



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/PAL/2024-25/W-01

at

Palashbari Pourashava, Gaibandha



Resilient Urban and Territorial Development Project (RUTDP)

Sub-Project Preparation Team, RUTDP, LGED

Summary of ESA Report for RUTDP/PAL/2024-25/W-02

Location: Palashbari Pourashava, Gaibandha

Project: Resilient Urban and Territorial Development Project (RUTDP)

Implementing Agency: LGED, Ministry of LGRD&C

1. Introduction

Palashbari Pourashava, a “C” grade municipality established in 2011, covers an area of 18.38 sq. km with a population of about 46,500. Rapid urbanization has increased the demand for improved infrastructure, particularly roads, drains, and street lighting.

The **objectives of the ESA** are to:

- Assess the existing environmental and social conditions.
- Identify potential impacts of the proposed subproject during construction and operation.
- Recommend mitigation and enhancement measures through an Environmental and Social Management Plan (ESMP).

The methodology included **desktop study, field surveys**, stakeholder consultations, and data analysis to build baseline conditions and forecast potential impacts.

2. Subproject Description

Key Components

- **2682m BC (Bituminous Carpeting) Road** development with street lighting and allied works.
- Construction of **RCC culverts and cross drains** for improved drainage.
- Street lighting to enhance road safety and nighttime mobility.
- **Existing Situation & Need**
 - Roads are narrow, damaged, and mostly earthen, creating potholes, undulations, and unsafe travel.
 - Absence of streetlights hinders night-time safety and community security.
 - Drainage is inadequate, causing waterlogging during heavy rains.

The subproject is expected to **benefit ~4,000 direct beneficiaries** in Ward 3, improve transport efficiency, promote business growth, and enhance urban services.



Existing Road Condition of the Subproject Site

Categorization

- **Road works & drains:** *Orange category* under ECR 2023; *Moderate risk* under WB ESF.
- **Streetlights:** *Green category* under ECR 2023; *Low risk* under WB ESF.

Thus, a full ESIA is not required; the ESA with ESMP suffices.

3. Baseline Environmental & Social Conditions

Physical Environment

- **Geology & Soil:** Barind Tract; lateritic clays, floodplain deposits; Zone-II/Zone-I seismic risk.
- **Climate:** Average temp 24.8°C; rainfall ~2060 mm/year. Monsoon-dominated.
- **Water:** Korotoa Lake and ponds influence hydrology; shallow aquifers contain iron but not arsenic.
- **Flooding/Drainage:** Area lies in a normal flood zone; suffers from drainage congestion and waterlogging.
- **Air & Noise:** Generally clean air; dust from unpaved roads. Noise from vehicles, markets, and social events.
- **Solid Waste:** A designated dumping site exists but poor community practices create health hazards.

Biotic Environment

- Rich vegetation with fruit, timber, and bamboo groves. Agricultural land dominates (paddy, seasonal crops).
- Common fauna: crows, sparrows, doves, etc. No protected or endangered species reported.

Socio-Economic Context

- Mixed peri-urban land use (residential, agricultural, institutional, commercial).
- Direct beneficiaries: ~4,000; literacy ~41% (lower than national average).
- Livelihoods: small business, transport, farming, public/private jobs.
- No indigenous or tribal communities (no ESS7 applicability).
- Land acquisition not required; some voluntary removal of roadside sheds/fences agreed by locals.

4. Potential Impacts and Mitigation

Anticipated Negative Impacts

- **Construction Phase:**
 - Dust, noise, and vibration from earthwork, excavation, asphalt plant, and vehicles.
 - Tree felling (about 120 trees).
 - Waste generation (soil, debris, fuel, oil leaks).
 - Temporary traffic disruptions and pedestrian safety concerns.
 - Occupational health and safety risks (sun exposure, machinery, poor sanitation at camps).
 - Social risks from labor influx (crime, gender-based violence, disease transmission).
- **Operation Phase:**
 - Increased air/noise pollution from traffic.
 - Solid waste mismanagement and drainage clogging risks.
 - Road accidents if traffic is not well managed.

Mitigation Measures

- Dust suppression (water spraying, covering stockpiles).
- Noise control (mufflers, restricted working hours).
- Designated disposal sites for waste.
- Tree replantation: **600 new saplings** (5x compensation, with bamboo fencing and maintenance).
- Traffic management: signage, section-wise construction, alternate routes.
- Worker safety: PPE, first aid, sanitation facilities, OHS training.
- Community engagement to minimize conflicts and ensure cooperation.
- Grievance Redress Mechanism (GRM) to address complaints.

Positive Impacts

- Improved transportation, reduced travel time, safer mobility.
- Enhanced night-time safety due to streetlights.

- Employment opportunities during construction and maintenance.
- Growth in trade, services, and property values.
- Improved governance and municipal service delivery.

5. Environmental and Social Management Plan (ESMP)

The ESMP outlines mitigation and monitoring measures across phases:

- **Institutional Arrangement:** PMU, LGED, DSM consultants, and Pourashava will jointly monitor compliance.
- **Capacity Building:** Training for contractors, workers, and Pourashava officials.
- **Emergency Response:** Fire safety, accident response, and disaster preparedness.

Monitoring:

- Visual inspection of dust, noise, and waste handling.
- Analytical monitoring of air, water, and soil quality.
- Community consultations and reporting.

Budget Allocation: Environmental and social management costs are included in BOQ.

6. Public Consultation

Stakeholder engagement involved FGD sessions, site visits, and Pourashava meetings.

Concerns raised: poor drainage, waste disposal, sanitation, road conditions, waterlogging.

Community expectations:

- Better connectivity, reduced congestion.
- Employment opportunities for locals.
- Quality construction with strict supervision.
- Proper waste and sanitation facilities.
- Stronger municipal capacity and long-term sustainability.

7. Conclusion & Recommendations

The Palashbari subproject is **socially desirable and environmentally feasible**. Impacts are moderate, site-specific, and manageable with mitigation.

Recommendations:

1. Strict implementation of ESMP and ESCoPs during construction.
2. Continuous community consultations and functioning GRM.
3. Replacement tree plantation program to ensure ecological balance.
4. Strong monitoring of contractor compliance on waste, OHS, and traffic safety.
5. Capacity building for Pourashava to manage future urbanization challenges.

Overall, the subproject will **improve urban infrastructure, enhance mobility, and support socio-economic development** in Palashbari Pourashava, contributing to the objectives of RUTDP.