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/SIT/2024-25/W-01
at
Sitakunda Pourashava, Sitakunda

Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

Summary of ESA Report for RUTDP/SIT/2024-25/W-01 at Sitakunda Pourashava

1. Introduction

Sitakunda Pourashava, established in 1998 as a B-type municipality with a population of around 62,350, is rapidly urbanizing. The Pourashava covers 28.91 sq. km and has 89 km of road networks, much of which are in poor condition. This subproject under the Resilient Urban and Territorial Development Project (RUTDP) focuses on upgrading and rehabilitating key roads and drains to support growing urban and economic needs.

The study was carried out to:

- Assess the baseline environmental and social conditions.
- Identify and evaluate potential environmental and social (ES) impacts during construction and operation.
- Recommend mitigation and enhancement measures.
- Formulate an Environmental and Social Management Plan (ESMP).

Methodology combined **desktop studies, field visits, data collection, consultations, and impact analysis**.

2. Subproject Description

Location and Scope

The works are concentrated in **Wards 2 and 7** of Sitakunda Pourashava, covering:

- **Sheikh Para Primary School Road**: ~1100 m RCC road with retaining wall, street lighting, and allied works.
- **Amir Hosain Miazi Road**: ~985 m RCC road with masonry guide wall, drainage, and street lighting.

Current Situation

- Roads are severely damaged with potholes and uneven surfaces, widths varying 1.5–2.5 m.
- Existing BC and HBB roads are beyond repair; drains are broken or inadequate.
- Traffic congestion and poor road conditions hamper mobility and business.

Existing Road Condition at Sheikh Para Primary School Road

Justification

- Identified through Pourashava's **Capital Investment Plan (CIP)** and feasibility studies.
- No land acquisition required; most lands belong to Pourashava.

- Minor ecological impacts (tree felling).
- Direct beneficiaries: ~11,950 people, with wider indirect benefits for the town.

Subproject Category
- **ECR 2023**: Orange Category.
- **World Bank ESF**: Moderate risk.

3. Baseline Environmental and Social Conditions

Physical Environment
- **Geology & Topography**: Alluvial flat land, prone to cyclones and earthquakes (Zone 2).
- **Climate**: Tropical monsoon; average rainfall 2,687 mm; vulnerable to flash floods and mudslides.
- **Hydrology**: Presence of ponds, ditches, and Pahari Chara; groundwater is abundant and arsenic/iron issues in shallow aquifers.
- **Flooding & Drainage**: Frequent flash floods due to hills; waterlogging common.
- **Air & Noise**: Generally acceptable; pollution from vehicles and dust; localized noise within tolerable limits.
- **Solid Waste**: Managed by Pourashava but challenged by poor community practices.

Biotic Environment
- Vegetation: Mix of indigenous and planted trees (Acacia, Mango, Mahogany, Bamboo, Jackfruit, etc.).
- Fauna: Birds, reptiles, amphibians, and fish; presence of IUCN-listed mongoose species.
- Habitats: Wetlands and ponds support aquatic biodiversity.

Socio-economic & Cultural
- Mixed urban-peri urban area with houses, shops, and mosques.
- Literacy rate: 61% (higher than national average).
- Livelihoods: Agriculture, small business, transport services.
- **No indigenous communities** (as per WB ESS7).
- **No land acquisition**, only voluntary removal of minor roadside structures.
- No archaeological or heritage sites within project influence area.

4. Environmental and Social Impacts

Positive Impacts
- Improved transport and drainage facilities.
- Reduced waterlogging and flood risk.
- Safer and more comfortable mobility.
- Economic growth through better connectivity.
- Employment during construction and enhanced livelihoods post-completion.

Negative Impacts (and Mitigation)

Construction Phase
1. **Site clearing, excavation, and earth works** → Dust, waste, noise. Mitigation: Cover soil, controlled disposal at designated sites, tarpaulin for stockpiles.
2. **Tree felling** (~60 trees) → Ecological imbalance. Mitigation: Plant 150 compensatory trees (local species with fencing and monitoring).
3. **RCC and sand filling works** → Dust, noise, water contamination. Mitigation: Water spraying, noise-control devices, regulated transport, safe waste disposal.
4. **Occupational Health & Safety** risks (sun, dust, heavy loads, machinery accidents). Mitigation: PPE, first aid, shaded labor sheds, training, accident compensation mechanisms.

5. **Community impacts** → Traffic disruption, damage to existing infrastructure, safety risks. Mitigation: Section-wise work, traffic signs, community liaison, first aid, avoid peak-hour deliveries.
6. **Labor influx** risks → Social tension, GBV, disease transmission. Mitigation: Prioritize local workers, monitor behavior, community engagement, coordination with administration.

Operation Phase

- Risks of noise, air pollution, and traffic congestion.
- Improved drainage reduces waterlogging.
- Enhanced employment and commercial activity.

Overall risk: **Moderate and manageable** with ESMP.

5. Environmental and Social Management Plan (ESMP)

Key Elements

- **Information Disclosure**: Public access to project details.
- **Institutional Arrangement**: PMU, LGED, DSM consultants, and Pourashava officials to oversee ES compliance.
- **Capacity Building**: Training for staff, contractors, and workers.
- **Emergency Preparedness**: Disaster response plans for floods, earthquakes, and cyclones.
- **Mitigation Measures**: Detailed action plans for dust, noise, waste, traffic, and OHS.
- **Monitoring Plan**: Visual observation and analytical testing for air, water, and noise.
- **Budget**: Environmental and social enhancement works integrated into BOQ.
- **Grievance Redress Mechanism (GRM)**: A GRC at Pourashava level to handle complaints promptly.

6. Public Consultation

- Conducted with **Mayor, Pourashava officials, community members, and consultants**.
- Issues raised: poor drainage, road conditions, sanitation, waste mismanagement, waterlogging.

- Recommendations:
    - Ensure quality construction.
    - Strengthen waste management.
    - Provide adequate employment for locals.
    - Proper scheduling of works to minimize disturbances.
    - Enhance capacity through workshops.

7. Conclusion and Recommendations

The ESA concludes that:

- The project will yield **significant socio-economic and environmental benefits**.
- Negative impacts are **site-specific, temporary, and manageable** through mitigation measures.
- Strong institutional support, continuous monitoring, community involvement, and adherence to ESMP will ensure sustainability.
- Overall classification: **Moderate risk**, acceptable for implementation under WB and GoB guidelines.