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/PAN/2024-25/W-01
at
Panchagarh Pourashava, Panchagarh

Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

Summary of ESA Report
Package No: RUTDP/PAN/2024-25/W-01
Location: Panchagarh Pourashava, Panchagarh

1. Introduction

Panchagarh Pourashava, established in 1985, is an "A" grade municipality covering about 22 sq. km with a population of ~45,589. Rapid urbanization and inadequate infrastructure (124.91 km of roads and 64.08 km of drains, many in poor condition) necessitate urgent rehabilitation.

The subproject under the **Resilient Urban and Territorial Development Project (RUTDP)** focuses on:

- Rehabilitation/replacement of **RCC pavements and BC roads**.
- Reconstruction of **RCC drains** with allied facilities (footpaths, street lighting).

Study Objectives:

- Assess existing environmental and social (E&S) conditions.
- Identify potential impacts during construction and operation.
- Propose an Environmental and Social Management Plan (ESMP).

Methodology: Desktop study, field investigations, consultations with stakeholders, and baseline environmental/social data collection

2. Subproject Description

Location: Wards 6 and 9 of Panchagarh Pourashava.

Components:

1. **503 m RCC drain** with BC road and lighting.
2. **670 m BC pavement** with RCC drain and lighting.
3. **660 m BC road** with RCC drain and lighting.
4. **2000 m BC road** with RCC drain, outfall link, and street lighting

Need for the project:

- Existing roads are narrow, damaged, and full of potholes.
- Drains are silted, discontinuous, and lack outfalls → causing severe waterlogging.
- Lack of street lighting affects night-time safety and mobility.

Current Situation of the Subproject:

Expected Benefits:
- Improved drainage, traffic flow, business opportunities, safety, and governance capacity.
- About 8,700 residents (Wards 6 & 9) will directly benefit, plus many more indirectly.

Categorization:
- **Roads & drains**: Orange category (ECR 2023); Moderate risk (World Bank).
- **Streetlights**: Green category (ECR 2023); Low risk (World Bank).
- Overall project: **Orange/Moderate risk** → ESA with ESMP suffices (no full ESIA needed)

3. Baseline Environmental & Social Conditions

Physical Environment
- **Topography & soil**: Flat terrain, Black Terai soils; seismic Zone II (medium risk).
- **Climate**: Hot summers (avg. high 99°F in May), cool winters (low 52°F in Jan), heavy monsoon rains (July avg. 13.5 in).
- **Hydrology**: Influenced by Karatoya & Talma rivers; shallow groundwater (0–5.3 m).
- **Flooding/Drainage**: Area prone to flash floods; poor drainage causes temporary waterlogging.
- **Air & noise**: Presently moderate; road dust, traffic, and burning waste degrade conditions.

Biotic Environment
- Vegetation includes Rain tree, Mango, Mahogany, Jackfruit, Coconut, Bamboo, etc.
- Aquatic fauna in ponds/canals; some vulnerable species (e.g., mongoose) recorded.
- Common birds and seasonal migratory birds present

Socio-economic & Cultural
- **Land use:** Dense residential with commercial, educational, health, and religious institutions.
- **Literacy:** ~70% (higher than national average).
- **Population**: Mixed occupations, largely non-farm (trading, transport, services).
- No indigenous peoples (per WB ESS7).
- **Land acquisition:** Not required; only minor voluntary relocation of small roadside structures with owner consent.
- No significant cultural or heritage sites in the area

4. Environmental & Social Impacts and Mitigation

Key Risks During Construction
- **Site clearance & excavation**: Dust, waste, noise.
- **Tree cutting**: ~80 roadside trees to be felled.
- **RCC/BC works**: Dust, noise, water pollution from construction materials.
- **Occupational health & safety (OHS)**: Risks from sun, heat, machinery, accidents.
- **Community impacts**: Traffic congestion, safety hazards, temporary relocation.
- **Labor influx**: Risk of crime, disease spread, gender-based violence, but also job creation.

Mitigation Measures
- Dust suppression (water spraying, covering stockpiles).
- Safe disposal of waste at designated Jalashi site (Ward 04).
- 3:1 compensatory plantation → **240 local fruit/ornamental/medicinal trees**.
- OHS protocols: PPE, first-aid, sanitation, accident compensation.
- Traffic management: Section-wise work, diversions, caution signs.
- GRM (Grievance Redress Mechanism) to address complaints.

Anticipated Positive Impacts
- Improved drainage → reduced flooding and waterlogging.
- Better transport connectivity → supports commerce, urbanization.

- Employment generation (construction + long-term commercial activities).
- Street lighting → night-time safety, reduced accidents and crime

5. Environmental and Social Management Plan (ESMP)

- **Information Disclosure**: Share ESA/ESMP with communities.
- **Institutional Setup**: PMU, PIU, DSM consultants, and Pourashava officials for compliance.
- **Capacity Building**: Training contractors/workers on E&S safeguards.
- **Emergency Response**: Plans for disasters and accidents.
- **Monitoring**:
    - Visual checks for dust, waste, OHS.
    - Analytical monitoring of water/air/noise quality.
- **Budget Allocation**: Environmental/social enhancement works included in BOQ.
- **Grievance Redress**: Multi-level GRC (community, PIU, PMU) for timely issue resolution

6. Public Consultation

Meetings with Pourashava officials, consultants, and community beneficiaries were held.

Key issues raised:

- Poor drainage, sanitation, waste management, traffic congestion.
- Need for quality construction, transparency, and minimization of adverse impacts.

Community feedback:

- Strong support for the project.
- No objections to voluntary removal of small structures.
- Recommended careful execution to avoid health, safety, and traffic hazards

7. Conclusions and Recommendations

- The project is **environmentally and socially justified**.
- Anticipated adverse impacts are **localized, temporary, and manageable** with mitigation.
- Major benefits: improved drainage, mobility, safety, economic growth, and quality of life.

Recommendations:

- Strict implementation of ESMP.
- Continuous environmental/social monitoring.
- Strong OHS enforcement and GRM functionality.
- Active community engagement throughout the project.

Overall Assessment:

The Panchagarh Pourashava subproject is feasible, beneficial, and aligned with sustainable urban development goals. With proper safeguards, it will significantly improve local infrastructure, environment, and livelihoods while minimizing adverse impacts.