# ASSESSMENT OF THE IMPLICATIONS OF RISING COST OF STAPLE FOOD ON THE DAILY FEEDING PATTERN OF RESIDENTS IN BENIN CITY

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**A RESEARCH WORK SUBMITTED TO THE DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE DEGREE (B.SC.) IN GEOGRAPHY AND REGIONAL PLANNING**

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## CERTIFICATION

We the under listed certify that this research work was carried out by **CHIGOZIE SAMUEL ABAWULEM** in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc.) Degree in Geography and Regional Planning of the University of Benin, Benin City, Nigeria.

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## DEDICATION

This project work is dedicated to the ALMIGHTY GOD who has kept me up and Going to this moment and also to my dearest Mother, Mrs Anna Abawulem, for her constant prayers, my wonderful course adviser, Mrs E. Otabor-Olubor, for her constant advice and endless support, and my good friends for their care, love and support that has seen me through my stay in this University.

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*ABSTRACT*

*This study examined the consequences of increased staple food costs on the daily feeding patterns of residents in Benin City. It analyzed the magnitude of food price rises, how inhabitants have modified their feeding patterns in response, and the larger socio-economic consequences of these changes. A cross-sectional survey study design was utilized, utilizing standardized questionnaires to gather data from individuals across different income levels. Findings predict a large rise in the cost of staple goods such as rice, beans, yam, and garri, with price hikes exceeding 70% for some items between 2023 and 2024. This escalation has led to major changes in daily dining behaviors, including a drop in meal frequency, increased dependence on cheaper food alternatives, and a shift towards less nutritional diets. Socioeconomic characteristics such as income level, household size, and occupation were found to strongly influence how residents cope with these price increases. The study also found crucial coping techniques, including engaging in new income-generating activities, substituting pricey necessities with cheaper alternatives, lowering portion sizes, and relying on financial aid from family, friends, and religious organizations.*

*The report advises specific initiatives to alleviate the impact of rising food prices, including government policies to stabilize food costs, investment in local food production, and the introduction of food assistance programs for needy communities. Additionally, lowering transportation costs and guaranteeing food affordability depend on enhanced infrastructure and security measures. To improve citizens' food security, community-based initiatives like food banks and urban farming are also promoted.*

# CHAPTER ONE

# INTRODUCTION

## 1.0. Background to the Study

Adequate feeding is a necessity for the human body to get the nutrients they need for growth and development. Food is the most fundamental human need, according to Maslow's hierarchy of needs (Maslow, 1943). For existence and as a result of this, people now need to work in both rural and urban areas in order to make sufficient money to buy food. However, people of the middle-class group improve their income due to the daily increase in commodity costs, which depletes consumers' savings, and the unpredictability of food and non-food item prices. Since the Food and Agriculture Organization (FAO) started monitoring the food price index, there have been intermittent swings in the price of food around the world (Mbegalo and Yu, 2016). Reports indicate that the cost of food is on the increase globally. According to the Central Bank of Nigeria (2023), the increase in food prices in Nigeria has fluctuated significantly, reaching a peak of 31.52% in October 2023. Food price increases are a major economic problem in Nigeria, putting a large portion of the population—the impoverished—at risk. (Egwuma, Ojeleye, & Adeola, 2019) found that Nigerians spend 58.9% of their household income on food. The price increase of food is influenced by numerous factors, and these issues include violence, high interest rates, inadequate fiscal capacity, and rising oil prices, according to Chad (2021) in Business News Daily. According to Udochukwu, Ozuzu, & Okafor (2022), COVID-19, the crisis in Russia and Ukraine, insecurity, high energy costs, high transportation costs, and rising income are some of the causes that are causing food prices in Nigeria to rise. It was also mentioned that food production was impacted by the 2020 COVID-19 epidemic, which led to a food shortage and an increase in the price of a number of food items. Rising food prices have a

major effect on the people of an economy, with the most affected being those from lower socioeconomic backgrounds. The primary source of daily nourishment is staple foods and having access to fundamental foods is a basic human requirement. The effects of growing food prices on economies and countries differ widely, claims Joachim (2018).

According to Johnson and Williams (2023), regional food systems are intrinsically linked to local resources and cultural knowledge, with government oversight being crucial for maintaining equilibrium between production and consumption. They emphasize that effective regulation of staple food availability, distribution, and pricing at both producer and consumer levels is essential for food security. Staple foods items should be reasonably priced and available in adequate amounts, food costs rise in response to the shortage of staple goods, and accessing fundamental foods for daily needs is made difficult by this disease. According to the aforementioned explanation, food security is viewed from both the perspective of availability and food pricing (Firdaus, 2021; Rachmadhan, Harianto, and Setyowati (2020). Taking these factors into account, achieving food security is a prerequisite. In terms of the economy, society, and even politics, staple foods are valuable commodities. The three primary pillars of food security development are the following: (1) the subsystem of food availability; (2) the subsystem of food distribution; and (3) the subsystem of food consumption (Rachman, 2010). The government must ensure that staple foods are available in appropriate amounts, at reasonable costs, in acceptable quality, and that the population may safely consume them (Nuryanti, Purwati, & Adnyana, 2017; Rachman, 2010).

Based on a few chosen food commodities, the National Bureau of Statistics' June 2017 food price watch data indicates that, on an annual basis (May 2016–May 2017), the average price per kilogram of imported rice increased by 29.6%, the average price per kilogram of medium-sized agri-eggs increased by 34.6%, and the average price per kilogram of tomato increased by 13.0%. The average cost of one kilogram of yam tuber went up 52.7%, the average cost of

one kilogram of garri went up 65.8%, and the average cost of beans went up 42.7%. The average cost of 1 kg of beef went up 29.9%, the average cost of 1 kg of fish went up 60.2%, and the average cost of local rice went up 37.4%.

The poor and vulnerable households bear the brunt of food price increases, spending as much as 80% (Obayelu, 2010) or more of their income on food. Food budget cuts are frequently the first thing that households do when they experience severe negative price or income shocks Ayinde, Okoruwa, & Ogundipe, 2012; Capuno, Antonio, & Fabella (2013). This shows up as a reduction in the quantity and quality of nutritional intakes, which in turn makes people more susceptible to poverty, malnutrition, food insecurity, and other related problems. According to available data on malnutrition in Nigeria, the country's under-5 child stunting and wasting rates are roughly 32% and 9%, respectively (NPC/ICF, 2014), and the country's hunger situation is still considered "serious" from an international perspective (Von Grebmer, Bernstein, Nabarro, Prasai, Amin, Yohannes, Sonntag, Patterson, Towey, & Thompson, 2015). Based on food calorie intake, some studies have estimated that between 49% and 78% of households in the nation experience food insecurity (Omotesho, Adebayo, & Okonkwo (2007); Nnakwe & Onyemaobi, 2013); & Adebayo Obayelu (2012). Additionally, it has been discovered that a significant number of households in the nation eat a lower quality and less diverse diet (Ajani, 2010; Sedodo, Akinlotan, & Folake, 2014; Agada & Igbokwe, 2015; Akerele, 2015). According to estimates based on self-evaluation (regardless of its subjectivity), the prevalence of poverty in Nigeria is higher, with several research estimating income poverties to be between 60% and 75% (Dada 2011; Kale 2012).

inflation is an economic situation where there is a general rise in the prices of goods and services, continuously. Inflation is influenced by changes in the cost of staple foods; from a societal standpoint, political stability is also influenced by the cost and availability of staple foods. On the other hand, price swings for staple foods are inevitable. According to Bola &

Prihtanti (2019), Kesuma, Juanda, & Anggraeni (2020), Sayaka & Adhie (2016), Wijayati, Harianto, & Siswadi (2019), crop failure, food prices naturally rise when demand is strong (around religious holidays). When there is a large harvest and an abundance of food, the cost of staple foods can also drop (Pratama, 2018; Rasoki, Rasyid, & Suryani (2016).

Governments worldwide implement strategic interventions and policy measures to mitigate the adverse effects of food price inflation. These could take the shape of specific laws and programs, like lowering import duties and sales taxes to guarantee stable prices, providing subsidies for necessities, imposing export prohibitions and restrictions, and encouraging the production of food domestically (Anríquez, Daidone, & Mane, 2013). Food distribution, direct cash transfers, and the usage of vouchers or food stamps are examples of social protection and safety nets that are frequently used to lessen the devastating consequences of price shocks on the well-being of the underprivileged and disadvantaged. In order to mitigate the effects of rising food prices and financial hardships on vulnerable groups, including children, and to systematically address the issues of poverty, inequality, and malnutrition in the nation, the Federal Government of Nigeria (FGN) has recently implemented a number of safety net interventions, such as cash transfers (Holmes, Samson, Magoronga, & Akinrimisi, 2012); World Bank, 2016; Adesina, 2017).

Furthermore, nutritional wellbeing is impacted by specific micronutrient deficits that have been exacerbated by the high cost of food (FAO, 2014). Although food prices have increased dramatically, household earnings have not kept pace with inflation, leaving households without reserves and negatively affecting low-income households' income and nutritional well-being. As a result, households find it difficult to achieve their basic nutritional and food needs. In light of the aforementioned, a study examining the effects of rising staple food prices on the daily eating habits of residents of Benin City, Edo State, had to be initiated.

## 1.1. Statement of the Research Problem

The constant increase in the prices of basic necessities is one of the challenges that Benin City inhabitants are dealing with, and it is making many people's financial difficulties worse. Household meal patterns are becoming more difficult as the cost of staple foods such rice, beans, yams, and garri continues to rise (National Bureau of Statistics 2020). This worsens the consequences of food security for people's nutritional well-being as well as the possibility of upending social and economic support networks in the community (FAO, 2017). Despite the fact that it is currently one of the most important problems facing Benin City, there is still a lack of comprehensive research evaluating the precise effects that rising prices for staple foods have on daily eating habits, life forms, and malnutrition among local residents. Prior research produces findings at the national or economic level, but it frequently overlooks regional patterns and adaption tactics employed by various urban household types (Babatunde & Qaim, 2010; Akinyele, 2009). Policymakers and other stakeholders lack the localized data necessary to design effective interventions that are suited to the particular needs of the people of Benin City.

In examining how rising food costs affect what and how much people consume on a precise level for different socioeconomic strata and the coping strategies used by families to deal with these price increases and any possible effects they may have on the general health of households (Obayelu, 2010). The study intends to offer a thorough grasp of the multifaceted effects of food price inflation on urban food security by examining these factors. In order to recommend possible policies and interventions to lessen the negative effects of food price inflation, it is imperative that this research challenge be resolved. Finding some of the variables driving these developments is necessary to ensure food security and the welfare of Benin City's citizens (World Bank, 2016).

Addressing this research question is essential in order to offer recommendations for potential laws and initiatives that could in mitigating the adverse effects of increasing food costs. A multifaceted approach is necessary for successful solutions, including strengthening local agricultural production, strengthening food supply chains, and putting social safety nets in place for the most vulnerable groups. Despite financial constraints, nutrition education-focused public health initiatives help households choose better foods.

Finding and addressing the causes of these changes is crucial to enhancing the welfare of people living in Benin City and guaranteeing food security. This study aims to provide useful data to support policy decisions, advance academic knowledge, and assist the community in overcoming the challenges brought on by rising food prices. The study will significantly advance the conversation on urban food security and economic resilience by carefully analyzing and focusing on particular areas.

### 1.2. Research Question

To accomplish this research, the following research questions will be assessed.

1. What were the previous prices of staple foods per unit cost in Benin City?
2. What are the current prices of staple foods per unit cost in Benin City?
3. What are the causes of the increase in the prices of staple foods per unit cost in Benin City?
4. What were the previous daily feeding patterns of residents in Benin City?
5. What are the current daily feeding patterns of residents in Benin City?
6. What is the relationship between the rising cost of staple foods and the daily feeding patterns of residents in Benin City?
7. What coping mechanisms are residents applying in response to the rising cost of staple foods in Benin City?

## 1.3. Aim and Objectives

The aim of this study is to assess the implications of rising cost of staple food on the daily feeding pattern of residents in Benin City. To achieve this, the specific objectives are to:

1. Examine the previous price of staple food per unit cost.
2. Assess the current price of staple food per unit cost.
3. Determine the causes of increase in the prices of staple food per unit cost.
4. Examine the previous daily feeding pattern of residents in Benin City.
5. Examine the current daily feeding pattern of residents in Benin City.
6. Examine the relationship between rising cost of staple foods and the daily feeding patterns of residents.
7. Identify the coping mechanisms of residents in light of the rising cost of staple food.

## 1.4. Research Hypothesis

In this research the following hypothesis will be tested.

**$H_0$** - There is no significant agreement amongst respondent on the causes of rising cost of staple food in Benin City.

**$H_0$** - There is no significant relationship between rising cost of staple food and daily feeding pattern of residents in the study area.

## 1.5. Scope of the Study

This study will examine data from a specific period of time, comparing current data with historical data on dietary patterns and the cost of staple foods. This comparison of time will provide light on how household consumption patterns have changed over time. The study will examine staple items that people in Benin City often take, which includes yams and garri, and also basic staples like rice and beans and other foods that are vital to the inhabitants' diet. It will examine the daily eating habits of the residents both now and in the past. This could

entail researching topics such as nutritional content, food variety, quantity control, and meal scheduling. The purpose of this study is to provide current information on unit costs (Staple foods) by extrapolation, as well as pricing trends over the same time period and price fluctuations. Data will be downloaded from secondary sources such as government papers and market surveys.

In an attempt to close the gap left by earlier research, this study will investigate the causes of the rising costs of staple foods. These could include inflation, supply chain interruptions, regulatory changes, economic considerations, and other pertinent causes. The study will also look at how inhabitants' daily meal habits relate to the growing price of staple goods. To find correlations and connections between price increases and modifications in feeding habit, statistical analysis will be used. This study will also determine and examine the coping strategies used by locals in reaction to the growing price of basic items. This covers tactics like dietary modifications, shifts in food buying patterns, and other adaptive behaviors. Previous research on food security suggests that rising food prices affect dietary habits and economic stability (Maxwell, 1996; Barrett, 2010). Food price inflation often reduces nutritional intake and increases food insecurity (Timmer, 2012) and these findings highlight the importance of understanding local food security challenges in Benin City to formulate effective interventions.

### 1.6. Significance of the Study

This study's main strength is its capacity to offer significant data for communities, organizations, and policymakers. The study can help design targeted interventions and policies aimed at reducing food insecurity by shedding light on how growing staple food costs affect the daily dining habits of Benin City inhabitants. It will assist gather support from local and foreign groups by bringing attention to the difficulties encountered by households. In terms of academia, the study will add to the literature on urban poverty and food security

by offering a thorough case study that advances our knowledge of both topics. The results of the study will also help development organizations and economic planners design programs that target both food security and broader economic stability.

Existing studies indicate that food insecurity affects economic stability and public health (FAO, 2019; Pinstrup-Andersen, 2009). Policymakers can leverage this research to develop strategies that enhance food access and affordability. Public health programs emphasizing nutrition education can also benefit from the study's findings. By analyzing staple food pricing trends and consumption patterns, this study will support efforts to improve food security in Benin City. The information will be helpful for public health programs that emphasize diet and nutrition from a health standpoint. Finally, by offering insights into the dynamics of the local food market, the study will assist players in building stronger and more stable food systems. In summary, this study is critical to the development of strategies and policies that enhance Benin City's overall well-being and food security.

## 1.7. The Study Area

### 1.7.1. Location

Benin City, the capital of Edo State, which is situated in Nigeria's South-South geopolitical zone, serves as the study area. According to Balogun and Orimoogunje (2015), it is situated between latitudes 6°11'N and 6°27'N, which represent the southern and northern bounds, respectively, and longitudes 5°31'E and 5°44'E, which represent the western and eastern boundaries, respectively. IkpobaOkha, Oredo, Ovia North East, Egor, and Uhunmwunde Local Government Areas are among the five local government areas that comprise its around 850 square kilometer land area as of 2019 (Fabolude & Aighewi, 2022).

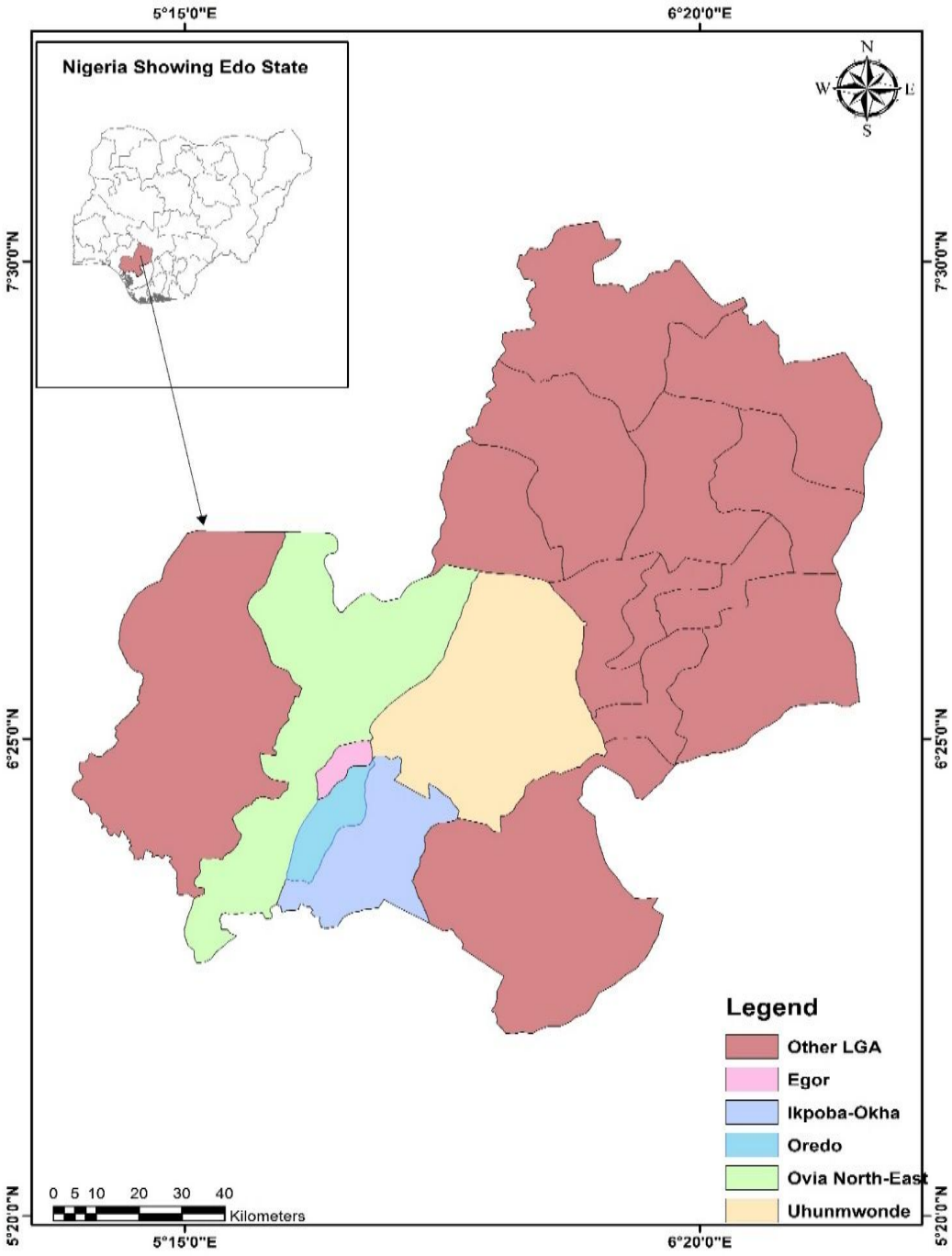



Figure 1.1: Edo State, Nigeria
Source: Redesigned by Author from Open Street Map, (2024)

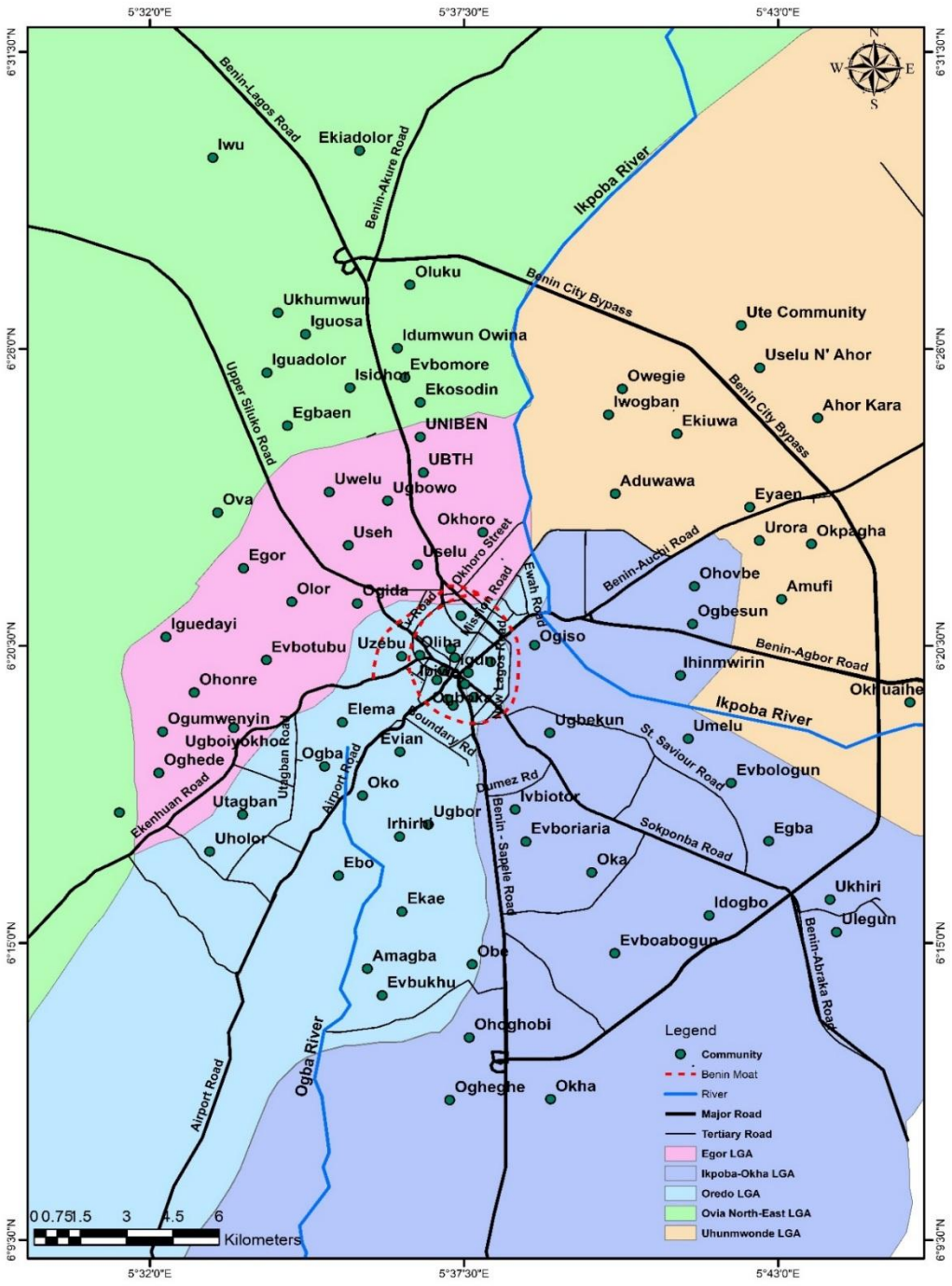



Figure 1.2: Benin City, Edo State, Nigeria
Source: Redesigned by Author from Open Street Map, (2024)

### 1.7.2. Climate

Koppen's climatic classification places the city's climate in the Af category, which is humid tropical (Ayoade, 2011). With an average temperature of 27°C and an expected yearly rainfall of over 2000mm, the climate is defined by dry and wet seasons (World Bank, 2021).

The shorter dry season starts in November and ends in February, whereas the wet season lasts from March to October. Rainfall in Benin City typically occurs throughout the year, with a brief temporal lull in August and double peak periods in June or July and September.

### 1.7.3. Socioeconomic Characteristics and Population

As Edo State's administrative capital, Benin City is a vibrant socioeconomic hub. Road transportation, crude oil shipping (Gelegele Seaport), oil palm production, sand mining, construction, artisanship, wholesale and retail commercial services, and services from banking, health, education, and other public and private organizations are some of the city's most important socioeconomic activities. In the city, market gardening is also common in areas with accessible green spaces. The National Population Commission (2006) projected that Benin City's population was 1,662,751 based on a growth rate of 2.78%. It is anticipated that Benin City's great volume and diversity of socioeconomic activity may unintentionally lead to urban problems, such as the growing price of staple goods. Residents' daily eating habits are greatly impacted by this economic pressure since households find it difficult to change their food consumption patterns in reaction to rising costs.

# CHAPTER TWO

# CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

## 2.0 Introduction

In addition to discussing the examination of related literature, this chapter will address several pertinent topics pertaining to the research study's aims.

## 2.1. Conceptual Framework

### 2.1.1. Concept of Food Security

After the 1980s, as the focus of food policy discussions shifted from food supply to food demand and new emphasis emerged on food entitlement, vulnerability, risk, and access, the term "food security" was coined (Maxwell & Slater, 2003, referenced by Hendricks, 2005). According to the World Food Summit in 1996, food security is achieved when everyone, everywhere, has physical and financial access to enough wholesome food to satisfy their dietary requirements and food preferences for an active and healthy life (WHO, 2014). The four main components of food security are usage, stability, access, and availability.

The term "food availability" describes the availability of a sufficient amount of food of a suitable quality, which can be obtained through imports or domestic production. Land use/tenure, soil management, crop breeding/selection, crop management, animal breeding/management, and harvesting are some of the elements that affect the availability of food through food production (FAO, 1997). Getting the resources to buy the right foods for a healthy, balanced diet is the main goal of food access. Using the entitlement relations that are in place in society, it is dependent on the ability to buy or control food (Brand, 2003). "Given the legal, political, economic, and social arrangements of the community in which he or she lives (including traditional rights such as access to common resources)," entitlements are the

collection of all commodity bundles over which an individual can establish command (Carletto et al., 2013:30).

One can obtain food in a number of ways. Although a household can directly acquire food by producing its own food, the quantity of food it can produce is dependent on its resources and how effectively it uses them to generate adequate food. Because poor farmers and the majority of women farmers typically lack the resources needed to produce, agricultural investment businesses and extension specialists help them accomplish their production goals. Purchased food is an indicator of financial access to food (FAO, 2012). Rural households buy the food they don't produce, while urban households buy their food from retail food stores. However, since the majority of the impoverished spend a significant amount of their income on food, economic access to food is vulnerable to danger. As a result, any shift in income, rise in food costs, or loss of employment may result in fewer food purchases and worse levels of food security (FAO, 2012).

Food stability, according to the FAO (2012), is the capacity of a household to continuously obtain sufficient food supply through production, income, and/or transfers, even in the face of unforeseen stress, shocks, or crises. It suggests that households would be resilient to shocks and able to handle the consequences of a food scarcity. The majority of farmers have implemented coping mechanisms, such as intercropping and mixed cropping, to stabilize food supplies because they are fully aware of the dangers (FAO, 2012). In this manner, food is created continuously. However, poor farmers could find this challenging since they lack the necessary production resources, like fertilizer and irrigation systems.

Food use, or the consumption of food by individuals, is the final component of food security. Every member of the household, including men and women, girls and boys, receives nutritious food that is produced, stored, distributed, and consumed in a way that meets their

needs (Mock et al., 1999). Households may be able to access food, but a variety of circumstances influence how the food is used, its quality during consumption, and its amount. People must eat food that is safe, healthful, and able to satisfy standard nutritional needs in order for them to be considered food secure. Food safety is influenced by a number of aspects, including how it is processed, prepared, and cooked (Mosisi, 2009). Food use is also influenced by the health of the people living in a family. When a person is ill, they might not eat the right foods, which prevents them from getting the nutrients they need to live a healthy life (Vozoris et al., 2003). The degree of food security in Benin City is assessed in the parts that follow.

## 2.2 Theoretical Framework

### 2.2.1. Neo-Malthusian Theory of Food Security

The Neo-Malthusian theory of food security incorporates contemporary environmental and technical factors while expanding upon Thomas Malthus's original concepts. According to this idea, food insecurity results when population expansion exceeds the potential for food production (Ehrlich & Ehrlich, 2009). In contrast to the original Malthusian thesis, Neo-Malthusians contend that resource depletion, climate change, and environmental restrictions ultimately limit sustainable food supply, even though they admit that technological advances can momentarily boost food production (Cohen, 2019).

The hypothesis highlights a number of important points:

1. Degradation of the Environment: In order to meet the rising need for food, intensive agriculture causes soil erosion, water depletion, and biodiversity loss.
2. Resource Scarcity: As the population rises, competition for scarce resources (land, water, and energy) gets fiercer.
3. Impact of Climate Change: Patterns of food production and agricultural yields are impacted by global warming.

4. Technological Restrictions: Although technology can increase output, it frequently has negative effects on the environment and declining returns (Pearce & Warford, 2018).

### 2.2.2. Sen's Entitlement Theory

Beyond just supply and demand, Amartya Sen's Entitlement Theory offers a vital framework for comprehending food security. Sen contends that the ability of people to legally control access to food is just as important to food security as the availability of food (Sen, 1981). Four entitlement linkages are identified by the theory:

- Trade-based privilege: The capacity to purchase food
- Producing food is a production-based entitlement.
- The right to own labor: The capacity to work for sustenance
- Transfer entitlement and inheritance: Food obtained by family assistance or social security

Sen's theory highlights the significance of access and distribution networks and explains how food insecurity can persist even in situations where food is plentiful (Devereux, 2001).

### 2.2.3. Food Regime Theory

Food Regime Theory, which was created by Harriet Friedmann and Philip McMichael, examines how international food systems are arranged within larger political-economic frameworks. According to the theory, different historical eras or "regimes" are distinguished by certain trends in the production, distribution, and consumption of food (McMichael, 2009). Often referred to as the corporate food regime, the current system is distinguished by:

- Worldwide supply networks
- Industrial farming
- Focus on corporations

- Financialization of food commodity: These features have a big impact on food costs and availability (Friedmann, 2005).

### 2.2.4. Sustainable Livelihoods Framework

The Department for International Development (DFID) created this framework, which offers a thorough method for comprehending how households use resources and deal with food insecurity. It looks at five different kinds of capital:

1. Human resources (knowledge, abilities)
2. Social capital (connections, networks)
3. Natural resources (water, land)
4. Physical assets (tools, infrastructure)
5. Financial resources (income, savings)

The framework aids in the explanation of how households' food security status and capacity to handle price rises for food are impacted by their access to these various forms of capital (Scoones, 2009).

### 2.2.5. Food Sovereignty Theory

This ideology, which was developed by La Via Campesina, supports the idea that peoples should have the autonomy to establish their own agricultural and food systems. It highlights:

- Local authority over food systems
- Methods of sustainable manufacturing
- Food's suitability for a given culture
- Democratic control of food systems This theoretical paradigm sheds light on how local food systems might improve resilience to price shocks and food security (Patel, 2009).

## 2.3. LITERATURE REVIEW

Numerous studies have demonstrated the impact of rising food prices and increased activity levels on households at both macro and micro levels in both developed and developing nations (Ivanic and Martin, 2008; Arndt et al., 2008; Wodon and Zaman, 2008; World Bank, 2012; Swinnen and Squicciarini, 2012; Shittu et al., 2015; Matz et al. 2015; Arndt and colleagues, 2016). Several reasons can be linked to this unexpected price rises and stock levels are low and declining as a result of changes in food availability (Minot, 2014; Tadesse et al.,). In 2014, severe weather occurrences were accompanied by export restrictions (Headey and Fan, 2008; Kornher). The problem has been exacerbated by variables like income growth, the rising cost of essential inputs, and variations in the exchange rate, according to Kalkuhl (2013) and colleagues.

Food export and import, currency rate fluctuations, foreign exchange reserves, food consumption patterns, and trade and marketing practices are all impacted by variations in global food prices on a macro level. Severe price increases lead to inflationary pressures, which have a detrimental effect on the well-being of low-income consumers, particularly in developing and food-importing nations where a larger portion of their meager income is spent on food. It has been said that the ongoing increase in food costs worldwide is a major concern that requires immediate intervention (Trostle, 2008; von Braun, 2008; Robles and Torero, 2010; FAO, 2011). When faced with significant negative price or income shocks, such as unexpected expenses, the poorest households have been shown to cut back on their food budget after paying for necessities (Ayinde et al., 2012). Among other things, this results in a decrease in the amount and caliber of food consumed.

Robles and Torero (2010) examine how four Latin American nations—Guatemala, Honduras, Nicaragua, and Peru—were affected by the "food crisis" of 2007–2008. They discovered that the population under study has a higher prevalence of poverty as a result of rising food prices.

Francisco et al. (2011) estimated the welfare and distributional effects of food price hikes in Brazil using two household surveys and spatially disaggregated monthly consumer price data. Large, adverse, and noticeably regressive impacts on spending were seen in households with higher rates and levels of poverty. According to Shittu et al. (2015), farm households in Nigeria generally benefited from increased food prices, however between 44% and 56% of the households faced welfare losses. According to Akerele (2013), the rise in food prices in Nigeria may have forced an estimated 3.99 million individuals into calorie undernutrition and hunger.

Food price hikes have impacted almost all agricultural items in Nigeria, according to Obayelu (2010), but there hasn't been a corresponding rise in households' or population groups' disposable income (particularly the vulnerable groups). As previously said, a significant increase in food prices can have a detrimental effect on food security since it may make it more difficult for individuals to obtain enough food that is both diverse and of high quality. Poor households are subjected to additional problems, such as the financial expenditures of acquiring food (Matz et al., 2015). A persistent food insecurity/poverty trap that may be more difficult to break can arise from vulnerable households being pushed to sell off their productive assets or forgo other necessities (Gustafson, 2013). Higher food prices, however, can increase farm incomes for agricultural households, which should improve household food security and purchasing power (all other things being equal) (Gustafson, 2013). The opposite scenario, food insecurity and hunger, may also arise in such a household if there is a significant decline in the cost of food production, which significantly lowers purchasing power (Burchi and De Muro, 2016).

### 2.3.1 Factors Affecting Food Security

According to Battisti and Naylor (2009), home food insecurity results from disparities in the quantity of food supplied by the household's wealth and labor, implying that shocks to output and/or changes in household wealth may alter the amount of food consumed in a household. Some of the elements that could influence a household's degree of food security are as follows:

**Output shocks** could include a household producing less or buying less food. Individuals can modify or change their jobs to counteract the consequences of these output shocks (Godfray et al., 2010). Their "allocative flexibility" and the availability of additional resources will determine this (Maxwell, 1996).

**Food Shocks:** Food shocks occur when there is a sudden spike in the price of food or when there is less food available in the market. Families have two options: they can grow their own food or labor to make money before buying food (Wheeler and Von Braun, 2013). However, these methods of obtaining food are not set in stone. A household without a source of income is unable to buy food, so losing a job directly reduces their purchasing power. Additionally, climate change contributes to changes in food production and threatens the production of food for subsistence (Simelton, 2012).

**Asset shocks:** An unanticipated decline in the amount and quality of assets is known as an asset shock. Examples include livestock theft and death, lending institutions seizing machinery or other assets, or the depreciation of assets as a result of high inflation (Akter and Basher, 2014). Families are compelled to donate their money in a variety of ways and at varying times during stressful situations because they handle their assets differently and have a variety of asset types. Some assets may be sold later when the circumstances worsen, or they may be immediately transformed into food items for immediate consumption (Stephens

et al., 2012). Residents of Benin City are also experiencing food insecurity as a result of rising oil and energy costs. Frequent increases in the price of oil lead to higher costs for food products and fertilizer, both of which depend heavily on petroleum as an input. Food costs must rise in line with the rising cost of transportation (Altman et al., 2009).

The age of the mother improves her experience in providing the family with the necessary and appropriate food, so there is evidence of a positive relationship between her age and per capita calorie intake (which has been used as a food security indicator) at the household level (Iram and Butt, 2004). The dependency ratio is another element that affects household food security. The reliance ratio and household food security are negatively correlated. A dependant has a set percentage of household consumption but does not contribute to the household's overall income (Shinns and Lyne, 2005). As a result, they take part in consumption but do not contribute to the generation of revenue. Household size can have either a beneficial or negative impact on food security. More output for consumption results from household members actively participating in on-farm activities, which increases the labor supply. However, food security is negatively impacted by household size if there are a lot of elderly and children living there (Babatunde et al., 2007). It is generally accepted that one of the key factors influencing food security is education. It has been demonstrated that education-based knowledge enhances nutrient-dense food access. When households have the proper information, they buy and use wholesome food, increasing their level of food security (Dauda, 2010). Human capital is also influenced by education. Those with less education have the highest unemployment rates (Shinns and Lyne, 2005). One of the major elements influencing welfare is unemployment, which is mostly determined by one's level of education. Therefore, the promotion of education should be the primary focus of policy priorities (de Cock et al., 2013).

Research suggests that households with working household heads are more likely to be food secure (Tshediso, 2013). The home will have more money to buy food and other essentials if more members work. Since income affects how affordable food is, it is a key factor in determining household food security. Any change in income has a significant impact on the food security of low-income households since they spend a significant amount of their income on food (Melgar-Quinonez et al., 2006). Food security is higher for households who use fertilizer and irrigation systems, own animals, and have more productive assets (Kidane et al., 2005). According to Sinyolo (2013), irrigators' welfare was superior to that of non-irrigators, and it is a major factor in determining rural welfare. In the section that follows, various aspects of food security are covered.

### 2.3.2 Definition and Importance of staple foods in the diet

Food is what gives the body nourishment. Anything that satisfies the body's demands for energy, development, control, protection, and repair can also be categorized as food or drink. In actuality, food serves as the body's building block. Good nutrition and health can be ensured by consuming the appropriate types and amounts of food, which may show in one's appearance, productivity, and mental stability (Ejiofor, n.d.).

Food has multiple purposes.

a) Food's physiological roles (Whitney & Rolfes, 2018):
    - To supply the energy needed to maintain and carry out daily tasks
    - To construct the body from infancy to maturity
    - To replace or restore the body's deteriorated tissues and
    - To control bodily functions like heart rate, muscular contraction, and waste product elimination.

b) Food's social roles (Counihan & Van Esterik, 2013):

- A major component of our social lives is food.
- It serves religious, cultural, and social functions.
- Homes, temples, and churches use it to commemorate holidays, birthdays, marriages, and
- Additionally, it has been used to show camaraderie and love.

c) Food's psychological effects (Macht & Simons, 2011):

- Emotional needs can be met with food.
- It gives one a feeling of safety and focus.
- While unusual cuisine broadens our culinary experiences despite not being satisfying, familiar food provides reassurance.

A staple food, commonly just called a staple, is one that is consumed frequently and in such large quantities that it makes up the majority of a population's typical diet. It provides a sizable amount of the energy-rich materials that are needed, as well as a generally substantial amount of the other nutrients that are consumed (Wikipedia, 2013). Although staple meals differ from place to location, they are usually affordable or easily accessible foods that provide one or more of the three primary macronutrients—fats, proteins, and carbohydrates—that are essential for survival and good health. Grains, legumes, various seeds, and roots or tuber crops are common examples of staples. A particular society's staple food may be consumed daily or at every meal. The foods that early societies established as staples were prized because, in addition to offering essential nutrients, they could typically be stored for extended periods of time without going bad. In times of scarcity, such dry seasons or previous mild winters, when harvests have been preserved, these storable foods are the only viable staples; in times of plenty, a greater variety of foods may be accessible. Nwokoma (2003).

Cereals like wheat, barley, maize, or rice, as well as starchy tubers or root vegetables like potatoes, yams, cocoyams, and cassava, are the main sources of staple foods. Other staple foods include pulses, which are dried legumes, and fruits like plantains and breadfruit. Depending on the area, staple foods may also include sugar, sorghum, coconut oil, palm oil, and olive oil. The majority of staple foods are plant-based, however in many communities, fishing serves as the main food source. Nigerian cuisine is fascinating and varied. They are frequently unprocessed foods that are high in dietary fiber, low in GI carbs, and come in a variety of vitamin-rich and nutrient-dense combinations. People often forget that foods that are highly sought after in Western nations, such as cassava, yams, plantains, palm oil, coconut and coconut oils, Nigerian brown rice, and beans, do not grow in the West when discussing meals consumed in Africa in general and Nigeria in particular. The majority of Nigerian and African foods are composed of these components, which are primarily from Africa, Asia, and South America. Nigerian cuisine is made up of commonplace tropical fruits including carrots, oranges, tangerines, mangoes, pawpaw, African breadfruit, bananas, and African bush mango seed (Ogbono), to mention a few (Osuji, 2014).

It goes without saying that Nigerians would continue to savor the treats of their ancestry and the associated health advantages. They must have faith that nutritious, well-prepared African food, whether it comes from Ghana, Zimbabwe, or Nigeria, is a well-balanced supply of necessary vitamins, minerals, protein, and fats. It is crucial that Nigerians in the diaspora do not push traditional Nigerian cuisine to the side in favor of Western diets, especially if their children were born overseas or are now residing in the West. This is solely for nutritional and health purposes. Numerous medical studies have demonstrated the superiority of unprocessed African food in promoting overall health (Ajala, 2006).

### 2.3.3 Rising Cost of Staple Food and their Impact on Household Daily Consumption

The average African family spends 50–70% of their income on staple foods (Baiphethi and Jacobs, 2009). In this area, rising food prices have the power to separate progress from poverty, health from illness, peace from violence, and life from death (Diao et al., 2008). Between 2007 and 2008, the percentage of hungry households in Benin City increased slightly as a result of the worldwide food price crisis (HSRC, 2012). Households led by women were somewhat more affected by the crisis (HRSC, 2012). Additionally, worldwide food costs are 36% higher than they were a year ago and are approaching their 2008 peak, according to the World Bank's Food Price Watch, a brief that tracks food prices and poverty trends. The brief also demonstrated that the number of hungry people increased significantly as a result of rising global food commodity prices, particularly for wheat, rice, soy, and maize (World Bank, 2011).

Evidence suggests that the poor are disproportionately affected by higher overall inflation, in addition to the immediate effects of rising food prices on the cost of the food that households buy (Wodon and Zaman, 2008). Often referred to as the global food crisis, the 2007–2008 spike in food prices resulted in a two-year increase of over 60%. That was not the end of the crisis. In 2010, the price of food increased significantly once more, surpassing the 2008 peak, and then somewhat decreased in the final quarter of 2011 (Huh and Park, 2013). Food exports and imports, currency rate fluctuations, foreign exchange reserves, food consumption patterns, and trade and marketing policies are all impacted at the macro level by rising global food costs. In order to create effective strategies to address problems like household food insecurity that are caused by food price inflation, it is crucial to comprehend the factors that influence food prices.

Due to the high level of price transmission between the domestic and international markets, Nigeria's domestic food prices have positively responded to global trends, and the percentage

of hungry families rose by 2-3% during the global price hikes (HSRC, 2012) (Alemu and Ogundeji, 2010). Following DAFF 2010's meeting to investigate the underlying causes of food price hikes, various parties defended their prices. The producers claimed that they had to pay disproportionately higher input costs and did not profit from the higher prices. Higher currency rates, higher electricity costs, and greater transportation costs were the reasons given by the merchants and processors for the increased food prices. The welfare of households is negatively impacted by rising domestic food prices.

Access to food is crucial for ensuring food security at the home level. Even if a large portion of households in rural regions are net food purchasers, the production of staple foods is crucial for the impoverished (FAO, 2012). Rural households in Edo State grow their own food and rely on the market, government programs, and other households for support (Baiphethi and Jacobs, 2009). Both urban and rural households are becoming more reliant on market purchases, according to recent studies (Baiphethi and Jacobs, 2009), which leaves them susceptible to price hikes.

Although consumers are negatively impacted by high food prices, impoverished rural consumers suffer more since they must spend a greater percentage of their income on food (Jacobs, 2009). The increased cost of food reduces purchasing power and puts households' food security at risk (Son and Hakwani, 2009). According to Wood et al. (2009), when food prices are high, rural households reduce the amount of food they eat and the number of meals they eat each day. Additionally, households frequently choose to less nutritious foods because they are typically less expensive (Son and Kakwani, 2009). Their current state of health may then be impacted. As rising food costs devalue the actual pay in the casual labor market, household members may see a decline in their entitlements (Gustafson, 2013). Exorbitant food costs also hinder production since people are unable to learn and work well, which puts more strain on the government to support and assist low-income households (Ngidi, 2013).

### 2.3.4 Preceding Price of Staple Food per Unit Cost

Record has it that a variety of economic and environmental factors have affected the fluctuating costs of staple foods in Nigeria, particularly in Benin City. Nigerian rice prices increased from N35 per kilogram in 2000 to N100 per kilogram in 2008, according to Akinyele (2009). The costs of cassava and maize also increased noticeably during that period. According to Ikom, Ogaboh, Nkpoyen, and Ezeh (2011), there have been significant fluctuations in the cost of rice, yam, cassava, and maize in Nigeria in recent years, making the prices of staple commodities unpredictable. According to a study by Ojo and Adebayo (2012), the average price of rice in Benin City in 2010 was about ₦200 per kilogram, while the price of cassava flour (garri) was about ₦150 per kilogram.

Basic food prices are naturally correlated with market movements and farming efficiency. According to Adeoti and Olayemi (2003), the cost of basic food items in southern Nigeria, particularly in Benin City, has historically been impacted by a number of factors, including seasonal variations in crop production, transportation costs, and storage capabilities. According to their research, prices often fluctuate by 15% to 20% annually, declining during harvest and increasing during periods of scarcity. According to Akpan and Aya (2011), the cost of staple foods in Nigeria has been impacted by a number of factors, including governmental laws, consumer demand, and agricultural skill. Additionally, they noted that local pricing was impacted by shifts in global market prices, particularly when it came to the importation of staple foods like rice.

### 2.3.5 Current Price of Staple Food per Unit Cost

The price of basic foods has significantly increased in Benin City and Nigeria in recent years. The National Bureau of Statistics' 2023 report states that food inflation in Nigeria increased by 26.4% in August 2023, with staple items seeing the biggest price increases. According to Osazuwa and Igbinosa (2022), garri, or cassava flour, is now priced at about ₦600 per

kilogram, while rice has gone up to about ₦800 per kilogram in Benin City. Inflation, currency depreciation, and supply chain disruptions are some of the local and global causes that have contributed to these hikes.

In their comprehensive analysis of Benin City's food markets, Okoruwa, Ogundele, and Oyewusi (2020) found that the cost of other staple items including yam, beans, and maize had also increased significantly. According to their research, the cost of yam tubers has gone up from ₦300–400 to ₦700–900 per kilogram. Urban households' daily food consumption and food security have been greatly impacted by these price increases. A 2023 FAO assessment claims that the COVID-19 pandemic had a significant impact on world food prices by upsetting supply systems and lowering agricultural output. In Nigeria, the problem is exacerbated by elements including rising transportation costs and insecurity in agricultural areas.

### 2.3.6 Causes of Increase in the Prices of Staple Food per Unit Cost

A number of variables are linked to the recent rise in the price of staple foods. Adenegan, Olorunfemi, and Nwachukwu (2013) outlined several important elements that contribute to Nigeria's rising food prices, including:

1) Due to macroeconomic considerations, Nigeria's economic challenges, such as currency depreciation and skyrocketing inflation rates, have significantly impacted food prices. The governor of Nigeria's central bank, Emefiele, claimed in 2022 that the depreciation of the Naira had led to increased costs for imported agricultural supplies and other items.
2) The impact of environmental factors and climate change on Nigerian agricultural output was highlighted by Ajetomobi, Abiodun, and Hassan (2015). Reduced harvests

due to droughts, flooding, and unpredictable rainfall patterns have also raised the price of food.

3) Security challenges: Food supply chains and agricultural operations have been hindered by the persistent security issues in many parts of Nigeria. According to Olayemi, Awogbade, and Okoruwa's 2021 study, conflicts between farmers and herders, along with insurgency in the North, have resulted in lower agricultural output and higher transportation costs, which have raised the price of food in urban areas like Benin City.
4) One of the factors that significantly affected food systems worldwide was the COVID-19 epidemic. According to research by Ayanlade and Radeny (2020), the impact of movement restrictions and lockdowns brought on by the deadly virus has caused disruptions in global supply chains, which in turn has resulted in an increase in food prices in Nigeria.
5) Government policies: Olomola (2017) investigated the effects of several government policies on Nigerian food prices. He said that some policies, such as import restrictions, intended to boost domestic production have caused short-term price increases due to a lack of supply.

### 2.3.7 Preceding Daily Feeding Pattern of Residents in Benin City

Benin City citizens' traditional diets have been impacted by cultural, economic, and environmental influences. According to Omorogiuwa, Zivkovic, and Ademoh (2014), starchy staples—particularly cassava and its derivatives (like garri and fufu), yam, rice, and maize—make up a large portion of the typical Benin City diet. These staples were frequently served with soups or stews made with meat, fish, or vegetables. In their study of Benin City's urban residents' eating habits, Omuemu and Ofili (2010) found that the average household ate three

meals a day: breakfast, which included bread or pastries and tea or coffee; lunch, which typically consisted of a main course and soup; and dinner, which followed the lunch pattern.

According to their findings, most households consumed meat or fish at least once a day, with the amount consumed varying according to their socioeconomic circumstances. According to Onyiriuka, Ibeawuchi, and Onyiriuka (2013), children and young adults in particular frequently eat snacks such roasted maize, groundnuts, and homemade pastries in between meals. The majority of households reported consuming at least one type of vegetable each day, usually in the form of soups or stews, indicating that fruit and vegetable consumption was modest.

### 2.3.8 Current Daily Feeding Pattern of Residents in Benin City

Latest research has revealed notable changes in Benin City residents' daily eating patterns, mostly as a result of shifting lifestyles and financial constraints. In a comprehensive study on eating habits in Benin City, Ezeomah and Farag (2021) found that many households had cut back from three meals a day to two, typically skipping breakfast or only having a brief snack.

Igbinosa and Odigie (2023) showed that consumption of packaged and processed foods has increased, particularly among working-class and urban adolescents. They associated this pattern with perceived cost savings in some cases, convenience of use, and time constraints. However, they also voiced concerns about the nutritional effects of this dietary shift. Over time, people's snacking habits have also evolved in Benin City. Omorodion and Eboreime (2022) found that traditional, homemade snack consumption was declining while commercially manufactured snacks were becoming more popular. They suggested that this change was brought about by the increasing availability and advertising of pre-packaged foods as well as shifting tastes among younger demographics.

### 2.3.9 The conceptual link between food price shocks and consumption responses

This study's conceptual framework is based on research by Kalkuhl et al. (2013) on the relationship between rising food prices and their immediate effects on food and nutrition security. Two main ways that price shocks may affect household consumption and food-based coping mechanisms have been identified by the literature. This might happen in the near future as a result of (i) real income impacts and (ii) substitution effects. Depending on whether the household is a net buyer or a net seller of food, the impacts could be different. A significant increase in the cost of basics would, under normal circumstances, lower the real income of a household that consumes a lot of food, including staples. The real value of food bought or consumed may decrease as a result of the decline in real income, which could ultimately lead to a decrease in the household's overall caloric consumption. This has to do with how pricing changes affect revenue.

A household may also shift expenditures from a costlier staple to a less expensive alternative in reaction to the price increase. This has to do with the impacts of pricing and substitution. Elevated price increases and the resulting decrease in real income may even result in increased consumption of calories and staples, depending on the calorie content of replacement staples. This is particularly true if less expensive energy-dense staple alternatives become available and/or if households' incomes become insufficient to purchase non-staple foods or non-food items. Although the replacement effects might make it impossible to cut calories, they might also make it harder to eat high-quality foods that could have provided households with the vital micronutrients needed for healthy bodily functions, growth, and development. This emphasizes the necessity of investigating the relationship between food price shocks and the range of foods consumed by households. Increases in food prices can also have a direct impact on spending on non-food products including health care, kerosene, vitamins, pesticides, mobile phone recharge cards, matches, and fuel/transportation costs,

among other things. The general welfare of the households may suffer as a result. The socioeconomic status of households and whether or not they are covered by safety nets can lessen the severity of the effects of food price shocks and the resulting decline in real income.

There are many different and intricate relationships between food prices and eating patterns. Numerous studies have examined this relationship in the context of Benin City and other Nigerian cities. Iyanda, Afolabi, and Oyedele (2021) conducted a long-term research to examine the effect of rising staple food prices on household food consumption in Benin City. The number of essential foods consumed was found to be significantly inversely correlated with growing prices, particularly among lower-income households. Families tended to eat fewer meals and less frequently as costs rose, and some started switching from expensive basics to less expensive alternatives. The impact of food price inflation on dietary diversity in urban Nigerian households was examined by Okoye and Onyenweaku (2020). According to their findings, families tend to eat a smaller range of more affordable, satisfying food options when the price of essential items rises. This trend was particularly apparent in Benin City's low- and middle-income households.

Ehigiator and Omorodion (2022) looked into how these dietary changes affected nutrition. Their research revealed that when costs increased, Benin City residents resorted to less expensive, less nutrient-dense diets, increasing the likelihood that at-risk groups would be deficient in vital nutrients like zinc, iron, and vitamin A. Ademola, Oyesola, and Osewa (2021) investigated how gender affects how people modify how much food they eat in response to price increases. It was shown that women in Benin City, who are usually in charge of managing the food in the home, were disproportionately responsible for preserving family nutrition levels in the face of rising expenses. This frequently resulted in women sacrificing their own nutritional needs to ensure the correct nourishment of other family members, particularly youngsters. According to a 2013 FAO report, rising food costs

typically lead to a decline in food consumption and a shift toward less healthful eating habits. This is consistent with data from Nigeria that demonstrates that households with high food expenses tend to eat less food and of lower quality (Smith & Haddad, 2000). According to a 2018 study by Ogunjimi and Akinloye, rising food prices are associated with increased food insecurity and altered eating patterns in urban households. The effects are evident in Benin City, where rising costs for staple foods have led to significant shifts in people's daily eating patterns, such as cutting back on meals and switching to less expensive options.

The following framework shows the different ways that rising staple food prices impact household feeding patterns in order to better visualize these intricate linkages between changes in consumption patterns and increases in food prices:

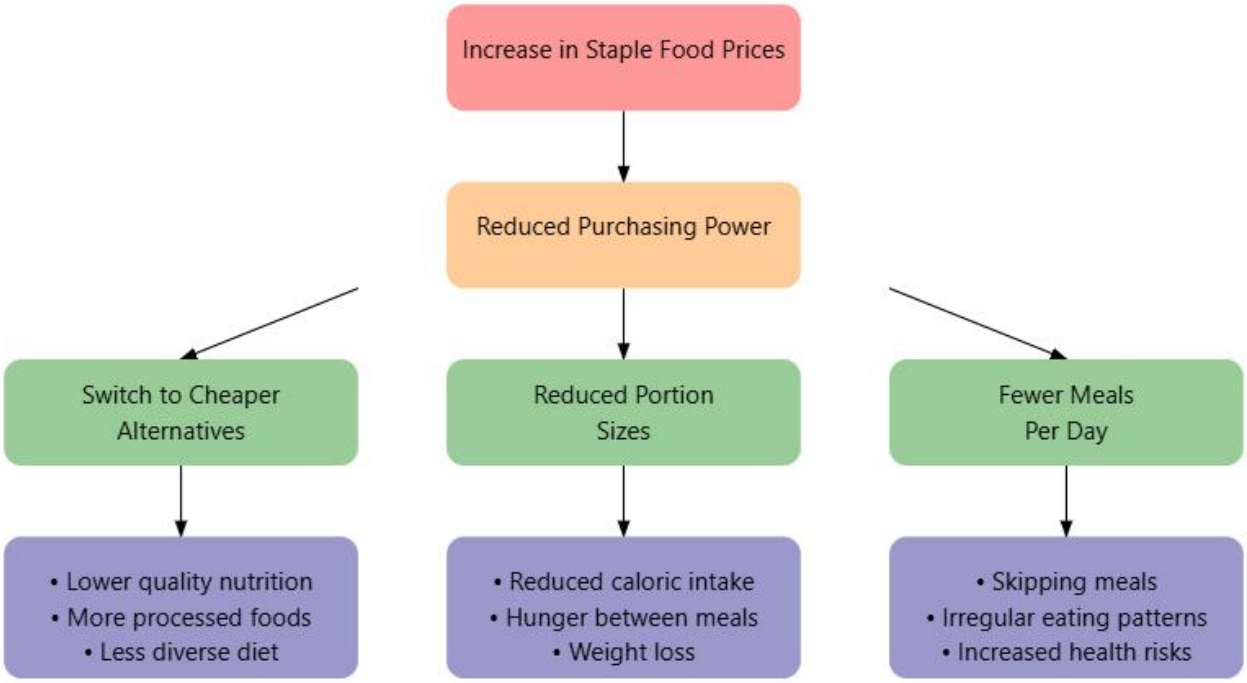



Figure 1.3: The increase in staple food prices significantly alters feeding patterns, leading to meal reductions and nutritional deficiencies
Source: Author's Fieldwork (2024)

The flow chart shows how people's eating habits change in a series of ways when the cost of staple foods rises. Consumers' purchasing power instantly declines when the cost of staple foods increases. People are forced to change their coping mechanisms as a result of this decline in purchasing power. Some people choose less expensive food options, which leads to a less varied diet, higher intake of processed foods, and lower-quality nutrition. In response, some people cut back on portion sizes, which lowers caloric intake, causes hunger in between meals, and may result in weight loss. The third typical reaction is to consume fewer meals each day, which leads to irregular eating habits, missed meals, and higher health risks.

Connected boxes in the chart illustrate these relationships, and arrows explain how cause and effect flow. In order to illustrate how a single economic shift in food costs may drastically change not just what individuals eat but also how and when they consume, ultimately impacting their general health and nutritional condition, each consequence branches out to highlight many implications. A thorough picture of how food price hikes can significantly influence daily meal patterns is painted by the sequence, which starts with the original economic trigger and continues through behavioral changes and physiological and health effects.

### 2.3.10 Coping Mechanisms of Residents in Light of the Rising Cost of Staple Food

Residents of Benin City have developed a number of solutions to cope with the growing costs of essential food products as a result of the rising cost of fundamental foods. These coping mechanisms demonstrated the resiliency and problems faced by Nigerian urban families. Obabuohien, Obayelu, and Ogunniyi (2022) found a number of common ways that people in Benin City handle these obstacles. These consist of:

1) Food substitution: An increasing number of households are switching to less expensive essential food items. One instance of this is when garri, or cassava flour, is consistently substituted for yam or rice.

2) Reduced meal frequency: Many households have cut back on the number of meals they eat each day, and some parents forgo meals to ensure that their kids are fed enough.

In order to cope with the rising costs of food, many households in Benin City have resorted to alternative sources of income, such as working in the unorganized sector, according to study by Ekunwe and Okoedo-Okojie (2023). As more local residents start cultivating tiny gardens to supplement their food supply, urban farming continues to flourish (Osagie & Omoregbe, 2021). According to Okoduwa and Igbinovia (2022), some households have begun purchasing staple foods in bulk while costs are low. They are also investing in improved storage methods to prolong the shelf life of their food. Many people will need to rely on their family, friends, and community connections to share food and offer financial support in order to survive as a result of the rising cost of necessities (Eweka and Omorodion, 2023).

According to Ogbeide and Omoregie (2022), families occasionally alter their recipes by using less expensive components, such as cutting back on the amount of meat or fish in soups and stews. Despite potential nutritional concerns, many households are now resorting to processed foods because they perceive them as more affordable or fulfilling (Igbinoba and Azelengha, 2023). These coping mechanisms demonstrate the adaptability of Benin City residents and draw attention to the significant obstacles caused by rising food prices. As a result of the inflation of food prices, many people have joined informal saving groups and cooperative societies, which will allow them to get loans or purchase food in bulk at reduced prices (Omorodion and Obarisiagbon, 2022). Omoike and Aihie (2023) cautioned that if coping strategies persist for an extended length of time, they may have negative long-term impacts on productivity and health, particularly when they involve restricting the quantity or quality of food consumed.

### 2.3.11 Summary of Literature Review

Numerous facets of food security, staple foods, and their effects on household consumption patterns in Benin City have been thoroughly examined in the literature study. The review started by outlining the theoretical underpinnings using a number of frameworks, such as the Food Regime Theory, Sen's Entitlement Theory, and Neo-Malthusian Theory, which taken together offer a strong basis for comprehending the dynamics of food security. Food security is a complex idea that includes availability, access, stability, and use, according to the review. A number of variables were shown to have an impact on food security, including asset shocks, food shocks, output shocks, and demographic traits including household size, education, and work status. According to the research, there are opportunities and difficulties for family food security as a result of these components' intricate interactions.

The review emphasized the importance of basic foods in Nigerian diets and their economic significance, as households spend between 50 and 70 percent of their income on these necessities. According to a historical review, Benin City's staple food costs have increased significantly over time, with recent years seeing especially steep increases. The study found a number of reasons for these price hikes, including the COVID-19 pandemic's effects, environmental difficulties, security concerns, and macroeconomic problems. The analysis of feeding patterns in Benin City across time showed significant changes, with contemporary trends indicating a move away from the traditional three-meal patterns toward more irregular eating habits, a rise in processed food intake, and a decrease in dietary diversity. The main causes of these shifts are shifting lifestyle choices and economic pressures. A number of coping strategies used by the inhabitants were also identified by the review, such as food substitution, fewer meals, urban farming, and dependence on social networks.

The intricate connection between food price shocks and consumption reactions is one of the literature's key findings. According to the study, households react to price rises through a

combination of income and substitution impacts, which frequently results in worse food quality and quantity. This has significant effects on household welfare and nutrition, especially for vulnerable groups. The literature also outlined study gaps, especially with relation to the efficacy of different coping strategies and the long-term effects of adaptive food patterns. These gaps point to areas that need more investigation to fully comprehend and tackle food security issues in Nigerian urban settings.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.0 Introduction

Research methodology is the examination of ways in which knowledge is acquired. Data collection through fieldwork, sample size and frame selection, data collection, sampling process, and data analysis are all included in the approach (Rajasekar et al. 2006). This chapter will describe the strategies that will be employed to accomplish the objective of assessing how rising staple food prices affect the daily eating patterns of people living in Benin City.

## 3.1 Research Design

A cross-sectional survey approach will be used in this project to collect data from a sizable participant base at a single moment in time. This survey approach provides a means of assessing how the variables under investigation relate to one another. The cross-sectional survey will be variable-focused, employ deductive reasoning, and use numerical data. Additionally, when analyzing the data, this study will combine descriptive and quantitative methods.

## 3.2 Sources of Data

Both primary and secondary sources of data will be used throughout the course of this investigation. Field observation and a questionnaire survey will be used to collect primary data. The objective is to gather first-hand accounts from study participants regarding the impact of rising basic food prices on their daily eating patterns. Utilizing a structured questionnaire, primary data collection will entail learning about respondents' demographic profiles, socioeconomic backgrounds, dietary habits, comprehension, and attitudes toward rising food prices, as well as their concerns about how these costs impact their daily diets.

Furthermore, this study will also make use of secondary data. Secondary data on food prices, inflation, and household consumption patterns in Benin City will be gathered from government reports, statistical data, and current literature. The purpose of using secondary data is to provide context and evidence for findings from primary data, as well as to compare current trends with historical data on the price of staple foods and their impact on eating patterns. This data will improve the analysis by providing a more comprehensive view of the economic variables influencing food prices and the dietary habits of locals in the study area.

### 3.3 Population of the Study

According to Burns and Grove (1993), a population is made up of all the things (people, things, and events) that fit the sample requirements to be included in a study. This study's primary goal is to investigate how people of Benin City's daily eating habits are affected by the rising pricing of staple foods.

The United Nations-World Population Prospects estimates that Benin City will have 1,905,000 residents in 2023, representing a 3.48% increase from 2022. This demographic will be used to choose participants for research on how rising food prices affect their dietary habits and nutritional status.

### 3.4 Sampling Method

A multistage sampling strategy will be used in this study. The study region will be separated into different geographic zones based on notable districts or local government entities. The households from each zone will be selected for the survey using a proportionate random sample technique. This ensures that the sample is representative of the entire city.

To choose respondents who are knowledgeable about the feeding habits and food expenses in each selected home, a purposive sample technique will be employed. The objective is to

incorporate a range of socioeconomic backgrounds in order to completely comprehend how people from different populations' eating habits are affected by the rising costs of necessities.

### 3.5 Sample Size Determination

The Taro Yamane (1967) formula was used to determine the sample size for this investigation. The equation is:

n = N/ (1+ N(e)2 ---------- Equation 1

Where:

n= the desired sample size.

N= total population size of the study area.

With a confidence level of 95% and an acceptable error margin of 5%, e=error margin is a reasonable margin for the social sciences. Consequently, e is 0.05.

399.91 is the sample size (n). Thus, 399 copies of the questionnaires will be distributed to the study participants.

### 3.6 Method of Data Analysis

This study uses a mix of descriptive and quantitative analytical techniques to investigate how Benin City inhabitants' daily eating habits are impacted by the growing price of staple goods.

#### 3.6.1 Descriptive Analysis

The information gathered from the structured questionnaire surveys will be compiled using descriptive analysis. In order to show results in an orderly and understandable way, this approach makes use of frequencies, percentages, means, and standard deviations.

The distribution of replies will be displayed using tables, bar charts, and pie charts, which will also reveal the respondents' socioeconomic traits, eating habits, and opinions on the inflation of food prices. Trends in food consumption behavior can also be found with the use

of descriptive statistics, which will draw attention to any notable changes in eating patterns brought on by the growing prices of staple foods.

### 3.6.2 Quantitative Analysis

Several quantitative techniques will be used to determine statistical correlations between variables:

**Kendall's Coefficient of Concordance (W)**

The degree of agreement among respondents regarding the reasons for the growing prices of staple foods will be evaluated using Kendall's Coefficient of Concordance (W). The consistency of rankings provided by several participants is assessed by this non-parametric test. Kendall's W formula is as follows:

$$W = \frac{12 \sum \mathrm{R}j^2 \; - \; 3\mathrm{N}^2 \, (\mathrm{N} + 1)^2}{\mathrm{N}^2 \, (\mathrm{N}^2 \; - 1)}$$

Where:

- $R_j$ is the sum of ranks for each factor
- $N$ is the number of respondents

Strong agreement among respondents is indicated by a high Kendall's W value (near to 1), whereas a lower number implies disagreement. This approach aids in identifying the most often mentioned causes of rising food prices.

**Percentage Change Analysis**

To assess how staple food costs have changed over time and how they have affected feeding habits, percentage change analysis will be used. The formula for the percentage change is:

$$\%Change = \frac{\text{New Price} - \text{Old Price}}{\text{Old Price}} \text{ x } 100$$

This will be used to compare past and present pricing for important staple foods in order to demonstrate the magnitude of price rises. The results will shed light on inflationary patterns and how they impact the cost of food for households.

**Correlation Change Analysis**

The association between changes in daily meal patterns and the increased cost of staple foods will be ascertained by correlation change analysis. The following formula will be used to determine the Pearson correlation coefficient (r):

$$r = \frac{\mathrm{N} \sum XY - \sum X \sum Y}{\sqrt{\mathrm{N} \sum X^2 - (\sum X)^2 \, (N \sum Y^2 - (\sum Y)^2}}$$

Where:

- $X$ represents staple food prices
- $Y$ represents changes in feeding patterns (such as meal frequency, diet variety, and nutritional intake)
- $N$ is the number of observations

A positive correlation ($r > 0$) would suggest that feeding habits alter dramatically in response to rising food costs, potentially resulting in fewer meals or less dietary variety. An inverse link would be implied by a negative correlation ($r < 0$), but a correlation that is close to zero would indicate little influence.

# CHAPTER FOUR

# DATA ANALYSIS AND DISCUSSION

## 4.1 Demography, Social and Economic Attributes of the Respondents

Analyzing the demography, social, and economic attributes of respondents is crucial in understanding the implications of the rising cost of staple foods on the daily feeding patterns of residents. Demographic factors such as age, gender, and household size provide insight into consumption behaviors and food preferences. Social attributes, including education level and occupation, influence the ability to adapt to food price changes, while economic factors such as income and employment status directly affect purchasing power. By examining these attributes, the study can identify vulnerable groups and develop targeted interventions to mitigate the impact of food price inflation on daily feeding habits.

### 4.1.1 Gender of Respondents

Analyzing gender is particularly relevant when studying the implications of rising staple food costs on daily feeding patterns, as it often shapes household roles, decision-making, and food distribution. In many households, women are primarily responsible for food procurement, preparation, and meal planning while the men are the provider of the income expended by the women. As food prices increase, women may bear the brunt of the burden, adjusting family diets and making trade-offs to manage limited resources. Additionally, gender differences in income, employment opportunities, and access to resources can influence the ability of men and women to cope with rising food costs. Understanding these gender dynamics helps to develop policies that address the unique challenges faced by different genders in ensuring food security. Figure 4.1 show the gender distribution of the respondents for this study.

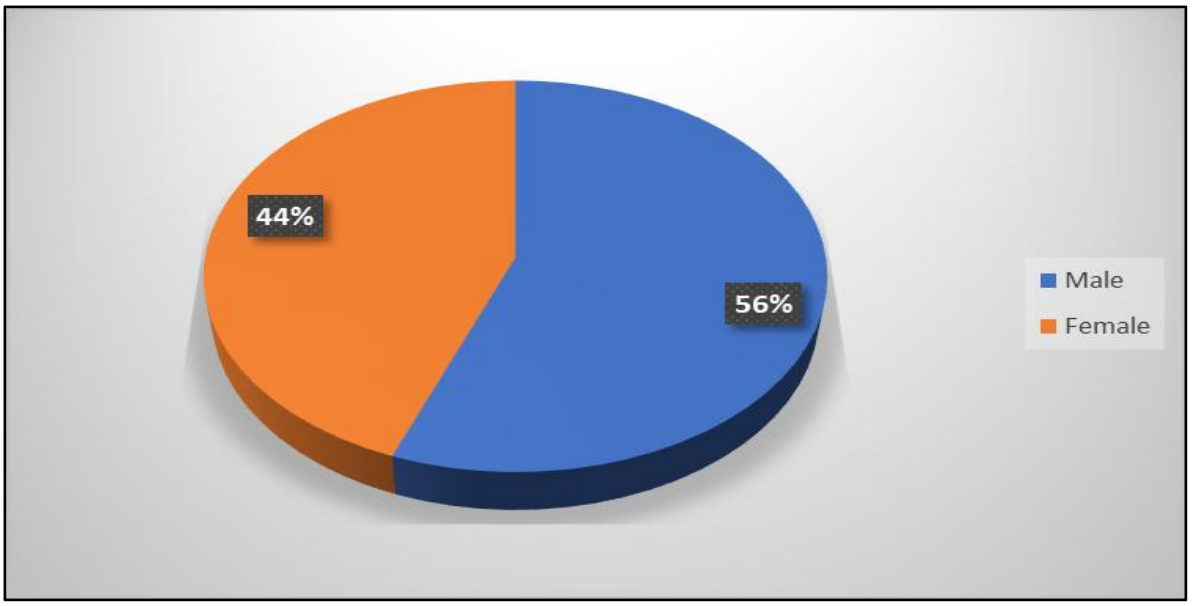



**Figure 4.1: Gender Distribution of the Respondents for the Study**
**Source: Author's Fieldwork, 2025.**

Figure 4.1 showed that out of 374 respondents, 55.9% (209 individuals) are male, while 44.1% (165 individuals) are female. This slight majority of male respondents offers insight into gender-specific experiences in dealing with the rising cost of staple foods. Given that food-related responsibilities in many households often differ by gender, this distribution provides a balanced representation that allows the study to explore variations in how men and women manage food budgeting, procurement, and daily consumption. The total number of respondents (374) reflects a robust sample size, providing a reliable basis for analyzing the broader population's coping mechanisms and feeding patterns in response to increasing food prices.

### 4.1.2 Age of the Respondents

Analyzing age is critical in understanding the impact of rising staple food costs on daily feeding patterns, as food consumption behaviors, dietary needs, and coping strategies can vary significantly across different age groups. Younger individuals or households with children may prioritize certain food items, while older adults might focus on more nutritionally dense or health-conscious choices. Age also influences income levels,

employment status, and dependency ratios within households, all of which affect the ability to afford staple foods during price increases. By examining age demographics, the study can identify age-related vulnerabilities and tailor interventions to address the specific challenges faced by various age groups in maintaining food security (see Table 4.1 for the age distribution of the respondents).

**Table 4.1: Age Distribution of the Respondents for the Study**

| Age Distribution of the Respondents | Frequency | Percentage |
|---|---|---|
| 18-25 | 157 | 41.9 |
| 26-35 | 101 | 26.9 |
| 36-45 | 61 | 16.2 |
| 46-55 | 29 | 7.8 |
| 56-66 | 26 | 7.2 |
| **Total** | 374 | 100 |

**Source: Author's Fieldwork, 2025.**

Table 4.1 presents the age distribution of respondents, offering insights into how different age groups are affected by the rising cost of staple foods. The majority of respondents, 41.9% (157 individuals), fall within the 18-25 age group, which likely consists of young adults, many of whom may still be in school or starting their careers. This group is particularly vulnerable to food price increases due to typically lower incomes or financial dependency, making it harder to adjust to rising food costs.

The 26-35 age group, comprising 26.9% (101 respondents), is another significant portion of the population. Individuals in this group are generally in their early career or family-raising stages, often balancing household expenses, which makes them particularly sensitive to shifts in food prices. As a key demographic, this group's ability to cope with food inflation could reflect broader household financial trends in the community.

The 36-45 age group, representing 16.2% (61 respondents), typically includes more established individuals who may have higher incomes but also greater financial

responsibilities, such as raising children. They are likely impacted by rising staple food costs due to larger household sizes and nutritional needs.

The older age groups, 46-55 and 56-66, make up 7.8% (29 respondents) and 7.2% (26 respondents) of the sample, respectively. These groups may have more financial security, potentially nearing retirement or managing stable incomes, but may still feel the pinch of rising staple food prices, especially as fixed-income planning becomes crucial. This age distribution highlights the varying levels of vulnerability to food price increases across different life stages, emphasizing the need for age-specific strategies to mitigate the impact of inflation on daily feeding patterns.

### 4.1.3 Household Composition of the Respondents

Analyzing marital status, number of wives, and household size (household composition) is crucial for understanding the implications of rising staple food costs on feeding patterns. Marital status can influence household income and decision-making dynamics, as married individuals often manage shared resources. In polygamous households, with multiple wives, the number of dependents and the complexity of financial responsibilities increase, further intensifying the impact of food inflation. Larger household sizes typically mean higher food consumption, making such households more vulnerable to price fluctuations. By examining these factors, the study can assess how diverse family structures and household sizes cope with increasing food costs, revealing disparities in food security and adaptability across different family types (see Appendix 2 for the contingency table between marital status, number of wives and household size).

The crosstabulation of marital status, number of wives, and household size in Appendix 2 highlights the distribution of respondents' household compositions based on these variables. For smaller household sizes (2 to 3 persons), the table shows that all respondents are married

and have only one wife. As household sizes increase, particularly in households with 4 to 5 members, variations in marital status appear, with single, married, and separated individuals present. Married respondents tend to have either one or two wives, while separated individuals typically do not indicate multiple spouses.

Notably, in larger households of 5 or more members, some married respondents have two wives, reflecting the dynamics of polygamous families. For instance, in households with 5 members, 66.7% of married respondents have one wife, while 33.3% have two wives. This trend continues in households with 6 or more members, where the majority of respondents still have one wife, though a small percentage have two wives. Across all household sizes, single respondents consistently report no wives, while separated individuals remain concentrated in households with fewer members, all reporting only one wife.

Overall, the crosstabulation indicates that as household sizes increase, polygamous families with two wives become more common, although the majority of married respondents maintain monogamous households across all household sizes. This insight into household composition is relevant when considering the distribution of resources, household dynamics, and feeding patterns within different marital and household structures.

### 4.1.4 Level of Education of the Respondents

Analyzing the level of education is crucial in understanding the respondents' access to knowledge, resources, and decision-making capabilities, especially in the context of urban facilities and development. Education often correlates with better awareness of public services, access to amenities, and the ability to make informed choices that can improve household well-being. In the context of the study, respondents with higher educational levels may be more knowledgeable about urban infrastructure, planning initiatives, or facility accessibility. Conversely, lower educational levels might indicate potential challenges in

accessing or utilizing urban facilities effectively, influencing planning outcomes and policy recommendations for more inclusive development (see Table 4.2).

**Table 4.2: Level of Education of Respondents**

| Educational Level | Frequency | Percent |
|---|---|---|
| No Formal Education | 10 | 2.7 |
| Primary School Education | 13 | 3.5 |
| Secondary School Education | 105 | 28.1 |
| Tertiary Education | 246 | 65.8 |
| Total | 374 | 100.0 |

**Source: Author's Fieldwork, 2024.**

Table 2 detailing the educational levels of respondents offers valuable insights into the population's overall educational background, which is essential for understanding how individuals engage with urban services and recreational facilities, especially in a city like Benin City.

With only a small proportion of respondents having no formal education (2.7%) or just primary education (3.5%), it indicates that most people in the surveyed population have access to basic educational structures. This level of education could allow them to engage with basic information regarding urban planning and the availability of various facilities, though their understanding might be limited compared to those with higher levels of education.

The largest portion of respondents has completed secondary school education (28.1%). This group likely possesses a fundamental level of literacy and numeracy, which may enhance

their ability to navigate urban spaces and understand the relevance of urban amenities such as recreational facilities. While they may not have specialized knowledge, they are still able to utilize and appreciate such spaces. Additionally, this group could play a critical role in raising awareness about issues related to facility accessibility and urban development.

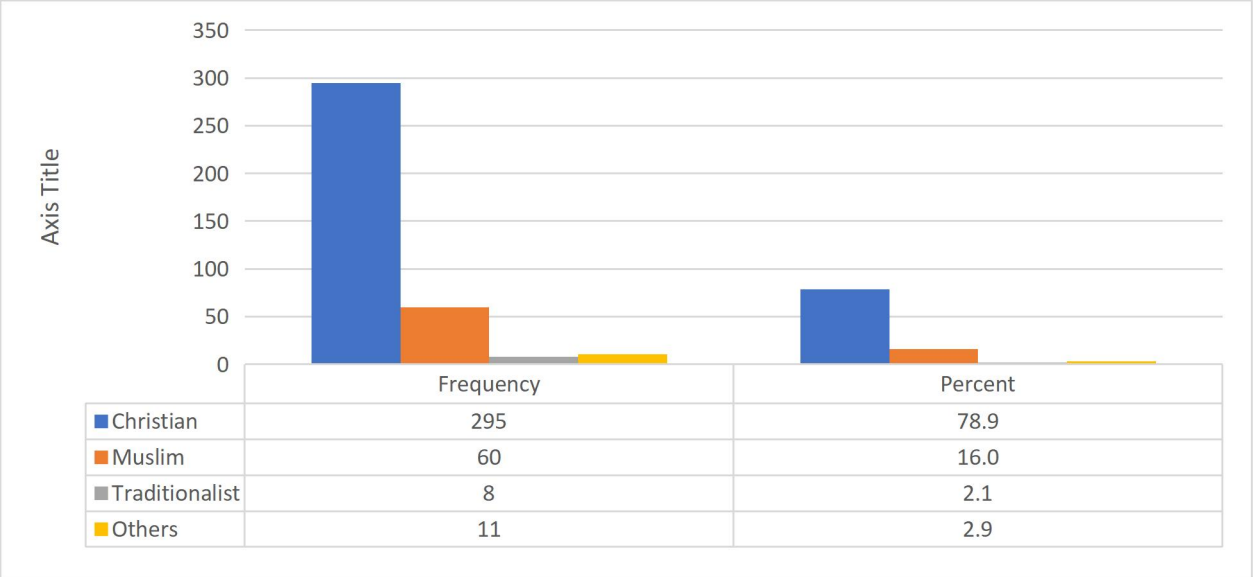
The majority of respondents, however, have attained tertiary education (65.8%), suggesting a highly educated population. This is particularly important in the context of urban geography and regional development, as individuals with higher education are often more involved in urban planning, policy advocacy, and decision-making. Such a population is likely to demand and utilize recreational facilities more actively, given their awareness of the benefits these spaces offer for health and well-being. Furthermore, their higher level of education could enable them to contribute meaningfully to discussions about improving the quality and accessibility of these facilities in their communities.

This educational distribution has several implications for urban policy and planning. A highly educated population may be more likely to push for improvements in recreational services, and may also have the capacity to engage with or contribute to urban development projects that aim to enhance public spaces. Additionally, with such a large proportion of the population having tertiary education, urban planners may need to consider this demographic's specific needs and preferences when designing or improving recreational facilities, ensuring that the infrastructure meets the expectations of a well-informed public.

### 4.1.5 Religious Affiliations of the Respondents

The analysis of religious affiliation is crucial in studying the implications of rising staple food costs on residents' daily feeding patterns because religion often shapes food preferences, restrictions, and consumption habits. Different religious groups may have distinct dietary requirements, fasting periods, or preferences for specific staple foods, making them

differently affected by price changes. Furthermore, religious organizations often provide social safety nets through charity or community feeding programs, playing a critical role in mitigating the effects of food price hikes. By examining religious affiliation, the study can provide a more comprehensive understanding of how rising food costs impact diverse groups and inform tailored support measures.




| | Frequency | Percent |
|---|---|---|
| Christian | 295 | 78.9 |
| Muslim | 60 | 16.0 |
| Traditionalist | 8 | 2.1 |
| Others | 11 | 2.9 |

**Figure 4.2: Religious Affiliations of the Respondents**
**Source: Author's Fieldwork, 2025.**

Figure 4.2 presents the religious affiliations of respondents, with the majority being Christians (78.9%), followed by Muslims (16.0%), Traditionalists (2.1%), and Others (2.9%). These religious demographics provide important context for understanding the implications of the rising cost of staple foods on daily feeding patterns.

Christianity and Islam, which dominate the sample population, may have distinct cultural practices that shape food consumption. For instance, religious festivals such as Christmas and Easter in Christianity or Ramadan in Islam often involve increased food consumption or specific dietary practices. Rising food prices could limit the ability of households to observe these traditions as usual, potentially altering meal preparation or food choices during religious events.

Religious communities may also play a critical role in mitigating the effects of rising staple food prices through charity and social support, such as food drives organized by churches, mosques, or other religious institutions. The high percentage of Christians in this sample suggests that Christian-based social programs might have a significant influence on helping affected families cope with the economic impact of price increases.

In times of economic hardship, religious practices like fasting or dietary restrictions might be more prevalent, particularly for Muslims during Ramadan, where fasting is a religious obligation. These practices might mitigate some of the effects of rising prices by reducing the frequency or quantity of meals. Additionally, religious teachings on charity and almsgiving could influence how communities respond to the food insecurity brought about by price increases.

### 4.1.6 Occupation and Monthly Income of the Respondents

Analyzing the relationship between occupation and monthly income is crucial when studying this study. Occupation often determines income levels, which in turn influences purchasing power, dietary choices, and food security. As food prices increase, households with lower or inconsistent income may struggle to maintain their regular feeding patterns, resorting to cheaper, less nutritious alternatives. Understanding this linkage is essential to assess the varying impact of food price inflation on different socioeconomic groups, highlighting vulnerabilities and guiding policy interventions for improving food access and affordability (see Table 4.3 for the contingency table between occupation and monthly income).

**Table 4.3: Contingency Table between Occupation and Monthly Income of Respondents**

| Monthly Income of Respondent | Civil Servant | Working in Private Sector | Trader | Farmer | Artisans | Unemployed | Students | Total |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Below 10,000** | 0 | 0 | 2 | 0 | 2 | 7 | 1 | 12 |
| % within Income | 0.00% | 0.00% | 16.70% | 0.00% | 16.70% | 58.30% | 8.30% | 100.00% |
| **10,000–30,000** | 8 | 0 | 2 | 2 | 3 | 3 | 19 | 37 |
| % within Income | 21.60% | 0.00% | 5.40% | 5.40% | 8.10% | 8.10% | 51.40% | 100.00% |
| **30,001–60,000** | 5 | 5 | 20 | 1 | 16 | 1 | 17 | 65 |
| % within Income | 7.70% | 7.70% | 30.80% | 1.50% | 24.60% | 1.50% | 26.20% | 100.00% |
| **60,001–100,000** | 7 | 4 | 12 | 1 | 10 | 1 | 4 | 39 |
| % within Income | 17.90% | 10.30% | 30.80% | 2.60% | 25.60% | 2.60% | 10.30% | 100.00% |
| **Above 100,000** | 21 | 25 | 17 | 10 | 30 | 7 | 17 | 127 |
| % within Income | 16.50% | 19.70% | 13.40% | 7.90% | 23.60% | 5.50% | 13.40% | 100.00% |
| **Total** | 41 | 34 | 53 | 14 | 62 | 19 | 58 | 281 |
| % within Income | 14.60% | 12.10% | 18.90% | 5.00% | 22.10% | 6.80% | 20.60% | 100.00% |

**Source: Author's Fieldwork, 2025.**

Table 4.3 provides a comparison between the monthly income of respondents and their occupations, shedding light on the potential impact of rising staple food costs on daily feeding patterns. It reveals how different occupational groups, such as civil servants, private sector workers, traders, farmers, artisans, the unemployed, and students, experience variations in income levels, which affects their ability to cope with the rising cost of food.

Respondents engaged in occupations like trading, farming, and artisanal work tend to fall within lower-income brackets, typically earning between ₦2,500 and ₦20,000 monthly. For these individuals, the rising cost of staple food significantly strains their already limited budgets. As food prices increase, households in this group may struggle to afford regular,

nutritious meals. Consequently, they might resort to coping strategies such as skipping meals, reducing meal portions, or substituting quality food with cheaper, less nutritious alternatives.

In contrast, respondents employed as civil servants and private-sector workers often fall within the middle-income category, earning between ₦20,000 and ₦80,000 monthly. While they are somewhat better positioned to manage the rising cost of food, they are not immune to its effects. Many of these households may have to adjust their feeding patterns by limiting the diversity of their meals or opting for less expensive food options, although they might not experience the same drastic impact as those in lower-income brackets.

At the higher end of the income scale, civil servants, private-sector workers, and some traders earn more than ₦100,000 monthly. While rising food prices can still affect their household budgets, these individuals are generally better able to absorb the impact due to their higher disposable income. Their daily feeding patterns are less likely to change dramatically, as they have more financial flexibility to maintain regular and diverse meals despite the increase in food costs.

The table highlights how rising staple food prices disproportionately affect low- and middle-income households, with those in lower income brackets experiencing the greatest challenges in maintaining their feeding patterns. Low-income groups, especially traders, artisans, and the unemployed, face a heightened risk of food insecurity. Middle-income households may adopt more gradual adjustments to their feeding habits, such as reducing the quality or variety of their meals, while high-income earners are more capable of sustaining their dietary practices. Overall, the table emphasizes the varying degrees to which rising food prices influence the daily feeding patterns of residents, shaped primarily by their occupation and income levels.

## 4.2 The Consumption of Staple Foods by Residents in Benin City

The consumption of staple foods is central to the daily feeding patterns of residents, as these foods often form the foundation of most meals, providing essential calories and nutrients. Staple foods, which include grains like rice, beans, and plantain, as well as tubers such as yam and cassava, are typically affordable and accessible to most households. However, the rising cost of these staple items poses significant challenges, particularly for low- and middle-income households. As food prices increase, residents may find it increasingly difficult to maintain their usual consumption patterns. This leads to changes in the quantity and quality of food consumed, with households potentially reducing meal sizes, skipping meals, or substituting cheaper but less nutritious alternatives. These adjustments have implications not only for food security but also for the nutritional well-being of the population, as the rising cost of staple foods forces households to make difficult trade-offs in their daily feeding practices. In this study, feeding pattern emphasis was on skipping meals as a way of rationing what is available.

### 4.2.1 Staple Food Consumed Regularly by Residents and their Prices Between 2023 and 2024

The consumption of staple foods such as rice, beans, cassava, yam, and plantain are central to the daily diet of many residents, particularly in developing regions. These foods provide essential calories, nutrients, and energy required for daily activities. However, the rising cost of these staples poses significant challenges to households, influencing both the quantity and frequency with which they are consumed. As prices for these staple foods increase due to some factors such as inflation, supply chain disruptions, or seasonal shortages, residents may find it increasingly difficult to afford their usual dietary patterns. This may lead to a reduction in the quantity of these foods consumed, a shift towards cheaper substitutes, or even a change in meal preparation practices to stretch limited resources. Such adjustments can have

important implications for residents' nutritional intake, as well as for their overall health and well-being, particularly among low-income populations. The rising cost of staple foods, therefore, significantly affects the daily feeding patterns of residents, highlighting the vulnerability of households to economic shifts and food price fluctuations.

**Table 4.4: Staple Food Regularly Consumed**

| | | Responses | | Percent of Cases |
|---|---|---|---|---|
| | | N | Percent | |
| Staple Food Regularly Consumed[a] | Rice is among the Stable Food Consumed Regularly | 360 | 33.5% | 96.3% |
| | Garri (Cassava) is among the Stable Food Consumed Regularly | 232 | 21.6% | 62.0% |
| | Beans is among the Stable Food Consumed Regularly | 205 | 19.1% | 54.8% |
| | Yam is among the Stable Food Consumed Regularly | 155 | 14.4% | 41.4% |
| | Plantain is among the Stable Food Consumed Regularly | 123 | 11.4% | 32.9% |
| Total | | 1075 | 100.0% | 287.4% |
| a. Dichotomy group tabulated at value 1. | | | | |

**Source: Author's Fieldwork, 2025.**

The data presented in Table 4.4 reveals the staple foods that residents regularly consume, reflecting the importance of specific foods like rice, beans, garri, yam, and plantain in daily diets. According to the table, rice is the most commonly consumed staple food, with 33.5% of respondents affirming its regular consumption, representing 96.3% of all responses. This indicates that rice holds a central place in the feeding patterns of the majority of the residents. Cassava, consumed regularly by 21.6% of the respondents (62.0% of cases), follows as a significant staple food. Beans comes in third, consumed regularly by 19.1% of respondents, representing 54.8% of the cases.

Yam and plantain are less frequently consumed as staple foods, with regular consumption reported by 14.4% and 11.4% of the respondents, respectively. The data shows that while yam and plantain are important in the diet of a portion of the population, they do not have the same widespread regularity in consumption as rice or beans.

The rising cost of these staple foods can have direct implications for the daily feeding patterns of residents. As food prices increase, households may find it increasingly difficult to maintain regular consumption of these staples. Given that rice, beans, and garri are consumed by the majority, their rising cost could lead to a reduction in the quantity consumed or a shift towards more affordable alternatives. For example, families may cut back on the frequency of rice and beans in favor of cheaper, less nutritious options, potentially impacting overall nutritional intake. In contrast, yam and plantain, which have lower regular consumption rates, may see even more significant declines in consumption as their affordability becomes more of an issue.

### 4.2.2 Prices of Staple Food Consumed Regularly by Residents Between 2023 and 2024

Analyzing the prices of staple foods consumed by residents between 2023 and 2024 is essential to understanding the impact of rising costs on household food security and

consumption patterns. As staple foods form the core of daily diets, price increases can force residents to reduce meal frequency, opt for cheaper, less nutritious alternatives, or skip meals entirely. This analysis sheds light on how inflation affects food accessibility, contributing to poverty and malnutrition. It also informs policymakers on the need for interventions, such as food subsidies or support programs, to mitigate the negative effects of rising food prices on vulnerable populations (see Figure 4.3 which shows the mean prices of the selected staple foods). In interpreting the figure, the data in the left and right side of the figure represents the mean cost of staple foods in the years 2023 and 2024 respectively.

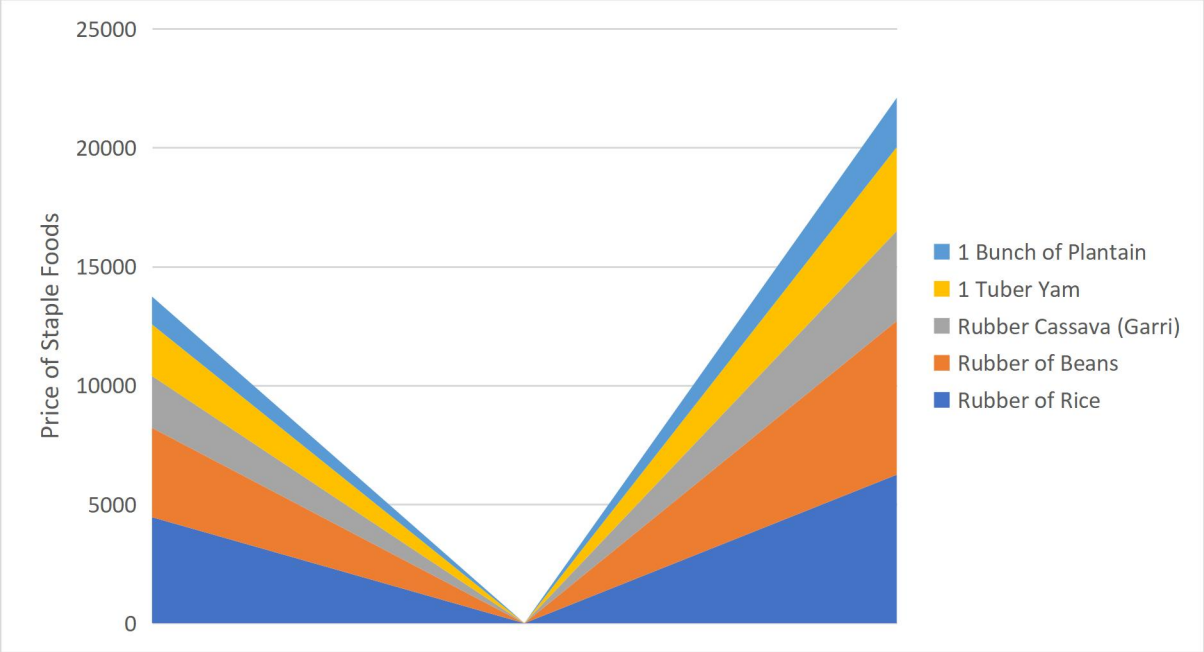



**Figure 4.3: Mean Prices of Staple Foods in the Year 2023 and 2024**
**Source: Author's Fieldwork, 2025.**

The table presents the mean cost of staple foods in 2023 and 2024, highlighting the significant increase in prices across essential food items consumed regularly by residents. The cost of a rubber of rice rose from ₦4,459 in 2023 to ₦6,247 in 2024, representing a substantial increase of 40.1%. Similarly, the price of a rubber of beans saw an even sharper rise, increasing from ₦3,758 to ₦6,468, reflecting a 72.1% hike. The cost of cassava (garri), a key staple for many households, also increased markedly, from ₦2,182 to ₦3,789, an increase of 73.7%. Yam, another critical food item, saw its price rise from ₦2,168 to ₦3,524,

a 62.6% increase. Additionally, the cost of a bunch of plantains almost doubled, increasing from ₦1,174 in 2023 to ₦2,073 in 2024, a 76.6% increase.

These price increases are indicative of inflationary pressures and economic challenges, severely affecting the affordability of staple foods. As these staples constitute the primary sources of nutrition for many households, the rising costs have likely exacerbated food insecurity, forcing residents to reduce consumption or opt for less nutritious alternatives. The substantial increases in prices reflect a growing financial burden on residents, making it difficult for low- and middle-income households to maintain their standard of living and dietary habits. The continuous rise in food costs may also contribute to increased poverty levels and worsen health outcomes due to inadequate access to balanced meals, highlighting the need for urgent policy interventions to stabilize food prices and improve food security.

### 4.2.3 Causes of the Increase in the Prices of Staple Foods in Benin City

The increase in the prices of staple foods can be attributed to a range of interconnected factors that are both structural and situational in nature. These causes include the lack of interest in farming, which has led to reduced agricultural productivity and limited supply of key staple foods. This, coupled with the high cost of production, exacerbates the problem. The rising costs of inputs such as fertilizers, seeds, and labor have made farming less economically viable for many producers. Additionally, the high cost of transportation, driven by rising fuel prices, significantly impacts the price of staple foods as they are moved from rural areas to urban markets. Poor road infrastructure further exacerbates transportation challenges, increasing the cost of delivery and contributing to delays in supply chains. The recent removal of fuel subsidies has led to higher fuel prices, further elevating the cost of production and transportation of food items. Moreover, disruptions in supply chains are also caused by insecurity, including incidents of kidnapping and banditry, which have made it difficult for farmers and traders to safely transport goods. These factors, working in tandem,

contribute to the rising cost of staple foods, which in turn has a profound impact on the daily feeding patterns of residents, forcing them to adjust their consumption habits by reducing the frequency or quantity of staple foods consumed, or seeking cheaper substitutes.

Thus, it was hypothetically stated as hypothesis 1 that "there is no significant agreement amongst respondents on the causes of rising cost of staple food in Benin City". In order to validate or not validate the claim, Kendall Coefficient of Concordance (W) analytical technique was employed. The Kendall coefficient of concordance (W) measures the degree of agreement among different raters or rankings, with values ranging from 0 (no agreement) to 1 (complete agreement). In this context, the mean ranks provided reflect the perceived importance of various causes for the increase in the price of staple foods, with a higher mean rank indicating a higher perceived significance (see Table 4.5 for the mean ranking of the variables).

**Table 4.5: Mean Ranking**

| Causes of increase in the Price of Staple Foods | Mean Rank |
|---|---|
| Kidnapping and farmers-herders conflicts is the cause of Increase in Price of Staple Food | 3.74 |
| Lack of interest in Farming Activities is the cause of Increase in Price of Staple Food | 3.97 |
| Increase in Transportation Cost is the cause of Increase in Price of Staple Food | 3.04 |
| Poor Road Condition is the cause of Increase in Price of Staple Food | 3.53 |
| Increase in the cost of Farming is the cause of Increase in Price of Staple Food | 3.94 |
| Removal of Fuel Subsidy is the cause of Increase in Price of Staple Food | 2.78 |

**Source: Author's Fieldwork, 2025.**

Based on the provided mean ranks, the cause with the highest rank is lack of interest in farming activities (mean rank of 3.97), followed closely by increase in the cost of farming (mean rank of 3.94). These two factors are seen as the most significant contributors to rising food prices, suggesting that respondents perceive agricultural neglect and the rising costs of farming as key factors influencing food price increases. On the other hand, the removal of

fuel subsidy has the lowest mean rank (2.78), indicating that respondents view it as the least important cause among the listed factors. This could suggest that respondents may attribute other causes as more influential or immediate in driving up food prices.

The factors of kidnapping and farmers-herders conflict (mean rank of 3.74), poor road condition (mean rank of 3.53), and increase in transportation cost (mean rank of 3.04) rank in between, suggesting varying degrees of significance in their impact on food prices. Specifically, kidnapping and poor road conditions are seen as relatively important, but not as much as farming-related issues, while transportation costs are perceived as slightly less impactful.

When considering the Kendall coefficient of concordance (W) for these rankings, the closer the values are among different causes, the higher the level of agreement between respondents. However, given the slight variation in mean ranks (ranging from 2.78 to 3.97), the agreement among respondents may not be very high, and this could be further confirmed by calculating the Kendall's W. If the W value is relatively low, it would suggest that the respondents' perceptions about the causes of price increases are somewhat varied, with no overwhelming consensus on the most significant factors.

**Table 4.6: Test Statistics**

| | |
|---|---|
| N | 374 |
| Kendall's W[a] | 0.069 |
| Chi-Square | 128.288 |
| df | 5 |
| Asymp. Sig. | 0.000 |
| a. Kendall's Coefficient of Concordance | |

**Source; Author's Fieldwork, 2025.**

Table 4.6 presents the results of the Kendall's Coefficient of Concordance (W) test, which evaluates the degree of agreement among rankings of various causes contributing to the

increase in the price of staple foods. With 374 observations or respondents (N), the calculated Kendall's W value is 0.069, indicating a low level of agreement among the rankings. The range for Kendall's W is between 0 (no agreement) and 1 (perfect agreement), so a value of 0.069 suggests that respondents' perceptions on the relative importance of the causes are not strongly aligned, revealing weak concordance.

The Chi-Square statistic of 128.288 reflects the overall variation in rankings across respondents. A higher Chi-square value typically signals more significant differences in the rankings, and in this case, it indicates that there is substantial variation in how the causes of the price increase are prioritized. The degrees of freedom (df) is 5, corresponding to the six causes being ranked. The very low p-value (Asymp. Sig. = 0.000) indicates that the differences in the rankings are statistically significant, meaning that the observed variation in rankings is unlikely to have occurred by chance. As the p-value is well below the typical significance level of 0.05, we can reject the null hypothesis, which would have suggested no agreement among the rankings. Thus, it would be concluded that, there is significant agreement among the respondents on the causes of rising cost of staple food in Benin City.

In conclusion, although the results are statistically significant, the low Kendall's W value suggests weak agreement among respondents regarding the relative importance of the causes behind rising food prices. While the respondents generally acknowledge these causes, their priorities differ considerably, indicating a lack of consensus on which factor is most influential in driving up staple food prices.

### 4.3 Daily Feeding Patterns of Residents in Benin City Between 2023 and 2024

Between 2023 and 2024, the daily feeding patterns of residents in Benin City have been significantly affected by the rising costs of staple foods. As these foods form the basis of most meals in the city, fluctuations in their prices have forced many households to adjust

their eating habits. With rising inflation and economic challenges, residents have experienced increased difficulties in affording basic food items like rice, yam, beans, and cassava. As a result, many households have been compelled to reduce meal sizes, cut down on the frequency of meals, or resort to cheaper and less nutritious alternatives. This shift in feeding patterns has important implications for food security and nutritional health, particularly for low- and middle-income households, as the rising cost of staple foods continues to strain the ability of families to meet their daily dietary needs (see Table 4.7).

**Table 4.7: Daily Feeding Pattern of Respondents in 2023 and 2024**

| **Respondents Feeding Pattern in 2023** | | |
|---|---|---|
| Feeding Pattern | Frequency | Percent |
| 1-1-1 | 196 | 52.4 |
| 1-1-0 | 19 | 5.1 |
| 1-0-1 | 75 | 20.1 |
| 0-1-1 | 64 | 17.1 |
| 0-0-1 | 9 | 2.4 |
| 0-1-0 | 6 | 1.6 |
| 1-0-0 | 5 | 1.3 |
| Total | 374 | 100.0 |
| | | |
| **Respondents Feeding Pattern in 2024** | | |
| Feeding Pattern | Frequency | Percent |
| 1-1-1 | 96 | 25.7 |
| 1-1-0 | 9 | 2.4 |
| 1-0-1 | 67 | 17.9 |
| 0-1-1 | 52 | 13.9 |
| 0-0-1 | 101 | 27.0 |
| 0-1-0 | 24 | 6.4 |
| 1-0-0 | 25 | 6.7 |
| Total | 374 | 100.0 |

**Source: Author's Fieldwork, 2025.**

Table 4.7 revealed a comparison of the daily feeding patterns of residents in 2023 and 2024, revealing significant changes due to the impact of rising food prices. One of the most striking observations is the drastic reduction in the percentage of respondents who consumed three meals a day (1-1-1). In 2023, 52.4% of respondents reported eating three meals, but by 2024,

this had dropped to just 25.7%. This sharp decline suggests that the rising cost of staple foods has forced many households to cut back on their daily meal intake, making it increasingly difficult to maintain a three-meal routine.

Conversely, there is a notable increase in the percentage of respondents consuming just one meal per day (0-0-1), which rose dramatically from 2.4% in 2023 to 27.0% in 2024. This significant shift reflects the financial pressures residents are facing, with more people now relying on only one meal a day as a coping mechanism. The rising cost of living has clearly pushed many into a situation where skipping two meals has become a necessity to manage food expenses.

The data also shows an increase in the number of people consuming only breakfast (1-0-0) or only lunch (0-1-0), with these patterns rising from 1.3% to 6.7% and 1.6% to 6.4% respectively. This further illustrates how residents are adjusting their meal schedules to align with what they can afford. It suggests that people are strategically choosing to eat only one meal, depending on which part of the day they consider most important for managing hunger or energy needs.

At the same time, the percentage of those consuming two meals a day (1-1-0 and 1-0-1) has also decreased. The "1-1-0" pattern dropped from 5.1% to 2.4%, and the "1-0-1" pattern saw a slight decline from 20.1% to 17.9%. These changes indicate that even individuals who previously managed to eat two meals daily are now struggling to maintain that habit, likely due to the ongoing rise in food prices.

### 4.3.1 Percentage Change Analysis of Respondents' Feeding Patterns

The purpose of carrying out this analysis is to assess the impact of rising food prices on the daily feeding patterns of residents. By comparing the feeding habits from 2023 to 2024, the analysis helps to identify changes in meal frequency, revealing how individuals and

households are adjusting their eating behaviours in response to economic challenges. This insight is critical for understanding food insecurity, measuring the effects of inflation on basic needs, and informing policy decisions or interventions aimed at mitigating the negative consequences of food scarcity, particularly among vulnerable populations.

To analyse the percentage change in feeding patterns from 2023 to 2024, we will calculate the percentage change for each category using the formula:

$$Percentage\ Change = \frac{New\ Percentage - Old\ Percentage}{Old\ Percentage} X100$$ ----------*(Equation 4.1)*

**Table 4.8: Percentage in the Feeding Patterns between 2023 and 2024**

| Feeding Pattern | 2023 (%) | 2024 (%) | Percentage Change (%) |
|---|---|---|---|
| 1-1-1 | 52.4 | 25.7 | -50.95 |
| 1-1-0 | 5.1 | 2.4 | -52.94 |
| 1-0-1 | 20.1 | 17.9 | -10.95 |
| 0-1-1 | 17.1 | 13.9 | -18.71 |
| 0-0-1 | 2.4 | 27.0 | 1025.00 |
| 0-1-0 | 1.6 | 6.4 | 300.00 |
| 1-0-0 | 1.3 | 6.7 | 415.38 |

**Source: Author's Fieldwork, 2025.**

The analysis in Table 4.8 revealled significant shifts in the feeding patterns of respondents from 2023 to 2024. The most notable changes are:

Reduction in the "1-1-1" feeding pattern (-50.95%). The percentage of respondents who consume three meals daily (1-1-1) has drastically reduced. This may suggest that many individuals are no longer able to afford three meals per day, likely due to rising costs of staple foods. Economic pressure is pushing people to cut back on their feeding frequency.

Increase in the "0-0-1" feeding pattern (1025.00%). The percentage of respondents who eat only one meal a day (0-0-1) has seen a massive increase. This pattern indicates that more people are skipping meals altogether, particularly breakfast and lunch, possibly as a coping strategy in response to increased food prices.

Increase in the "0-1-0" and "1-0-0" patterns (300.00% and 415.38%). There is a substantial rise in respondents eating only lunch or breakfast (0-1-0, 1-0-0). This points to a growing number of individuals who can afford only one meal, possibly choosing breakfast or lunch to manage hunger.

Decrease in the "1-1-0" and "0-1-1" patterns (-52.94% and -18.71%). These patterns have seen a decrease, which may suggest that individuals are increasingly cutting back on meals at various times of the day, opting to skip meals more frequently due to financial strain.

These findings indicated that the rising cost of staple foods is directly impacting the feeding patterns of residents. A significant portion of the population has been forced to reduce their daily food intake, leading to a reduction in the number of meals consumed per day. This change implies increased food insecurity and reduced access to balanced nutrition, which can have long-term negative effects on public health and overall well-being.

Thus, the shift toward fewer meals and the preference for a single meal per day reflects the economic hardship faced by many residents, emphasizing the urgent need for measures to mitigate the impact of rising food costs.

### 4.4 Relationship Between Rising Cost of Staple Foods and Daily Feeding Pattern

The rising cost of staple foods has significant implications for household food security, particularly in regions where these foods constitute the primary source of nutrition. As food prices increase, many households are forced to adjust their daily feeding patterns to cope with limited financial resources. This often results in reduced meal frequency, smaller portions, or shifts to less nutritious alternatives, all of which can have adverse effects on health and well-being. Understanding the relationship between the rising cost of staple foods and daily feeding patterns is crucial for addressing food insecurity and ensuring equitable access to sufficient and nutritious meals. This study explores how rising staple food prices have

impacted the daily feeding patterns of residents. The Pearson Moment Correlation was used to test the hypothesis that "there is no relationship between rising cost of staple food and daily feeding pattern of residents in the study area". Table 4.11 shows the correlation table.

**Table 4.11: Correlation Table**

**Correlations**

| | | Difference Monthly Feeding Cost in 2023 and 2024 | Difference in the Daily Feeding Pattern Between 2023 and 2024 |
|---|---|---|---|
| Difference Monthly Feeding Cost in 2023 and 2024 | Pearson Correlation | 1 | .136** |
| | Sig. (2-tailed) | | .009 |
| | N | 372 | 371 |
| Difference in the Daily Feeding Pattern Between 2023 and 2024 | Pearson Correlation | .136** | 1 |
| | Sig. (2-tailed) | .009 | |
| | N | 371 | 373 |

**. Correlation is significant at the 0.01 level (2-tailed).

**Source: Author's Fieldwork, 2025.**

The correlation table provides valuable insights into the relationship between the difference in monthly feeding costs and the difference in daily feeding patterns between 2023 and 2024, a period characterized by rising staple food prices. The Pearson correlation coefficient between the two variables is r = 0.136, and this correlation is statistically significant (p = 0.009), indicating a weak but positive relationship between changes in monthly feeding costs and changes in daily feeding patterns.

This positive correlation suggests that as the monthly feeding costs of households increased due to rising staple food prices, there was a corresponding shift in daily feeding patterns, albeit modest. Specifically, the increase in food costs may have led households to reduce the

number of meals consumed per day or alter their meal composition. The significant relationship between these two variables implies that food price inflation exerts pressure on household food consumption behaviors, forcing them to make adjustments in their daily feeding patterns to cope with the increased financial burden.

While the correlation is relatively weak, it is important to note that even a modest positive association reflects the sensitivity of feeding patterns to rising costs. Households facing higher food prices may experience constraints in their ability to maintain regular meal frequency or quality, leading to compromised nutrition and food security. The significance of this correlation emphasizes the impact of economic factors on feeding behaviors and underscores the need for policies that address rising food prices, particularly in vulnerable communities where even small increases in costs can lead to substantial changes in dietary habits.

Thus, the significant positive correlation between changes in monthly feeding costs and changes in daily feeding patterns highlights the broader socio-economic implications of rising staple food prices. As food costs rise, households are forced to adapt by modifying their feeding patterns, which may have long-term consequences for health, nutrition, and overall well-being. This relationship underscores the importance of addressing food price inflation to mitigate its impact on daily feeding practices and ensure food security for all residents.

### 4.5 Coping Mechanisms of Residents in Light of the Rising Cost of Staple Foods

The increase in the price of staple foods has prompted residents to adopt a variety of coping strategies to mitigate the impact on their daily feeding patterns and overall food security. A qualitative exploration of these strategies revealed how households adapt to economic hardships, relying on diverse approaches to survive. These strategies are rooted in socio-

economic realities and reflect the resilience of individuals and communities facing rising food prices. Through thematic analysis, several key coping mechanisms have emerged.

**Getting Involved in Menial Jobs**

One common strategy among residents is engaging in menial jobs to supplement household income. Many individuals take on informal or low-paying jobs, such as street vending, cleaning, or other manual labor, to afford basic food items. This reflects the willingness of households to expand their income-generating activities, often outside of their primary occupations. The increase in food prices forces people to work longer hours or in multiple jobs to meet their food needs, often at the expense of time for other essential activities or rest. As one respondent noted, "I had to start doing laundry for people to make sure I could buy food for my family."

**Reduction of Quantity and Quality of Food**

The reduction of both the quantity and quality of food consumed is a pervasive coping mechanism among residents. Many households, unable to maintain their regular feeding patterns due to inflated food costs, resort to reducing meal portions or skipping meals entirely. Additionally, the quality of food declines as residents switch to cheaper, less nutritious alternatives. Instead of balanced meals, they may consume more starch-based foods with fewer vegetables or protein sources. One interviewee remarked, "We used to eat three meals a day with good portions, but now we manage with two, and it’s mostly eba or rice."

**Increase in the Price of Goods and Services Rendered**

Another emergent theme is the increase in the price of goods and services rendered by individuals as a way to offset rising food costs. Entrepreneurs, traders, and artisans raise their prices to cope with higher food prices, passing the burden onto consumers. This creates a ripple effect across the economy, as the cost of living escalates beyond just food, affecting

other essential goods and services. A respondent who runs a small business mentioned, "I had to increase the price of my products because everything is more expensive now, especially food."

**Increase in Feeding Expenditure**

In line with the rise in food prices, many households report a significant increase in their feeding expenditures. Despite efforts to cut down on the quality or quantity of food, overall spending on food continues to rise, putting pressure on household budgets. For most, feeding becomes a top priority, forcing families to divert money from other necessities, such as education, health care, or transportation. As one participant explained, "We spend almost all our money on food now, leaving little for anything else."

**Financial Dependence on Family and Friends**

Financial dependence on family and friends has become a vital coping mechanism for many households struggling with rising food prices. Social networks provide a safety net, as individuals seek financial support or food aid from relatives and close acquaintances. This reliance underscores the importance of community solidarity in times of economic hardship. "I've had to borrow money from my brother several times just to make sure we have something to eat at home," one respondent shared.

**Reliance on Religious Palliatives**

Religious institutions have also played a significant role in helping residents cope with the economic strain caused by rising food prices. Many churches, mosques, and other religious organizations provide food donations, financial assistance, and palliative measures to vulnerable members of their communities. These palliatives are essential for households with limited means, offering temporary relief from the pressures of rising food costs. "The church

has been giving us rice and other foodstuffs, which helps us survive these hard times," one interviewee expressed with gratitude.

**Support Through Subsistence Agriculture**

For residents with access to land, subsistence agriculture has become a critical strategy for mitigating the effects of rising food prices. Growing one's own food helps reduce reliance on market-purchased staples, as households can produce crops like vegetables, tubers, and grains. While not all residents have access to agricultural resources, those who do benefit from a more sustainable way of securing food. A participant explained, "We've started planting cassava and vegetables in our backyard to ensure we have enough to eat without buying from the market."

The rise in the cost of staple foods has led to diverse coping strategies among residents, ranging from economic adjustments, such as engaging in menial jobs or increasing service prices, to social and community-based support, including reliance on family, friends, and religious institutions. Additionally, households adapt their consumption patterns by reducing meal portions and relying on subsistence agriculture where possible. These strategies highlight the resilience of individuals and communities but also reflect the severity of the economic pressures caused by rising food prices. Addressing the root causes of food price inflation and improving access to affordable food sources are essential to alleviate the long-term impact on the daily feeding patterns and well-being of residents.

# CHAPTER FIVE

# SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

## 5.1 Summary of Findings

This study examined the impact of rising staple food prices on the daily feeding patterns of residents in Benin City, highlighting how the increased costs have forced households to adapt their consumption behaviors. The analysis revealed the following key findings:

1. Staple Food Consumption Patterns: The most commonly consumed staple foods among residents are rice, beans, garri, yam, and plantain. Rice is the most significant staple, regularly consumed by 33.5% of respondents, followed by cassava (21.6%) and beans (19.1%). Yam and plantain were less frequently consumed, with 14.4% and 11.4% of respondents regularly consuming them. This suggests that rice and beans form the core of residents' diets, with cassava being another essential staple.

2. Rising Food Prices: The prices of staple foods, including rice, beans, garri, yam, and plantain, have seen substantial increases between 2023 and 2024. The price of rice increased by 40.1%, beans by 72.1%, cassava by 73.7%, yam by 62.6%, and plantain by 76.6%. These increases reflect the inflationary pressures faced by residents, exacerbating the financial burden on households and making it difficult for them to afford essential food items.

3. Impact on Daily Feeding Patterns: The rising cost of staple foods has led to significant changes in daily feeding patterns. The percentage of residents consuming three meals per day dropped drastically from 52.4% in 2023 to 25.7% in 2024. In contrast, the proportion of those consuming just one meal per day increased from 2.4% to 27.0%, indicating that more households are resorting to reducing their daily meals to cope with rising food prices. This trend suggests increasing food insecurity among residents.

4. Changes in Meal Frequency: There were also notable shifts in the frequency of meals consumed. The number of residents consuming only breakfast or lunch increased, as did the number of people consuming fewer than three meals per day. The data showed a decline in those eating two meals per day, reflecting further adjustments in meal frequency in response to economic pressures.

5. Socio-Demographic Factors: The analysis using ANOVA revealed that socio-demographic factors, such as monthly income, household size, occupation, and marital status, have a significant impact on changes in monthly feeding costs. These factors are important in shaping how households respond to the rise in food prices, particularly in terms of their ability to maintain their feeding patterns.

6. Correlation Between Feeding Costs and Feeding Patterns: A significant positive correlation was found between changes in monthly feeding costs and changes in daily feeding patterns. This indicates that as food costs rise, residents are forced to adapt their feeding habits, often by reducing meal frequency or the quality of food consumed. This correlation highlights the broader socio-economic implications of rising food prices, which have long-term effects on health and nutrition.

7. Perceived Causes of Rising Food Prices: Respondents attributed the increase in food prices primarily to a lack of interest in farming activities and the rising cost of farming. Factors such as poor road conditions, kidnapping, and increased transportation costs were also noted as contributors, but were seen as less significant than farming-related issues. The removal of fuel subsidies was ranked as the least important cause.

8. Disparities in Feeding Patterns Across Zones: The study found statistically significant differences in feeding patterns across different zones, suggesting that economic pressures

have exacerbated food insecurity in specific regions. The findings call for targeted interventions to address these disparities and ensure equitable access to affordable food.

Overall, the study highlights the significant impact of rising staple food prices on the daily feeding patterns of residents, pointing to increased food insecurity, reduced meal frequency, and potential long-term health and nutritional challenges. It underscores the need for policy interventions aimed at stabilizing food prices and improving access to affordable food for all households.

## 5.2 Conclusion

This study on the relationship between the rising cost of staple foods and daily feeding patterns has revealed critical insights into how economic pressures, particularly food price inflation, are reshaping the consumption habits of residents. The relevance of this study lies in its timely analysis of the socio-economic impact of food price increases on households, particularly in a context where food insecurity is becoming an urgent concern. By examining the significant shifts in meal frequency, the reduction in food quality and quantity, and the coping mechanisms adopted by residents, the study underscores the far-reaching consequences of inflationary pressures on public health, nutrition, and overall well-being.

The findings are highly relevant to policymakers, urban planners, social welfare organizations, and food security experts. Policymakers will benefit from this study by gaining an understanding of the root causes of rising food prices, such as agricultural neglect and poor infrastructure, which can inform targeted policy interventions to stabilize food prices and address food insecurity. Urban planners and regional development experts can use these insights to design strategies that improve access to food resources, particularly for low- and middle-income households.

In addition, non-governmental organizations (NGOs) and social welfare agencies can draw on the study's findings to tailor their relief efforts, particularly by focusing on the most vulnerable households, who are now consuming fewer meals per day and resorting to less nutritious alternatives. The study also highlights the need for community-driven solutions such as subsistence farming and reliance on local support networks, emphasizing the importance of strengthening social safety nets.

Residents themselves are direct beneficiaries of this study, as it raises awareness of the broader socio-economic factors driving food price increases and offers insight into potential coping strategies. The study thus contributes valuable knowledge to all stakeholders, promoting informed decision-making aimed at improving food security and public welfare.

### 5.3 Recommendations

Based on the findings of this study, several key recommendations were made to mitigate the negative effects of rising staple food costs on the feeding patterns and livelihoods of residents. First, there is a need for governments and relevant stakeholders to implement food price stabilization policies, especially for essential staples such as rice, beans, garri, and yam. Measures like price control regulations, subsidies for farmers, and improved access to markets will help ensure food remains affordable for all population groups. Additionally, supporting small-scale farmers through agricultural investment is crucial. This could be achieved by increasing financial support, providing modern farming tools, and improving market access. By encouraging local food production, communities can become less dependent on imports, which will contribute to stabilizing local food prices.

Introducing new and expanding existing social welfare programs to include targeted support for vulnerable households will also be essential in alleviating food insecurity. Programs such as food assistance or cash transfers can help families maintain adequate nutrition despite

rising food costs. To complement this, promoting subsistence farming and urban agriculture can empower residents to grow their food, providing a direct way to supplement household food supplies. Training programs and the provision of farming tools or seeds could further support this effort.

In addition, community-based food banks and collaboration with religious organizations offering palliatives can provide temporary relief to struggling households. Ensuring that such relief efforts are structured for equitable distribution will ensure that those most in need receive adequate support. Educating residents on affordable and nutritious alternatives should also be prioritized. Meal planning initiatives and nutrition education programs can help families diversify their diets with less expensive, locally available food options, ensuring they continue to meet their nutritional needs despite financial constraints.

Lastly, it is also important to address infrastructure challenges and security concerns, which were identified as contributing to the rising cost of food. Investments in infrastructure, particularly improving road networks and enhancing security measures to reduce logistical challenges, are necessary to lower the cost of transporting food, especially from rural areas to urban centers.

## References


Adamola, O., Oyesola, B., & Osewa, S. O. (2021). Gender dimensions of food consumption patterns and coping strategies in urban Nigeria. Journal of Gender Studies in Africa, 15(2), 78-92.

Adeoti, A. I., & Olayemi, J. K. (2003). Price trends and seasonal patterns of food crops in Nigeria: A case study of Oyo State. Journal of Rural Economics and Development, 16(1), 45-61.

Adesina, A. (2017). Making food security a national priority: The role of social protection. Nigerian Journal of Agricultural Economics, 7(1), 1-15.

Adenegan, K. O., Olorunfemi, O. D., & Nwachukwu, I. N. (2013). Determinants of food price inflation in Nigeria. International Journal of Agricultural Economics and Rural Development, 6(1), 12-25.

Agada, M. O., & Igbokwe, E. M. (2015). Dietary diversity of rural households in North Central Nigeria. European Journal of Nutrition & Food Safety, 5(3), 150-155.

Ajala, C. G. (2006). Nigerian foods and feeding patterns: Theory and practice. Nigerian Food Journal, 24(1), 111-118.

Ajetomobi, J. O., Abiodun, A., & Hassan, R. (2015). Economic impact of climate change on Nigerian agriculture. South African Journal of Economic and Management Sciences, 18(4), 34-52.

Ajani, S. R. (2010). An assessment of dietary diversity in six Nigerian states. African Journal of Biomedical Research, 13(3), 161-167.

Anderson, E. N. (2014). Everyone eats: Understanding food and culture (2nd ed.). New York University Press.

Akerele, D. (2013). The effects of food price changes on household food security in Nigeria. Food Security, 5(4), 427-435.

Akerele, D. (2015). Household food expenditure patterns, food nutrient consumption and nutritional vulnerability in Nigeria: Implications for policy. Ecology of Food and Nutrition, 54(5), 546-571.

Akinyele, I. O. (2009). Ensuring food and nutrition security in rural Nigeria: An assessment of the challenges, information needs, and analytical capacity. International Food Policy Research Institute, 7(1), 1-89.

Akpan, S. B., & Aya, E. A. (2011). Analysis of causality between food price variables in Nigeria. Journal of Agriculture & Social Sciences, 7(1), 76-80.

Akter, S., & Basher, S. A. (2014). The impacts of food price and income shocks on household food security and economic well-being: Evidence from rural Bangladesh. Global Environmental Change, 25, 150-162.

Alemu, Z. G., & Ogundeji, A. A. (2010). Price transmission in the South African food market. Agrekon, 49(4), 433-445.

Altman, M., Hart, T. G., & Jacobs, P. T. (2009). Household food security status in South Africa. Agrekon, 48(4), 345-361.

Anríquez, G., Daidone, S., & Mane, E. (2013). Rising food prices and undernourishment: A cross-country inquiry. Food Policy, 38, 190-202.

Arndt, C., Hussain, M. A., Jones, E. S., Nhate, V., Tarp, F., & Thurlow, J. (2016). Explaining the evolution of poverty: The case of Mozambique. American Journal of Agricultural Economics, 98(5), 1375-1391.

Ayinde, O. E., Muchie, M., & Olatunji, G. B. (2012). Effect of climate change on agricultural productivity in Nigeria: A co-integration model approach. Journal of Human Ecology, 35(3), 189-194.

Ayanlade, A., & Radeny, M. (2020). COVID-19 and food security in Sub-Saharan Africa: Implications of lockdown during agricultural planting seasons. npj Science of Food, 4(1), 1-6.

Babatunde, R. O., & Qaim, M. (2010). Impact of off-farm income on food security and nutrition in Nigeria. Food Policy, 35(4), 303-311.

Babatunde, R. O., Omotesho, O. A., & Sholotan, O. S. (2007). Socio-economic characteristics and food security status of farming households in Kwara State, North-Central Nigeria. Pakistan Journal of Nutrition, 6(1), 49-58.

Baiphethi, M. N., & Jacobs, P. T. (2009). The contribution of subsistence farming to food security in South Africa. Agrekon, 48(4), 459-482.

Balogun, I. A., & Orimoogunje, O. O. I. (2015). Urban climate variability and heat island in Benin City, Nigeria. Journal of Geography and Regional Planning, 8(2), 20-33.

Battisti, D. S., & Naylor, R. L. (2009). Historical warnings of future food insecurity with unprecedented seasonal heat. Science, 323(5911), 240-244.

Brand, J. E. (2003). Measurement error in nonrecursive models. Sociological Methodology, 33(1), 291-325.

Burchi, F., & De Muro, P. (2016). From food availability to nutritional capabilities: Advancing food security analysis. Food Policy, 60, 10-19.

Capuno, J. J., Kraft, A. D., Poco, L. C., Quimbo, S. A., & Tan Jr, C. A. R. (2013). Health conditions, payments and health care utilization of Philippines. Philippine Review of Economics, 50(1), 137-156.

Carletto, C., Zezza, A., & Banerjee, R. (2013). Towards better measurement of household food security: Harmonizing indicators and the role of household surveys. Global Food Security, 2(1), 30-40.

Chad, B. (2021). Understanding food price dynamics. Business News Daily, 15(4), 45-52.

Cohen, J. E. (2019). Human population growth and the environment. Science, 371(6529), 589-593.

Counihan, C., & Van Esterik, P. (2013). Food and culture: A reader (3rd ed.).

Dada, J. T. (2011). Determinants of rural poverty in Nigeria: Evidence from small holder farmers in South-western Nigeria. Journal of Research in National Development, 9(1), 105-115.

Dauda, R. O. (2010). Investment in education and economic growth in Nigeria: An empirical evidence. International Research Journal of Finance and Economics, 55(1), 158-169.

De Cock, N., D'Haese, M., Vink, N., Van Rooyen, C. J., Staelens, L., Schönfeldt, H. C., & D'Haese, L. (2013). Food security in rural areas of Limpopo province, South Africa. Food Security, 5(2), 269-282.

Devereux, S. (2001). Sen's entitlement approach: Critiques and counter-critiques. Oxford Development Studies, 29(3), 245-263.

Diao, X., Headey, D., & Johnson, M. (2008). Toward a green revolution in Africa: What would it achieve, and what would it require? Agricultural Economics, 39(s1), 539-550.

Egwuma, H., Ojeleye, O. A., & Adeola, S. S. (2019). Food price volatility and household food security: Evidence from Nigeria. International Journal of Food and Agricultural Economics, 7(2), 145-158.

Egharevba, J.O. (2024). Unpublished Doctoral Thesis written in the Department of Geography and Regional Planning and submitted to the School of Post-Graduate Studies in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy (Ph.D.) in Geography and Regional Planning (Urban Geography and Regional Development) of the University of Benin, Benin City, Edo State, Nigeria.

Ehigiator, F. A., & Omorodion, B. E. (2022). Nutritional implications of dietary adjustments among urban households in Benin City. Nigerian Journal of Nutritional Sciences, 43(1), 56-68.

Ehrlich, P. R., & Ehrlich, A. H. (2009). The population bomb revisited. The Electronic Journal of Sustainable Development, 1(3), 63-71.

Ekunwe, P. A., & Okoedo-Okojie, D. U. (2023). Alternative income sources and food security among urban households in Benin City. Agricultural Economics Review, 24(1), 89-102.

Emefiele, G. (2022). Monetary policy and food security challenges in Nigeria. Central Bank of Nigeria Economic and Financial Review, 60(2), 1-22.

Eweka, O., & Omorodion, S. (2023). Social networks and food security in urban Nigeria: A case study of Benin City. Journal of Social Development in Africa, 38(1), 67-82.

Ezeomah, B., & Farag, K. (2021). Changes in urban food consumption patterns: A case study of Benin City. Journal of Agriculture and Food Research, 3(2), 100-112.

Fabolude, O. O., & Aighewi, I. T. (2022). Spatial analysis of urban growth in Benin City, Nigeria. Journal of Geography and Regional Planning, 15(1), 1-12.

FAO. (1997). Agriculture food and nutrition for Africa - A resource book for teachers of agriculture. Rome: Food and Agriculture Organization of the United Nations.

FAO. (2012). The state of food insecurity in the world 2012. Rome: Food and Agriculture Organization of the United Nations.

FAO. (2013). The state of food and agriculture: Food systems for better nutrition. Rome: Food and Agriculture Organization of the United Nations.

FAO. (2014). The state of food insecurity in the world 2014. Rome: Food and Agriculture Organization of the United Nations.

FAO. (2017). The future of food and agriculture – Trends and challenges. Rome: Food and Agriculture Organization of the United Nations.

Firdaus, M. (2021). Food security and price stabilization policies in Indonesia. Journal of Asian Economics, 74, 101302.

Francisco, H. G., et al. (2011). Rising food prices and undernourishment: A cross-country inquiry. Food Policy, 36(1), 112-123.

Friedmann, H. (2005). From colonialism to green capitalism: Social movements and emergence of food regimes. Research in Rural Sociology and Development, 11, 227-264.

Gibson, E. L. (2012). The psychobiology of comfort eating: Implications for neuropharmacological interventions. Behavioural Pharmacology, 23(5-6), 442-460.

Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., ... & Toulmin, C. (2010). Food security: The challenge of feeding 9 billion people. Science, 327(5967), 812-818.

Gustafson, D. J. (2013). Rising food costs & global food security: Key issues & relevance for India. Indian Journal of Medical Research, 138(3), 398-410.

Headey, D., & Fan, S. (2008). Anatomy of a crisis: The causes and consequences of surging food prices. Agricultural Economics, 39(s1), 375-391.

Hendricks, S. L. (2005). The challenges facing empirical estimation of household food (in) security in South Africa. Development Southern Africa, 22(1), 103-123.

Holmes, R., Akinrimisi, B., Morgan, J., & Buck, R. (2012). Social protection in Nigeria: Mapping programmes and their effectiveness. London: Overseas Development Institute.

HSRC. (2012). State of poverty and its manifestation in the nine provinces of South Africa. Human Sciences Research Council Report.

Huh, H. S., & Park, C. Y. (2013). Examining the determinants of food prices in developing Asia. Asian Development Bank Economics Working Paper Series, (370).

Igbinoba, A. E., & Azelengha, U. M. (2023). The shift towards processed foods: Implications for urban nutrition in Benin City. Journal of Food Processing and Preservation, 47(2), 123-135.

Igbinosa, S. O., & Odigie, B. E. (2023). Contemporary food consumption patterns in Benin City: A socioeconomic analysis. Nigerian Sociological Review, 18(1), 45-57.

Ikom, A., Ogaboh, A. M., Nkpoyen, F., & Ezeh, C. (2011). Analysis of price variations in the marketing of selected staple foods in Nigeria. Global Journal of Management and Business Research, 11(4), 96-103.

Iram, U., & Butt, M. S. (2004). Determinants of household food security: An empirical analysis for Pakistan. International Journal of Social Economics, 31(8), 753-766.

Ivanic, M., & Martin, W. (2008). Implications of higher global food prices for poverty in low-income countries. Agricultural Economics, 39(s1), 405-416.

Iyanda, R. A., Afolabi, K. O., & Oyedele, D. J. (2021). Impact of food price increases on household consumption in Benin City: A longitudinal analysis. Journal of Consumer Studies, 45(3), 234-248.

Jacobs, P. T. (2009). The status of household food security targets in South Africa. Agrekon, 48(4), 410-433.

Joachim, V. B. (2018). Rising food prices and household welfare: Evidence from Brazil in 2008. Journal of Agricultural Economics, 69(1), 18-40.

Kale, Y. (2012). The Nigeria poverty profile 2010 report. Paper presented at the National Bureau of Statistics Press Briefing on Nigeria Poverty Profile 2010 Report, Abuja.

Kalkuhl, M., von Braun, J., & Torero, M. (2013). Food price volatility and its implications for food security and policy. Springer.

Kesuma, A., et al. (2020). Food price volatility and its determinants in Indonesia. Economies, 8(4), 88.

Kidane, H., Alemu, Z. G., & Kundhlande, G. (2005). Causes of household food insecurity in Koredegaga Peasant Association, Oromiya zone, Ethiopia. Agrekon, 44(4), 543-560.

Matz, J. A., Kalkuhl, M., & Abegaz, G. A. (2015). The short-term impact of price shocks on food Security-Evidence from urban and rural Ethiopia. Food Security, 7(3), 657-679.

Maxwell, S. (1996). Food security: A post-modern perspective. Food Policy, 21(2), 155-170.

Macht, M., & Simons, G. (2011). Emotional eating. In I. Nyklíček, A. Vingerhoets, & M. Zeelenberg (Eds.), Emotion regulation and well-being (pp. 281-295). Springer.

Mbegalo, T., & Yu, X. (2016). The impact of food prices on household welfare and poverty in rural Tanzania. Discussion Papers, Department for Agricultural Economics and Rural Development.

McMichael, P. (2009). A food regime genealogy. The Journal of Peasant Studies, 36(1), 139-169.

Melgar-Quinonez, H. R., Zubieta, A. C., MkNelly, B., Nteziyaremye, A., Gerardo, M. F. D., & Dunford, C. (2006). Household food insecurity and food expenditure in Bolivia, Burkina Faso, and the Philippines. The Journal of Nutrition, 136(5), 1431S-1437S.

Minot, N. (2014). Food price volatility in sub-Saharan Africa: Has it really increased? Food Policy, 45, 45-56.

Mock, N., Magnani, R., Abdoh, A., & Konde, M. K. (1999). Guidelines for assessment of coping strategies and food security. Washington, DC: Food and Nutrition Technical Assistance Project.

Mosisi, M. (2009). South African food security and climate change: Agriculture futures. Outlook on Agriculture, 38(4), 322-326.

National Bureau of Statistics. (2020). Consumer Price Index and Inflation Report. Abuja: National Bureau of Statistics.

Ngidi, M. S. (2013). Measuring the impact of crop production on household food security in KwaZulu-Natal using the food insecurity scale. African Journal of Agricultural Research, 8(11), 1006-1012.

Nnakwe, N., & Onyemaobi, G. (2013). Prevalence of food insecurity and inadequate dietary pattern among households with and without children in Imo State Nigeria. International Journal of Sociology and Anthropology, 5(9), 402-408.

Nwokoma, N. (2003). The dynamics of inflation and its effects on the Nigerian economy. Journal of Economics and Business Sciences, 1(2), 145-160.

Obayelu, A. E. (2010). Global food price increases and nutritional status of Nigerians: The determinants, coping strategies, policy responses and implications. ARPN Journal of Agricultural and Biological Science.

Patel, R. (2009). Food sovereignty. The Journal of Peasant Studies, 36(3), 663-706.

Pearce, D. W., & Warford, J. J. (2018). World without end: Economics, environment, and sustainable development.

Sen, A. (1981). Poverty and famines: An essay on entitlement and deprivation. Oxford University Press

Scoones, I. (2009). Livelihoods perspectives and rural development. The Journal of Peasant Studies, 36(1), 171-196.

Stipanuk, M. H., & Caudill, M. A. (2019). Biochemical, physiological, and molecular aspects of human nutrition (4th ed.). Elsevier Health Sciences.

Whitney, E., & Rolfes, S. R. (2018). Understanding nutrition (15th ed.).

**Appendices**

**Appendix 2: Contingency between marital status, number of wives and household size Crosstabulation**

| Household Size | | | | Number of Wives | | Total |
|---|---|---|---|---|---|---|
| | | | | 1.00 | 2.00 | |
| 2.00 | Marital Status of the Respondent | Married | Count | 16 | | 16 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| | Total | | Count | 16 | | 16 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| 3.00 | Marital Status of the Respondent | Married | Count | 21 | | 21 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| | Total | | Count | 21 | | 21 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| 4.00 | Marital Status of the | Single | Count | 1 | | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Respondent | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| | | Married | Count | 27 | | 27 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| | | Separated | Count | 5 | | 5 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| | Total | | Count | 33 | | 33 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| 5.00 | Marital Status of the Respondent | Single | Count | 1 | 0 | 1 |
| | | | % within Marital Status of the Respondent | 100.0% | 0.0% | 100.0% |
| | | Married | Count | 4 | 2 | 6 |
| | | | % within Marital Status of the Respondent | 66.7% | 33.3% | 100.0% |
| | Total | | Count | 5 | 2 | 7 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | % within Marital Status of the Respondent | 71.4% | 28.6% | 100.0% |
| 6.00 | Marital Status of the Respondent | Married | Count | 4 | 1 | 5 |
| | | | % within Marital Status of the Respondent | 80.0% | 20.0% | 100.0% |
| | Total | | Count | 4 | 1 | 5 |
| | | | % within Marital Status of the Respondent | 80.0% | 20.0% | 100.0% |
| 7.00 | Marital Status of the Respondent | Married | Count | 3 | | 3 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| | Total | | Count | 3 | | 3 |
| | | | % within Marital Status of the Respondent | 100.0% | | 100.0% |
| 10.00 | Marital Status of the Respondent | Married | Count | | 1 | 1 |
| | | | % within Marital Status of the Respondent | | 100.0% | 100.0% |
| | Total | | Count | | 1 | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | % within Marital Status of the Respondent | | 100.0% | 100.0% |
| Total | Marital Status of the Respondent | Single | Count | 2 | 0 | 2 |
| | | | % within Marital Status of the Respondent | 100.0% | 0.0% | 100.0% |
| | | Married | Count | 75 | 4 | 79 |
| | | | % within Marital Status of the Respondent | 94.9% | 5.1% | 100.0% |
| | | Separated | Count | 5 | 0 | 5 |
| | | | % within Marital Status of the Respondent | 100.0% | 0.0% | 100.0% |
| | Total | | Count | 82 | 4 | 86 |
| | | | % within Marital Status of the Respondent | 95.3% | 4.7% | 100.0% |

**Source: Author's Fieldwork, 2025.**