



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/KAH/ 2024-25/W-01

at

Kahaloo Pourashava, Bogura



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

Resilient Urban and Territorial Development Project (RUTDP)

Location: Kahaloo Pourashava, Bogura

1. Introduction

Kahaloo Pourashava, established in 2002, is a small urban center covering 6.83 sq. km with a population of ~23,000. With increasing population pressure and rapid urbanization, the municipality faces major infrastructure gaps, particularly in roads, drainage, and lighting. The subproject, under the Resilient Urban and Territorial Development Project (RUTDP), proposes rehabilitation and development works to improve core municipal services.

Key Subproject Activities:

- Rehabilitation and replacement of **RCC pavements**.
- Rehabilitation of **bituminous carpeting (BC) roads**.
- Construction of **RCC drains with allied works** (footpaths, street lighting).

Objectives of ESA:

- Establish environmental and social baseline conditions.
- Identify potential construction and operational impacts.
- Recommend mitigation and enhancement measures.
- Prepare an Environmental and Social Management Plan (ESMP).

Methodology included literature review, site visits, field data collection, public consultations, and stakeholder interviews

2. Subproject Description

2.1 Project Components

The works are located mainly in Ward 7 of Kahaloo Pourashava and involve:

- **2.6 km RCC drain with street lighting and allied works**.
- Road upgrading (RCC and BC), linking key roads and marketplaces.
- Installation of street lighting for night-time safety and smooth traffic.

2.2 Existing Situation & Needs

- Roads are heavily damaged with potholes and narrow widths (1.5–2m).
- Drainage system is poor; stormwater leads to waterlogging and congestion.
- No functional streetlights, compromising night safety.



Existing Road Condition of the Subproject Site

Expected Benefits:

- Reduced waterlogging and improved stormwater management.
- Safer, smoother transport networks.
- Increased business opportunities, better municipal services, and improved governance.

2.3 Risk Categorization

- **ECR 2023:** *Orange Category* (moderate impacts).
- **World Bank ESF:** *Moderate Risk*.
- Street lighting is separately categorized as *Green* (low risk).

3. Baseline Environmental and Social Conditions**3.1 Physical Environment**

- **Geology & Soil:** Barind clay and floodplain sediments; slightly acidic soils with low organic matter.
- **Climate:** Warm temperate (avg. temp 24.8°C; annual rainfall 2060 mm).
- **Hydrology:** Saray Noyonjoli Khal as main outfall; groundwater abundant but shallow aquifers contain iron.
- **Hazards:** Flood-free zone but experienced historical floods (1988, 1998); in Earthquake Zone 2.
- **Air & Noise:** Air quality moderately degraded due to dust, vehicles, and waste burning. Noise mainly from local vehicles but within tolerable limits.

3.2 Biotic Environment

- Common tree species: mango, jackfruit, mahogany, rain tree, bamboo.
- Habitat for birds, reptiles, amphibians, and some vulnerable species (e.g., mongoose).
- No ecologically critical areas within the project footprint.

3.3 Socio-economic Environment

- Land use: dense residential with commercial hubs.
- Population directly benefiting: ~3,100.
- Literacy: ~62% (above national average).
- No tribal/indigenous communities in the area.
- Land acquisition not required; only minor voluntary dispossession of roadside sheds/fences with community consent.

4. Environmental and Social Impacts & Mitigation**4.1 Construction Phase Impacts**

- **Site clearing & excavation:** Dust, noise, disposal of spoil.
- **Tree felling:** ~50 roadside trees removed.
- **Air & noise pollution:** From vehicles, equipment, and asphalt plant.
- **Water quality risks:** Construction wastes could contaminate local khal.
- **Labor influx risks:** Possible social tensions, GBV, disease transmission.
- **Traffic disruptions:** Local congestion and pedestrian safety risks.
- **Occupational health & safety:** Heat exposure, accidents, machinery risks.

Mitigation Measures:

- Controlled dust suppression, covering stockpiles, spraying water.
- Planting **150 compensatory trees** with fencing and monitoring.
- Designated dumping site for wastes at Lakhipur.
- Strict OHS practices (PPE, first aid, accident compensation, sanitary latrines).
- Community consultations, traffic management, liaison with local leaders.
- Monitoring labor behavior and engaging local workers.

4.2 Operational Phase Impacts

- Improved roads will reduce congestion, but vehicle emissions/noise may increase.
- Solid waste mismanagement may create secondary pollution.
- Night-time safety enhanced by streetlights.
- Long-term positive impacts on commerce, mobility, and municipal services.

5. Environmental and Social Management Plan (ESMP)

5.1 Key Components

- **Institutional Arrangement:** LGED/Pourashava responsible; DSM consultants to support monitoring; contractors to comply with ESMP.
- **Capacity Building:** Training for municipal staff, contractors, and workers.
- **Monitoring Plan:** Visual inspections and analytical monitoring of air, water, noise, soil during construction.
- **Budget:** Allocated for mitigation and environmental enhancements.
- **Grievance Redress Mechanism (GRM):** GRC established at Pourashava level to address complaints.

6. Public Consultation & Participation

- Multiple consultations held with Pourashava officials, engineers, and community representatives.
- **Key issues raised:** drainage congestion, sanitation, construction quality.
- **Community feedback:** Strong support, voluntary removal of minor structures, demand for proper implementation and quality works.

7. Conclusion & Recommendations

- The subproject will significantly improve **transportation, drainage, and urban safety** in Kahaloo Pourashava.
- Impacts are **site-specific, temporary, and manageable** with recommended mitigation measures.
- Overall classified as **Moderate Risk** under World Bank ESF.
- Strong community support ensures smooth implementation.

Recommendations:

1. Implement mitigation measures strictly during construction.
2. Monitor dust, noise, and waste disposal regularly.
3. Ensure workers' safety and community health protection.
4. Engage community continuously for transparency and support.
5. Strengthen Pourashava capacity for ESMP implementation and monitoring.