



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/SAT/ 2024-25/W-01

at

Satkania Pourashava, Chattogram



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

Summary of ESA Report
Package No: RUTDP/SAT/2024-25/W-01
Location: Satkania Pourashava, Chattogram

1. Introduction

Satkania Pourashava, established in 2003, is a “B” grade Pourashava with an area of 12.5 km² and population of about 45,001 (BBS 2011). The municipality lacks adequate infrastructure such as roads, drains, and streetlights. With increasing population and urbanization, urgent infrastructure development is required.

This subproject under RUTDP involves:

- Rehabilitation and replacement of RCC and bituminous carpeting (BC) roads.
- Replacement of RCC drains with allied works.
- Construction of culverts, footpaths, and installation of streetlights.

Objectives of the ESA:

- Assess baseline environmental and social conditions.
- Identify potential impacts during construction and operation.
- Develop Environmental and Social Management Plan (ESMP) with mitigation measures.

Methodology included desktop review, field surveys, public consultations, data analysis, and preparation of mitigation and monitoring plans

2. Subproject Description

Location & Coverage:

- Wards 3, 4, 5, and 6 of Satkania Pourashava.
- Main activity: 2,500 m RCC road with culverts, allied works, and street lighting from T&T Road – Badrul Khail Mor – Jibon Market – Anu Fakir Dokan.

Current Situation:

- Existing BC and RCC roads are worn-out, average width only 3 m, impeding motorized vehicle movement.
- Inadequate drainage and absence of streetlights.

Proposed Interventions:

- New 5 m wide RCC pavements.
- Construction of 8 culverts at strategic points for stormwater diversion.
- Installation of streetlights for traffic and pedestrian safety.

Justification:

- Identified through Feasibility Study and Capital Investment Plan (CIP).
- Owned mostly by Pourashava; no private land acquisition needed.
- Expected beneficiaries: ~16,000 people directly, many more indirectly.

Subproject Category:

- **Road & Drains:** Orange category (ECR 2023), Moderate risk (WB).
- **Streetlights:** Green category (ECR 2023), Low risk (WB).
- Overall classification: **Orange (Moderate Risk)**.

3. Baseline Environmental & Social Conditions

Physical Environment:

- ❖ Geology: alluvial deposits, clay soils, cyclone-prone, earthquake Zone-2.
- ❖ Climate: avg. max temp 28–36.5°C; rainfall concentrated June–Sept.

- ❖ Hydrology: canals (Isamoti Khal, Dolu Khal, etc.), ponds, wetlands; groundwater contains arsenic & iron.
- ❖ Drainage: inadequate, leading to waterlogging during heavy rainfall.
- **Biotic Environment:**
 - ❖ Flora: Rain tree, Mahogany, Mango, Jackfruit, Coconut, Bamboo, etc.
 - ❖ Fauna: birds, amphibians, reptiles, mongooses (IUCN vulnerable), fish species.
 - ❖ Roadside tree felling expected (~60 trees).
- **Socio-economic Setting:**
 - ❖ Peri-urban, medium-density housing with shops, mosques, madrashas.
 - ❖ Beneficiaries: ~16,000 people across wards 3–6.
 - ❖ Literacy rate ~61.4% (slightly below national average).
 - ❖ No indigenous/tribal communities.
 - ❖ No cultural or heritage sites in project influence area.
 - ❖ No land acquisition required, only partial voluntary removal of roadside structures.

4. Environmental & Social Impacts

Construction Phase Risks:

Negative:

- Dust, noise, vibration, and waste generation.
- Felling of ~60 roadside trees.
- Occupational health & safety risks (heat, dust, accidents, machinery use).
- Temporary traffic disruptions and drainage congestion.
- Labor influx risks (crime, disease, social tension).

Positive:

- Employment opportunities (skilled/unskilled labor).
- Local business for suppliers.

Operation Phase Risks:

- Air and noise pollution from vehicles.
- Solid waste management challenges.
- Safety concerns for pedestrians and road users.

Positive Impacts:

- Improved transport and drainage facilities.
- Better urban connectivity, trade, and governance.
- Enhanced night safety through street lighting.
- Socio-economic uplift through improved communication and business growth.

5. Mitigation & Enhancement Measures

- **Tree Felling:** Plant 130 compensatory trees (fruit, ornamental, timber) with bamboo fencing and regular maintenance.
- **Air & Noise:** Water spraying, covered transport of materials, noise abating gear, scheduled deliveries.
- **Water & Soil Protection:** Prevent disposal of waste into canals/water bodies, safe storage of fuels and chemicals.
- **Solid Waste:** Designated dumping at Sham Chowdhury Para (Ward 8).
- **Traffic Management:** Section-wise construction, diversion routes, traffic signs.
- **Labor Influx:** Engage local labor, monitor workers' behavior, liaise with community leaders.
- **OHS:** PPE, first aid, sanitary facilities, training on health & safety.

6. Public Consultation

Consultations included Pourashava officials, engineers, and local community members.

Key Issues Raised:

- Drainage congestion, sanitation, waste management, road communication.
- Waterlogging in low-lying areas.
- Demand for more infrastructure projects annually.

Community Feedback:

- Strong support for subproject.
- Requests for quality construction and adherence to ESMP.
- Emphasis on creating employment opportunities.
- Suggested workshops for capacity building and awareness.

7. Environmental and Social Management Plan (ESMP)

- **Institutional Arrangement:** PMU (LGED), PIU (Satkania Pourashava), DSM consultants, and contractors will jointly ensure compliance.
- **Capacity Building:** Training workshops for PIU staff, Pourashava officials, contractors, and workers.
- **Monitoring:** Visual and analytical monitoring (air, noise, water quality).
- **Emergency Preparedness:** Disaster management plan covering natural hazards, environmental emergencies, and pandemics.
- **Grievance Redress Mechanism (GRM):** Community-based complaint handling via Pourashava and LGED.
- **Budget:** Specific provisions in BOQ for environmental and social mitigation, monitoring, and tree plantation.

8. Conclusions & Recommendations

- The subproject is environmentally and socially **feasible** with moderate, site-specific risks.
- Anticipated negative impacts are temporary, localized, and manageable through proposed mitigation.
- No land acquisition, no resettlement, and no indigenous communities affected.
- Strong community demand and support for implementation.
- Implementation of ESMP and monitoring plan is essential for ensuring compliance.

Overall Recommendation: Proceed with the project as it will significantly improve urban infrastructure, transport connectivity, drainage, and safety in Satkania Pourashava, thereby accelerating urbanization and improving livelihoods.