

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/KUS/2024-25/W-01 at Kushtia Pourashava, Kushtia





Resilient Urban and Territorial Development Project (RUTDP)
Sub-Project Preparation Team, RUTDP, LGED

Environmental and Social Assessment (ESA)Summary

Package No: RUTDP/KUS/2024-25/W-01, Kushtia Pourashava

1. Introduction

Kushtia Pourashava, established in 1869 and currently graded as "A", covers an area of 42.79 sq. km with a population of about 229,340. With rapid urbanization and inadequate infrastructure, the Pourashava faces challenges in transportation, drainage, and street lighting.

This subproject under the Resilient Urban and Territorial Development Project (RUTDP) aims to:

- Rehabilitate and replace damaged Bituminous Carpeting (BC) roads and RCC pavements.
- Replace narrow, silted, and damaged brick drains with RCC drains having proper outfalls.
- Install footpaths and modern street lighting to improve mobility and safety.

The study identifies environmental and social impacts, proposes mitigation and enhancement measures, and develops an Environmental and Social Management Plan (ESMP) to ensure sustainable implementation

2. Subproject Description

Location and Scope

The project spans **Wards 4, 5, 7, 8, 9, 10, 11, and 12** of Kushtia Pourashava, focusing on major core-area roads and drains.

Key works include:

- Activity 1: 2.3 km improvement of Khondaker Aminul Haque Badsha Road and two link roads.
- Activity 2: 672 m upgrade of Kabi Azizur Rahman Road.
- Activity 3: 900 m rehabilitation of Adv. Mahtab Uddin Road.
- Activity 4: 1.88 km rehabilitation of Mir Mosharof Hossain Road.

Current Situation of the Subproject:



Justification

- Roads are damaged, potholed, and narrow, disrupting traffic and livelihoods.
- Existing drains are inadequate and cause waterlogging during monsoon.
- Old and insufficient streetlights compromise night-time safety.

An estimated **69,500 people** will directly benefit, while others indirectly gain from better mobility, drainage, and urban safety

3. Baseline Environmental and Social Conditions

Physical Environment

- Geology & Soils: Kushtia lies on the Ganges floodplain with flat alluvial sandy clay soils.
- Climate: Tropical monsoon; annual rainfall ~1035 mm (70% during monsoon).
- Air & Noise: Air quality is generally fair but affected by vehicles and dust; noise comes mainly from traffic but remains within tolerable limits.
- **Water Resources:** Gorai and Kaliganga rivers, ponds, and khals form major sources; groundwater (5–7.6 m deep) often contaminated with arsenic and iron.
- **Flooding:** The area is flood-free but suffers waterlogging due to poor drainage.

Biotic Environment

- Vegetation includes rain tree, mahogany, mango, jackfruit, guava, and seasonal crops.
- Some faunal species (birds, mongooses, amphibians) exist, with moderate ecological value.

Socio-Economic Environment

- Land use: Dense **residential-commercial mix** with markets, schools, hospitals, and industries.
- Literacy: 74.8% (above national average).
- **Livelihoods:** Predominantly small business, services, transport, and trade.
- No indigenous/ethnic minority communities are present.
- No private land acquisition required; minor structure removal agreed voluntarily by locals

4. Environmental and Social Impacts

Construction Phase Risks

- Air & Noise Pollution: Dust from earthworks, emissions from vehicles and machinery.
- Water Pollution: Possible contamination from waste, oil spills, or construction runoff.
- Soil Disturbance: Excavation and improper disposal of spoil.
- Tree Felling: About 16 roadside trees to be cut.
- Community Disturbance: Temporary traffic congestion, waste generation, and safety risks.
- Labor Influx: Potential social risks (GBV, communicable diseases, pressure on services).
- Occupational Health & Safety (OHS): Workers face risks of accidents, exposure, dehydration, dust, and machinery use.

Operation Phase Benefits and Risks

- **Positive:** Improved drainage reduces waterlogging; roads improve mobility and trade; streetlights enhance safety and security.
- Risks: Traffic-induced noise and air pollution, increased solid waste from commercial growth.

Overall Risk Classification

- ECR 2023: Orange Category (moderate impacts).
- World Bank ESF: Moderate Risk.
- Impacts are **site-specific**, **temporary**, **and manageable** through mitigation

5. Mitigation and Enhancement Measures

Key Measures

Air Quality: Water sprinkling, covering stockpiles, and proper vehicle maintenance.

Noise Control: Limit construction during daytime, use noise abatement gear.

Waste Management: Disposal at designated sanitary landfill (Mouja Baradi, Ward 16).

Tree Replacement: Planting of **90 compensatory trees** (mango, jackfruit, rain tree, mahogany, etc.) with fencing and monitoring.

OHS Measures: PPE, first-aid, accident compensation, proper worker sheds, sanitation facilities. **Community Engagement:** Public consultations, traffic management, grievance redress mechanism (GRM).

Labor Influx Management: Awareness on health, prohibition of child/forced labor, gender-sensitive facilities, security monitoring.

6. Environmental and Social Management Plan (ESMP)

Institutional Arrangement

- PMU (LGED) oversees ES compliance.
- **DSM Consultants** provide technical supervision.
- Pourashava Officials monitor locally.
- Contractors implement mitigation on-site.

Monitoring

- Visual and analytical monitoring of air, noise, water, and soil quality.
- Regular reporting to PMU and World Bank.

Capacity Building

• Training on environmental safeguards, OHS, and community liaison for contractors and municipal staff.

Grievance Redress Mechanism (GRM)

• Multi-tier structure: community → Pourashava → PMU → World Bank (if unresolved).

7. Conclusions and Recommendations

The ESA concludes that the proposed subproject in **Kushtia Pourashava** is **socially beneficial and environmentally manageable**.

- It addresses critical urban needs—better **roads**, **drainage**, **and lighting**—that directly benefit ~70,000 residents.
- Environmental and social risks are moderate, mostly construction-related, and can be mitigated.
- Strong implementation of ESMP, tree plantation, OHS protocols, waste management, and GRM is vital.
- Public support is high, with voluntary cooperation from affected parties.

Recommendation: Proceed with implementation under strict adherence to ESMP, safeguard policies, and monitoring requirements to maximize long-term benefits while minimizing adverse impacts