Restructuring Fire Response in Zinjira, Keraniganj: Mapping for Safety and Efficiency

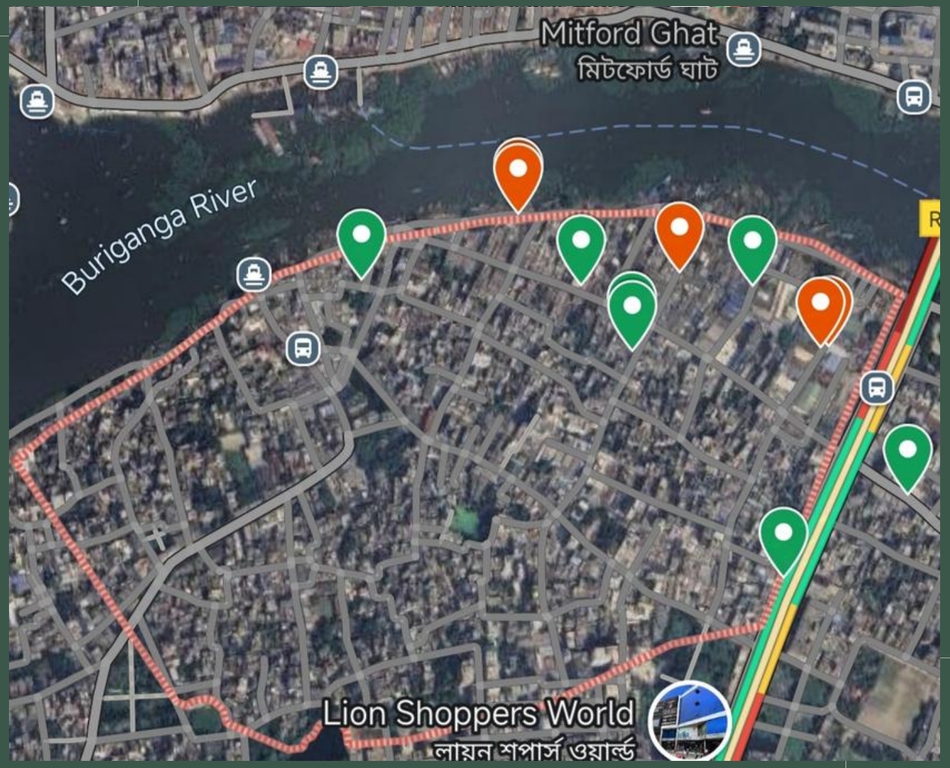
Background

Zinjira, located in Keraniganj, serves as a crucial hub for light engineering and diverse manufacturing industries, contributing significantly to Dhaka’s retail market. Despite its economic importance, Zinjira faces severe risks from fire hazards due to:

Dense and often informal infrastructure.

A poorly maintained road network, with some routes so narrow that only pedestrians can pass through.

Study Area


Mitford Ghat
মিটফোর্ড ঘাট
Buriganga River
Lion Shoppers World
লায়ন শপার্স ওয়ার্ল্ড

Objectives

Analyze and categorize the road network based on accessibility for fire trucks and on-foot responders.

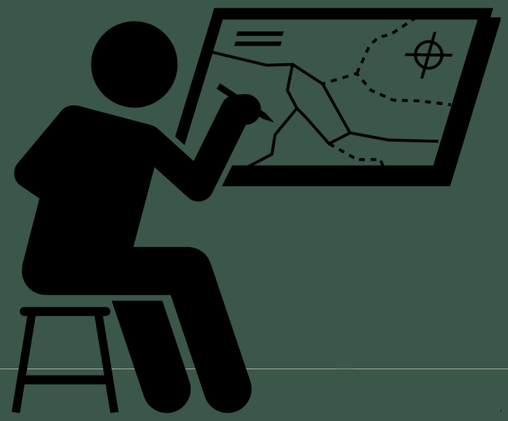
Identify and map optimal rescue routes to fire-prone areas, minimizing response times.

Ensure access to critical resources, including clear routes to the Buriganga River as a water source.

Project Methodology

To achieve these goals, we will implement the following steps

Data Collection



Mapping Tools

Project Methodology

OpenStreetMap (OSM): For base mapping and community-driven data collection.

Mapillary: To capture street-level imagery for detailed analysis.

JOSM (Java OpenStreetMap Editor): For advanced editing and data integration.

Expected Out Comes

Significance

This project will address critical gaps in emergency response infrastructure in Zinjira, benefiting its population and safeguarding its industrial ecosystem. It aligns with broader goals of urban resilience and disaster risk reduction, providing a replicable model for similar vulnerable areas in Dhaka and beyond.

Budget and Timeline

Estimated Duration: 6-8 months.
Budget Requirements: To cover equipment (GPS devices, cameras), software (OSM-compatible tools), and community workshops.

CONCLUSION

This refined proposal ensures clarity and communicates the technical, social, and economic importance of the project effectively. Let me know if you need assistance with any specific sections or details!

Thank You