Plan (ESMP)

- **Access to Information:** Reports made public at Pourashava office.
- **Institutional Arrangement:** LGED, Pourashava, DSM consultants, Contractor.
- **Capacity Building:** Training for officials and workers.
- **Emergency Response:** Disaster preparedness integrated.
- **Monitoring Plan:** Visual checks, analytical testing for air, water, and noise.
- **Costing:** Budget included in BOQ for mitigation & monitoring.
- **GRM:** Multi-tier grievance handling through GRC and Pourashava officials

7. Public Consultation

Consultations involved Pourashava Mayor, engineers, local community, and beneficiaries.

Issues raised:

- Demand for durable construction.
- Inclusion of proper drainage and street lighting.
- Emphasis on safety and transparency.

Community feedback:

- Strong support for the project.
- Suggestions incorporated into ESMP

8. Conclusion & Recommendations

- The subproject is **technically feasible and socially beneficial**.
- Anticipated environmental and social impacts are **site-specific, temporary, and manageable**.
- Mitigation measures in the ESMP (tree plantation, waste management, OHS, GRM) will ensure sustainability.
- The project will **significantly improve drainage, reduce waterlogging, enhance traffic flow and safety**, and strengthen Birol Pourashava's service delivery capacity.