

Title: Ananda Bazar’s Growing Waste Crisis: Impacts on Public Health and the Environment

Introduction

Environmental pollution caused by poor solid waste management is a problem worldwide. Open dumping and open burning are the main methods used to treat and dispose of waste, especially in low-income countries (Ferronato & Torretta,2019). About 84% of them had no formal education. Most of the people worked 8 to 10 hours each day. Their average daily income from selling recyclables was BDT 443.5 (about US \$5.15) (Begum et al.,2022). Environmental problems are found all over the world. The main issues include marine litter, pollution of air, soil, and water, and waste pickers coming into direct contact with dangerous waste (Ferronato & Torretta,2019). The uncontrolled dumping of solid waste in urban areas causes problems for nearby residents in many developing cities. Although open dumps are supposed to have environmental protection measures, these safeguards are often inadequate, create major health problems for people and lead to environmental damage in urban areas (Sankoh et al., 2013). Landfilling causes different types of environmental pollution, including: (a) groundwater pollution from harmful organic, inorganic, and other substances that leak from waste, (b) air pollution from dust and particles, (c) bad smells from municipal solid waste, and (d) possible marine pollution from run-off. In addition, health problems can result from polluted groundwater and gas emissions, which cause cancer and other illnesses in people living nearby (Siddiqua et al., 2022). People living nearby suffered from illnesses such as malaria, chest pains, diarrhea, and cholera due to the dumpsite’s close location to their communities (Sankoh et al., 2013). Regarding health conditions, most of the people had digestive problems, including occasional diarrhea (39%), intestinal worms (57%), and hepatitis A (2.5%) (Begum et al.,2022).

Literature Review

Landfills and open dumpsites in developing areas, including South Asia, cause groundwater contamination, air pollution, and higher risk of diseases (Siddiqua et al.,2022). Open dumping and burning, which are common in low-income Asian countries, cause air, soil, and water pollution. create health risks for informal waste workers and people living nearby (Ferronato & Torretta,2019).Various types of waste are produced, the lack of proper facilities, and the environmental and health problems caused by poor waste management in Chattogram (Sarkar,et al.). Landfill leachate pollution in Dhaka and other cities, dangers to water sources, food crops, and people’s health. toxic liquid from landfills pollutes soil, crops, and groundwater. long-term health risks and the absence of properly designed landfill systems (Rahman & Ahmed, 2024). Current landfill sites in Chattogram, including Ananda Bazar, it fails to protect the environment properly (Ashraf et al., 2015). High levels of iron, cloudiness, and heavy metals, creating serious health risks for nearby communities. Groundwater pollution near major dumping sites such as Ananda Bazar and Arefin Nagar (Chowdhurya et al.,2024). Chattogram’s plastic waste problem and affects the environment and people’s health (Hossain et al.,2021). Bad waste management in Chattogram leads to environmental damage and health problems (Biswas et al.,2020). (Behnam et al., 2020) Highlights bigger waste management problems in Chattogram. Environmental and worker health dangers caused by poor waste disposal and wastewater handling. Weak laws, poor cooperation, high population growth, limited funding, and negative community habits. Increase environmental damage and create greater health risks for people. (Balitaan) Represent challenges the city faces poor waste disposal leads to disease spread, polluted water, and dirty air. And also highlights poor waste management harms vulnerable groups, especially those living in slums.Improper waste disposal leads to more diseases and worsens poverty (Nahid Aktar,2023). Health risks, working conditions, and socio-economic challenges faced by informal waste pickers at the Ananda bazar dumping site (Begum et al.,2022).Most research looks at waste problems for entire cities or districts, but it often ignores smaller areas like marketplaces where a lot of waste is produced and health risks are higher.So far, no detailed study has examined the specific types of waste, how it is thrown away, or how people are exposed, how people are affected and also environment face problems it in Ananda Bazar.

Methodology

This study uses a mixed-method approach to understand the waste problems in Ananda Bazar and how they affect public health and the environment. It includes direct observation, questionnaire surveys, and focus group discussions to collect detailed, local information.

Observation

To understand the patterns of waste generation, disposal practices, and environmental conditions in Ananda Bazar, the study involved walking systematically through various parts of the market. During these walks, researchers recorded the different types and amounts of visible waste. They also observed where waste was stored, the locations of collection points, and any informal dumping sites. The general cleanliness of the area was noted, along with visible signs of environmental pollution such as blocked drains, stagnant water, and the presence of animals like flies or rodents.

Questionnaire Survey

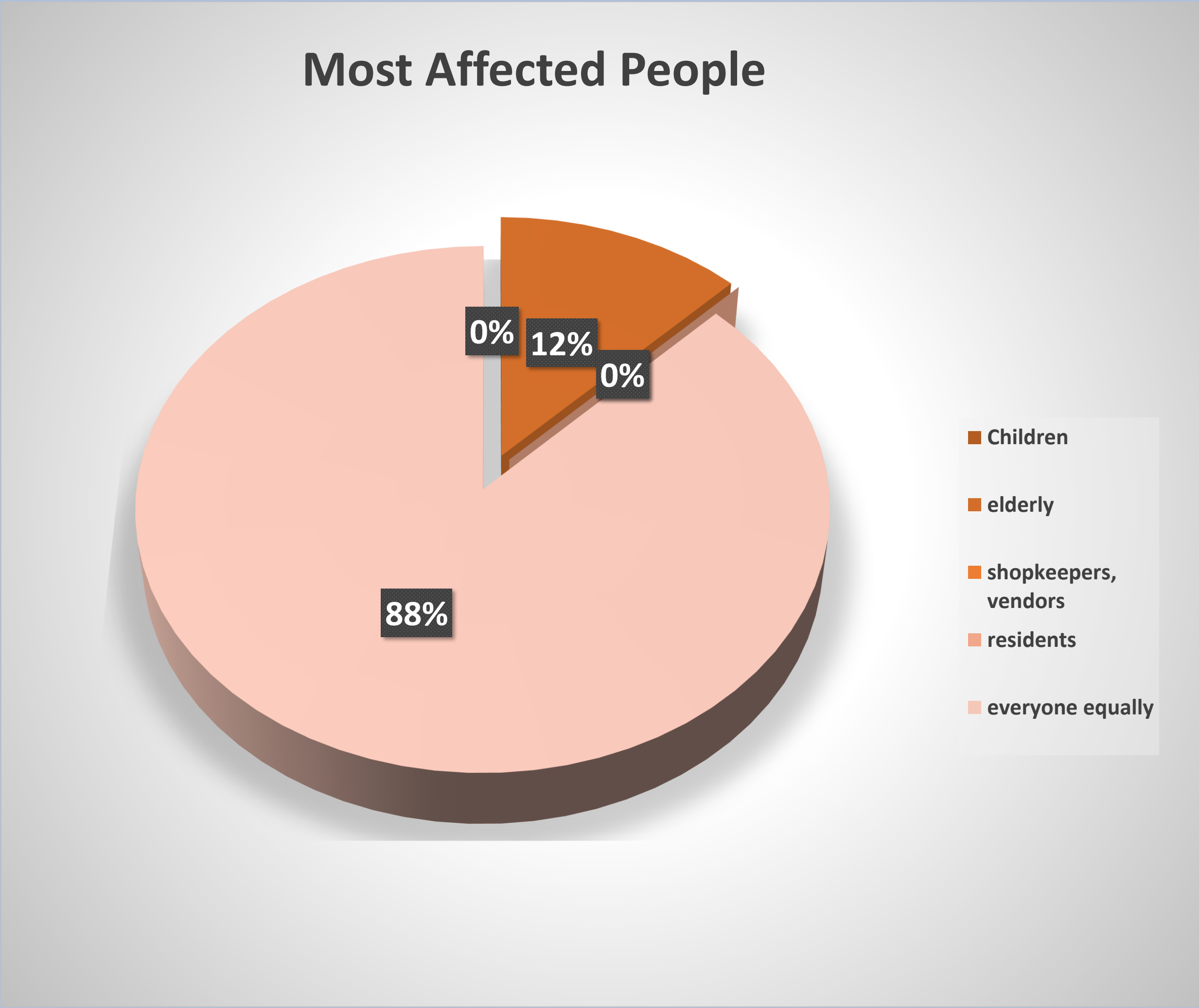
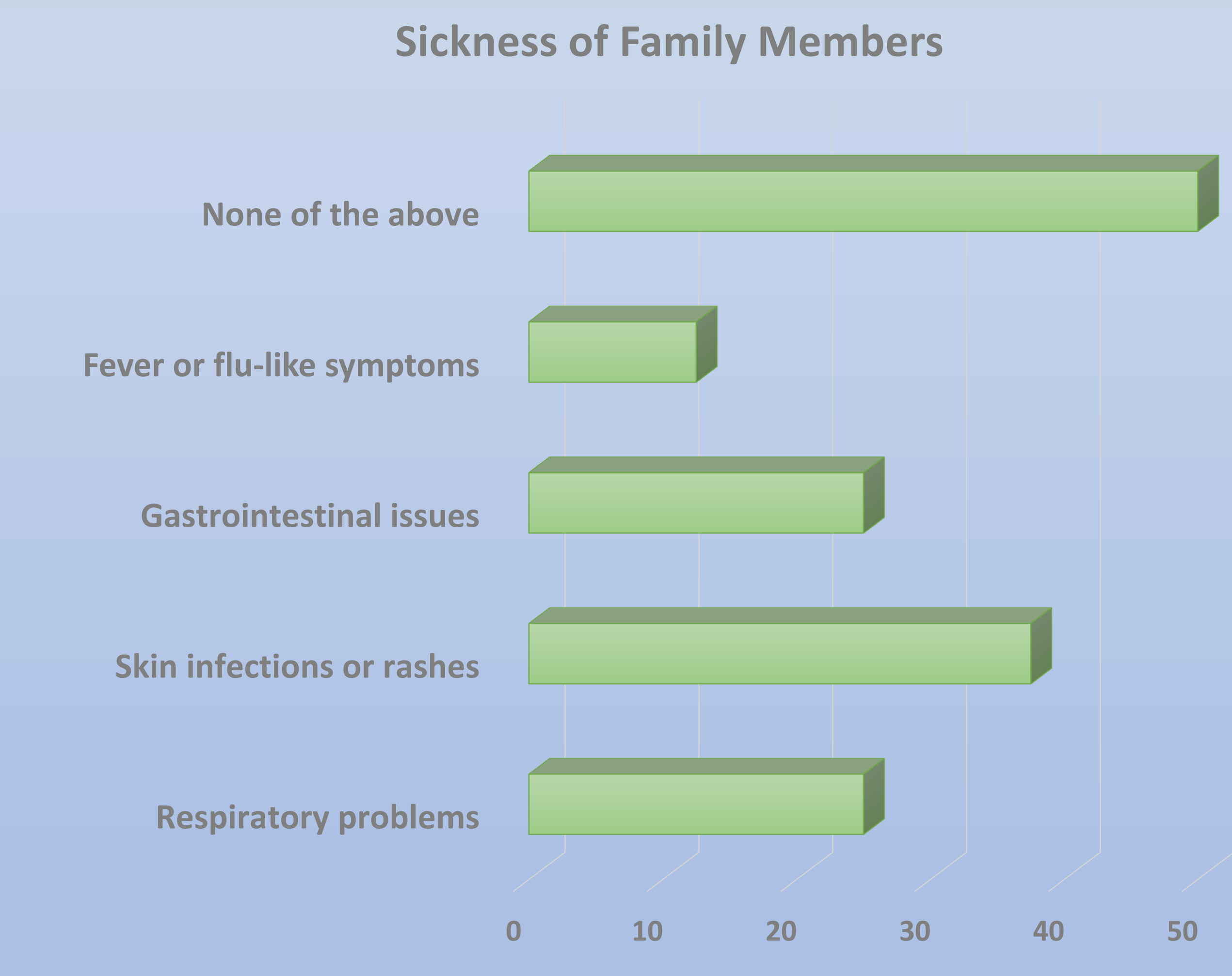
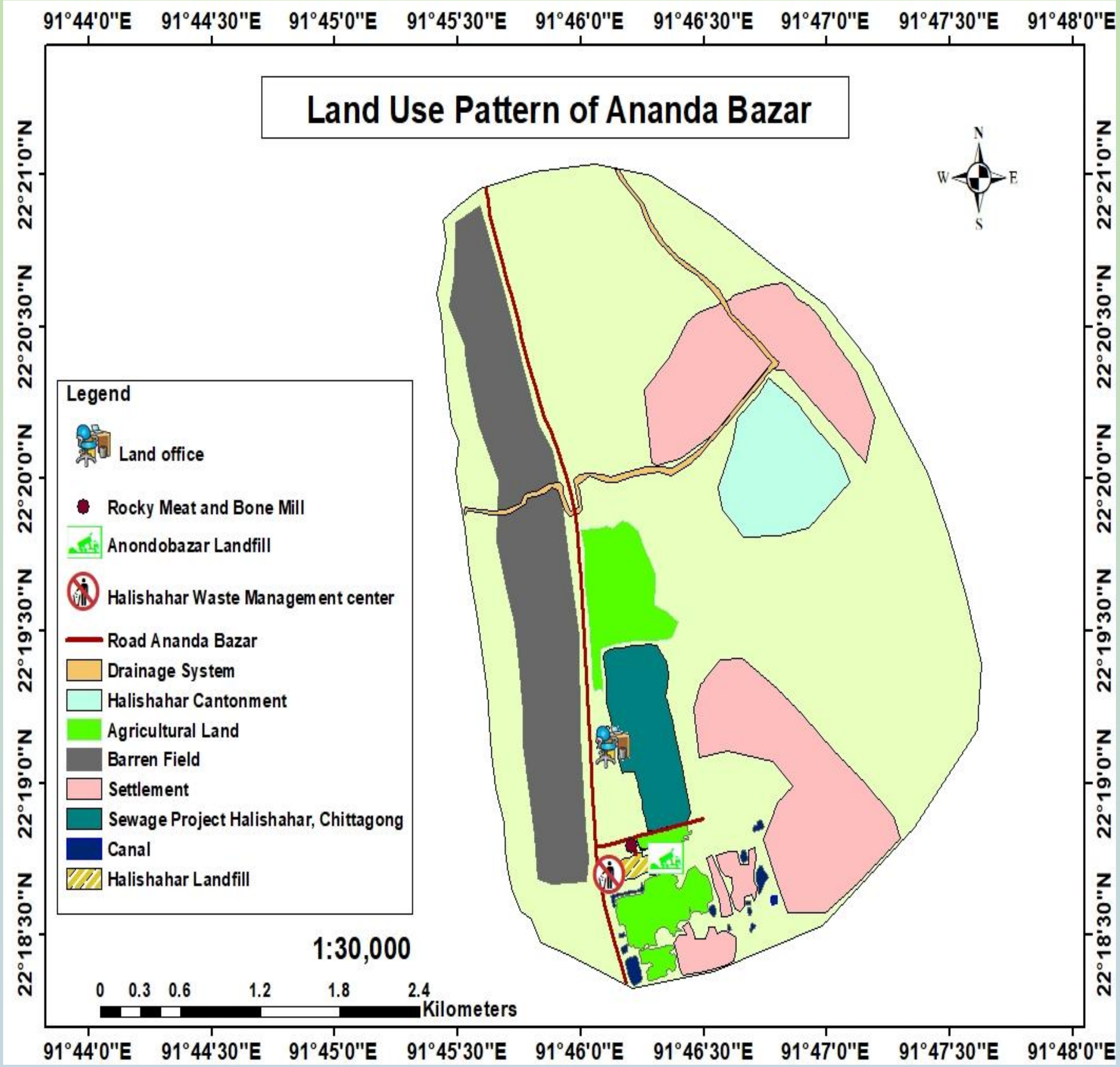
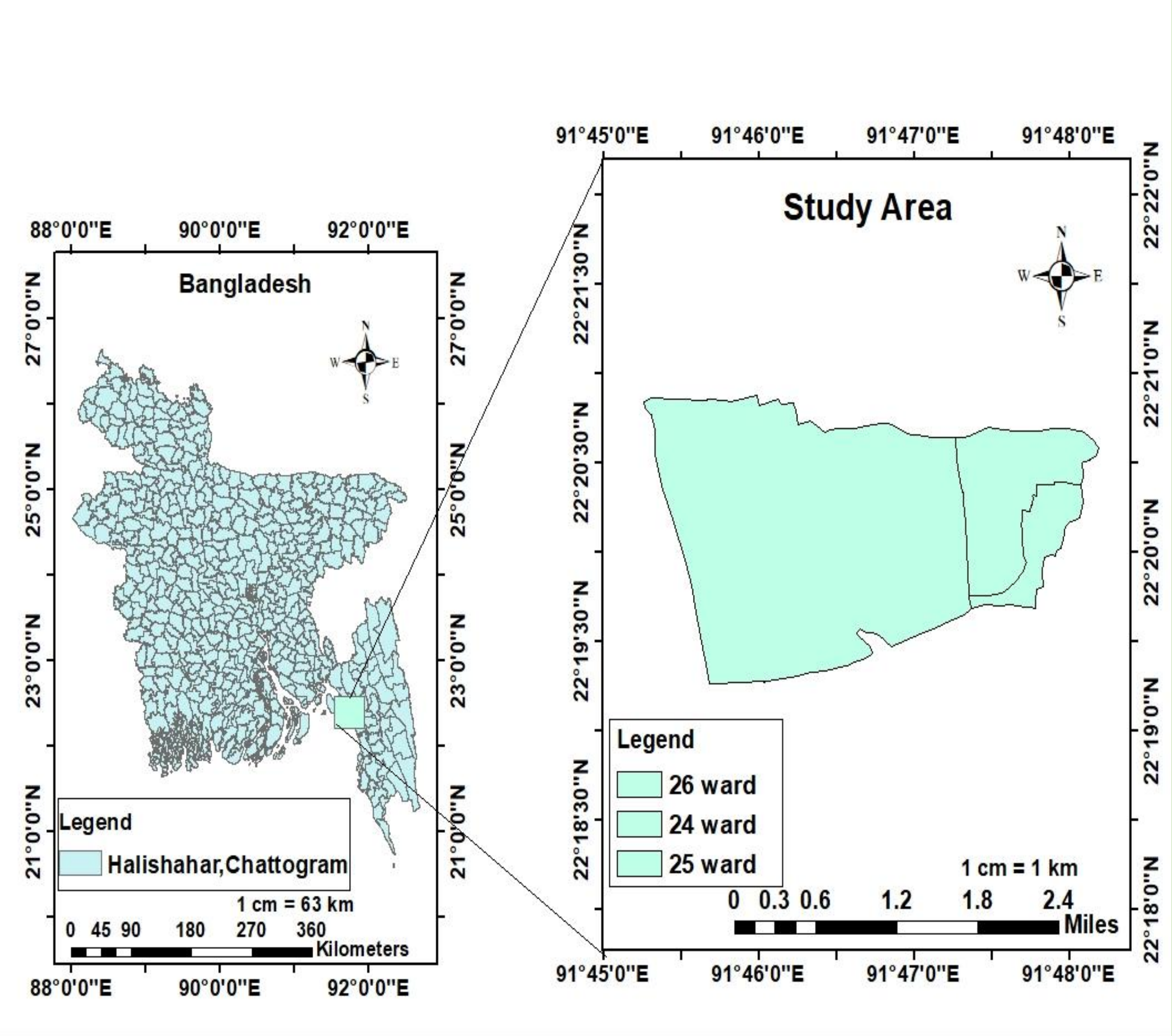
The purpose of this part of the study is to gather both numerical and descriptive information from people connected to the market about their waste-related habits, views, and health experiences. The participants include market vendors, customers, and residents living nearby. The discussions focus on the kinds and amounts of waste they produce, how they currently dispose of it, their understanding of the health and environmental risks, any health issues they believe may be linked to poor waste management, and their willingness to adopt better waste management practices.

Group Discussion

This part of the study aims to understand in greater detail how people connected to the market see the problems, obstacles, and possible solutions for improving waste management. Separate group discussions are planned for vendors, local residents, and, if possible, municipal staff, with around 6 to 10 participants in each group. These discussions will cover the difficulties faced in disposing of waste in the market, the effects people believe this has on health and the environment, the roles and responsibilities currently in place for managing waste, and ideas for improvements or new interventions.

Discussion

The growing waste problem in Ananda Bazar is a major concern for public health and the environment. The study found that the amount of waste in the market has increased a lot, but there are not enough proper storage or collection facilities. Many vendors and residents throw waste in informal dumping sites or leave it in open areas, leading to poor cleanliness and unhygienic conditions.The environmental effects can be seen in blocked drains, standing water, and waste scattered around that attracts animals like rodents and flies. These conditions provide breeding grounds for disease-carrying insects and increase the risk of illnesses spread through water and insects. People in the market mentioned problems like bad smells, dirty surroundings, and health issues such as diarrhea and breathing difficulties, which they believe are connected to poor waste management. The findings also show that many people are not fully aware of safe waste disposal methods or the health risks involved. Even though many know better management is needed, they face problems like not having enough waste bins, irregular collection services, and unclear responsibility for keeping the area clean. Because of these challenges, informal ways of dumping waste have become common.



Conclusion

The waste problem in Ananda Bazar is a serious issue that harms both public health and the environment. This study shows that the increase in waste, along with poor storage and irregular collection, has led to dirty conditions, blocked drains, and the presence of disease-carrying pests like flies and rodents. These conditions pose health risks for market vendors, customers, and nearby residents, who report problems like diarrhea and breathing difficulties.The study also found that although some people understand the need for better waste management, they face challenges such as not enough bins, unclear responsibilities, and limited support from municipal authorities. Solving this problem will need everyone to work together. Possible solutions include improving waste collection services, providing better storage facilities, increasing public awareness, and ensuring stronger involvement from local authorities.

Reference

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Appendix



Caption: Field Photo

Group Name: Ozone
Members Name & ID No: 21603007- Sadia Tasnim
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20603084- Md. Ariful Islam