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# An Empirical Analysis of Urban Housing Demand and Residents' Perceived Challenges in Lokoja, Nigeria

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## *Abstract*

The study attempts to examine residents' perception on problems associated with housing demand in Lokoja metropolis with respect to the identification of the causes of the upsurge in population, the impact of it on the immediate environment and the way forward in solving housing challenges in Lokoja. The research employed statistical analysis using ANOVA to conclude that perceptions differed significantly over the years. Out of the 400 questionnaires distributed, a total of 372 were retrieved and deemed usable, representing a response rate of 93% as the sample size. Result shows that, the average housing demand increased by 31.8% in the 2nd decade and 39.7% in the 3rd decade respectively. Thus, the residents' perception on problems associated with housing demand differed significantly over the years in Lokoja metropolis. Hence, it became very imperative to posit that; the government should embark on massive acquisition and construction of low-cost housing units to accommodate the rising demand for housing by the people, encourage public-private housing partnerships in housing delivery, with a specific focus on meeting the needs of low-income earners and workers.

**Keywords:** Urbanization, Residents' Perception, Housing Deficit, Sustainable Housing Policy, Demand in Lokoja, Nigeria.

## *Introduction*

The global trend of urbanization is further increasing, and as of 2021, more than 56% of the world's population resides in urban area (United Nations, 2019). Cities and town are expanding, the global population is increasing, and young people are moving to cities to find word and better life, especially in the rapidly developing countries such as Nigeria. More residential, commercial and industrial areas are needed to satisfy the demands of an increasing urban population. Sustainability, quality of life, health, air quality, moderate temperature within city boundaries, urban climate, green spaces, and closeness to recreation need to be heeded when planning the future state of our living space. With the unprecedented speed of urban development, planning measures to provide for these considerations is even more difficult. The share of Africans living in urban areas is projected to grow from 36% in 2010 to 50% by 2030. The continent's urbanization rate, the highest in the world, can lead to economic growth, transformation, and poverty reduction. Alternatively, it can lead to increased inequality, urban poverty, and the proliferation of slums. Therefore, the laws, policies, and actions needed to reap positive dividends from Africa's urbanization are critical in the continent's transformation (Teye, 2018).

Urban cities in Nigeria are facing the problems of over-stretched infrastructures, environmental degradation, seasonal flooding, and the destruction of natural vegetation, all resulting from increase in Population (Momoh et al., 2018). The movement of people from rural to urban centres in search of better livelihood led to an expansion of urban areas and an increase in social and economic activities along flood plains, thus increasing the risk of urban dwellers and infrastructures to natural disasters such as floods (Ishaya et al., 2012; Charles et al 2018).

The city of Lokoja is proliferating with the inadequate provision of all urban services housing accommodation inclusive with regards to adequacy and coverage of the area. How cities have influenced and shaped social life throughout history has led scholars of urban studies to delve into the origin and development of the urban form. Urbanization is a complex phenomenon with various dimensions (Hussain & Imitiyaz, 2018). However, the size of the place has been the most widely used criterion in the definition of urban population. Urban areas have a higher concentration of population in a limited area and thus a higher density of population and social heterogeneity.

According to Moreno (2017), urbanization is an increased system modernization process that modifies socio-economic activities and revolutionizes the land use pattern in accordance with the time frame. Also, Bae and Richardson (2017) define urbanization as a complex diffusion process that dramatically spread and affect rural landscapes at varying spatial scales. The most fundamental source of potential confusion in the study of urbanization and city growth is the measurement of the term urban itself. What defines an urban area? Unfortunately, there is no unique answer. Despite the rapidly urbanizing world, the definition of urban remains rather fleeting, changing over time and space (Heshmat & Rashidghalam, 2020).

Urbanization is a transformative process from a rural to an urban experience. The level of urbanization of a country determines its level of development and economic growth in most cases (UNFPA, 2007; White et al., 2012; Okopi, 2021). Therefore, it can be easily concluded that urbanization is inevitable as it is part of an old recent human population history. The evolution and the process of urban centres in Nigeria have a profound effect on contemporary urban life. This is obvious from specific spectra, staring from dynamic town expansion based on high construction activities and as well as functional development leading towards a spatial divergence of centrality, continue with strong economic display and increased social living standards (Ojo & Ojewale, 2019). This is one of the most noticeable trends in Lokoja urban form. United Nation Population Funds (2020) estimated that the world's population is put at about 7.87billion people, out of whom about 4.3billion people (55%) live in urban areas (World Bank, 2020). Egidi et al (2020), stated that about 66% of the world's population was residing at the fringe in the early 1950s. in the same vein, recent statistics show that by 2030, about 61% of the total population in the world will be residing in the cities; and that all the world's increase in population in the next three decades will occur in low-and middle-income countries (Canton, 2021).

Housing is a fundamental human need and a cornerstone of socio-economic well-being in any society. In rapidly urbanizing cities of developing countries, persistent housing demand and associated problems have undermined sustainable urban living, affecting quality of life, economic participation, and socio stability (e.g., basic access to shelter, affordability, and environmental health). Nigeria, like many Sub-Saharan African countries, continues to grapple with a substantial housing deficit, resulting in overcrowding, high rental costs, informal settlements, and housing dissatisfaction among urban residents. Despite government interventions and policy frameworks, these challenges remain deeply entrenched and multifaceted.

Housing has been conceived in various ways by scholars, basically housing is more than a mere shelter, and it encompasses the totality of the residential environment that man uses for shelter (Millward-Hopkins, Steinberger, Rao & Oswald 2020). It is a structure that is highly needed for man's physical, mental health and social well-being (Ajom, Mfon, Moses & Eteng, 2022; Salih & Al-slik, 2023). Housing is a basic need in the daily needs of individuals. It is a very essential commodity and it is highly needed for survival of man. In all, humans desire housing units for different purposes (Pohl, Genz, Helbrecht & Dobrusskin, 2022). Mass housing connotes different meanings to different people. Ogunleye (2019) described mass housing as the provision of housing on a large scale by government or in collaboration with private sector for public purchase either on owner occupier or leasing.

However, the meaning of quality and housing quality, it can be described as the provision of housing should meet the expectations and needs of the customer and the housing delivered should achieve a degree of excellent standard (Ding, Choo, Ng & Ng, 2020). In encounter these needs, there is involvement of many actors such as professionals, bureaucrats and other decisionmakers in the formulation of standards, interpretation and implementation of housing quality (Scheller, Doser, Schulte, Johanning, McKenna & Bruckner, 2021). Wagner and

Boczkowski (2019) defined housing quality as a very complex concept that is exposed to debate due to its diverse meanings and perceptions from different background and experience of people.

Public housing refers to the government's provision of housing for civil occupancy to satisfy the demands of the residents and reduce the financial burden of housing production. Despite this, some authors have suggested that the dwelling of many people living in public housing is unsatisfactory (Ogunsote & Afolabi, 2021; Saliu et al., 2023). This dissatisfaction may be due, in part, to a lack of user participation in the housing development process, particularly in the public sector. According to Ishiyaku (2016) and Kasim et al. (2007), the emphasis on low-cost housing production has often taken precedence over occupant satisfaction in public housing programs.

Affordability generally is a measure of ability and capability of consumer to pay for goods and services to be consumed. Haffner and Hulse (2021) pointed out that housing affordability usually focus on the relationship between housing expenditure and household income, and that they seek to establish a standard in respect of which the amount of income spent on housing is deemed unaffordable. Padley, Marshall and Valadez- Martinez (2019) revealed that measurement of affordability is problematic as what individual household can afford is often underestimated. The often-quoted rule of thumb is that household should not spend more than 30 percent of their income on housing unless they choose to do so.

Satisfaction studies cut across a wide range of disciplines in the management and social sciences as well as the built environment. Generally speaking, satisfaction is a subjective evaluation of the performance of products or services in meeting the needs and expectations of users or customers (Guo, Zu, Chen & Zhang, 2023). Researchers have come to define housing satisfaction as an individual's subjective assessment of whether or not his/her needs are being met (Weckroth, Ala-Mantila, Ballas, Ziogas & Ikonen, 2022; Wu, Tan, Wang & Chen, 2023; Genç, 2023). Francescato et al. (2018) defined residential satisfaction as the emotional response to a person’s dwelling; the positive or negative feeling that the occupants have for where they reside, premise on this definition by Francescato signifies that residential satisfaction can either be positive or negative. The definition and assessment of satisfaction today use structured surveys followed by statistical correlation of variables Fathollahi-Fard, et al. (2020). In their study, Ajayi, Nwosu and Ajani (2015) corroborate with the work of Elsinga and Hoeksta (2005) and Hassanain (2008) who display similar views on the concept of housing satisfaction based on their observation on past studies. In their opinion, the concept of housing satisfaction has been used for four major objectives. It is the key to predict an individual's perception on the overall quality of life. It is also an indicator of individual mobility which later changes the demand on housing and influences surrounding area change. However, Abe and Kato (2017), Adeyemo and Aderonmu (2020), Fagbenle and Adeyemi (2020) and Olubodun and Adenuga (2021) define residents' satisfaction as the degree to which individuals living in a specific residential area experience a sense of happiness or fulfilment with the physical, social, and environmental conditions of their residential environment. It is

a measure of the level of happiness and well-being experienced by residents in their living conditions.

The study of residential satisfaction is crucial in housing research since it helps to assess how the standard of living experienced by residents is impacted by the residential environment and satisfaction with various components of housing, such as housing unit characteristics, neighbourhood characteristics, housing management characteristics, resident demographics, and socioeconomic status (Mohit and Azim, 2012; Salleh et al., 2012; Adeyemo & Aderonmu, 2020; Akin et al., 2014; Huang & Du, 2015; Adenuga, 2021). However, the degree to which each of these components influences overall residential satisfaction varies, as Mohit et al. (2014) pointed out, requiring further research to address this gap.

Musewe (2012) and Defo (2014) concurred that Africa as a continent has the prospect of the highest population growth rates globally. The continent accounted for 20% of the world's slum dwellers, estimated at 200 million (The University of Dublin, Trinity College, 2015). This also represents that most African cities are densely populated, and about 75%–90% live in slums. This condition further stirred housing shortage problems beyond Nigeria's border (Ezeigwe, 2015).

Olanrewaju, Anavhe, and Hai (2016) attributed issues with affordable housing shortage to inaccessible financial support, low capital and budgetary distribution, the problem of land security of tenure, ineffective policies and regulations, legal issues, and conflicting government legal requirements. The government's commitment to solving housing problems in developing countries, particularly Nigeria, has only resulted in insufficient and unaffordable housing unit provisions across the country (Ugochukwu and Chioma, 2015). The imbalance between housing supply and demand is causing the affordability housing crisis in metropolitan cities. Metropolitan cities, as described by Solís Trapero et al. (2015), citing Scott (2011), are the progressive wheels of the global economy. Sud and Yilmaz (2013) described metropolitan areas as an economic base, and innovative solid capacity cities contribute a significant share of gross domestic product, job opportunities, high-level skills, and economic growth rate and income.

Nonetheless, the affordable housing concept has evolved over the decades, and researchers have expressed different views. For instance, Perera and Lee (2021) and Bangura and Lee (2021), citing Stone (2006), describe the concept of housing affordability as the capacity of households to rent or purchase housing within their income levels to achieve life aspirations. Bieri (2013:1) expressed different perspectives of housing affordability as follows: house price-to-income ratio or rent-to-income ratio, the difference between non-housing expenditures to what is left after paying for housing and income affordability distinguishing between "purchase affordability" (the ability to borrow funds to purchase a house), or "repayment affordability" (the ability to afford housing finance repayments). The concept has also been used to describe housing for the "poor" or low-income earners without being stigmatized (Ogunnaike et al., 2013).

| Location | Name of housing scheme | Age of buildings | Number of housing units |
|---|---|---|---|
| **Adankolo** | Phase 1 | 10 | 200 |
| **Ganaja** | Phase 2 | 8 | 100 |
| **Lokongoma** | Phase 3 | 8 | 150 |
| **GRA** | Commissioners' Quarters | 8 | 100 |
| **Workers'** | Phase 4 | 7 | 100 |
| **Lokongoma** | Secretariat Housing Estate | 6 | 200 |
| **Ganaja** | House of Assembly Quarters | 6 | 50 |
| **GRA** | DG Quarters | 4 | 20 |
| **Gadumo/Ganaja** | Workers Housing Units | 1 | 200 |

**Source:** Adapted from Olawepo, 2021

Tan (2020) stated that residents' satisfaction is determined by the perceived gap between their achievements and aspirations. Similarly, Abe and Kato (2017), Adeyemo and Aderonmu (2020), Fagbenle and Adeyemi (2020) and Olubodun and Adenuga (2021) define residents' satisfaction as the level of happiness or fulfilment that individuals living in a particular residential area experience with the physical, social, and environmental conditions of their residential environment. It serves as a measure of residents' well-being and happiness with respect to their living conditions. Understanding how residential satisfaction is affected by the residential environment and different aspects of housing, such as housing unit and neighbourhood characteristics, management, demographics, and socioeconomic status, is crucial in housing research. However, the extent to which each factor influences overall residential satisfaction varies, and further research is needed to bridge this gap, as noted by Mohit et al. (2014) and Adeyemo and Aderonmu (2020).

**Problem Statement and Residents' Perception**

Despite the growing body of literature on housing dynamics in Lokoja and other Nigerian cities, there is a need to understand how residents themselves perceive the specific problems associated with housing demand including affordability constraints, rental market pressures, infrastructural deficits, housing quality concerns, and policy effectiveness. Residents' perceptions provide critical insight into lived experiences that statistics alone cannot capture, such as perceived causes of housing problems, lived effects on quality of life, coping strategies, and community-level expectations of government and market actors.

These perceptions are especially important given that housing challenges directly affect social outcomes beyond shelter, including health, safety, economic productivity, and social cohesion. Research on urban housing in Lokoja and comparable context highlights that slum conditions, overcrowding, and inadequate infrastructure contributes to negative living conditions, which residents often cite as priorities for intervention.

Demand for housing is strictly an economic term and is affected by the following: Per capital income of the population, total population, rate of new households, price of housing, interest rate, availability of mortgage facility among others. According to Tejvan (2022), the following are factors that determine housing demand; economic growth, number of households, availability of mortgages, speculative demand, affordability of housing and interest rates.

High rural-urban migration contributes to high demand for housing in Lokoja as people constantly drift to the urban center with corresponding inadequate measures for housing provision, giving rise to slum and squatter settlement; an offshoot of overcrowding that result in high building density and high occupancy rate. Thus, the large population of people in the urban centre is a continuous challenge to the accessibility of housing in urban centers (David *et al.,* 2022). According to the rule of demand, demand declines as prices rise. Customers, therefore, buy less when prices climb (Luther, 2022). The supply of housing is affected by numbers of houses available for sell and number of houses newly built. Relating this to housing, Omole (2001) defined housing supply as "the total number of housing units that suppliers (public or private) are ready to offer for sale at a particular time for a particular price. In other words, housing supply refers to the total amount of housing units that are produced annually by both private and public sectors that are ready for consumption.

A recent study of housing situation in Nigeria put existing housing stock at 23 per 1000 inhabitant. The country's present housing deficit as at December 2018 is estimated at a staggering 20 million unit which is about 15.0 per cent increase from the figures in January 2019. About N21 trillion will be required to finance the deficit. With a population of nearly 200 million, the current deficit is alarmingly high. In 1991, Nigeria housing deficit was at 7 million and rose to 12 million in 2007,14 million in 2010 and currently 20 million units. House prices and rents, on the other hand, have grown ahead of general inflation. Making matters worse, the composition of houses for sale and rent on the market has been inexorably shifting towards very expensive houses. The increasing demand for housing in Lokoja is a reflection of broader national trends. Nigeria is currently experiencing a housing deficit estimated at over 20 million units, and this figure grows annually due to the twin forces of population explosion and inadequate planning (National Bureau of Statistics [NBS], 2021). However, residents in Lokoja metropolis perceived lack of affordable housing as a major bottleneck which necessitated urgent, participatory, and sustainable urban planning to improve living conditions.

Since becoming Kogi state capital in 1991, Lokoja's administrative (post-1999) has driven rapid growth by intensifying land use and population concentration, causing significant housing deficits, urban sprawl, and infrastructure strain. Rapid urbanization (roughly 10% growth rate) has driven development into fringe areas, often without adequate planning or public infrastructure provision.

The administrative role since 1999 as a driver of this upsurge to ground the problem in local history include:

- *Government-Driven Development and Sprawl:* Successive administrations have accelerated expansion, notably along main transport routes and the western bank of the River Niger, replacing agricultural land and forest with residential development
- *Unplanned Urban Expansion:* The rapid population influx, largely driven by administrative roles and employment, has led to uncontrolled development in the city's fringe areas (expanding 3% to 83% between 2000 and 2016), leading to a high demand for housing.
- *Administrative Housing Initiatives:* The government has made efforts to reduce housing shortages through initiatives like public housing schemes. Recently, 100 hectares were allocated to the Federal Housing Authority for a 1,000-unit project, known as the "Renewed Hope City", aiming to mitigate these shortages.
- *Infrastructure Deficits:* The administrative focus on expansion has, however, not been matched with adequate infrastructure, leading to poor sanitation, limited potable water, and overcrowding in many neighbourhoods, such as Adankolo layout.
- *Increased Property Costs:* The high demand for housing has resulted in a significant increase in property values and rental rates within the metropolitan area.
- *Future Planning Challenges:* To curb the negative effects of this uncontrolled expansion, such as slum development, there is an urgent need for an integrated comprehensive development plan for Lokoja metropolis.

The rapid population increase, with an estimated, 9.37% to 10.24% growth rate between 2001 and 2020, underscores the immense challenge for urban planning and housing, necessitating a more proactive and sustainable, approach to urban development.

**Methodology**

**Study Area**

The study covers Lokoja town in Kogi state; it is made up of approximately eight (8) zones. The population studies of Lokoja highlight rapid urban growth driven by rural–urban migration, significant shifts in land use, and evolving socioeconomic dynamics since it became the capital of Kogi state in 1999. Lokoja has experienced a substantial influx of population, leading to rapid expansion and urban sprawl. The population of the Lokoja Local Government Area (L.G.A.) increased from approximately 77,516 in the 1991 census to 196,643 in the 2006 census and was projected to reach approximately 265,000 by 2022. Lokoja, which lies between altitudes of 45–125 m above sea level, has precise geographical coordinates or locations between latitudes 7° 45'N and 7° 51'N and between longitudes 6° 41'E and 6° 45'E. However, because Lokoja covers a small urban area rather than a single point, its coordinate range portrays latitude spans: approximately 7° 45' to 7° 51'N, whereas its longitude spans: approximately 6° 41'E to 6° 45'E. This range further describes the spatial spread of the Lokoja metropolitan area used in geographic and planning studies. These coordinate ranges help in GIS mapping, spatial analysis, and surveying within a city. It lies on the western bank of the Niger River, close to its confluence with the Benue River. The majority of the town is sandwiched between the Niger River and Mount Patti. Lokoja covers a total area of

approximately 804 km2 (80,400 hectares). The area limit of Lokoja is entrenched in the land use order of 1991, in which all parcels of land within a 20 km circle (as the crow flies) around a Centre point at the General Post Office with geographical coordinates of 7° 48'05"N, 6° 44' 39"E. (Fig. 1).

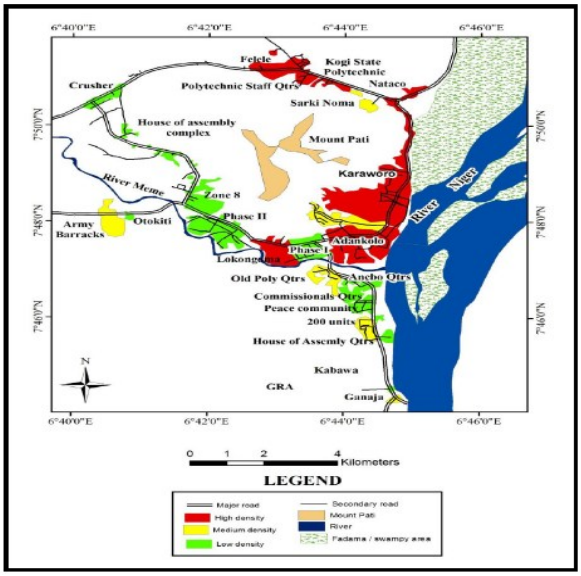



**Fig.** 1**:** Residential areas in the study's location
***Source:*** Adapted and modified from administrative map of Kogi state, 2021

**Sampling Technique**

A sampling technique is a method used to select a subset of individuals from a population to estimate characteristics of the whole group. Hence, it this research work, a Simple random sampling was employed where every member has an equal chance of selection. However, to obtain information on residents' perception of problems associated with housing demand in Lokoja, a set of questionnaires was administered to residents in each of the eight (8) zones in the area using the projected population for 2022, which is 265,000, and by utilizing Yamane's formula of sample size with an error of 5% and a confidence coefficient of 95% (Yamane, 1967). The respondents who were adults aged 18 years and above were selected for a total of four hundred (400) participants. The breakdown of the samples in the study area is shown in Table 1. This is followed by the division of each zone into streets. Five (5) streets were selected systematically from each zone to provide a fair representation, and a proportional sample of questionnaires was assigned to each street. The questionnaire was administered to each selected street through a simple random technique. However, 372 correctly completed questionnaires were retrieved and processed for analysis, while the criteria that led to the rejection of the remaining questionnaires included incomplete responses, inconsistent or contradictory answers, multiple invalid responses, wrong target respondents, noncompliance with the survey instrument, and evidence of enumerator error. The subsections employed in this research work were as follows: instrument type and purpose, where data for this study

were collected via a structured questionnaire designed to assess housing needs and supply in Lokoja, Kogi state; instrument structure, which also describes the sections and content areas; and a questionnaire consisting of six sections. Section A covers the socioeconomic characteristics of the respondents; Section B addresses housing development programmed by successive governments; Section C examines trends in housing demand in Lokoja; Section E discusses the problems associated with housing demand; and Section F focuses on measures for addressing housing demand challenges. A pilot survey was conducted to test the clarity and relevance of the questionnaire items, identify ambiguous and confusing questions, check the time required to complete the questionnaire, assess respondents' understanding of the questions, evaluate the data collection procedures and enumerator performance, and, most importantly, improve the reliability and validity of the instrument.

**Data Sources**

Data for this research were collected from both primary and secondary sources. The primary sources of data collection included the following: the administration of a structured questionnaire to residents of the Lokoja metropolis; interviews with the opinion leaders, landlords, and tenants; and direct observations of the state of the housing situation in the area.

**Questionnaires:**

Questionnaires were extensively used in the study to collect large volumes of primary data. Through this method, data on the socioeconomic characteristics of the respondents and the factors influencing housing demand were obtained. The data collected through the questionnaires were used to test the residents' perceptions of housing demand in the Lokoja metropolis as one of the hypotheses.

**Oral Interview:**

Face-to-face oral interviews were conducted with selected residents of the study area, which included traders, workers, businessmen, students, professionals, and key officials of the relevant governmental ministries and parastatals.

**Direct Observation:**

Direct observations were made on the patterns of housing delivery, rates of urbanization, housing conditions, and factors that influence housing demand in the Lokoja metropolis.

**Data Collection**

The primary data was obtained by personal observation, direct interviews (which was held with government officials, landlords, and tenants), and the administration of questionnaires to residents of the area. The secondary data. To include the topographic map of Lokoja and materials from the internet. The objectives and data set required for their measurement are indicated in Table 4.1, and Table 4.2 shows the data required to test the four formulated hypotheses.

**Data Analysis**

Data were collected and analyzed via a table with inferential statistical techniques, i.e., the chi-square ($X^2$) test for independence, to test the relationships between categorical variables and their application in alignment with the study, which included housing adequacy × income level, tenure status × housing condition, and location × housing shortage.

Decision rule: if $p < 0.05$, a significant relationship exists. The chi-square test revealed a significant relationship between household income and housing adequacy in Lokoja ($X^2 = 12.45$, $p < 0.05$).

Independent sample t tests compare the mean differences between two groups, i.e., the mean housing expenditure of owners vs. renters and the average household size of adequate vs. inadequate housing. The t-test revealed a significant difference in the mean housing expenditure between renters and owners, i.e., occupiers ($t = 3.21$, $p < 0.05$).

Analysis of variance (ANOVA), which also compares means across more than two groups, i.e., housing affordability across income groups and housing quality across residential zones. One-way ANOVA indicated significant variation in housing affordability across income categories in Lokoja ($F = 5.62$, $p < 0.01$).

**Table 2: Selected zones and number of questionnaires administered and retrieved**

| S/N | Zone Name | Area of coverage | Coordinates | | Sample Distributed | Sample Retrieved |
|---|---|---|---|---|---|---|
| | | | Latitude | Longitude | | |
| **1** | Ganaja | Along Ajaokuta road | 7°42' - | 6°42' - | 60 | 53 |
| **2** | Township | Otokiti and Workers | 7°45'N | 6°45'E | 53 | 47 |
| **3** | Lokoja A | Village | 7°48'07"N | 6°44'39"E | 47 | 46 |
| **4** | Lokoja B | Post Office and Marine | 7°48'6"N | 6°44'38"E | 50 | 47 |
| **5** | Lokoja C | Road | 7°46′45″N | 6°44'21"E | 43 | 40 |
| **6** | Lokoja D | Gadumo Village and | 7°48’8"N | 6°43'59"E | 46 | 44 |
| **7** | Lokoja E | Adankolo | 7°50'32"N | 6°44'47"E | 57 | 48 |
| **8** | Nagazi Farm Oworo | Mount Patti and N.T.A. Nataco Junction & Sarki Noma Kabba/Kaduna Junction Felele | 7°49’29"N 7°51'11"N | 6°35'06"E 6°44'03"E | 44 | 47 |
| **Total** | | | | | 400 | 372 |

**Source:** Author’s field work, 2025

**Results and Discussion**

The rule of demand, a core principle in microeconomic theory, states that *ceteris paribus* (all things being equal), the quantity demand of a good or service is inversely related to its price. In the context of urban housing, this implies that as the cost of housing (rent or purchase price) increases, the demand for housing should decrease, and vice versa. However, empirical realities in developing urban centres such as Lokoja often reveal complexities that modify or even contradict this theoretical expectation.

Field survey data collected from residents in Lokoja metropolis indicate that:

- Despite rising rental costs, demand for housing remains persistently high.
- A significant proportion of respondents continue to occupy housing units even when prices increase.
- Many households adjust by reducing housing quality, living in overcrowded conditions and relocating to peri-urban or informal settlements.

This suggests that housing demand in Lokoja is relatively price inelastic, meaning that changes in price do not proportionately affect demand.

The observed deviation from the rule of demand can be explained by several structural and socio-economic factors:

a. **Housing as a necessity good:** Housing is a basic human need. Unlike luxury goods, it cannot be easily forgone. Therefore, even when prices rise, people are compelled to secure accommodation, leading to sustained demand.
b. **Rapid urbanization:** Lokoja, being the capital of Kogi state experiences continuous population influx due to administrative functions, employment opportunities and rural-urban migration. This population growth increases housing demand irrespective of price level.
c. **Limited housing supply:** Field data reveal a shortage of affordable housing units. This supply constraint means that: Even at higher prices, available units are quickly occupied, demand appears insensitive to price changes.
d. Low income and poverty levels: Many residents have low or unstable incomes. Instead of reducing demand, they compromise on housing standard, share accommodation and resort to informal housing.

**Perceived Challenges Land Their Economic Implications**

Residents identified several challenges that further shape demand behaviour which include high cost of rent, poor housing quality, inadequate infrastructure (water, roads, electricity) and land tenure issues. These challenges do not reduce demand but instead shift it toward lower-quality housing and informal settlements. Hence, demand persists but changes in structure rather than quantity, which refines the classical rule of demand.

**Theoretical Implication:**

The Lokoja case demonstrates that while the rule of demand holds in theory, its practical application in urban housing market – especially in developing economies is moderated by necessity of the good, supply constraints and socio-economic realities. Thus, the relationship between price and demand is weakened but not entirely invalidated.

**Conclusion:**

Field data from Lokoja therefore reveal that urban housing demand does not strictly conform to the classical rule of demand due to the essential nature of housing and prevailing socio-economic conditions. Instead of decreasing demand, rising housing costs lead to adaptive

behaviours among residents, thereby reinforcing the concept of price elastic demand in the housing sector.

**Housing Development Programme by Successive Government**

Housing development programme of different government administrations in Lokoja metropolis was explained in response to the objective of the study which centred on the following: awareness of housing programme and the extent to which projects of various governors helped to solve housing problems while in office.

**Table 3: Housing Development Programme by Successive Government in Lokoja**

| Item | Variable | Frequency | Percentage (%) |
|---|---|---|---|
| **Awareness of housing programmes** | Yes | 230 | 61.8 |
| | No | 142 | 38.2 |
| | **Total** | **372** | **100.0** |
| **The extent it helped** | Greatly | 30 | 13.0 |
| | Slightly | 105 | 45.7 |
| | No impact | 95 | 41.3 |
| | **Total** | **230** | **100.0** |
| **Governor with more attention to housing development** | Governor Audu | 185 | 49.7 |
| | Gov. Ibrahim Idris | 62 | 16.7 |
| | Gov. Ichala Wada | 70 | 18.8 |
| | Gov. Bello Adoza | 55 | 14.8 |
| | **Total** | **372** | **100.0** |

**Source:** Author's field work, 2025

Table 3 indicates the housing development programmes by successive governors in Lokoja. 230 (61.8%) respondents were aware of housing programmes in Lokoja while 142 (38.2%) were not aware. Out of the 230 respondents who know about housing programme, 45.7% agreed that the programmes were slightly helpful as 41.3% claimed that the programme had no impact while 13% confirmed that they were of great help. As shown in Fig 2, Governor Audu has the highest rating for the government with more attention to housing development with 49.7%, followed by Governor Ichala Wada with 18.8%, then followed by Governor Ibrahim with 16.7% and Governor Yahaya Bello with 14.8%. it is observed that government's attention to housing development in Lokoja Metropolis declined over the years as Governor Audu who served in 1999-2003 had more rating than his successors. Some of his major achievements during his first two terms in office include the establishment of three different housing schemes for public officers consisting of over 1,500 housing units in Lokoja.

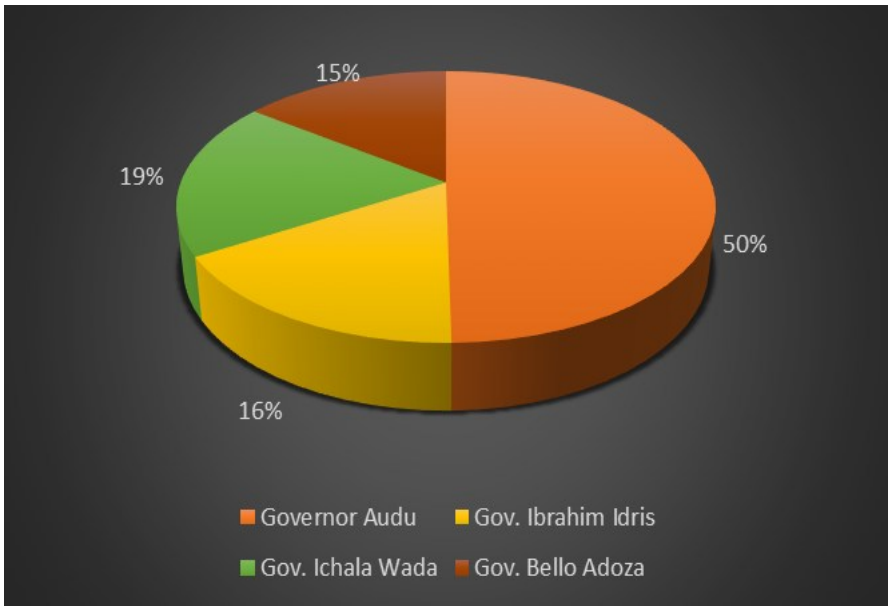


**Figure** 2**:** Housing Development Programmes by successive Government in Lokoja

**Trends of Housing Demand**

Trend helps to understand the flow of housing demand over a specific period of time. Table 4 presents respondents' perception of urban expansion in Lokoja metropolis over the last three decades. 69.6% respondents noticed expansion in the last three decades as against 30.4% who did not notice an expansion related to housing issues. Out of the 259 who affirmed their notice of urban housing expansion, majority of them (40.2%) attributed their claims to seeing addition of 1 – 10 houses while the least (7%) claimed additional 41 houses as others fall in-between. This justifies the findings of the identified features of housing expansion as springing up of new buildings with accounted for 41.9% while temporary tents as shelters accounted for the least with 13.4%. Hence, there is urgent need for the provision of more qualitative and affordable housing accommodation to ameliorate the high rise in housing demand problem encountered in Lokoja metropolis.

As presented in Table 3, people got informed about urban expansion through either family members or friends as the dominant method of information transmission with 43.2%. This was seconded by personal observation with 28%, followed by the media with 17.3%, and research publications with 11.5%.

As further pointed out in Fig 3, the suggested pull factors that contributed mostly to urban expansion in descending order of magnitude are: job opportunities (36.2%) which could also be intervening opportunities, education (17.6%), business (17.6%), adventure (15.4%), and peace (13.5%). Since Lokoja is a city with thriving business potentials from tourism, fishing and hotel businesses, both job opportunities and business ranked highest above other factors. Furthermore, as it houses many tertiary institutions like the Federal University Lokoja, Salem University and State Polytechnic, education ranks third in the list of factors causing expansion in the city.

**Table 4: Trends of Housing Demand in Lokoja**

| Item | Variable | Frequency | Percentage (%) |
|---|---|---|---|
| **Notice of urban housing expansion in the last 3 decades** | Yes | 259 | 69.6 |
| | No | 113 | 30.4 |
| | **Total** | **372** | **100.0** |
| **If yes, denote expansion in added number of houses** | 1 – 10 | 104 | 40.2 |
| | 11 – 20 | 69 | 26.6 |
| | 21 – 30 | 27 | 10.4 |
| | 31 – 40 | 41 | 15.8 |
| | 41 and above | 18 | 7.0 |
| | **Total** | **259** | **100.0** |
| **Identified features of expansion** | Establishment of new industries/factories | 55 | 14.8 |
| | Springing up of new buildings | 156 | 41.9 |
| | Temporary tents as shelters | 50 | 13.4 |
| | Clearing of site | 59 | 15.9 |
| | Disappearance of surrounding bushes | 52 | 14.0 |
| | **Total** | **372** | **100.0** |
| **Information on urban expansion** | Personal observation | 203 | 28.0 |
| | Family/Friend | 312 | 43.2 |
| | Media (TV/Radio/Newspapers) | 125 | 17.3 |
| | Research publications | 83 | 11.5 |
| | **Total** | **723** | **100.0** |
| **Suggested reasons for urban expansion** | Job opportunity | 289 | 36.2 |
| | Education | 140 | 17.6 |
| | Adventure | 123 | 15.4 |
| | Business | 138 | 17.3 |
| | Peace and comfort | 108 | 13.5 |
| | **Total** | **798** | **100.0** |
| **Challenges with housing occupancy** | Land dispute | 62 | 16.7 |
| | Payment problem | 115 | 30.9 |
| | High cost of building materials | 71 | 19.1 |
| | Dispute with Town Planning Authority | 72 | 19.3 |
| | Dispute with community youth on land | 52 | 14.0 |
| | **Total** | **372** | **100.0** |
| **Cost of land** | Less than 1 million | 121 | 32.5 |
| | 1– 2 million | 153 | 41.1 |
| | 2– 3 million | 65 | 17.5 |
| | More than 3 million | 33 | 8.9 |
| | **Total** | **372** | **100.0** |
| **Rate of Increase in the Cost of Landed Property in the last ten years** | 25% | 55 | 14.8 (mean 1.73) |
| | 50% | 91 | 24.5 (mean 1.93) |
| | 75% | 115 | 30.9 (mean 1.71) |
| | 100% | 111 | 29.8 (mean 2.43) |
| | **Total** | **372** | **100 (mean 1.87)** |
| **Notice of migration over the years** | Yes | 268 | 72.0 |
| | No | 104 | 28.0 |
| | **Total** | **372** | **100.0** |
| **Causes of problems of urban growth pattern** | Unplanned housing expansion | 119 | 32.0 |
| | Inadequate/dilapidated infrastructures | 92 | 24.7 |
| | Inaccessible location of some areas | 94 | 25.3 |

| Item | Variable | Frequency | Percentage (%) |
|---|---|---|---|
| | Lack of proper housing policies | 67 | 18.0 |
| | **Total** | **372** | **100.0** |
| **Factors influencing urbanization** | Topographic effect | 50 | 13.4 |
| | Confluence effect | 95 | 25.5 |
| | Competition from other land uses | 131 | 35.2 |
| | Migration | 25 | 6.7 |
| | Political factors | 29 | 7.8 |
| | Nature of existing housing demand in the area | 25 | 6.7 |
| | Variation in housing demand among income groups | 17 | 4.6 |
| | **Total** | | |
| | | **372** | **100.0** |
| **Identical density of areas** | Low density | 85 | 22.9 |
| | Medium density area | 174 | 46.8 |
| | High density area | 113 | 30.3 |
| | **Total** | **372** | **100.0** |

**Source:** Author's field work, 2025

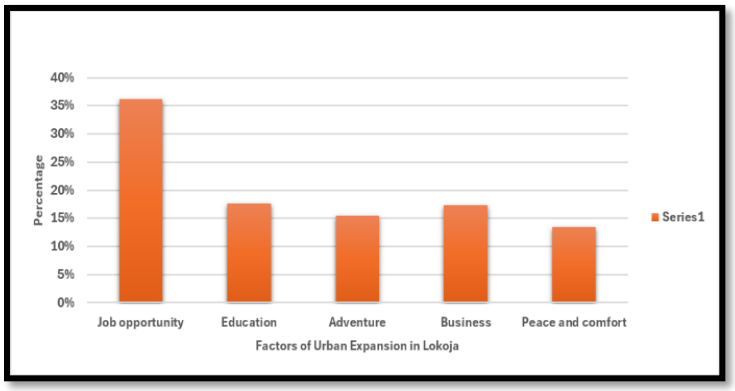



**Figure 3:** Factors of Urban Expansion in Lokoja Metropolis

From Table 4, the most noticed challenge with housing occupancy is payment problem (30.9%) while the least is dispute with community youths on land (16.7%). This calls for the urgent need to review rent control measures to help curb problem of housing occupancy as this will further prevent the regular tussle experience between landlords and tenants.

From the research, 72% of the respondents noticed migration over the years while 28% did not. The major cause of urban growth pattern is unplanned housing expansion (32%), while lack of proper housing policies accounts for the least cause with 18%. Others fall in between. Therefore, it is important that the Town Planning Development Board should assume their responsibility by instilling some development control standard that will help to curb future occurrence of an unplanned housing expansion in the study area.

Some factors influence urbanization in one way or the other which in Lokoja are: competition from other land uses (38.9%), confluence effect (25.7%), topographic effect (14.7%), political factors (6.9%), migration (5.5%), and variation in housing demand among various income groups (3.3%).

On the density of areas where respondents are living, 46.8% live in averagely dense area, 30.3% dwell in high density area while 22.9% live in low density area. The medium density areas are bridges that connect the highest income earners (low density areas) and lowest income earners (highest density areas). They are sometimes regarded as average income earners as they are neither poor nor rich but live average livelihood.

**Testing of Hypothesis**

**$H_0$:** There is no significant variation in residents' perception of problems associated with housing demand in Lokoja metropolis

**Results:**

Thus, hypothesis suggests that in aggregate, residents' perception of problems associated with housing demand differed significantly over the years in Lokoja metropolis, at less than 0.05 significant level. (See, Table 6). This statistical conclusion connotes with the descriptive findings of Kun-Huang *et. al. (*2019) in their paper titled 'Qualitative analysis of housing demand using Google trends data.'

Furthermore, a descriptive analysis was done to better understand this as its discussion focuses solely on the residents' perception of problems associated with housing demand in Lokoja Metropolis. For instance, above half of the respondents have noticed urban housing expansion justifying their claims with evidences that they have seen 1 – 20 added houses in 3 decades. Being the capital city of a state that borders 10 states, it is expected that migration influences the demand for housing. Moreover, the 2019 and 2022 floods that affected the state, with the worst impact on Lokoja Metropolis would have caused people to demand for more houses in less susceptible parts of the capital city. Additionally, the residents' perception of problems associated with housing demand could also be indirectly affected by the level of attention State Governors give to housing development as seen in Fig 2

**Conclusion**

This study attempts to examine the residents' perception on problems associated with housing demand in Lokoja metropolis. It was found that the housing demand differed over period of three decades from 1994 to 2024. There was also variation in housing demand among the various income groups. The low-income group had the highest housing demand among other income groups. It was followed in descending order by medium income and high-income groups respectively.

However, six factors influenced housing demand at 0.01 significant level. These are population, income, number of schools, public utilities, security and household size. Four of the six identified factors namely population, income, number of schools and public utilities responded positively to housing demand. On the other hand, the remaining two variables (security and household size) responded negatively to housing demand. This implied that the six factors are the determinants of housing demand and therefore should be considered in future housing policies and programmes.

Furthermore, the finding has improved the earlier notion, upon which housing policies and programmes are based, that population alone is the determinant factor of housing demand. Other identified factors which also influence housing demand are income, number of schools, public utilities, security and household size. This finding is the major contribution of this study to the existing knowledge in housing demand and supply.

**RecommendationS Based on Residents' Perceptions**

Based on the problems identified through residents' perceptions, the following recommendations are appropriate:

i. Increase supply of affordable housing targeted at low/medium income groups
ii. Improve housing quality and amenities
iii. Improve infrastructure and services in housing locations
iv. Ensure location suitability and access to work/amenities
v. Strengthen land-use planning, reduce land cost and streamline approvals
vi. Regulate rental market and protect tenants
vii. Encourage residents in housing policy and decision-making
viii. Monitoring and data collection

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