**Chapter one**

**Introduction**

**1.1 Background of the Study**

Flood events are recurring natural disasters that have significant implications for human societies and the environment. They cause extensive damage to infrastructure, disrupt livelihoods, and pose significant threats to public health. Yonov, located in Logo Local Government Area of Benue State, Nigeria, has experienced devastating flood events in recent years. Situated in an area vulnerable to flooding due to its geographical location and inadequate drainage systems, Yonov is particularly susceptible to the increasing frequency and severity of flood events. Climate change has contributed to alterations in rainfall patterns and intensified rainfall events, leading to heightened flood risks. Recent climate change projections indicate that Nigeria is expected to experience more frequent and intense rainfall events, increasing the likelihood of flooding in areas like Yonov (Oguntunde *et al.,* 2020). The region's floodplain location further exacerbates its vulnerability to these changes.

Additionally, rapid urbanization in Yonov has led to the expansion of impervious surfaces, such as roads, buildings, and parking lots. This expansion reduces natural rainwater infiltration and increases surface runoff during heavy rainfall events. Inadequate drainage systems further worsen the problem, impeding efficient water flow and escalating the risk of flooding (Ewetan *et al.,* 2021).

The consequences of flood events in Yonov are far-reaching, impacting various aspects of the community's socio-economic fabric. Flooding often results in the destruction of houses, displacement of residents, and loss of property. For instance, according to the National Emergency Management Agency (NEMA), the 2017 flood in Yonov affected over a certain number of people and resulted in significant material losses (Vanguard, 2017). The disruption of livelihoods and loss of agricultural lands further compound the socio-economic impacts as agriculture is a major source of income for many residents in the area. Additionally, flood events can lead to the contamination of water sources, inadequate sanitation facilities, and an increased risk of waterborne diseases, posing significant health risks to the affected population. Previous studies have shown that flood events can cause outbreaks of waterborne diseases such as cholera, typhoid fever, and diarrheal diseases (Ogendi *et al.,* 2019). Understanding the relationship between flooding and public health is essential to inform effective mitigation and response strategies.

Given the recurring nature of flood events and their devastating impacts, there is an urgent need to develop comprehensive flood risk management strategies for Yonov. This requires a multidisciplinary approach that integrates urban planning, engineering, environmental management, and community engagement. Therefore, this study aims to assess the impact of flood disasters in Yonov, Logo Local Government Area, Benue State, Nigeria. It seeks to understand the causes and patterns of flood events, evaluate the socio-economic consequences on affected communities, examine the impact on public health and the environment, analyze existing flood management strategies, and propose recommendations for improving flood risk reduction and resilience in Yonov. By addressing these research objectives, this study aims to provide valuable insights for policymakers, urban planners, and other stakeholders involved in flood risk management and resilience-building efforts in the area.

**1.2 Statement of the Problem**

The flood events in Yonov, Logo Local Government Area, have resulted in severe consequences, including loss of lives, displacement of residents, damage to infrastructure, contamination of water sources, and the spread of waterborne diseases. The lack of comprehensive studies on the impact of flood events in Yonov has hindered effective disaster management and mitigation efforts. Consequently, there is a pressing need for a detailed investigation of the impact of flood events in Yonov to provide valuable insights for policymakers, urban planners, and other stakeholders in developing appropriate strategies for flood risk reduction and resilience building.

**1.3 Aim and Objectives**

The aim of this study is to assess the impact of flood disasters in Yonov, Logo Local Government Area, Benue State, Nigeria. The specific objectives are as follows:

1. To analyze the causes and patterns of flood disasters in Yonov.
2. To evaluate the socio-economic consequences of flood disasters on the affected communities.
3. To assess the impact of flood disasters on public health and the environment in Yonov.
4. To identify existing flood management strategies and their effectiveness.

**1.4 Research Questions**

To guide this study, the following research questions will be addressed:

1. What are the main causes and patterns of flood disasters in Yonov, Logo Local Government Area?
2. What are the socio-economic consequences of flood disasters on the affected communities in Yonov?
3. How do flood disasters impact public health and the environment in Yonov?
4. What flood management strategies are currently in place, and how effective have they been?

**1.5 Significance of the Study**

This study on the impact of flood disasters in Yonov, Logo Local Government Area, is significant for several reasons. Firstly, it will provide valuable insights into the causes and patterns of flood events, enabling policymakers and urban planners to make informed decisions regarding flood risk management. Secondly, understanding the socio-economic consequences of flood disasters will help in formulating appropriate strategies for post-flood recovery and rehabilitation. Thirdly, assessing the impact of flood disasters on public health and the environment will aid in the development of measures to mitigate health risks and protect natural resources. Lastly, this study will contribute to the existing body of knowledge on flood risk reduction and resilience-building strategies in flood-prone areas.

**1.6 Scope and Limitations of the Study**

This study focuses specifically on the impact of flood disasters in Yonov, Logo Local Government Area, Benue State, Nigeria. It will analyze data from previous flood disasters, including rainfall patterns, flood extent, damage assessments, and community surveys. However, limitations such as data availability, time constraints, and financial resources may restrict the comprehensive analysis of all flood-related aspects. Nonetheless, efforts will be made to ensure that the findings of this study provide a valuable contribution to the understanding and management of flood disasters in Yonov.

**1.7 Definition of Terms**

**Climate change**: Climate change refers to long-term alterations in temperature, precipitation patterns, wind patterns, and other aspects of the Earth's climate system. It is primarily caused by human activities, such as the burning of fossil fuels and deforestation, leading to increased concentrations of greenhouse gases in the atmosphere.

**Drainage systems**: Drainage systems are the network of channels, pipes, and structures designed to manage and direct the flow of water, particularly during rainfall events.

**Flood events**: Flood events refer to natural disasters characterized by the overflow of water onto normally dry land. They can be caused by heavy rainfall, river overflow, tidal surges, or dam failure, resulting in the inundation of areas not typically submerged.

**Yonov**: Yonov is a location situated in Logo Local Government Area, Benue State, Nigeria, and is vulnerable to recurring flood events.

Public health: Public health encompasses the efforts and practices aimed at promoting and protecting the health and well-being of communities and populations.

**Socio-economic consequences:** Socio-economic consequences refer to the impacts of flood events on human societies and the economy.

**Urbanization**: Urbanization refers to the process of population growth and the expansion of cities and towns. It involves the conversion of rural areas into urban areas, characterized by the development of infrastructure, increased population density, and changes in land use patterns.