



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

Local Government Engineering Department (LGED)

Local Government Division

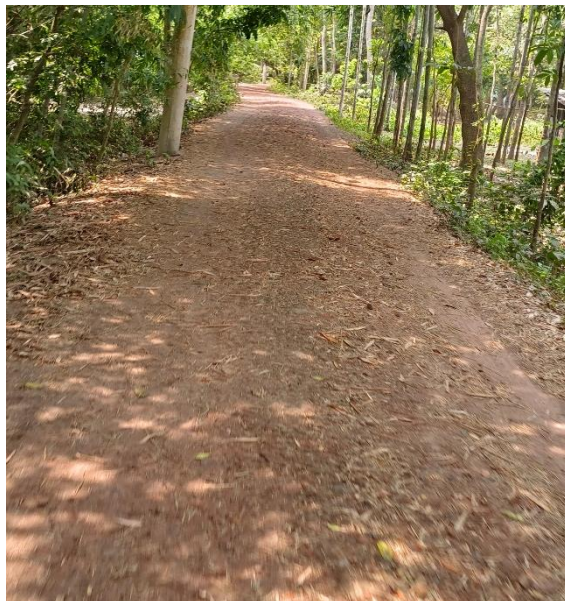
Ministry of Local Government, Rural Development and Cooperatives

ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) REPORT FOR

Package No: RUTDP/NAR/ 2024-25/W-01

at

Narail Pourashava, Narail



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

SUMMARY OF ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) REPORT

Package No: RUTDP/NAR/2024-25/W-01, Narail Pourashava, Narail

1. Introduction

Narail Pourashava, established in 1972, is an “A” grade municipality covering 28.52 km² with a population of ~155,775. Rapid urbanization has increased the need for improved transport, drainage, and civic facilities. The subproject under the Resilient Urban and Territorial Development Project (RUTDP) includes:

- Rehabilitation and replacement of **Bituminous Carpeting (BC) roads**
- Construction/replacement of **RCC drains with allied works**
- Installation of **street lighting and footpaths**

The ESA study was conducted to establish a baseline, assess potential environmental and social impacts, and design mitigation and enhancement measures through an Environmental and Social Management Plan (ESMP).

2. Subproject Description

Location: Wards 07, 08 & 09 of Narail Pourashava.

Main activity: ~5,300 m of BC road improvement from *Machimdia Underpass to Mirapara Ghat via Bijoypur*, with RCC drains, footpaths, and street lighting.

Current Situation & Needs

- Roads are narrow, damaged, and potholed, averaging 3m width.
- Existing drains (343 m brick drain) are inadequate, damaged, and silted.
- Frequent waterlogging occurs during monsoon due to poor drainage.
- Absence of streetlights causes safety risks at night.

The present situation of the subproject area is further elaborated in the following



Photographs: Existing Road Condition of the Subproject Site



Photographs: Existing Drain Condition of the Subproject Site



Photographs: Current Situation of the Outfalls at Subproject Site

Proposed works aim to improve traffic flow, drainage efficiency, and safety, benefiting ~10,600 people directly.

Justification

- Selected from the Pourashava's Capital Investment Plan (CIP).
- No private land acquisition required (roads are municipality-owned).
- Expected to generate local employment and enhance urbanization.
- Categorized as **Orange (moderate risk)** under ECR-2023 and **Moderate risk** under World Bank ESF.

3. Baseline Environmental and Social Conditions

Physical Environment

- **Geology & Soil:** Located on Ganges floodplain; soils include calcareous alluvium.
- **Topography:** Flat terrain, elevation 11–15 m.
- **Climate:** Annual rainfall 1,500–1,800 mm; April is the hottest month (~35°C).
- **Hydrology:** Chitra River is the main outfall; groundwater contains arsenic/iron.
- **Flooding:** Area lies in a normal flood zone; occasional waterlogging occurs.
- **Air & Noise:** Present air quality is acceptable; vehicle traffic and burning cause dust. Noise is within tolerable limits but can rise during construction.

Biotic Environment

- Vegetation: Rain tree, mahogany, mango, jackfruit, coconut, bamboo, etc.
- Wildlife: Birds, reptiles, amphibians, and some vulnerable species (e.g., mongoose).
- Aquatic environment: Ponds, khals, wetlands hosting fish and migratory birds.

Socio-economic & Cultural Environment

- Land use: Mixed residential and commercial peri-urban settlement.
- Literacy rate: ~81.7% (higher than national average).
- No indigenous/tribal communities present.
- Livelihoods: Small businesses, services, transport.
- Cultural sites: Hatbariya Park and Narail landlord estate.
- No large-scale land acquisition needed; only voluntary removal of small roadside structures.

4. Potential Environmental & Social Impacts

Positive Impacts

- Improved **traffic flow and safety** (day & night).
- Reduced **drainage congestion and waterlogging**.
- Increased **business activity and urban services**.
- Creation of **local employment opportunities** during and after construction.

Negative Impacts (Construction Phase)

1. **Air & Noise Pollution** – from vehicles, machinery, dust.
2. **Water Quality Risks** – if wastes are disposed in drains/river.
3. **Vegetation Loss** – ~60 roadside trees to be felled.
4. **Community Impacts** – temporary traffic congestion, inconvenience.
5. **Occupational Health & Safety Risks** – exposure to dust, heat, machinery accidents.
6. **Labor Influx Risks** – potential social issues (GBV, health hazards, conflicts).
7. **Solid Waste Generation** – unmanaged debris can pollute surroundings.

Operational Phase Risks

- Vehicle emissions, noise, and traffic safety risks.
- Drain maintenance issues if solid waste disposal is not properly managed.

5. Mitigation & Enhancement Measures

- **Air/Noise Control:** Water spraying, covering stockpiles, mufflers on machinery, off-peak transport of materials.
- **Tree Compensation:** 300 trees (fruit, medicinal, ornamental) to be planted with fencing and monitoring.
- **Water Management:** Waste disposal at designated sites, prohibit dumping in drains/Chitra River.
- **Occupational Safety:** PPE (helmets, masks, gloves, boots), first aid facilities, accident compensation.
- **Traffic Management:** Section-wise work, cautionary signs, liaison with local community.
- **Community Engagement:** Regular consultations, GRM (Grievance Redress Mechanism) established.
- **Labor Influx Safeguards:** Preference for local workers, monitoring outsider behavior, awareness against GBV, liaison with administration.

6. Environmental and Social Management Plan (ESMP)

- **Institutional Arrangements:** LGED, Pourashava, Project Management Unit (PMU), and Design Supervision & Management (DSM) consultants will ensure compliance.
- **Capacity Building:** Training for contractors/workers on environmental & safety compliance.
- **Monitoring Plan:** Visual and analytical monitoring for air, noise, water, and waste.
- **Budget:** Cost estimates included in BOQ for environmental and social enhancement measures.
- **Emergency Response:** Procedures for disaster management and accident response outlined.

7. Public Consultation & Participation

Two consultations were conducted with Pourashava officials and local residents.

- **Issues Raised:** drainage congestion, road damage, traffic risks, need for safety.
- **Feedback:** Strong community support; demands for quality construction and timely completion.
- **Commitments:** Pourashava assured community involvement and grievance handling.

8. Conclusions & Recommendations

- The subproject will have **minor, site-specific, and temporary negative impacts**, manageable with mitigation.
- **Significant positive impacts** include improved transport, drainage, urban services, safety, and socio-economic development.
- Classified as **Orange/Moderate risk** – detailed ESIA is not required; ESA with ESMP is sufficient.
- Strong local support ensures smooth implementation.
- Key recommendation: Strict adherence to ESMP, effective monitoring, community consultation, and post-construction maintenance.