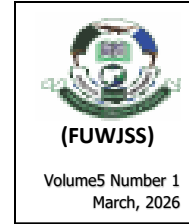


**COMPARATIVE ANALYSIS OF HOUSING
QUALITY AND HOUSING DEGENERATION IN
HIGH- AND LOW-DENSITY RESIDENTIAL
AREAS WITHIN LOKOJA METROPOLIS,
NIGERIA**



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Abstract

Housing crisis remains a major issue in urban areas like Lokoja, Nigeria, where rapid urbanisation has led to overstretched and dilapidated accommodation. This study examines housing conditions, facilities, and degeneration in high-density and low-density residential areas of Lokoja. A field survey was conducted in Lokoja, sampling 400 households in Adankolo, Lokongoma, Sarki-noma, and Zone 8. Findings showed significant differences in housing quality and degeneration between high-density and low-density areas. High-density areas faced prominent housing degeneration issues, including poor drainage, inadequate waste disposal, and pollution, impacting residents' health and environment. In high-density areas, houses were mostly built with mud bricks and zinc roofs, with pit latrines and outdoor facilities, whereas low-density areas had better amenities like cement-block houses, aluminum roofs, and water closets. The study confirmed that housing degeneration was more pronounced in high-density areas compared to low-density areas in Lokoja, Nigeria. Statistical analysis (t-test) revealed a significant difference in housing degeneration between the two areas (Calculated t-Value = 6.154 > Tabulated t-Value =

1.725, $p=0.05$). The study concluded that poor infrastructure, inadequate waste management, and pollution were major concerns in high-density areas, requiring targeted interventions to improve housing conditions and environmental sustainability. Addressing these issues is crucial to mitigate the impact of housing degeneration on residents' health and well-being.

Keywords: Comparative analysis, housing quality, degeneration, residential areas

Introduction

Housing is a fundamental human need, right up there with food and shelter. Housing is a necessity, essential to the growth of any nation (Ishola, Gokay, & Huda, 2023). The quality of housing significantly impacts the well-being and overall quality of life of urban residents, being connected with various social factors. Aribigbola (2011) opined that housing is very fundamental to the welfare, survival and health of individuals. Housing is also ascertained to be regular and continuous maintenance of the built environment for the daily living activities of individuals/families within the community while reflecting their socio-economic, cultural aspirations and preferences (National Housing Policy, 2012).

Consequently, urban population is anticipated to grow on an average 2.3 percent per year in the developing world between 2000 and 2030 (Jiboye, 2011). The United Nations (2013) defines urbanization as movement of people from rural to urban areas with population growth equating to urban migration which is indeed a phenomenon that removes the rural character of a town or an area.

This implies that rapid urbanization is a distinguishing characteristic of contemporary Africa and it is greatly spurred by rural - urban migration. In addition, there has been a growing concern on the deteriorating state of housing in most urban areas of the developing nations as observed by Jiboye (2010). Hence, good quality housing is essential to planning because it does not only ensure the safety and dwelling of people, but promotes beauty, convenience and aesthetics in the overall built-up environment (Jiboye, 2010). Housing quality is defined as structural attributes and facilities provided for the inhabitants of a building to live a decent life (Bradley & Putnick, 2012). Good quality housing is the desire of all, however, good quality housing is not easy to come by; it involves the provision of adequate funding (Foluso, *et al.*, 2023)

The quality of a housing unit is dependent on the structure, the various components, facilities within, and the aesthetical rendering of the unit (Agabi & Odekunle, 2014). Moreover, quality housing is the goal of all localities and this reflects a community's ability to respond to the needs of its citizens, as well as to accommodate growth and economic development.

Addo (2013) observed that, the areas that are overcrowded are characterized by poor infrastructural facilities, poor building quality and insufficient environmental facilities. In effect to this, built-up structures degenerate in quality with age / obsolescence, high rate of negligence and consequent deterioration of housing have resulted to poor housing quality in many public estates in Nigeria. This situation contradicts the objectives of Nigerian National Housing Policy (NHP, 2006) of whose goal is sustainable and appropriate urban renewal programmes in blighted areas.

Funmilayo & Michael (2018) described housing quality indices as the structural or dwelling quality, neighbourhood quality, and locational quality. While, Foluso & Afolabi (2017) described the quality of housing as an important health element which affects the well-being of the people, their productivity, manner of living, decencies of their lives and provides the foundation for stable communities and social inclusion. Ibem & Amole (2010) stated that inadequate housing condition has become an intractable challenge that has continued to grab the attention of governments, professionals, developers and individuals in most developing countries. Hence, the quality of housing is basically an important health element which affects the well-being of the people, their productivity, manner of living, decencies of their lives and provides the foundation for stable communities and social inclusion (Foluso & Afolabi, 2017).

Lokoja, the capital city of Kogi State has been experiencing continuous increase in population. Record has shown that, Lokoja as a state capital has a population of 75,000 people in 1991, 102,000 in 1995, 149,000 in the year 2000, 237,000 in 2006, and 348,000 in the year 2011. It was estimated that the population of the city as a state capital will increase to 886,000 by the year 2025 (population statistic, 2024). This may have negative effect on the quality of life that urban people experience in Lokoja. It is to this end that this study assessed housing quality and facilities available within the high and low density residential quarters in Lokoja Metropolis. A hypothesis was tested on significant difference in housing degeneration within the high and low density residential areas in the study area. .

Housing Policies and Interventions in Nigeria's Urban Areas

Different public intervention programmes and policies were introduced to solve housing problems in Nigeria but could not achieve the aim because of the excessive and unnecessary delays in the planning, execution and construction of housing project. Many studies have tried to quantify the level of degradation of urban housing in Nigeria (Jelili, Adedibu, & Ayinla, 2006; and Olotuah, 2006). These studies affirm that 75% of the dwelling units in urban centres in Nigeria are substandard and the dwellings are sited in slums.

Slums are marked by decay, stemming from factors like aging infrastructure, neglect, poor maintenance, inappropriate land use, inadequate sanitation, and environmental degradation.

Olotua (2015) revealed that Nigeria is a developing country with severe housing deficiency, and that the quality of housing is particularly poor. Owolabi (2014) studied characteristics of housing in Nigeria and stated that most areas of urban centers of Nigeria are faced with vast numbers of problems, which have resulted to overcrowding, high rents and slum settlements. Furthermore, he was of the opinion that this brought about inadequacies of basic infrastructural facilities and social services in terms of quantity and quality such as pipe borne water, electricity, roads, schools and health institutions (Owolabi, 2014). Ezeigwe (2015) and Ibimilua and Ibitoye (2015) observed that high cost of building materials and poverty contributed to housing problem

However, Makinde (2014) identified housing problem as economic recession which hinders housing supply; inaccessibility of land, high cost of building and construction materials, and high planning standard by planning authorities and delay in plan approval. High rates of overcrowding, fast deteriorating environmental facilities, degenerating building structures, and infrastructural decay have been reported in all the urban centres in Nigeria (Agbola, 2006; Jiboye, 2010).

Aside that the aforementioned scholars have made notable and significant contributions on housing, their findings differed widely. The assessment of housing quality, availability of housing facilities and housing degeneration have not been well explored. Hence, little is therefore known on the housing condition, availability of housing facilities and housing degeneration across different residential density areas.

In view of the above detected gaps, this study filled these gaps by examining housing quality, availability of housing facilities across different residential density areas and also compared housing quality and housing degeneration among the High and Low Density Residential quarters in Lokoja, Nigeria.

Housing Quality Degeneration in Nigeria

Quality of Housing standards are often used as norms or measures that are applicable in legal cases where there is some question as to the acceptability of construction relative to prevailing laws or conventions that operate within the residential building industry (Emankhu and Ubangari, 2015). The concept of housing quality is broad and comprises both the physical characteristics and satisfaction (Streimikiene, 2015). Quality of housing is determined by the residents' perception as identified by Adeleye, Azeez & Yusuff (2014). Hataminejad, Yazdi, & Hosseinnejad (2014)

described settlement informality as obvious facets of urban destitution in most of in-migration and vulnerable cities. Majani (2006) revealed unplanned housing development areas represent a key development challenge for urban planners and professionals in the built environment. Housing quality depends on indicators as yardstick for measuring housing performance. The quality of housing within any neighbourhood should be such that satisfies minimum health standards and good living standard, but should also be affordable to all categories of households (Aribigbola, 2011; Amao, 2012).

In countries like Nigeria, rapid urbanisation has overwhelmed governments' capacity to provide housing and basic services to the populace, leading to severe urban poverty. The high level of poverty of most urban households places the available housing stock out of their economic reach. Many of the households resort to constructing makeshift dwellings with all sorts of refuse materials on illegally occupied land (Makinwa, 1988).

Adetunji & Isah (2015) researched on urban housing quality and its health implications in Lokoja. Their findings revealed that more than sixty percent (%) of the inhabitants of city live in undignified houses. A large proportion of the population do not have reasonable access to safe and ample water supply, neither do they have the means for hygienic waste and sewage disposal. The demand for urban services in Nigeria has grown over the years but the overall quality and coverage of public services have deteriorated (Olotuah 2002).

There have been studies on housing in Nigeria by different authors. However, findings differed widely. Many studies have tried to quantify the level of degradation of urban housing in Nigeria (Jelili, et al., 2006; Olotuah, 2006; Abiodun, 2015; Anofojie & Adeleye, 2014; Adeleye, *et al.*, 2014; Adewale, Olabisi, & Babawale, 2015; and Foluso & Afolabi, 2017). These studies affirm that 75% of the dwelling units in urban centers in Nigeria are substandard and the dwellings are sited in slums. The inadequacy of the quality of most of urban housing stems mainly from the poor physical state of the buildings. The studies further show that the buildings are often unsafe and insecure and do not provide adequate shelter from the elements of weather.

Anofojie & Adeleye (2014) examined the quality of housing in Amuwo-Odofin in Lagos State and their study focused on housing and infrastructure. The Results of their study revealed that majority of the houses and infrastructure were in poor condition. Also, Abiodun (2015) carried out a research on the impact of users' needs on housing quality in Ado-Ekiti and discovered that public services and infrastructure are inadequate in the housing estates. But as substantial as these works are, these studies did not

fully explore the evaluation of housing quality across densities such as high and low residential neighbourhoods. Hence, this study filled that gap.

More so, Adewale, Olabisi, & Olawunmi, (2018) studied the housing quality in Ede and the impacts of urbanization on environmental degeneration of urban built environment. Their findings revealed that household size has a significant influence on the overall housing quality. Adewale et al, (2015) studied housing and neighbourhood quality condition in Ilesa. While, Udoo, *et al.*, (2018) conducted a research on housing and neighborhood condition in the Katungu District of Makurdi Town. Their studies revealed that majority of houses were in poor condition. Adeleye, *et al.*, (2014), undertook a research to unravel the perception of housing quality by residents and nonresidents of Ibara housing estate in Ogun State. Their study established that the condition of the building elements (roofs, walls, floors windows, doors, toilets/bathrooms, lighting and ceiling) was perceived by the residents to be of good condition.

While the non-residents perceived it to be fair in condition. Similarly, Foluso and Afolabi (2017) assessed housing quality in urban core of Ado-Ekiti. They focused mainly on building elements and their study revealed that building elements such as roofs, doors, windows, walls, ceiling and floors were in deplorable conditions. These studies by eminent scholars focused mainly on the intrinsic quality of individual building as a yardstick of measuring housing quality. However, this study will not only consider intrinsic (indoor) factors but will also consider the extrinsic (outdoor) factors such as drainage, access road, waste disposal in determining quality of housing in the study area.

In line with the findings of the aforementioned authors, the objective investigated the problem and effects of housing degeneration across different residential density in Lokoja, with a view of providing a guide to the landlords and dwellers in the country, in providing and managing houses and facilities for sustainable development of the country. Aside that the aforementioned scholars have made notable and significant contributions, little is known on quality of facilities and housing degeneration across different residential density areas.

In view of the above detected gaps, this study filled these gaps by examining quality of housing facilities across different residential density.

Research Methodology

Lokoja is a medium-sized urban centre in central Nigeria. It is both the administrative and commercial capital of Kogi state and Kogi Local Government Area. Absolutely, Lokoja is located between Latitude. $7^{\circ} 45'N$ - $7^{\circ} 51'N$ and Longitude. $6^{\circ} 41'E$ - $6^{\circ} 46'E$. It is situated at the confluence of Rivers Niger and Benue in Kogi state, Nigeria (Fig. 2). It is arguably the

fastest growing town in Kogi state and the seat of Government. The town at present is an amalgamation of a number of small sized settlements such as Adankolo, Lokogoma, Felele, Otokiti, Ganaja, Gaduma that are sandwiched between a water body -River Niger- and Mount Patti.

The topography of the study area is fairly flat for most of areas but, the land slopes most from the mountain area towards the River Niger. The most striking relief feature is the Mount Patti with an altitude of about 1,500m above sea level. A number of intermittent valleys exist, most with streams that flow to crisscross the town. The basement complex rock consists of fine to medium – grained sand stones, clays, carbonaceous silts and colitic ironstones. Lokoja sandstone is generally pebbly and clay with a maximum thickness of 270meters (Alaci, 2004).

The climate of the study area falls into the Koppen-Aw climatic group that is, the warm continental type. Rainfall starts in earnest in the month of March/April and it extends to October/November. September is the month of heaviest rainfall, while August break is not particularly marked. (Alaci, 2004). June and November are particularly cooler months, while February and March are the hottest months. The highest temperature of 36.7°C occurs in March, Ifatimehin (2014).

Lokoja has an education function, because of the presence of the university and other secondary and primary schools, the presence of a university is rapidly initiating and transforming the land use type and economy from agrarian to a commerce driven economy and also function as nodal town that provides quick access from some part of the states to other part of the country. The major economic activity of Lokoja is trading and this has survived largely due to increasing population of the area which provides market for various items brought in from other parts of the country. Cotton ginning, weaving, palm and shea kernel processing are important local activities available.

The establishment of the University in Lokoja has contributed immensely to the success of hotels, commercial banks and housing business, as a result, the establishment of the university has attracted people from both far and near to trade in various businesses which witnessing tremendous growth and development. Lokoja generally can be described as a break of bulk point of business. There are limestones and iron deposits in the vicinity and nearby Mount Patti. Hence, industrial production take place in Lokoja.

The original settlers in Lokoja were the Bassa-Nges and Oworos and other indigenous tribes are Kakanda, Kupa, Ganagana and Egan as well as the Ebira, Igala and Hausa. The nature of the land use is presently segregated mainly into residential and administrative uses. The old township made up of Kabawa, Karaworo/Cantonment, Kpata/Marine and Adankolo are

The map displays the political divisions of Nigeria, with state boundaries delineated by thin black lines. State capitals are marked with red squares. Major rivers, including the Niger, Benue, and Cross Rivers, are shown in blue. An inset map in the lower right corner provides a detailed view of Kogi State, which is highlighted in orange. The map is bordered by the Niger Republic to the north, Chad to the northeast, Cameroon to the east, and the Atlantic Ocean to the south. A legend in the bottom right corner identifies the symbols used: a red square for the state capital, a thin black line for the state boundary, a thick black line for the national boundary, blue lines for rivers, and a scale bar for distances up to 400 km. The map also includes latitude and longitude coordinates along its edges.

Source: Adapted from Kogi State Ministry of Land and Environment, 2008.

[illegible]

Quantitative Cross Sectional Research Design was adopted for this study. Primary data were obtained through the reconnaissance housing survey and copies of structured questionnaire designed for study. The structured questionnaire used was adapted from the work of Adeleye, *et al.*,

(2014) and was up graded by reviewing Emankhu & Ubangari (2015); Muhammad (2015); Adeleye, *et al.*, (2014); Lanrewaju (2012) & Jiboye (2010) works. The questionnaire consists of two sections A and B made of closed-ended questions on housing quality and assessment of housing degeneration among the High and Low Density Residential areas respectively.

The secondary data used for this study included map of Nigeria showing Kogi State and this was adapted from Kogi State Ministry of Land and Environment (2008) and the map of Kogi State showing the study area as adapted from Okoli & Achegbulu (2013) work. These maps were used to locate and identify the study area. Population figures are from population statistic (2024).

During the reconnaissance housing survey of the study area, 822 buildings out of 1200 buildings that are thirty years old and above (Adewale et al, 2018) were adopted as the sampling frame for this study. The total respondents sample size for the study (400 households) was arrived at using the sample size determination formula of Yamane Taro 1963 (cited in Eshetu & Mekonnen, 2016). The study adopted multistage sampling technique. Systematic sampling method was used to select 100 houses in each of the sampled residential area. This was done by the use of balloting method while purposive sampling method was used to sample the head of the households and thereafter administered a copy of the structured questionnaire for the study (Table 1).

The study adopted both descriptive and inferential statistics analytical methods to analyze the data collected. Data collected objectively (quantitatively) on housing quality were summarized into Graph, Frequency and Percentage table while data collected subjectively on housing degeneration was summarized using Mean Weight Analysis method and summarized into tables. This study employed 3-points Likert Scale where the Mean Weight Value (MWV) for each response and the General Mean Weight Value (GMWV) to all responses were both calculated. MWVs of all the variables were collated and ranked

In doing so, respondents responses to Good (G), Fair (F) and Bad (B) were rated as 3, 2 and 1. The correspondent respondents responses to G, F and B were multiply by the 3, 2 and 1 respectively and then added together to get the Total Weighted Values (TWV) for each factor of housing degeneration. The TWV was divided by number of respondents (n) to arrive at the Mean Weighted Value (MWV) for each factor of housing degeneration. Finally, the Grand Mean Weighted Value (GMWV) for all factor of housing degeneration was obtained by dividing the Summation of all Mean Weighted Values ($\sum$ MWVs) by total number of housing condition variables (x).

Thus, any factor of housing degeneration with Mean Weighted Value greater than the Grand Mean Weighted Value were accepted and recognized as factor responsible for or affecting housing degeneration and vice versa (Sunmola, 2018). Moreover, the stated hypothesis was tested using Student's T-Test at (0.05) 5% level of significance.

Results and Discussions

Table1: Questionnaire Administration across Districts.

Residential Status	Residential District	Number of identified houses	Random sampling of houses	Total Sampled Houses
HIGH	Adankolo	255	100	200
	Lokongoma	234	100	
LOW	Sarki –noma	171	100	200
	Zone 8	162	100	
Total	4 Residential Areas	822	400	400

Source: Field Survey, 2024.

Socio- Economic Characteristics of Respondents

The study revealed that 62 % of the respondents are males, while 38 % are females. Thus, in this study males were more represented than the females. This is a credence that household heads are males and as such need to build or rent house to accommodate their family.

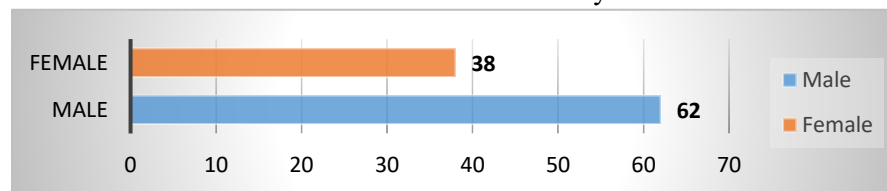


Figure 3: Bar Chart Showing Respondents' Gender

Source: Field Survey, 2024.

Respondents' Marital Status

Table 2 revealed that 72.3% of the respondents are married, 15.8% are single, while 6.3% and 5.8% are widowed and divorced respectively. These results showed that majority of the respondents are married.

Table 2: Marital Status of Respondents

Marital Status	Frequency	Percent
Married	289	72.3
Single	63	15.8
Widow/Widower	25	6.3
Divorced	23	5.8
Total	400	100

Source: Field Survey, 2024.

Housing Degeneration in the Study Area

With a GMWV = 2.16, the accepted types of housing degeneration within the High density residential areas (Adankolo and Lokongoma Zones) in the study area include but not limited to drainage system facility (MWV= 2.20), structural condition of building (MWV= 2.44), condition of plastered/ painted walls (MWV= 2.21), toilet and bathroom condition (MWV= 2.23), Ventilation (MWV= 2.19), Condition of the roof (MWV= 2.22), access to waste disposal (MWV= 2.17), accessibility (MWV= 2.22), Condition of ceiling (MWV= 2.40), and Access to water/sanitation (MWV= 2.46) as seen in Table 3.

Table 3: Types of Housing Degeneration within the High Density Residential Areas (Adankolo and Lokongoma Zones) In the Study Area.

Responses					Likert's Rating			TWV	MW V	Decision
Housing Condition	G	F	P	Total						
					3	2	1			
Drainage system facility	46	56	60	162	186	112	60	358	2.20	Accepted
Structural condition of building	18	55	89	162	267	110	18	395	2.44	Accepted
Condition of plastered/ painted walls	44	40	78	162	234	80	44	358	2.21	Accepted
Toilet and bathroom condition	30	65	67	162	201	130	30	361	2.23	Accepted
Ventilation	41	63	58	162	188	126	41	355	2.19	Accepted
Condition of the roof	39	61	62	162	199	122	39	360	2.22	Accepted
Access to waste disposal	41	52	69	162	207	104	41	352	2.17	Accepted
Accessibility	36	55	71	162	213	110	36	359	2.22	Accepted
Condition of ceiling	45	48	69	162	225	96	69	390	2.40	Accepted
Access to water/sanitation	55	34	73	162	259	68	73	400	2.46	Accepted
GMWV = 2.16										
Note: G= GOOD (1), F= FAIR (2), P=POOR (3).										

Source: Field Survey, 2024.

With a GMWV = 2.35, the accepted types of housing degeneration within Low Density Residential areas (Sarki-noma and Zone 8) are; structural condition of building (MWV = 2.62), condition of plastered/ painted walls

(MWV =2.47), rusted condition of the roofing sheet (MWV = 2.40) as seen in table 4.

Table 4: Responses To Types Of Housing Degeneration Within Low Density (Sarki-Noma And Zone 8) Residential Area in the Study Area.

Responses					Likert's Rating			TWV	MWV	Decision
Housing Condition	G	F	P	Total	3	2	1			
Toilet and bathroom condition	131	77	30	238	366	154	30	550	2.31	Rejected
Condition of the roof	133	66	39	238	399	132	39	570	2.40	Accepted
Ventilation	136	63	39	238	380	126	39	545	2.28	Rejected
Structural condition of building	165	55	18	238	495	110	18	623	2.62	Accepted
Condition of ceiling	111	58	69	238	333	116	69	518	2.18	Rejected
Condition of plastered/ painted walls	155	39	44	238	465	78	44	587	2.47	Accepted
Access to water/sanitation	112	55	71	238	336	110	71	517	2.17	Rejected
Access to Waste disposal	136	55	47	238	398	110	47	555	2.33	Rejected
Accessibility	121	48	69	238	333	138	69	540	2.26	Rejected
Drainage system facility	106	66	66	238	318	132	66	516	2.17	Rejected
GMWV = 2.35										
Note: G= GOOD (1), F= FAIR (2), P=POOR (3).										

Source: Field Survey, 2024.

Comparatively, the most prominent types of housing degeneration observable within High density residential area (Adankolo and Lokongoma Zones) in the study area have to do with the poor structural condition of buildings and ceilings, loss of aesthetic value of the condition of plastered/ painted walls, prevailing bad condition of the toilets and bathrooms, inadequate accessibility due to presence of slums poor and deteriorated ventilation due to too much closeness of buildings, rusted condition of the roofing sheet due to prolong exposure to weather and poor quality of the roofing sheet, poor drainage system which leads to pollution of the environment, poor sanitation and water availability and finally poor or virtually absent access to waste disposal points/dungs that has made the High density residential area (Adankolo and Lokongoma Zones) lost good scenic value (Table 3).

Unlike, the high density residential area, the types of housing degeneration within the Low Density Residential Area (Sarki-noma and Zone 8) in the study area include structural condition of buildings, condition of plastered/ painted walls and condition of roof (Table 4). Going by what was observed during the reconnaissance survey for this study most of

structures in the low residential density area were fashioned after the ones found in oversea and imported. These designs cannot withstand the prevailing weather condition of the Tropics, hence, the high rate of their degeneration of these structures, the washing and fading away of their plastered/ painted walls by intense sun radiation and rainfall.

Thus, unlike the development of residential quarters in developed world, most of residential quarters in Nigeria do not take in to cognizance of things such as like layout, accessibility, drainage system and waste dump sites among other necessities that are needed to be put in place before buildings sprung up in new sites. In so doing, buildings in most of the new sites in the study area were built haphazardly, hence, the high level of degeneration of drainage system and accessibility condition.

The hypothesis was tested by subjecting the summary of the Mean Weight Values of responses to features of degeneration to Student's T-Test Analysis.

At $p=0.05$ and $df=18$, the Calculated t-Value = 6.154 while the Tabulated t-Value is 1.725. Since the Calculated t-Value 6.154 is greater than the Tabulated t-Value =1.725. H_0 is rejected. That is, there is significant difference in housing degeneration between High Density Residential Areas (Adankolo and Lokongoma areas) and Low Density Residential Areas (Sarki-Noma and Zone 8) in the study area.

Table 5: Summary of Student's T-Test Analyses on Difference in Degeneration between High Density (Adankolo and Lokongoma Zones) And Low Density Residential Area (Sarki-Noma and Zone 8) In the Study Area.

Variables	Cal t-test value	Df	A	Tab t-test Value	Decision
Degeneration between High density (Adankolo and Lokongoma Zones) and Low Density Residential Areas (Sarki-Noma and Zone 8) in the study area.	6.154	$n_1 + n_2 - 2$ $= 10 + 10 - 2 =$ $20 - 2 = 18$	0.05	1.725	H_0 is rejected

Source: Field Work, 2024

Conclusion and Recommendations

This study evaluated housing quality and facilities available in Lokoja Metropolis's high and low-density areas. The findings showed that most housing units in low-density areas met standards, while others fell short. The findings suggest Lokoja's housing quality is varied, impacting sustainable development goals. Improved facilities could boost residents' well-being and support sustainable development goals attainment. However, current gaps may hinder progress. Therefore, addressing these disparities is

beneficial for sustainable growth and livability in Lokoja. The study recommended that residents should be sensitised on the factors responsible for the deterioration of houses, and the danger behind indiscriminate disposal of wastes, hence increase residents' consciousness on its implication.

References

- Abiodun, O.O. (2015). Assessing the impact of users' needs on housing quality in Ado- Ekiti, Nigeria. *Global Journal of Research and Review* 2(4), 100-106.
- Addo, A.I. (2013). Assessing Residential Satisfaction among Low Income Households in Multi habited Dwellings in selected low Income Communities in Accra: policy review. *Urban Standard Journal*.5 (4), 1- 20.
- Adeleye, O., A, Azeez, T. O., & Yusuff, I. O. (2014). Perception of Housing Quality by Residents and Non Residents of Ibara Housing Estate, Abeokuta, Ogun State, Nigeria, *American Journal of Human Ecology*, 3(3), 35-42.
- Adetunji, M.A. & Isah I.O. (2015). Urban housing quality and its health implications in Lokoja, Nigeria. *Ethiopian Journal of Environmental Studies & Management*, 8(5), 570-578.
- Adewale, O. Y., Olabisi. O.A., & Babawale. A.A. (2015). An assessment of housing and neighborhood quality condition in Ilesa, Nigeria. *Analele University in Seria Geografie*, 2065-3409.
- Adewale, Y., Olabisi, A., & Olawunmi, Y. (2018). Assessment of Housing Quality in Ede, Nigeria. *Asian Themes in Social Sciences Research*, 1(2), 76-83.
- Agabi, J., & Odekunle, F. (2014). Housing Quality of residential neighborhoods in Nigeria. Focus on low residential areas of Birnin Kebbi, Kebbi State. *Covenant Journal of Research in the Built Environment (CJRBE)*. 2(2), 140-156.
- Amao, F.L. (2012). Housing quality in formal settlements and urban upgrading in Ibadan, Nigeria. *International Knowledge Sharing Platform Journal and Books Hosting Conference and Workshops Solution*, 2(10), 69-78.
- Anofojie, A. E., Adeleye, O. A., & Kadiri, M. A. (2014). Housing quality assessment in selected public residential estates in Amuwo-Odofin L.G.A, Lagos, Nigeria. *International Journal of Research in Earth & Environmental Sciences*, 2(6), 2311-2484.
- Aribigbola, A. (2010). Rational choice model and housing decisions in Akure, Ondo State, Nigeria. *Journal of Environmental Studies*, 1 (1), 53-63.
- Bradley, R.H., & Putnick, D.L. (2012). Housing quality and access to material and learning resources within the home environment in developing countries. *Child Development*, 83(1), 76-91.
- Emankhu, Sunday .E. & Ubangari, A. Y. (2015). Analysis of housing quality in the peripheral area of Lafia, town. *International Journal of Geography and Regional Planning Research*, 1(3), 9-17.
- Foluso, C.A., & Afolabi, F. (2017). Assessment of housing quality in urban core of Ado- Ekiti, Nigeria. *Journal of Civill and Environmental Research*, 9(7), 2225-2514.

- Foluso, C.A., Albert, B.A., Muiyiwa, L.A., Francis, O.O., Sunday, U.Y. & Folahan, D.A. (2023): Assessment of the relationship between housing quality and income in urbanizing city of Ado –Ekiti, Nigeria. *World Journal of Advanced Research and Reviews*, 18(02), 969-978.
- Funmilayo, A., & Michael, A. (2018). Assessment of housing quality in Ibeju-Lekki peri-urban settlement, Lagos State, Nigeria. *Journal of Home*, 25(1), 126-151.
- Hataminejad, H., Yazdi, H.P., & Hosseinnejad, M.R. (2014). Analysis of the Local Characteristics of Informal Settlements and how to Deal with these Settlements in the Neighborhood of Mashhad Abkuh. *Entrepreneurship and Innovation Management Journal*, 2(4), 219-230.
- Ifatimehin, O.O. (2014). Application of Remotely-sensed Data for Modeling Malaria Infection in Lokoja, Nigeria. *International Journal of Tropical Disease and Health*, 4(6), 101-105.
- Ishola, A., Gokay, D., & Huda, S.(2023). The challenges in providing affordable housing in Nigeria and the adequate sustainable approaches for addressing them.13(3), 2165-3925.
- Jelili, M.O. Adedibu, A.A., & Ayinla, A.K. (2006). Planning Implications of Housing Redevelopment in Residential Areas of Ogbomoso, Nigeria: a pilot study”. *Journal of Human Ecology, Kamla-Raj Enterprises, Delhi, India*, 20(3), 273- 277.
- Jiboye, A. D. (2011). Urbanization challenges and housing delivery in Nigeria: The need for an effective Policy framework for Sustainable Development. *International Review of Social Sciences and Humanities*, 2(1), 176-185.
- Lanrewaju, A. (2012). Urbanization, housing quality and environmental degeneration in Nigeria. *Journal of Lewin Geography and Regional Planning*, 5(16), 422–429.
- Magigi, W., & Majani, B .B. (2006). Community involvement in land regulation for informal settlements in Tanzania: A strategy for enhancing security of tenure in residential neighbourhood. *Habitat International*, 30, 1066-1081.
- Makinwa, A. P.K. (1988). Upgrading and Urban Squatter Settlement in Nigeria: the experiment in Olalele-Iponri. *Urban Services in Developing Countries*, 175-194.
- Muhammad, M. S., Kasim, R., Martin, D., Mohammed, M. I., & Adamu, D. (2015). Housing Quality in Segregated Residential Neighbourhoods in Bauchi Metropolis. *International Journal of Scientific and Research Publications*. 5(11) 432-440.
- National Housing Policy (NPC), (2006). Sustainability policy Retrieved from: <http://www.housingcorp.gov.uk>. [Assessed March, 5, 2009].
- National Housing Policy, (2012). Sustainable Housing for Sustainable cities: A policy framework for developing countries. Rerieved from: <http://www.housingcorp.gov.uk>. Accessed on October, 10, 2017.
- Olotuah, A.O. (2006). Housing Quality in Suburban Areas: An empirical study of Oba – Ile, Nigeria. *Dimensi Teknik Arsitektur*, 34(2), 133-137.
- Štreimikiene, D. (2014). Housing indicators for assessing quality of life in Lithuania. *Intellectual Economics*, 8(1), 25-41.