

# **EXPLORING THE INTERPLAY BETWEEN FLOODING SUSCEPTIBILITY AND DISEASE OCCURRENCE IN ANAMBRA STATE: A GIS-BASED ANALYSIS**

## **EXECUTIVE SUMMARY**

This project represents a crucial step in understanding the interplay between flooding and disease occurrence in Anambra State. The findings have the potential to inform public health initiatives and flood risk management, despite the challenges and limitations inherent in such a comprehensive analysis.

Anambra State, located in southeastern Nigeria, frequently contends with the challenges of flooding, particularly during the rainy season. This natural disaster has profound consequences, affecting infrastructure, livelihoods, and public health. The project, "Exploring the Interplay Between Flooding Susceptibility and Disease Occurrence in Anambra State: A GIS-Based Analysis," endeavors to investigate the intricate interrelationship between flooding and disease incidence in the region. Flooding is a recurring issue in Anambra State, driven by its geographical location, seasonal rainfall patterns, and low-lying terrain. As a result, certain areas in the state have become more vulnerable to flooding over time. This, in turn, has led to property damage, displacement, and potential public health concerns that necessitate attention.

The impact of disease in flood-prone areas is a significant concern, as flooding can create conditions conducive to the spread of waterborne diseases. Analyzing the occurrence of diseases in these regions can help us identify potential links between flooding and health outcomes, guiding public health interventions. In order to effectively address these challenges, a comprehensive analysis is needed. Geographic Information Systems (GIS) provide a robust method for mapping and understanding flood-prone regions, taking into account various factors, including terrain, land usage, and historical flood data. Such an understanding is critical for effective flood risk management and preparedness.