



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/CHN/ 2024-25/W-01

at

Chandina Pourashava, Cumilla



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

SUMMARY OF ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA)

Package No: RUTDP/CHN/2024-25/W-01 at Chandina Pourashava, Cumilla

1. Introduction

Chandina Pourashava, located in Chandina Upazila of Cumilla District, is a **Class B municipality** established in 1997, with an area of 14.2 sq. km and a population of about 46,823. The area has significant economic importance due to its linkage with the Dhaka–Chittagong Highway but faces **serious infrastructure problems**: damaged roads, inadequate drains, and absence of street lighting.

The proposed subproject under the **Resilient Urban and Territorial Development Project (RUTDP)** aims to:

- Rehabilitate and replace RCC and BC pavements.
- Replace damaged RCC drains and construct new ones with proper outfalls.
- Install allied works such as **footpaths and street lighting**.

The ESA study's objectives were to:

- Establish baseline environmental and social conditions.
- Assess potential positive and negative impacts during construction and operation.
- Develop an Environmental and Social Management Plan (ESMP) to mitigate risks and maximize benefits

2. Subproject Description

Scope and Activities

- **RCC Roads & Drains**: 3,025 m road rehabilitation from **Post Office to Srimontopur**, including drains, footpaths, and lighting.
- **BC Road & Drain**: 875 m rehabilitation from **Hazi More to Katarpul**, including RCC drains and lighting.
- **Street Lighting**: Installation of poles, conductors, and energy meters.

Justification

The project is part of the **Capital Investment Plan (CIP)** prioritized by feasibility consultants. It does not require **private land acquisition**, except for voluntary removal of a few roadside structures. The project is expected to **benefit ~20,400 residents directly** and many more indirectly by improving mobility, safety, drainage, and business activity

Current Situation

- Roads are **damaged, narrow, and congested**, with potholes and uneven surfaces.
- Existing drains are **narrow, silted, discontinuous, and without proper outfalls**, causing **waterlogging during monsoon**.
- **Streetlights are absent**, reducing safety at night.



Photographs: Existing Road Condition starting from Hazi More to Katarpul of the Subproject Site



Photographs: Current Situation of the Outfall at Subproject Site

3. Baseline Environmental & Social Conditions

Physical Environment

- **Geology & Soils:** Low-lying floodplain area with silty soils prone to flooding; located in **earthquake Zone-2**.
- **Climate:** Tropical monsoon, average temperature 25–32°C (summer), 12–15°C (winter), rainfall ~2430 mm annually.
- **Hydrology:** Adjacent to **Khir and Karjon Canals**; groundwater shallow (5–7m), often contaminated with arsenic and iron.
- **Air & Noise:** Generally tolerable, but risks from increasing vehicles and poor waste management.
- **Solid Waste:** No formal system; wastes dumped in drains and open spaces.

Biotic Environment

- **Flora:** Mango, Jackfruit, Mahogany, Coconut, Bamboo, etc.
- **Fauna:** Birds, amphibians, reptiles, and **vulnerable mongoose species** noted.

Socio-economic & Cultural Environment

- Core Pourashava area with **dense housing, shops, schools, mosques, and markets**.
- Literacy ~59.3% (below national average).

- **No indigenous communities** identified.
- Livelihoods mainly from small business, services, and transport.
- No **archaeological or cultural heritage sites** within influence area

4. Environmental and Social Impacts

Positive Impacts

- Improved **transport, drainage, and mobility**.
- Increased **safety and security** due to street lighting.
- Enhanced **business and employment opportunities**.
- Better **urban environment and resilience** to waterlogging.

Negative/Adverse Impacts (Mostly Temporary & Localized)

- **Construction-phase risks:**
 - Dust, noise, and vibration from machinery.
 - Risk of water pollution from improper waste disposal.
 - Tree felling (25 trees) and vegetation clearance.
 - Occupational health and safety risks (heat, dust, accidents).
 - Traffic congestion during works.
- **Social impacts:**
 - Minor voluntary displacement of roadside sheds/walls (agreed by owners).
 - Labor influx may cause social tensions, GBV risks, and pressure on local services.

Risk Categorization

- **ECR 2023:** Orange Category (RCC/BC roads & drains); Green Category (Streetlights).
- **World Bank ESF:** Moderate Risk.
- Hence, **detailed ESIA not required**; ESA with ESMP is sufficient

5. Mitigation and Management Measures

Environmental

- **Dust Control:** Regular water spraying, cover stockpiles, transport materials with tarpaulins.
- **Noise Control:** Use mufflers, schedule work during day, avoid sensitive hours.
- **Waste Management:** Dispose wastes at designated site (Belashor near Dumuria Bridge).
- **Tree Compensation:** Fell ~25 trees but plant **130 new trees** (fruit, shade, and ornamental species) with bamboo fencing.
- **Drainage:** Ensure proper outfall to Khir and Karjon Canals.

Occupational Health & Safety

- Provide PPE (helmets, masks, gloves, boots).
- Maintain first-aid facilities.
- Ensure clean labor sheds, adequate sanitation, and drinking water.

Social

- Consult affected persons; follow **Resettlement Policy Framework** if disputes arise.
- Promote local hiring and supplier engagement.
- Establish **Grievance Redress Mechanism (GRM)**.
- Awareness campaigns on **traffic safety and gender-based violence (GBV)**.

Institutional & Monitoring Arrangements

- **LGED and Pourashava authorities** responsible for ESMP compliance.
- Regular monitoring of air, noise, water, and waste disposal.
- Capacity building and training for contractors, workers, and local officials

6. Public Consultation

Consultations were held with **Pourashava officials, local residents, business owners, and community leaders.**

- **Concerns raised:** traffic disruption, dust, noise, drainage congestion, and road safety.
- **Feedback:** community strongly supports the project, expecting improved transport, drainage, and safety.
- Recommendations included timely completion, tree plantation, and strict enforcement of safety measures

7. Conclusions and Recommendations

The Chandina Pourashava subproject is **technically feasible, socially acceptable, and environmentally manageable.**

- Negative impacts are **minor, temporary, and mitigable.**
- Positive impacts are **significant and long-term**, including improved infrastructure, reduced flooding, enhanced safety, and better quality of life.

Key recommendations:

- Implement ESMP strictly with adequate monitoring and budget allocation.
- Ensure effective **community participation and grievance redress.**
- Enforce **contractor compliance with occupational safety, waste management, and tree plantation plans.**
- Strengthen **institutional capacity** for monitoring and environmental-social compliance.

Overall, the project will **benefit ~20,400 residents directly** and play a crucial role in enhancing urban resilience, connectivity, and living standards in Chandina Pourashava.