

Chapter One Introduction

1.1 Background to the Study

It is posited that majority of the global population reside in the urban areas¹. It is equally projected that this trend will continue in the years to come². According to United Nations Department of Economic and Social Affairs (UN DESA) report, more than half (around 55% or 4.2 billion people) of the world's population live in the cities and this is projected to grow to about 68% (6.5 billion people) by the year 2050³. In 2021, it was projected that about two-thirds (or 67%) of the world's population will live in the urban areas by 2030 and about 75% by 2050^{4,2}. World cities are rapidly growing as a result of increase due to urbanisation and natural birth^{5,6}. Studies have established that future increases in the world urban population are expected to be concentrated in few countries of Asia and Africa notably China, India and Nigeria; and that the trio will jointly account for about 35% of the projected growth^{3,1}. The Report further stated that by 2050, China, India and Nigeria would have added 255 million, 416 million and 189 million people respectively to the world's urban population³.

Several fundamental factors are responsible for the unprecedented growth in African urban population. The quest for socio-economic opportunities has continued to drive African rural dwellers to the cities. This rural-urban migration phenomenon has led to an increase in the urban population which resulted into challenges among which is housing deficits leading to the development of informal housing⁷. The combined effects of these challenges call for urgent attention through regularization of informality in the housing sector.

Due to growing population, poor economy, inadequate infrastructure and services, especially in the rural and peri-urban areas, cities are growing at an alarming rate across the world particularly in the Global South⁷. It is therefore becoming ever more difficult for city dwellers especially the poor ones to meet their housing needs. This resulted into the spread of self-built informal homes and the result is informality.

Generally, self-built informal homes have been a major source of affordable housing in the Global South especially among the urban poor⁷.

In Latin America, a prominent way of securing affordable housing accommodation for the urban poor is through informal means, thus leading to informality of settlements in the cities⁸. As the phenomenon persists in the region, almost 25% of the urban population lives in informal settlements. It was therefore noted that regularisation strategies designed to counter it have not been effective⁸.

Informal housing arises as a result of unregulated human activities through circumvention of the law by taking advantage of loopholes in housing policies and regulations⁷. Informal settlements have the following characteristics, among others - unsanitary conditions, poor quality housing and deficient infrastructure and amenities^{9,10}. These settlements accommodate most of the low-income urban poor. It is however argued that urban informal housing is not peculiar to the urban poor alone, illegal use of land is also prevalent among the urban affluents^{11,12}. It is therefore a misconception to assume that informal settlements are peopled entirely by the urban poor¹³. Moreover, informal settlements are also prevalent in the rural areas as well, a phenomenon that is a fallout of uncontrolled and inefficient planning policies.

In a similar vein, informal housing is not peculiar to the Global South alone, it is a phenomenon that is prevalent in the Global North as well^{14,15,16,13}. From studies, informal settlements are present in the United States and other advanced economies although they are less noticeable compared to what obtains in the Global South¹³. The phenomenon is gradually being noticed in the United States particularly in the urban peripheries of urbanite regions¹⁷. Similar views were also shared by other scholars where it is posited that informal housing is a growing mode of home ownership particularly along the Mexican border states of the United States¹⁷. Studies have also shown that this phenomenon has been toned down to give the impression of the absence of informally built homes in the developed countries especially the United States¹⁸.

Research work has equally revealed that problems of housing informality are prevalent in more than 20 countries of the Economic Commission of Europe (ECE) region with impacts on the lives of over 50 million people¹⁹.

According to United Nations Development Programme (UNDP), urbanisation is a population shift from rural to urban areas leading to decrease in the proportion of people living in the rural areas and the corresponding increase in the proportion of people living in the urban areas. Urbanisation is also a consequence of natural birth⁷. Natural birth is defined as the excess of a city's births over its deaths²⁰. Urbanisation also refers to the movement of people from rural to urban areas leading to increase in town and city population²¹. From the economic point of view, urbanisation is seen as the redistribution of population and a change in the economic balance between rural and urban areas. According to the National Library of Medicine, urbanisation is described as the process where a society is transformed from rural to urban way of life; through a gradual increase in the proportion of people of diverse cultures and backgrounds living in the urban areas²².

The degree of urbanisation, the designation criteria as well as the population threshold and distribution differ significantly across the globe²³. For example, an area is designated as an urban area in Sweden with as low as 200 inhabitants, 250 inhabitants in Denmark, and 1,000 inhabitants in Canada²⁰. The figure goes up to as high as 10,000 and 20,000 inhabitants in Greece and Nigeria respectively. These differences have prompted a new paradigm shift in the classification and reclassification of rural and urban areas globally through the concept of urban-rural continuum²³. Furthermore, to eliminate these differences, a new machine delineating tool has also been proposed where buildings within a space of sufficient density are grouped in an attempt to find a suitable definition for urban areas²⁴.

Globally, urbanisation is increasing rapidly resulting in pressure on urban amenities and, to the extent that sustainability of the environment is threatened²⁵. This is particularly true of cities in Africa, South East Asia,

Latin America and some Eastern European countries¹³. According to Drivers of Migration and Urbanisation in Africa Report published by the United Nations in 2017, it is posited that approximately 54% of the global population live in the cities. The report further projected that this figure may increase to 75% by the year 2050. According to a UN-Habitat report published in 2014, a projection of increase in urban dwellers by 60 million people every year was made. There is therefore the need to make urban provisions that will accommodate these increases.

Notwithstanding its various challenges, the United Nations Population Fund (UNFPA) posited that urbanisation is a necessary evil as it is obvious that no country will achieve significant economic growth in the industrial age without urbanisation. This position is also the view of other scholars^{26,27}. This school of thought is why urbanisation is seen as a “transformative force” that have assisted people to escape poverty through the opportunities provided from city lives²⁸. Thus, irrespective of its negative implications, the greatest significance of urbanisation is that it results in the development of the world economy as well as contribute to the emerging level of industrialization. This is because urbanisation has been “considered as an economic growth-growth promoting process”^{29,30}.

Urbanisation comes with its benefits; such as when rural dwellers migrate to the cities, the urbanisation so created leads to technological change and growth in productivity³¹. In spite of the benefits however, through urbanisation processes, cities globally are absorbing the world’s population leading to various socio-economic and environmental challenges confronting the cities³². Some of these are: inadequate and affordable housing leading to the emergence of informal housing, pollution of all sorts, peri-urban degradation, contribution to climatic change, unemployment, crimes and other vices^{32,33}.

As a result of this, urban dwellers, who are mostly contributors to the development of the economy, and who are in need of housing and other amenities that are unmet by the institutions usually opted for self-help alternatives outside the legal and institutional frameworks⁷. These self-help mechanisms have led to

increase in the number of informally-built homes, thereby contributing significantly to the development of slums and shanties across African cities. 'Informal settlements' as a term refer to the absence of a higher order governance of settlements which include land titling and a pre-determined urban plan³⁴.

Informal housing arises when buildings are developed outside institutional rules and regulations³⁵. This could be buildings without legal titles⁷. This could also be developments put up without permit or built in excess of permit³⁴. Contrary to popular beliefs, informal housing does not refer to the development of shanties and slums alone, rather the term also refers to houses and shelters put up illegally without the necessary title documents; these are often done outside laid down rules and institutional frameworks³⁵. It is either the structures are put up without legal rights to the land, or they are built without permit, or they are built in excess of permit and often without infrastructure and amenities^{7,9}. Informal settlements are usually products of self-help communities; this is because relevant codes, laws and regulations were not adhered to and often on self-help basis⁷. Though they are informal in terms of nature, characteristics and patterns, shanties and slums are by-products of unmanaged urbanisation³⁶.

Unmanaged urbanisation leads to the growth of cities especially in Africa. Over 25% of the world's fastest growing cities as a result of urbanisation are found in Africa³⁷. Nairobi-Kenya, Cape Town-South Africa and Lagos-Nigeria are three rapidly growing African cities with high rate of informal settlements created by urbanisation³⁸. The impacts of this on African cities include acute housing deficit, congestion and overcrowding, uncontrolled peri-urban sprawl and pollution of all sorts among others³⁹.

A number of related factors have driven the emergence of informal settlements, among which are population growth, rural-urban migration, deficit in affordable and legal housing stock, civil strife and conflicts, natural disasters, climate change, weak and failed urban planning policies and many more^{40,41}. In Nigeria, the phenomenon is similar. Apart from the inherent effect of urbanisation, the number of informally-built homes are on the increase due to a number of factors which include poor land tenure

systems, inadequate land management and administration mechanisms, corrupt housing institutions, poor development control measures, and absolute ignorance of many affluent home owners and other stakeholders.

Informally-built houses are those constructed without formal design, no standard specifications and no proper title documentations^{42,43}. Notable cities in Nigeria like Lagos, Ibadan, Port Harcourt, Abuja among others shared the same pattern of housing informality with large and informal settlements predominant in the inner city as well as the city peri-phery.

In the case of Abuja, Nigeria's Federal Capital Territory (FCT), notwithstanding the availability of a Master Plan and development timelines, the eventual movement to the city was spontaneous and did not align with the plan, thereby leading to the city's population explosion. With the resultant population influx, pressure increased on available urban resources including housing provision, infrastructure and amenities in the city center⁴⁴. Hence, new settlers resorted to self-help housing around the city's periphery like Lugbe, Mpape, Kuchingoro, Chika, Pyakassa, Karu, Nyanyan and other satellite towns. Many of the settlements along the Abuja Airport Road fall within this category. Secondly, the locals are not willing to let go their inherited traditional lands which the government had, before then, acquired, resulting in erection of housing outside the legal and planning requirements⁴².

The major drivers of informality in Nigeria are urbanisation through migration brought about by the quest for better living, as well as natural birth²⁰. This has resulted in population explosion in the cities, and the accompanying socio-economic as well as environmental challenges^{5,20}. Also, conflicts arising from insecurity in Nigeria since 2011 is a contributing factor to housing informality as seen in the proliferation of Internally Displaced People (IDP) camps.

Another prominent cause of informal housing in Nigeria is deficit in legal housing stock³⁶. Rapid urbanisation, rising population and uncoordinated housing institution are some of the identified critical

factors expanding the deficit in Nigerian legal housing stock³⁶. According to the Managing Director of the Federal Mortgage Bank of Nigeria (FMBN) in 2019, the country's housing deficit gap was put at about 22 million units. The bulk of these numbers are in the urban areas of Abuja, Lagos, Port-Harcourt, Ibadan and other major cities. The bank further argued that bridging this gap will require investment in the region of ₦6 trillion annually over a three- and half-year period⁴⁵. This is not expected to come from government funding alone; housing provision, especially for the vulnerable ones should be seen as a social amenity. It has been posited that even though housing provision is seen as a social amenity, provision of adequate and affordable housing cannot solely be achieved through government funding alone⁴⁶. There is therefore the need for collaborative efforts of all stakeholders in the housing sector to bridge the identified gaps in housing deficits.

Poor land tenure system is another cause of housing informality. By the Land Use Decree (now Act) of 1978, which was incorporated into Section 274 of the Federal Republic of Nigeria Constitution 1999 (as amended), all land within the territory of a state belong to that state and held in trust by the governor for the common use of all Nigerians. It is doubtful if the governors have properly managed the trust according to the provisions of the constitution.

Informal housing also arises as a result of high-level corruption and negative practices among development control enforcers. From observation, it appears the system itself favors informal development. This stems out of poor and ineffective planning control mechanisms⁴⁷. Research and observations have shown that the government, especially at the local government levels collects levies and dues from the illegal settlers thus giving the understanding of formalization.

1.2 Statement of the Problem

The global urban population is growing at an alarming rate, mainly due to urbanisation despite the accompanied socio-economic and environmental challenges. As at 2020, the world has a projected

population of 7.795 billion with about 55% of this being urban dwellers³. Studies further showed that the projection can increase to about 68% by the year 2050³. This phenomenon has created lots of socio-economic and environmental problems among which are the proliferation of informally-built houses in the cities and other urban centers. As urbanisation exacerbates in the Global South, informally-built houses are on the increase. About 70% of the world's population will live in the urban areas by 2050³, of which, between 30 to 60% will be accommodated in informal settlements³. It thus becomes important that sustainable and effective regularization strategies for informal housing development is vigorously pursued and adopted.

Informal housing/settlement brought about by various drivers is a phenomenon that is not abating, not only in the Global South but in the Global North as well^{16,15,48}. The understanding of the situation varied and often times have negative meanings^{49,50}. Some scholars see the phenomenon as a direct linkage with the urban poor^{35,26}. On the contrary, some others are of the opinion that this is not necessarily the case and that the affluents are also major stakeholders^{11,13}. Informality in housing extends beyond the urban poor but embraces the actions of various sectors and actors including the urban affluents as well⁵¹.

From earlier studies, it is apparent that previous regularization strategies aimed at formalization appears to be ineffective. Various authors have written on the concept of informal housing in Abuja and offered some solutions aimed at abatement^{42,52,53,54}. Observations however have it that the phenomenon is not abating despite their recommendations thus creating a gap requiring further studies.

While Adiukwu worked on the informal settlements of Abuja's urban fringes of Karu, Durumi, Nyanya and Mararaba from the point of view of poverty and homelessness, and the need to improve and upgrade the quality of the environment; Obiadi, Onochie and Uduak discussed informal settlements from the point of view of government neglect of Abuja Master Plan leading to "inadequate housing and perverted urbanisation" as a result of spontaneous relocation to the city in December 1991. The authors dwelt mainly

on the causes of informal settlements rather than their regularisation. On his part, Wahab avers that although dwellers of informal settlements are tagged with negative expressions, they nevertheless are important part of the urban community. There is therefore the need for improvement in the physical and environmental conditions of the dwellers⁵². The author made suggestions for the conscious efforts of all stakeholders for regularisation to ensure liveability in the cities. But how effective are the suggestions?

Moreover, Obiadi, Ezezue and Uduak dwelt on the improper implementation of Abuja Master Plan that resulted in rapid urbanisation of Abuja leading to housing deficit and other socio-economic and environmental challenges especially as it impacts on the urban poor. They went ahead to proffer solutions which include a suggestion of a connection between the formal and informal settlements and other stakeholders with the Central City Infrastructure to generate a varied economy and economic inclusiveness for dwellers of the city.

Despite all the suggestions aimed at regularization of informal settlements in Abuja, Nigeria, none of these has shown apparent effectiveness, thus resulting in a research gap to be filled. Therefore, this work will review similar works on the subject, examine the present circumstances, with the aim of identifying other gap or gaps in previously suggested regularization strategies, and make recommendations where necessary to fill the identified gap or gaps.

1.3 Aim and Objectives of the Study

1.3.1 Aim of the Study

The aim of the study is to assess the impacts of existing regularization strategies on informal housing in Abuja, Nigeria; examine the degree of effectiveness of the existing strategies and thereafter make positive recommendations capable of extenuating the effects of informal housing in the study area.

1.3.2 Objectives of the Study

The Specific Objectives are to:

1. assess the socio-economic attributes of the respondents and the housing characteristics in the study area;
2. examine the drivers of informal housing in the study area;
3. examine the level of regularisation of selected housing units in the study areas and explore the effectiveness of the adopted strategies.
4. examine the level of provision of municipal and social services in the study areas and to investigate the degree of satisfaction with such provisions.
5. evaluate the prevailing environmental and socio-economic challenges of informal housing in the study areas.
6. determine possible ways of improving on the existing strategies.

1.4 Research Questions

Specifically, this research work seeks to answer the following questions:

1. what are the socio-economic attributes of the respondents and what are the housing characteristics in the study areas?
2. what are the drivers of informal housing in the study areas?
3. what previous regularization strategies have been put in place in the study areas and how effective have these been?
4. what are the levels of provision of social services in the study areas and what are the degree of satisfaction with such services?
5. what are prevailing environmental and socio-economic challenges of informal housing in the study areas?
6. what possible ways can the existing strategies be improved upon to extenuate informal housing in the study areas?

This work will attempt to answer these and other questions that may arise during the course of investigation.

1.5 Significance of the Study

It is acknowledged that close to 70% of the world's population will live in the urban areas by 2050 of which, between 30 to 60% will be accommodated in informal settlements³. It is thus only reasonable that sustainable regularisation strategies for informal housing development that will be beneficial to the dwellers, the community at large and the government as policy makers need to be adopted.

Findings in this research will allow the informal settlers to benefit through tenure regularization as opposed to existing practice of eviction of illegal land occupants for reasons of none or defective titles. The informal settlers will also benefit through the provision of necessary social infrastructure brought about by focused urban renewal, bringing about improved social lives, health and general well-being. The community and the general public will benefit by the realization of a more secured neighborhood as opposed to what is obtainable in slums and shanties. Private service providers of urban services will benefit through identification of relevant services to target users.

To those in the academics, the research work will contribute to knowledge both in theory and practice in many different ways. First, the work will add to the existing literature on regularisation strategies for informal housing settlements in Abuja, Nigeria. Secondly, the findings of this research work will form the basis upon which policy makers, city authorities and academics can dwell upon to take informed decisions on regularisation of informal settlements in their respective areas.

As a political tool, it has been suggested that regularisation of informal settlements, if properly handled, will ensure social peace and stability in the cities⁵⁵. The work will therefore be beneficial to government as a political tool if its recommendations are followed. It will also benefit the government by enhancing local

economic resources through improvement in revenue generation, enhanced and coordinated collection of property taxes and levies formalized informal developments.

1.6 Scope of the Study

The Federal Capital Territory (FCT), covers a land area of about 7,315 square kilometers of which Abuja is a part. The spatial scope of this work is therefore limited to Abuja administratively known as Abuja Municipal Area Council (AMAC). This covers a land area of about 1,769 square kilometers. Within this area, the work was limited to a purposively selected five informal settlements – Garki Village, Tudunwada (Lugbe), Kuchingoro, Jabi and Gishiri Villages. The case studies were selected based on the prevailing pattern of housing informality and observed characteristics of the settlements.

1.7 The Study Area

The urban problems (housing deficits, development of slums, traffic congestion, high crime rates, pollution, land shortages leading to disputes and many more) experienced in Lagos led to the emergence of the Federal Capital Territory (FCT), Abuja, Nigeria. The city is located in the North Central part of Nigeria and has boundary with Niger State to the West and North West, Kaduna State to the North East, Nassarawa State to the East and South and Kogi State to the South West. The FCT has an approximate area of 7,315 square kilometers. Abuja has an altitude of 360 meters above sea level and has a cooler climate and less humidity compared to Lagos, the former capital of Nigeria. The centrality of the FCT on the map of Nigeria is shown in Appendix I.

The choice of the Federal Capital Territory led to the displacement of the original settlers of the territory either through resettlement or forced evictions. The resettlement and forced eviction challenges are major driving factors contributing to the emergence of housing informality in the Federal Capital Territory. Although compensation was claimed to have been paid to the original majority settlers (the Gbagyi tribe),

they still hold the believe that the FCT land (especially the peri-urban lands) is their heritage. This belief results into lots of challenges to real estate developers in the territory.

1.7.1 Geographical Features and Characteristics of the Study Area

Geographically, Abuja is centrally located at the centre of the country and lies within the North Central region of Nigeria having been carved out of the states bordering the region namely Kogi, Niger, Kaduna and Nasarawa States with a large mass of the land carved out of Niger State (Appendix I). The FCT is located North of the confluence of Rivers Niger and Benue and lies between Latitude 8.25°N and 9.20°N of the Equator and between Longitude 6.45°E and 7.39°E of the Greenwich Meridian. Abuja is situated within the savannah region with moderate climatic conditions. The map of the FCT in relation to Nigeria and Africa is shown in Appendix II.

The FCT is characterised by a 400-meter monolith rock called Aso Rock where the Presidential Complex, the National Assembly Complex and the Supreme Court (collectively referred to as “The Three Arms Zone”) are located. For administrative purposes, the FCT has six Area Councils with the Abuja Metropolitan Area Council (AMAC) serving as the FCT’s Administrative headquarters (Appendix III). Abuja is approximately 480 kilometers North East of Lagos and has an estimated population of 3,564,100 inhabitants (2016 estimation) with a density of 190 persons per square kilometer⁵⁶. The United Nations reported in 2019 that between the year 2000 and 2010, Abuja grew by 139.7% making it the fastest growing city in the world. The rapid urbanisation of the territory leads to various urban challenges being experienced including informal housing.

The FCT has an average annual temperature of 26.0°C and about 1,469mm of annual precipitation. In the FCT, the rainy season runs from March to November; the season is warm, oppressive and cloudy while the dry season which runs from November to March is hot and partly cloudy⁵⁶.

Although Hausa language is widely spoken, there are diverse ethnic groups in the FCT – nine in all (with the Gbagyi tribe being the most dominant). Some of these are listed in Appendix IV. The FCT has diverse cultures and way of life one of which is shown in Appendix V.

The major physical features of the FCT include the Presidential Complex, the National Assembly and the Supreme Court. Others include the 792-meter monolithic Zuma Rock, the City Gate (Appendix VI), the National Ecumenical Centre, the National Mosque, the Millennium Park, the International Conference Centre, MKO Abiola Stadium (Appendix VII) among others.

The territory is blessed with first class infrastructure facilities and amenities (Appendixes VI, VII, VIII). However, its rapid urbanisation and the subsequent population explosion have resulted in the proliferation of informal settlements especially in the peri-urban areas.

1.7.2 Case Study Areas

The scope of this work is limited to Abuja administratively known as Abuja Municipal Area Council (AMAC) covering a land area of approximately 1,769 square kilometers. The area has a boundary with Bwari Area Council to the North East, Gwagwalada to the West, Kuje to the South and Nasarawa State to the East as shown in Appendix III. Within this area, the work was limited to a purposively selected five informal settlements spread across the study area.

Tudunwada, Lugbe

Tudunwada is a large residential informal settlement at the outskirts of Abuja. The settlement is located in Lugbe District, an Abuja satellite town of approximately 50 square kilometre dotting the urban fringes of Abuja. Tudunwada is one of the settlements scattered around Lugbe District. The settlement shares boundary with Federal Housing Authority (FHA) Estate, and in close proximity with Voice of Nigeria (VON) transmission station. The settlement is inhabited by virtually all ethnic groupings in Nigeria. All the characteristics of informal settlements are manifested in the area. These include failed urban planning

policies as seen in poor quality building designs, plot sizes and inadequate plot set back. Another apparent characteristic is inadequate provision of infrastructure and amenities – poor and barely motorable roads and lack of drainage facilities (Appendix IX). The settlement thrives in crimes, prostitution and other social vices.

Kuchingoro

Kuchingoro is a slummy settlement located off Musa Yar' Ardua Expressway (Airport Road), Abuja. It is an informal settlement at the suburb of Abuja Municipal Area Council (AMAC). Across the expressway and opposite this settlement are posh residential estates. Like any other informal settlements in the FCT, the inhabitants of Kuchingoro are living in devastating conditions. This settlement booms in prostitution, corruption and other anti-social characteristics. Kuchingoro is made more popular with the presence of an Internally Displaced Persons (IDP) camp accommodating refugees from Adamawa, Borno, Kaduna and Plateau states. The population of the settlement, according to the Community Development Association (CDA) records, is in the region of 5,000 inhabitants excluding the residents of the IDP camp.

Jabi Village

Jabi village is an informal settlement located on the eastern side of Obafemi Awolowo way as one drive from Jabi Park towards Life Camp Junction. The village was believed to have been established around 1942. The original settlers were believed to have migrated from Garki village and Kado Kuchi to establish the settlement. Some of their kinsmen also migrated from Mabushi. Jabi village, an urban informal settlement is home to virtually all the ethnic groups in Nigeria and has a population of about 1,200 inhabitants. Both the current chief of the village and his deputy were born in the village. Like any other informal settlements, the village is characterised by failed planning policies in the form of disorganised developments as well as lacking adequate infrastructure/amenities (Appendix X). These include poor road and drainage

infrastructure, poor urban waste management and poor health infrastructure. Crime and other social menaces are equally prevalent in the community.

Garki Village

Garki village is a large expanse of informal housing settlement that is located between Ubiaja Crescent and Lagos Street, Garki area, Abuja. The dominant inhabitants are the traditional northern ethnic group and has a Hausa traditional ruler that oversees the day-to-day affairs of the community. According to the CDA and palace information, the settlement has a population of around 2,500 inhabitants. The settlement is notorious for sex-workers who usually dressed in conservative northern fashion. Like any other informal settlement in the FCT, this urban informal settlement is characterised by poor environmental sanitation, crime and other social vices, poor urban planning and apparently deficient in infrastructure and amenities good roads, drainage and provision of portable water (Appendix XI). Although the community is located within well-developed neighbourhood, the settlement is however under developed.

Gishiri Village

Gishiri village is an informal settlement community located opposite the popular National Insurance Corporation of Nigeria (NICON) Junction and close to the exclusive formal residential district of Maitama. Like any other informal settlements, this community is characterised by lack of basic infrastructure and amenities and failed urban planning policies. Crimes and other social threats are popular here. This settlement is home to about 1,500 inhabitants who are mainly mid and low-level civil servants, support staff and artisans.

1.7.3 Criteria for Selection of the Study Areas

Two major reasons informed the choice of Abuja as a case study for this research work. Firstly, the Federal Capital Territory (FCT), Abuja has been the new capital of Nigeria since 1991, and the rate of urbanisation has been tremendous making the city one of the fastest growing in the world³⁷. This situation results to

population explosion leading to the distortion of the Abuja Development Plan. The shortages in residential and business accommodation led to non-adherence to norms/land use regulations, uncoordinated developments and absence of proper legal titles to land. The emergence of these scenarios are major pointers of informal settlements. Forced eviction and demolition becomes so rampant as if other regularisation strategies are no longer urban planning tools in the city. It is therefore necessary to investigate the missing links.

Secondly, after due reconnaissance of the areas coupled with the researcher's knowledge of the terrain, he became more familiar with the challenges posed by the shortages of business and residential accommodation as a result of which residents of the city, especially the poor resorted to self-help in the urban peri-phery. This self-help mechanism often led to forced eviction and demolition as the only option of regularisation.

1.8 Limitation of the Study

Limitation encountered when carrying out this research work had to do with bottlenecks in data collection which was cumbersome. Data were not available in some instances as some people were not willing to volunteer information freely. On policy issues, getting information was difficult as most government papers were classified despite the operation of the Freedom of Information (FOI) bill. Another important limitation was finance. Collection and analysis of data on a work of this nature require substantial human and financial resources which, in most cases, are not available. Another limitation to the study is lack of awareness, language barrier and illiteracy among the locals in some of the study areas.

Notwithstanding the challenges, the author has been able to work around this by adopting some strategies which include: adequate and supervised use of trained research assistants in data collection, use of locals to circumvent language barriers and illiteracy especially in the city's periphery, and use of influencers through networking with friends and colleagues in government establishments. In all, the author has been able to

maximally utilize the available materials obtained for the analyses, findings and recommendations herein presented.

1.9 Operational Definition of Terms

Characteristics of Informal Housing: In terms of characteristics, this is defined as a settlement with poor access to safe water and sanitation, poor quality of housing, inadequate social services and amenities, overcrowding, tenure insecurity among others. It is an area characterised by social services and amenities deficits as well as failed planning policies.

Housing: For the purpose of this work, housing is seen as a structure to provide rest, shelter, safety from adverse weather conditions and warmth. For these to happen, the quality of the environment is important.

Informal Housing: Informal Housing refers to buildings that are developed outside institutional rules and regulations and characterised by infrastructure deficiency, failed planning policies and lacks security of tenure. Informal housing is a product of self-help developments devoid of government presence in terms of infrastructure and amenities, and dwellers do not adhere to building codes, laws and regulations. In addition, it is an area characterised by deficient state control measures - buildings are erected on lands for which the dwellers do not have legal rights and construction do not comply with planning and building codes. It is a housing settlement where the dwellers believed they are outside official government control, rules, regulations as they are not afforded protection by the authorities. For the purpose of this work, Informal housing will assume any of the above definitions.

Legal Housing Stock: Housing stock here refers to the number of houses and apartments in a given area. The houses and apartments become legal housing stock when the development conform with building codes and other building regulations including security of tenure.

Peri-Urban Area: This is an area, a precinct of changeover from rural to urban land uses located immediately next to a city or urban center and characterized by a mixture of rural and urban settings. For

the purpose of this work and where applicable, this will be taken to be a distance of between 5 to 15 kilometers beyond the urban fringes.

Peri-Urbanisation: This is a process whereby rural areas of urban fringes of established cities are transformed and urbanized in physical and socio-economic characters, usually in a steady and progressing form.

Regularisation Strategies: Strategies are defined as set of approaches or methods or plan of actions to be adopted in a bid to solve a given problem. For the purpose of this work, these are approaches or methods adopted to extenuate the challenges of housing informality.

Self-help Housing: Self-help housing arises when individual household takes responsibility for the construction of their housing units.

Urban Area: The urban area is defined in the Nigerian context as a neighborhood consisting of the city center and inner urban and having a population in excess of 20,000 inhabitants. By regulation, all local government headquarters in Nigeria are designated as urban centers.

Urbanisation: This represents rural-urban and inter-city movement of people resulting in population growth at the point of destination usually the urban areas. Population growth as a result of natural birth is also a form of urbanisation.

Urban Degradation: This refers to the debasement of the urban/peri-urban areas usually as a result of damage to the land through human interference such as deforestation, pollution of all sorts and overpopulation among others leading to alteration in the environmental balance.

1.10 Thesis Outline

Chapter One is a general introduction that sets out necessary information essential to understanding the concept of the subject of study. The chapter further states the research problems and questions, the aim and objectives of the research as well as the significance of the investigation among others. The chapter also gives a detailed insight into the case study areas.

Chapter Two reviewed previous works relevant to the subject under investigation. The purpose is to provide theoretical background, validity and conceptual framework for the investigation.

Chapter Three discussed in details the research design and methodology adopted in the work, detailed explanation of the research tools as well as insight into the methods and tools of analysis. This chapter formed the foundation upon which findings presented in chapter four were obtained.

Chapter Four is the findings and discussions section where interpretations of analysed data were carried out. The thesis ended in Chapter Five with conclusion and recommendations.

Endnotes

1. M. Awumbila, *Drivers of Migration and Urbanisation in Africa: Key Trends and Issues*. **Expert Group Meeting, New York: The United Nations**, 2017.
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Chapter Two Literature Review

2.1 Conceptual Review

The focus of this chapter is on the conceptual as well as the empirical review of the topic. These are urbanisation, population growth, housing challenges, housing deficit, informal housing. The chapter also reviewed applicable theories necessary to understand the phenomenon under discussion. These include theories of housing, urbanisation and informality as they all relate to informal housing. The chapter equally reviewed the existing regularization strategies in the study area as well as examination of policy response(s) to the phenomenon by various governments across Africa. Consequently, the chapter reviewed previous works relevant and appropriate to the current work under research by providing a theoretical credibility as well as conceptual background for the research questions in this study. The chapter provides a literature background for the conceptualization and theoretical framework on the subject from previous works on informal housing settlements. The chapter enabled the researcher to identify gap(s) in previous research works which relate to regularization strategies of informal housing in the study area. The research framework was subsequently formed through a review of various literature.

Approximately 13% of the global population dwell in informal settlements having the appearances of minimum or non-existing state control and protection, poor planning and insufficient infrastructure, amenities and services¹. Informal settlement is not an emerging issue that is prevalent only in Africa, Asia

and Latin American countries alone, it is a phenomenon that is found in the Global North². Further attesting to the prevalence of informal settlements in the Global North, a sizeable portion of about 863 million people living in informal settlements globally are located in the United Nations Economic Commission of Europe (UNECE) region³. For decades, various scholars have delved on the subject of housing informality worldwide particularly in the Global South; its drivers, challenges and the need for regularization in view of its socio-economic and environmental implications was also examined^{4,5,3}. Research interest in this area is growing in view of the unprecedented urbanisation trends across the world forcing majority of the city dwellers to live in informal settlements⁶.

The concept of housing informality cannot be fully comprehended without establishing the nexus that exists between Urbanisation, Population Growth, Housing Challenges/Deficits and Housing Informality. This is illustrated in Figure 2.1. As urbanisation increases, there is also growth in urban population. This leads to many urban challenges including housing deficits brought about by unmet housing needs. Urban dwellers in need of accommodation resort to self-help developments. This results in housing informality.



Figure 2.1: Nexus Between Major Concepts of the Topic
Source: Author's Creation, (2023)

2.1.1 Housing Regularisation

Cities around the world are experiencing rapid population growth and physical urban expansion as a result of urbanisation especially in the Global South. It is projected that total population of urban dwellers in the region will double nearly every ten years⁷. This high rate of urban growth coupled with inadequate planning has resulted in housing deficit, poor and noticeably overstrained social infrastructure and amenities leading to challenges of slum development in most cities⁸.

The challenge of slum development in most cities globally is appalling and necessitate concerted efforts of regularisation from different stakeholders. Consequently, in 2015, 195 countries of the world, under the aegis of the UNDP, committed themselves to 17 life changing goals otherwise known as Sustainable Development Goals (SDGs). Specifically, Goal 11 is aimed at Sustainable Cities and Communities and explicitly calls “for a future in which cities provide opportunities for all, with access to basic services, energy, housing, transportation and more”⁹.

Self-help housing is not abating in Africa because informally-built homes has continued to remain the major source of affordable housing for the low income families despite several regularisation attempts¹⁰. As a result of the magnitude of informal settlements in African cities, the various governments have embarked on various initiatives to address the growing phenomenon¹¹. Various governments’ responses to challenges of housing informality varied depending on the perception of individual nations¹². In some African countries, government are indifference on the existence of informal settlements while some resort to eviction and outright demolition of such settlements. These strategies have been found to be ineffective in addressing the challenges associated with informal settlements¹².

In Ghana and Kenya for example, scholars have made case for slum upgrading either in-situ or by relocation to other sites as opposed to eviction and outright demolition. Researchers agreed that this strategy is deemed more successful¹³. In Zambia, stakeholders’ participation in informal settlement upgrading was suggested as a more effective strategy¹⁴. Similarly in Nigeria, an incremental pro-poor neighbourhood planning approaches as a regularisation strategy was demonstrated in the upgrading of the informal settlement of Eagle Island, Port-Harcourt, Nigeria¹⁵. This corroborated earlier research findings eviction and outright demolition is not effective in addressing the housing informality issues¹².

The government of Tanzania made similar planning approach through the informal settlement of Makongo Juu in Dar es Salaam, The initiative was rejected by the settlers on the basis of non-participatory, thus

making case for the participatory involvement of the settlers¹⁶. In spite of the fact that government accepted the request of the settlers, there are still some weaknesses which make government regulation necessary even in the face of participatory regularisation¹⁶.

Furthermore, the government of propose the adoption of Community Land Trust model as a response to housing informality in Africa¹⁰. This strategy was demonstrated in the Tanzania-Bondeni Community Land Trust of the 1990s and also in the Global South generally because of the obvious benefits¹⁷. On the contrary, slum clearance through forced eviction and demolition are widely used as a regularisation strategy in Nigeria¹⁸. It was however acknowledged that forced evictions are violations of human rights and therefore incompatible with international laws suggesting that this strategy is not effective^{19,20}. Several other alternative strategies have been proposed, for example, slum upgrading which is widely believed to be a better alternative to eviction and demolition. Another strategy that ensures improved infrastructure and tenure security, poverty alleviation and economic growth is the one done through land titling²¹. Scholars have however observed that debates on this strategy is progressing and require more studies²². It is further posited that land titling will not necessarily reduce poverty in informal settlements using Lagos, Nigeria as a case study²³. This points to the likely ineffectiveness of this strategy.

Generally, various recommendations aimed at curtailing the unabated growth of informal settlements have been suggested²⁴. Such recommendations include: containment of city sprawl, creation of tenure systems through land pooling and replotting, pursue effective and participatory regularisation of the settlements, implementation of localised planning and effective information management system, and identification of appropriate housing types for the city's future. In addition to these, other recommendations include provision of variety of affordable housing types with flexible payment options, investment in education, health care and social services in addition to provision of infrastructure, engagement of the community in

participatory planning and security of land and housing in anticipation of future migration and population growth.

The regularisation strategies suggested are noted to be ineffective. To achieve the realization of United Nations SDG 11, issues concerning slum development and effective strategies towards its upgrading, revitalization and prevention from further deterioration needs to be visited⁸.

Bottom-up regularisation of informal settlements has also been suggested. On this strategy, several dwellers of informal settlements took up some planning tasks in order to regularise their informal dwellings²⁵. Such tasks, termed “non-public planning” or “inverse planning” involves drawing a detailed neighborhood planning aimed at dealing with the deficiencies of the planning authority. This initiative informed the decision of the inhabitants of Polana Canico in Maputo to develop detailed plan of their settlement²⁵. This initiative was aimed at obtaining legal titles for the land they occupy informally towards regularisation²⁵. The inverse planning mechanism obviously has its own flaws.

2.1.2 Informal Housing

The concept of informality is a complex phenomenon that lacks unified definition²⁶. Some literature conceptualized that formality is the norm while informality is departure from the norm despite robust arguments against such belief²⁷.

The first attempt at explaining the concept was by John Turner in 1963 where “informal urbanisation” is perceived as self-made housing solution for housing deficit for the urban poor especially in the Global South²⁸. John Turner’s view was geared towards self-built settlements in the midst of housing deficits. Keith Hart’s view in 1973 tilted towards economic activities where the dualistic approach of formality and informality were introduced with opposing characteristics²⁶.

Various definitions have been advanced in an attempt to explain the concept of informal settlements. These include:

- i. Residential areas where housing units are developed on land to which the occupants have no legal claim, or which they occupy illegally;
- ii. Areas with unregulated informal housing and unplanned settlements; areas where houses are developed without regard to the existing planning and building regulations²⁹.

Informal settlements are also described as dwellings constructed often without specifications, formal design, absence of rules and regulations controlling urban developments and usually without access to public utilities and services³⁰. Moreover, the phenomenon is also seen as a practice leading to the absence of a higher order governing the settlements as for example, effective urban governance, land titling and a pre-determined urban plan²⁴.

It is important to state the difference between slums, informal settlements and squatter camps. Slum refers to the physical condition of the dwellings that have shown remarkable deterioration, unhygienic buildings, poverty and social ineptitude. On the other hand, informal settlements or squatter camps refer to the legal status of the dwellings; they settle on land for which they do not have legal permission to do so by the land owners³¹. The situation also refers to areas with unregulated informal housing and unplanned settlements; areas where houses are developed without regard to the existing planning and building regulations²⁹. Slums are therefore downgraded version of informal settlements or squatter camps.

Apart from housing informality, literature have also identified economic informality which is a common feature of informal settlements. In addition, recent literature has also established that informality embrace behavioral, social/governance components, and informal politics^{32,33}. While the economy, employment and poverty were at the center of discussions of informality in the 1970s, literature extended the discussion to embrace physical development issues and non-economic aspects of rural and urban settlements^{34,35}.

Perspectives of Informal Housing

Low-income earners constitute larger proportion of urban dwellers across African cities. They are financially excluded from formal housing arrangements forcing them to live in unregulated informal environments³⁶. The growing study of the emergence of housing informality has led to the various and usually confusing perspectives to the formation and continued existence of informal housing³⁷. Economic, socio-political, post-colonial and cultural perspectives are identified as the major perspectives of informal housing. In addition, a case for an updated categorization identified as institutional perspective was made³⁷. Accordingly, this new perception encompasses “New-Institutionalist notions and understand the informal occupiers as agents who mobilises within regulated but not pre-determined institutional and legal settings”³⁷.

Economic factors that led to the emergence of informal housing include land prices which are not affordable, low level of income as a result of unemployment and underemployment usually among the urban poor³⁸. These factors contribute to relocation of urban poor towards informal settlements at the urban peri-phery. Urban segregation as a result of differences in societal status as well as educational attainment are part of social factors that have influenced living in informal settlement^{39,38}. Religious affiliation, ethnicity, family and marriage ties are some cultural indices that stimulate living in informal settlements.

Drivers of Informal Housing

The factors and actors that contribute to the rise of informal settlements are varied and multifaceted. These factors are attributed to different schools of thoughts⁴⁰. A major actor in the rise of informal settlements is the actions of individuals through migration^{41,42}. Similarly, another major actor is government through its regulatory frameworks and policies, and inability to satisfy basic needs of urban dwellers especially housing^{43,44,45,46}.

Researchers have also identified other critically related factors driving the formation of informal settlements. These include rapid urbanisation through recurrent rural-urban migration and high natural

birth^{47,42}. Other factors include ineffective housing policies, inefficient public administration, inappropriate planning/inadequate land administration tools, poverty, war and natural disasters among others⁴⁵.

Informal settlements are also a consequence of the failure of the institutions in charge of land administration and planning in addressing the needs of the people. This failure leads to their relocation, usually to the urban peri-phery, to satisfy their housing needs which usually remained unmet by the government^{30,4548}. This explains the emergence of many of the informal settlements in and around Abuja, Nigeria. Some of these settlements include Mpape, Tudunwada, Kuchingoro, Chika Village, Garki Village, Pyakassa among others.

As people cannot satisfy their housing needs through the legal housing market, informal settlements emerged as the main providers of housing⁴⁹. This unfiltered system constitutes social and environmental vulnerabilities, as well as negatively affects city economies; in addition to violating land and property rights^{50,51}. As a result of limitation in the provision of public services and infrastructure, a lot of pressure is thus put on public resources because of rapidly growing urban population brought about by massive urbanisation. Therefore, self-help housing emerged both as a symptom and potential solution to urban housing challenges⁴⁸.

The followings are the major factors causing the rise of informal settlements in Abuja, Nigeria³⁰.

- i. Disequilibrium between demand and supply of housing leading to deficit. This a fallout of rapid urbanisation and high level of poverty among the city dwellers;
- ii. Failure of government to cater for the housing needs of the non-income and low-income dwellers who are in the majority;
- iii. Inability of the system to accord the housing sector its due priority through lopsided policies and unhealthy competition with other sectors; and

- iv. Poor housing and urban development policies that favor production of formal housing. This often leads to financialization of housing making it unaffordable to the majority.

2.2 Theoretical Framework

2.2.1 Housing Theories

There is inadequacy of unified definition for the concept of housing which goes beyond a mere structure or enclosure called houses⁵². Scholars have described housing as an enclosure or structure that accommodates humans for shelter and other social needs⁵³. For the purpose of this work, housing will be seen as described above and beyond to include provision of adequate infrastructural facilities/amenities that will ensure liveability. Accordingly, housing relates to such things as provision of basic standards of living, quality of life and family's future expectations⁵². For the purpose of this research, theories relating to housing will be considered in the following contexts:

Regulated informal housing

Unregulated informal housing

It is posited that housing theories are logically connected to Marxism, Radicalism and Liberalism; and based on ideology and identity⁵³. Accordingly, the work will consider the following theories of housing:

Marxist or Radical Housing Theory

This theory was developed by Karl Marx and Friedrich Engels during the period of 1844 and 1848. It was developed as a theory of capitalist social change, and based on economic aspect of human life. This theory assumed that everyone is, by right, entitled to decent housing, their economic status notwithstanding. The theory is of importance in housing studies where analyses of land use, rented housing and worsening housing situations are of research interest^{54,55}. According to the Marxist opinion, housing is viewed from three fundamental perspectives⁵⁶:

- i. Housing is a necessary good, a means of subsistence essential as a factor of production.
- ii. Housing is a fixed good for which a fundamental component is land, the use of which is preserved by law.
- iii. Housing has a use as well as exchange value, the use of which is open to those who can pay for it.

Consequently, the theory encourages exploitation by wealthy and influential private developers whose development is driven by profit maximisation⁵³. Accordingly, this theory is the driving force for profit driven housing development by private developers in major urban centers in Nigeria⁵³. This is particularly true of Abuja, the Federal Capital Territory. In most cases, the products of such developments are not affordable to the low-income urban dwellers; they thereby resort to self-help housing developments.

Non-Marxist/Liberal Housing Theory

This theory perceives housing as a vibrant element of life that, because of the materials (building materials), elements and services (infrastructure services) it uses, the dwelling unit reflects the life of the residents, the culture and backgrounds of every social group⁵⁶. The liberal theory also dwells on the socio-economic disparities of the family, on which the individual housing needs depend⁵⁴.

The theory acknowledges the functional importance of housing in a neighborhood which functions have direct consequences on the residents⁵³. Furthermore, the theory acknowledges that freedom to build and own a house is a fulfillment of one of the most important needs of man. The standard of the dwelling, and its impacts on the life of the residents and the whole environment is usually overlooked making the family's financial status a determining factor.

This theory explains why humans strive to get involved in the building of their houses not minding flouting all known rules and regulations in the process leading to the proliferation of informal settlements and

squatter camps⁵⁷. This theory is at the center of most self-help housing development in majority of the urban centers in Nigeria, including Abuja.

Positivists Housing Theory

This theory was developed by Auguste Comte and defines housing from socio-economic and environmental perspectives. Positivists see housing from three dimensions⁵⁶.

- i. From the economic dimension on which physical improvement as well as the economic value depend;
- ii. The measurable health situation perspective within the dwelling units;
- iii. The involvement of government in ensuring that housing units are available in adequate quantities and qualities to the individuals at affordable prices.

Consequently, individual households' socio-economic status are key factors in determining their housing needs. It laid emphasis on housing quality as well as adequate provision of basic services like water, waste management and environmental quality⁵³. This theory is a major driving force behind social housing development policies embarked upon by various tiers of governments.

2.2.2 Informality Theories

The discussions on the theoretical framework of informality have been raging for decades prompting ideas from various scholars^{58,44,43}. From these, literature pointed out five approaches that are helpful in the explanation of the meaning, causes, features and policy recommendations aimed at curtailing informality.

The Dualistic Approach proposed by Keith Hart draws a distinction between formal and informal income opportunities. The argument is based on wage earning and self-employment⁵⁸. According to this theory, the relationship between 'formal' and 'informal' sectors is based on the concept of dualism where 'formal' and 'informal' sectors are considered to be wholly opposed to each other but they exist together as part of the global economy^{58,26}.

The theory opined that there is a distinction between two existing economic sectors – the formal being normal, modern and well organized while the informal one is defined as being unstable, ancient and inefficient²⁶. While concluding, Hart noted that the formal sector operates according to the societal norm (reliable and stable) while the informal goes against the norm (risky and unreliable). The dualists propose growth-oriented policies and expansion of modern working sector as policy recommendations.

The inability of the Dualistic Approach to explain the spread of informality globally both in poor and affluent societies resulted to the Structuralist Approach. The structuralists led by Castells and Portes based their arguments on underlying economic processes with the belief that the differences between formality and informality are artificial because the institutions create and modify the distinctions.

The authors believed in a single economy engaging in formal and informal activities and argued that both depend on each other. According to the structuralists, urban informality is prevalent in both the highbrow and low-end neighborhoods of the urban center²⁶. Labour protection policies, support for entrepreneurship and innovation are some of the policy recommendations proposed by the structuralists.

The Legalistic Approach made popular by Hernando de Soto is concerned with regulatory systems and rejected the idea of equating informality with poverty and argued further that the formal sector disregards the informal one²⁶. The proponents of the theory were of the opinion that even the poorest family have financial capital but informal tenure system prevents them from having access to formal economic opportunities⁵⁹. Furthermore, the legalists were of the opinion that the government was responsible for discriminatory rules and regulations that favored some economic groups against the other thereby hindering the growth of competition²⁶.

It has been posited that informality forced macro-entrepreneurs to work informally in order to moderate the high cost and regulatory requirements to function in the formal sector⁴⁴. In urban planning, deficient land

use and zoning regulations are considered important causes of housing informality and usually led to decrease in formal housing and encourage the proliferation of informal settlements and squatter camps⁶⁰.

The legalists conclude that the government, through urban regulations, constitute obstacles that pushes firms and citizens on the way of informality²⁶. The theory proposed more accessible property rights, simplified bureaucratic system, deregulation among others as some of the policy recommendations.

Maloney and Levenson are the proponents of the Voluntarists view and believed that informality is a choice, a voluntary decision to avoid regulation and taxes and not necessarily as a result of overregulation. The decision to either participate or not in societal institutions is a choice⁶¹. Accordingly, informality is a voluntary decision targeted to increase competition through the avoidance of taxes and regulations⁶¹.

Moreover, the voluntarists are further of the opinion that every individual could predict government policies and adjust to them by choice. This theory is therefore behind the choice of adopting informal housing by Abuja informal settlements dwellers. This choice is however necessitated by affordability. Reduction in taxes and enforcement, where appropriate, are some of the policy recommendations by the Voluntarists.

Urban planning is the concern of the Critical Governance Approach proponents. The theory recognised that the planning system is one of the driving forces of housing informality due to its discriminatory nature²⁶.

According to the approach, informality defines the state since the state uses its powers to modify the limits of formality and informality⁶². In all, the critical governance approach is temporary and frequently changing thereby defiling the state powers but modifying institutions²⁶. Planning system reform is a major policy recommendation by the proponents of the critical governance approach.

The approaches discussed above historically guided discussions on the phenomenon of informality as summarized in Table 2.1.

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Table 2.1: Summary of Informality Approaches

Approach	Features of Informality	Causes of Informality	Policy Recommendations	Literature Authority
Dualistic Approach	Unstable, risky, archaic, unpredictable, low productivity among others	Population growth without expansion of the industrial and productive sectors	Growth-oriented policies, expansion of the modern working sector	Hart, (1973)
Structuralist Approach	Low-cost labour, highly competitive and exploitative	Global capitalism, government regulation of activities	Labour protection policies, support for entrepreneurships and innovation	Castells and Portes, (1989)
Legalist Approach	Reactionary, lack of creativity	Overregulation by the government, bureaucracy	Liberalization, privatization, deregulation among others	De Soto, (2000)
Voluntarist Approach	Convenient, Strategic	Inefficient welfare system	Reduce taxation and improve in the quality of formal institutions,	Maloney and Levenson, (1998)

Critical Governance Approach	Marginalized, discriminated, organized, contradictory	Discriminatory and discretionary nature of the planning system	enforcement where applicable Planning reforms	system	Roy, (2005)
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Source:²⁶

The theoretical framework of informality is summarized as follows – the dualistic approach is concerned with the nexus between wage earning and self-employment, the legalists focused on regulatory systems. While the structuralists concerned themselves with economic processes, individual choice is the main concern of the voluntarists. Finally, urban planning is at the center of the critical governance approach. In all these approaches, scholars have identified the causes of housing informality either through the features of the housing system, excessive land use, nature of the tenure and zoning/planning regulations and self-built housing⁴⁹.

2.2.3 Urbanisation Theories

Scholars have derived several theories on the drivers of urbanisation and the emergence of towns and cities. Drivers of urbanisation are linked to several ideas and theories. From available literature on theories of urbanisation, some thoughts cut between each other while some emerge from other theories⁴².

To further enhance understanding of the drivers and subsequent emergence of urbanisation, the research considered some of the theories relevant to the subject of discussion.

The proponents of the Western Liberal/Modernisation idea view urbanisation as a product of development and the emergence of new things through industrialisation, technological innovation and cultural integration⁴². Rural dwellers are drawn towards the cities through the availability of jobs and other socio-economic services⁶³. This approach further states that employment from industries draws people from the

rural areas to the urban centers which is supported by the theories of the “rural push” and “urban pull” factors^{63,42}.

Sociologists Ernest Burgess and Robert Park proposed the Urban Ecological or Self-Generated Theory of Urbanisation in the 1920s where it was asserted that for urbanisation to occur, two conditions must be present. The first condition is the generation of surplus products and services needed to support urban dwellers not engaged in agricultural services⁴². The second condition is the accomplishment of a substantial level of social development that allows urban dwellers to achieve success while working independently⁴¹. This theory is valid for the rural-urban migration form of urbanisation where people move to the cities in search of factory jobs⁴². Furthermore, the theory identified industrialisation as the main driver of rural migration to the urban centers⁴². This theory supports the urbanisation of Abuja because people migrate to the city in search of white-collar jobs and other ancillary services.

In the views of the Marxist Capitalist or Dependency/World-System proponents, urbanisation theorists see urbanisation as a product of capitalism⁶³. It is believed that this theory came about through intentional force or in-built principle of capitalism thereby creating a capitalist development pattern in the societies⁴². The capitalists made the decisions that will favour the growth of their wealth and therefore influence the movement of people from the rural areas to the urban areas in a bid to equip their factories with cheap labour⁶³.

In the view of the Urban Bias theorists, urbanisation is a function of developmental inequalities between the rural and the urban centers⁴². It is further contended that the bias in favour of the urban dwellers created gaps in the area of consumption, wage and productivity levels thereby necessitating the migration of rural settlers to the cities⁴². This theory is valid in Abuja and Nigeria generally where developmental projects are located in the state capitals, local government headquarters and other major cities in apparent bias against the rural areas.

2.3 Review of Empirical Studies

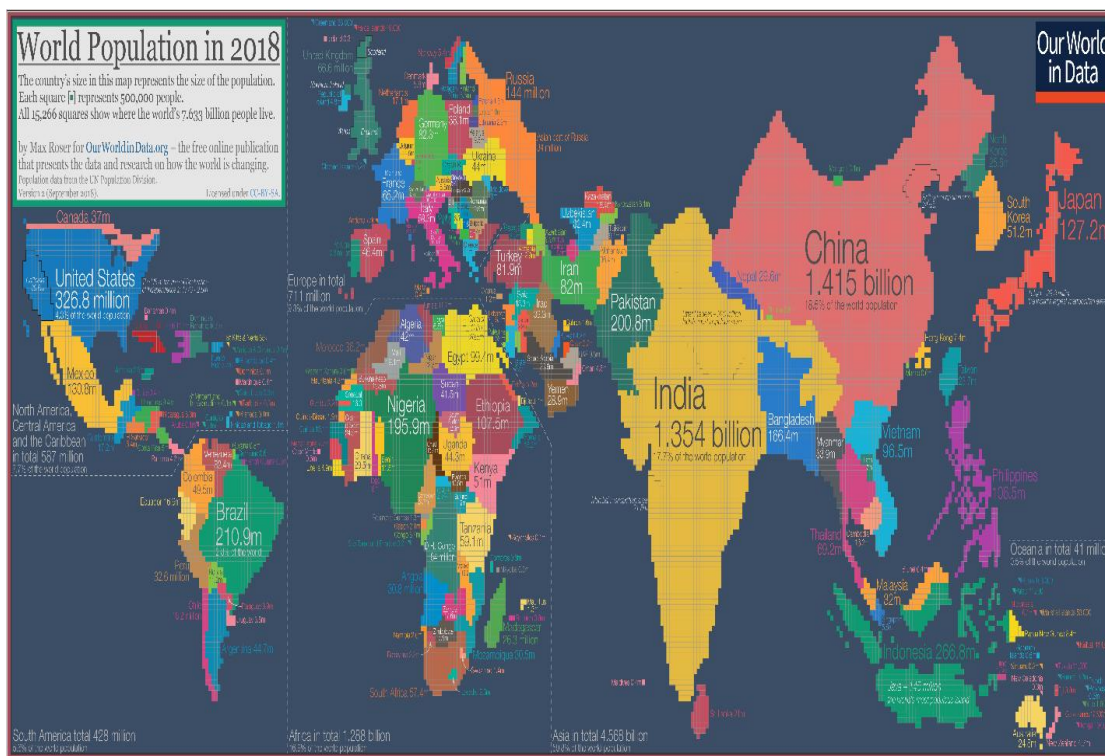
2.3.1 Population: Meaning and Trend

The concept of population is not exclusive to a particular field of study, and it generates different definitions and meanings depending on the context from which it is viewed. In the natural sciences for example, population is seen as a group used generally in a context where it signifies the group of individuals of the same species. In biological and ecological sciences, population is taken as a group of organisms of a particular specie that interbreed and live in the same place and at the same time as for example human population, population of lions in the game or population of mango trees in the garden and so on. In statistics, population is seen as an assemblage of information where a statistical data is drawn.

Generally, and for the purpose of this research, population will be defined as a group of people inhabiting a geographical territory at a particular time or range of time. Thus, reference can be made to the World Population 2020, American Population 2000-2020, Africa's Population projection 2020-2050 and so on. Population in this context can also be perceived as a census of the number of people or residents in a political or geographical boundary such as town, city or a nation as, for example, the population of Gwagwalada town, the population of Abuja City or the population of Nigeria at a particular time or range of time. This is achieved through a comprehensive headcount termed "population census" as, for example, Nigeria Population Census, 2006. Also, for the purpose of this research, population will also be taken as the unit of investigation as, for example, the population of housing units in the study areas.

The global population was a fraction of what it is today, but in the last few centuries, it has continued to grow amid astonishing changes⁶⁴. Some of the growths are observed at alarming rate as evidenced by some countries of Africa South of the Sahara; and some at a slower pace as evidenced in some of the most advanced countries. Projections have it that population will decrease in size in Asia, Latin America and the Caribbean, Europe and North America at the end of the century due mainly to reduced levels of fertility⁶⁵.

Studies have also shown that global population projection could rise to 8.5 billion in 2030 from the estimation of 7.7 billion in 2019; 9.7 billion in 2050 and 10.9 billion by the turn of the century⁶⁵.



Approximately 47% of these figures (that is, about 643.9 million people) live in the urban centers⁶⁵. According to the United Nations Department of Economic and Social Affairs (UN DESA), Africa's portion of the global population grew from 9% in 1950 to the present estimate of 17.2% in 2021, and this is projected to reach nearly 39.4% by the end of the century. According to The World Bank in 2020, Africa's fertility rate is put at 4.7% as at 2018, the highest in the world; this is suggesting that there will be more births in the continent. Obviously, this demography comes with its several challenges.

Table 2.2: Africa's Population Growth: 2000 – 2020

Year	Population (Millions)	Growth Rate (%)
2000	810.98	2.46
2005	916.15	2.50
2010	1,039.30	2.59
2015	1,182.44	2.60
2016	1,213.04	2.59
2017	1,244.22	2.57
2018	1,275.92	2.55
2019	1,308.06	2.52
2020	1,340.60	2.49

Source:⁶⁶

2.3.2 Urbanisation: Trend, Causes and Challenges

Urbanisation is a process that leads to increase in the city population as a result of migration of people from rural areas to urban areas and the resultant changes to the urban settings^{39,67}. This is due to many factors which include globalization, industrialisation, economic development and modernisation of cities among others⁶⁸. It is the immediate outcome of movement of population from least developed (rural areas) to developed (urban areas or towns or cities). Urbanisation is seen to be mostly poverty driven and findings have it that urbanisation results in the movement of the poorest, low-income and defenseless people into large, commonly distressed informal settlements^{32,33}. However, inter-city migration might not necessarily

be as a result of poverty, as job relocation, educational pursuit among others might be factors for consideration.

Some scholars extended the definition of urbanisation to include not only human population movement but also movement of their domestic animals³⁹.

Urbanisation could also be a consequence of natural birth⁵. Natural birth is defined as excess of a city's births over deaths⁴². This phenomenon has long been associated with human development and progress and is widely distributed globally, and having enormous impacts on urban settings and consequently city lives³⁹. The phenomenon is not abating as many people are still migrating, on a daily basis, from the rural to urban areas in search of employment and quest for better living conditions⁶⁹.

Urbanisation is not just a modern phenomenon; it is a historic change in human social roots globally where rural culture is being transformed into urban culture⁶⁹. It is further posited that urbanisation is closely linked with modernisation and industrialisation⁷⁰. It has been argued that urbanisation is an unavoidable process globally, a 'necessary evil' as no meaningful economic development will occur without urbanisation^{70,6}.

It is further argued that rural settings must go through urbanisation as a prerequisite to transforming them into modern and developed societies⁷¹. Furthermore, urbanisation is seen as a tool for socio-economic and political progress, a phenomenon that is a process that leads to the growth of cities in terms of industrialisation and economic development⁷¹.

Trend of Urbanisation

Urbanisation is a phenomenon that is still experiencing rapid growth in both the developed and the emerging economies as a result of rural-urban migration of people in search of better opportunities^{71,72}. Globally, and particularly in Africa south of the Sahara, urban population continued to experience rapid and continuous growth as people move from rural to urban settings in search of better living⁴⁶.

Research revealed that in about two-and-half centuries ago, only two per cent of the global population reside in the cities with the figure increasing to 15% at the commencement of the 20th century⁷³. The rate of global population that lived in urban areas was less than 30% at the middle of the century; and during this period, urbanisation majorly occurred in the developed economies as a result of industrialisation in Europe and North America⁷³.

The real urban transformation began at the beginning of the 21st century when, in 2007, urban dwellers rose above 50% of the global population for the first time⁶⁵. Recent researches showed that urbanisation is rising globally as a result of migration of people from rural to urban areas⁷⁴. In 2014, 54% of the global population reside in the cities; this is projected to reach 68% by 2050 and nearly 75% by the turn of the century⁶⁵. It is reported that more than half of the global population is currently living in the urban areas, and most of these growths will take place in African, Asian and Latin American cities^{65,75}.

The rate of urbanisation in the world is high⁴⁶. While the Global North is mostly urbanized, urbanisation in the future will occur mostly in Africa, Asia and some Latin American countries^{65,76}. It is projected that three countries (India, China and Nigeria) will altogether account for about 35% of the projected growth of the world's urban population between 2018 and 2050⁷⁷. By 2050, it is estimated that India will have added 416 million people to the population of the urban dwellers, China 255 million people and Nigeria 189 million inhabitants⁷⁷.

Based on the postulation that the global population is still growing and that rural-urban migration is on the rise, urban population growth will continue at least for the next decades^{46,78}.

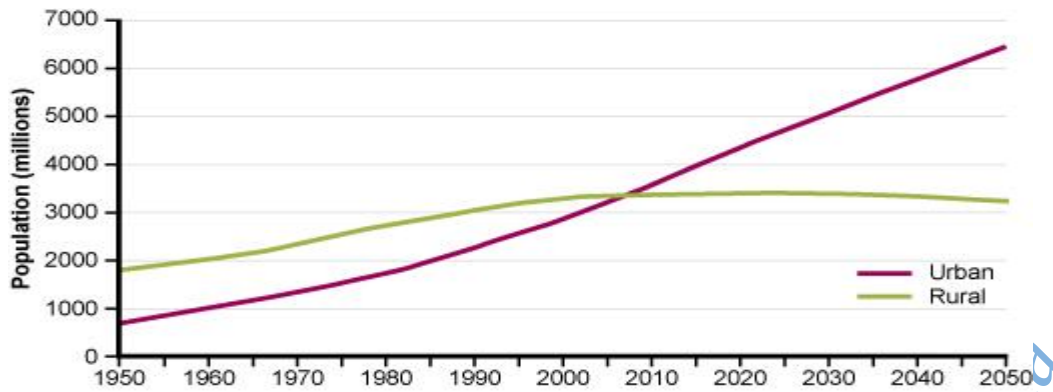


Figure 2.2. Projected Global Urban and Rural Population, 1950–2050
Source:⁶⁵

Figure 2.2 showed the change in the rural and urban populations of the world from 1950 through projected figures up to the year 2050. The interception of the curve showed that urban population exceeds rural population for the first time in history around 2007, and the rise is continuing.

In Nigeria, urbanisation is rapidly growing with its socio-economic and environmental consequences being of great concern to professionals in the built environment⁷⁹. In Nigeria, it has been noted that urbanisation concern is mainly on the rate of urbanisation and not necessarily the level of urbanisation⁷⁹.

Scholars have found it extremely difficult to define the concepts of “urban” and “rural” in the urbanisation discourse^{80,78}. Accordingly, the definition of an urban center and the parameters used vary from country to country and, may also vary within a country depending on periodic reclassification over time⁷⁷. Classification and reclassification depend on many multifaceted matters which are interrelated such as population size, population density and the nature of the built environment.

Urban area may be defined by one or a combination of the following criteria⁷⁷. These are administrative criteria or political boundaries, population size (which varies from country to country globally but typically between 200 and 50,000 inhabitants), population density (that is, number of inhabitants per unit of an area), economic functions (for example, where majority of the inhabitant is not primarily engaged in agriculture) or the presence of urban characteristics and amenities (such as paved streets, provision of electricity, waste

management services, sewerage among others). Classification of urban centers also depend on how the population is distributed, the nature of the city as well as population size⁴². Other criteria used in classifying an area as urban include density of physical development, number and range of services, life style of the dwellers among others⁷⁸.

According to Section 5 of the Urban Areas and Cities Act No. 13 of 2011 in Kenya for example, for a settlement to be classified as urbanised, it must satisfy the following requirements:

- i. Has a population of at least 500,000 residents as gazette by the results of last population census;
- ii. Has an integrated urban area or city development plan;
- iii. Has a capacity to generate sufficient revenue to sustain its operations;
- iv. Has a record of prudent management;
- v. Has a capacity to effectively and efficiently deliver essential services to its residents;
- vi. Has institutionalized participation by its residents in the management of its affairs;
- vii. Has infrastructural facilities;
- viii. Has a capacity for functional and effective waste disposal.

According to Urban Areas and Cities (Amendment) Bill 2017, the population required for a city has been reduced from 500,000 to 250,000 inhabitants while a municipality is classified as having a population threshold of 50,000 residents.

In Nigeria, population size of 20,000 inhabitants in addition to administrative and legal instruments were adopted in the definition of urban areas⁸¹. The administrative and legal instrument for example stipulates that all state capitals as well as local government headquarters in Nigeria are designated as urban centers.

Table 2.3: Urban Designation Criteria by Population Size of some Selected Countries

S/N	Country	Population Size
1	Botswana (Africa)	5,000
2	Ethiopia (Africa)	200
3	Argentina (South America)	2,000

4	Canada (North America)	1,000
5	USA (North America)	2,500
6	Israel (Europe)	2,000
7	Japan (Asia)	50,000
8	France (Europe)	2,000
9	Norway (Europe)	200
10	Portugal (Europe)	10,000
11	Nigeria (Africa)	20,000
12	Sweden (Europe)	200
13	Denmark (Europe)	250
14	Greece (Europe)	10,000
15	Kenya (Africa)	250,000

Source: Author's Compilation from various Literature (2023)

Like any other regions of the world, urbanisation is on the rise in Africa as many cities are attracting people in search of better socio-economic opportunities⁴. The region is considered the fastest urbanisation hub in the world⁷⁰. The United Nations projected that more than 50% of global increase in population between 2019 and 2050 will occur in just nine countries of the world. Five of these countries, Democratic Republic of Congo (DRC), Egypt, Ethiopia, Nigeria and Tanzania are located in Africa⁶⁵. With this also comes a rise in the urban population. As presented in Table 2.4, Africa's urban population has been growing annually over the years. From 286 million urban dwellers in 2000, the continent's urban population has grown to nearly 609 million in 2021. It is further projected that this will increase to 722 million by 2026⁶⁶.

Table 2.4: Africa's Urban Population: 2000 – 2021

Year	Urban Population (Millions)
2000	285.998
2005	341.034
2010	408.587
2015	491.531
2016	509.684
2017	528.371
2018	547.602
2019	567.388
2020	587.738
2021	608.654

Source:⁶⁶

As at 2020, Gabon has the highest urbanisation rate in Africa with slightly over 90% of the population living in the cities while Burundi is the least urbanised having only 13.71% of the population residing in the urban areas. Nigeria's urbanisation rate is approximately 52% as of 2020⁶⁶.

Causes of Urbanisation

Urbanisation as a concept is closely linked with globalization, modernisation, commercialisation and industrialisation. Urbanisation as a phenomenon is made worse by factors which include industrialisation, commercialisation, quest for better life, natural population increase, quest for improved social services, employment opportunities, better security and many more⁴². All these come to a broad categorization into three main heads which encompasses every other reasons. The three causative categories of urbanisation were identified as follows - Rural-Urban (including inter-city) Migration, Negative Policies of government and Rural-Urban Transformation⁴².

Consequent upon the above views, there have been various understandings of the drivers of urbanisation. Some of these include: industrialisation, commercialisation/economic development, social benefits and services, modernisation and changes in mode of living, employment opportunities, political, cultural and social influences, rural-urban transformation, natural birth and many others. As mentioned earlier, all the drivers of urbanisation mentioned here overlaps and embraces each other and are better discussed under three major headings – Rural-urban migration, Rural-urban transformation and Negative government policies⁴².

Besides the above, some scholars attributed the root cause of urbanisation in Africa to the colonial past where “centers of life” were established in areas that have access to sea ports. This affords the colonisers the opportunity to export raw materials to manufacturing points overseas and backward shipment of finished goods⁷¹. With time, such points become cities and urbanised. This is the case of the rapid development of port cities like Lagos, Port Harcourt and Calabar in Nigeria. Moreover, junction towns

become rapidly urbanised as a result of economic activities. Example of such town is Ore in Ondo State, Nigeria.

Rural-Urban Migration

Rural-urban (including inter-city) migration is a global phenomenon that is not limited to African cities alone. For the purpose of this work, migration is seen as the voluntary movement of people from their places of birth or residence to another either on a temporary or permanent basis⁴². The reasons could be to access social amenities, employment opportunities, relocation due to employment/educational purposes or presence of government which may not be available in their homeland but are present in their desired new location. However, there are instances where such movements are not voluntary as in the case of political turmoil, insurgency and natural disasters among others⁴². These are “push factors” that drive people away from the rural settlements.

The major cause of urbanisation in the developing economy is rural-urban migration⁴¹. The government is seen to exhibit bias towards the rural dwellers in the location of industries for employment opportunities as well as provision of social amenities. This urban bias phenomenon result in significant inequalities between the rural and urban settlers³⁹. This results in mass movement of people from the rural areas to the urban areas in search of better opportunities.

Rural-Urban Transformation

The process of urbanisation and its effects are felt in all sizes of settlements through rural-urban transformation. Through this process, small towns gradually grow to become large towns and cities especially those in the city periphery and some “junction towns”. Example of such junction town is Ore, Ondo State which is gradually assuming the status of urban center being a major junction along the Sagamu-Benin expressway.

This transformation led to the growth of large towns and megacities with increased presence of industrial and commercial activities in which people may not need to migrate from their homelands in search of opportunities that will lead to better conditions of living because of the presence of social and other amenities in the cities⁴². The author further argued that people from nearby towns and villages may migrate to the new urbanised settlement as a result of the transformation.

Negative Government Policies

Government policies and programmes influence urbanisation globally where development is tilted towards the urban areas especially in African countries. The major stimulus on urbanisation globally is negative policies of government put in place by different countries⁴². Developments that concentrate in the urban centers will exhibit the “pull and push factors” as opposed to another that encourages the development of the urban periphery. In Nigeria for instance, the system encourages development mostly in the state capitals and local government headquarters. This scenario will attract people to such areas due to push and pull factors. The lack of spread and even development through policies that favour the capital cities and other major towns will always encourage rural-urban migration⁴².

Urbanisation in African Context

It is posited that Africa is the least urbanised continent globally, yet its rate of urbanisation is higher than any cities of other continents in the world⁸². As at 2015, 40.4% of the continent’s inhabitants live in the urban centers. This grew to 42.60% in 2020, and this is projected to reach 56% by the year 2050^{83,82,84}. Africa is rapidly urbanising and this is shown in the growth of its cities with seven of them being megacities as of 2018⁸⁵.

Africa’s urban population is projected to grow from 395 million in 2010 to nearly 1.4 billion by the year 2050 representing nearly 21% of global expected urban population⁶⁵. Similarly, it was reported that Africa

is rapidly urbanising with its urban areas holding around 472 million inhabitants as of 2018⁸⁶. This figure is expected to double by the middle of the century⁸.

Table 2.5: Trends of Urbanisation in Selected African Countries – 1980-2050

S/N	Country	1980	2000	2005	2010	2015	2020	2025	2050
1	Gabon	54.70	80.10	83.40	85.70	87.20	88.00	88.50	91.00
2	Libya	70.10	76.30	76.90	77.60	78.90	79.60	80.70	85.70
3	Djibouti	72.10	76.50	76.80	77.00	77.30	77.80	78.50	82.70
4	Algeria	*	59.90	63.80	67.50	70.70	73.40	75.60	82.10
5	Cape Verde	*	53.40	57.70	61.80	65.50	68.60	71.00	77.60
6	South Africa	*	56.90	59.50	62.20	64.80	67.20	69.40	77.40
7	Nigeria	*	*	*	43.50	47.80	51.70	55.30	67.10
8	Ghana	*	*	*	50.70	54.00	57.20	60.00	70.50
9	Tunisia	50.60	63.40	65.10	65.90	66.80	67.90	69.20	76.60
10	Morocco	*	53.30	55.10	57.70	60.20	62.60	64.90	74.00
11	Cameroon	*	*	*	51.50	54.40	57.10	59.60	70.00
12	Botswana	*	53.20	55.10	56.20	57.40	58.90	60.50	69.90
14	Congo	*	58.70	61.00	63.20	65.40	67.40	69.40	77.20
15	Cote d'Ivoire	*	*	*	50.60	54.20	57.50	60.50	70.90
16	Africa	26.70	34.50	36.30	38.30	40.40	42.60	44.90	55.90

Source:⁸⁴

*Data not available

As presented in Table 2.5, it is observed that Africa's urban population has been on the upward trend in the last four decades. It is equally observed that the trend is not uniform among the countries of the continent. It is projected that the trend will continue into the middle of the century and beyond. In the 1980s, 26.70% of the continent's population live in the cities, this grew to 42.60% in 2020 and is projected to reach nearly 56% by the year 2050.

The situation is not different in Nigeria, like most countries of Africa, where the country is characterised by rapid urbanisation and urban growth. Urban population has been growing rapidly in the last five decades as more people are moving into the cities in their quest for opportunities and better living conditions⁸⁷. It is further posited that Nigeria's urban population will continue to grow and possibly double in the next two-and-half decades⁸⁸.

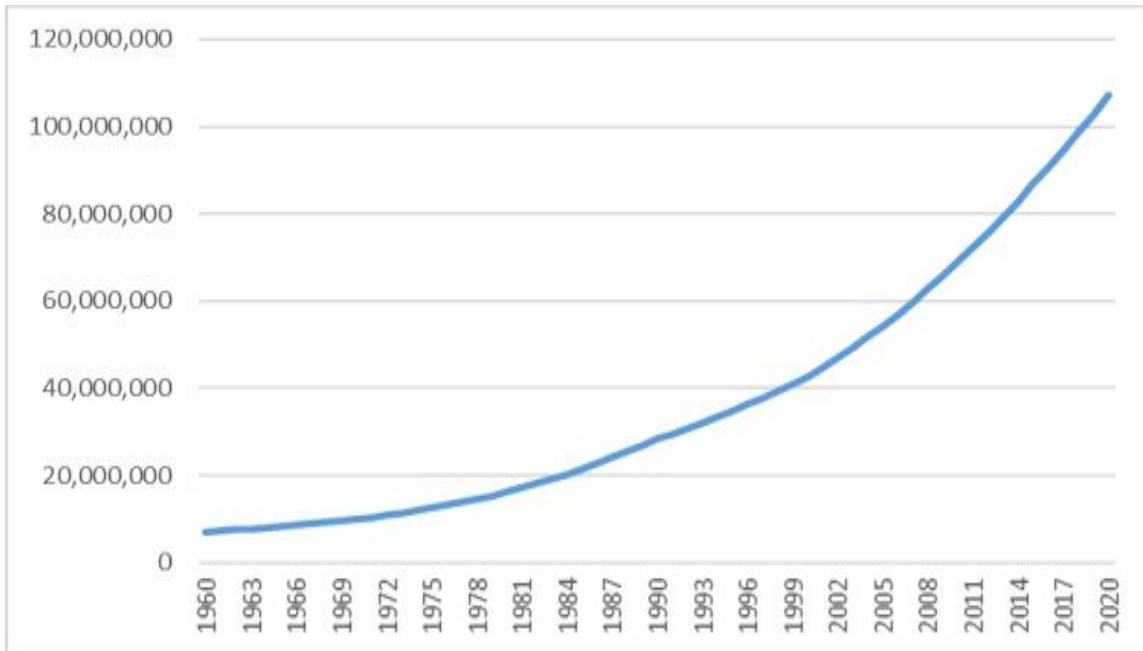


Figure 2.3: Trend in the Growth of Nigeria's Urban Population: 1960 – 2020
Source: World Development Indicators

Nigeria's urban population has continued to increase over the years and this is expected to continue into the next decades^{89,88}. According to World Development Indicators as presented in Figure 2.3 and Table 2.6, Nigeria's urban population as at 1960 was 6,955,837 people representing 15.41% of the total population. Twenty years after in 1980, the urban population has grown to 16,131,175 people representing 21.97% of the total population. As at 2000, the urban population has grown to 42,603,694 being 34.84% of the total population. By 2020, the figure has risen to 107,106,007 representing approximately 52% of Nigeria's total population living in the urban centers. It is projected that the rate will increase to 67.1% by the year 2050⁸⁴. As of 2022, The World Population Review reported that Nigeria has seven cities having a million people or more, 80 cities having between 100,000 and a million people and 248 cities having between 10,000 and 100,000 inhabitants.

Table 2.6: Nigeria's Urban Population Growth: 1960 - 2020

Year	Urban Population (M)	% of Total Population
1960	6.956	15.41
1965	8.297	16.55
1970	9.942	17.76
1975	12.535	19.78

1980	16.131	21.97
1985	21.421	25.64
1990	28.259	29.68
1995	34.765	32.21
2000	42.604	34.84
2005	54.260	39.07
2010	68.917	43.48
2015	86.653	47.84
2020	107.106	51.96

Source: World Development Indicators

The causes of rise in urban population are a multitude of factors but similar to those of other countries and include, broadly, rural-urban migration, rural-urban transformation and negative government policies^{78,42}.

In addition to other factors, rapid population growth in the face of reducing mortality and rising fertility leading to natural increase have been significant causes of urbanisation in Nigeria⁷⁴.

Challenges of Urbanisation in Nigeria

Like other countries of the world, Nigeria is urbanising at a fast pace with her cities having to accommodate more people than the carrying capacities⁹⁰. In Nigeria, urbanisation has also been on the increase in the recent past rising from 20% in the 1970s to over 40% at the moment, resulting in acute housing shortage, inadequate quality accommodation and overcrowding⁹¹. Nigeria's urban population is approximately 43.5% of its entire population in 2010, this rose to 51.7% in 2020 and this is projected to rise to 55.3% by 2025 and 67.1% by 2050 thereby putting pressure on urban services and amenities⁸⁴.

This demography comes with lots of challenges some of which are environmental while some are socio-economic and political in nature. These include: pollution of all sorts, deforestation and wetland destruction, erosion and flooding, urban heat island and aesthetic degradation⁹². Housing deficits led to the proliferation of informal settlements, rising insecurity, violence and various environmental health factors are other identified challenges^{34,32,82,78,89}. Others are: peri-urban degradation, desertification and contribution to climatic change, unemployment, food insecurity and many more^{93,94}.

Resulting from the number of people concentrating in an area, the environment is usually polluted through land, water, and air including noise pollution in densely populated urban centers. It is posited that certain diseases and psychological disorders such as annoyance, sleep disorder, cardiovascular and respiratory diseases and so on occur as a result of noise and air pollution⁹⁵.

As presented in Plates 2.2 and 2.3, oil exploration in the Niger Delta region is a major driver of urbanisation in many towns and villages in the region. This has, in turn, led to serious environmental pollution⁴². As cities grow due to urbanisation, habitats are destroyed and split along the urban periphery. This peripheral degradation alters the environmental balance and constitute the greatest threat to biodiversity loss⁹⁶.



Plate 2.2: Environmental Effect of Shell Oil Spillage in the Niger Delta
Source: Friends of the Earth



Plate 2.3: Gas Flare by Shell at Kolo Creek, Niger Delta
Source: Friends of the Earth (Rexler, 2010)

The environment is further contaminated through car and industrial emissions. Moreover, toxic wastes are deposited into nearby rivers and streams leading to contamination downstream⁹⁷. Solid waste management also constitute a serious challenge which has often led to the blockage of drainage channels thereby causing flooding⁴².

Other negative environmental effects of urbanisation in Nigeria include deforestation which leads to soil erosion and flooding; water, air and noise pollution and destruction of watersheds and wetlands that leads to biodiversity loss. These challenges lead to increase in environmental health risks of the urban dwellers.

Rapid urbanisation especially in sprawling and unplanned cities has resulted in the rise of crimes and violence with inhabitants fearing for the safety of their lives and properties⁸². This is more prevalent in informal settlements that have developed into slums and shanties where majority of the urban poor reside.

Unemployment, underemployment and other vices are other challenges of urbanisation in Nigerian cities⁴².

Another challenge of urbanisation is its impact on climate change and resultant global warming. Research has shown that while cities occupy only about two per cent of land space, they produce about 70-80% of greenhouse gas (GHG) emissions; they also account for over 60% of global energy consumption, and produce about 70% of global waste²⁹. It is generally accepted among scholars that global temperatures will rise and rainfall will become more uncertain in cities, with serious effects on local climates across the world⁹⁸. This prediction also affects Nigeria.

Within the urban areas, it is predicted that increase in global warming associated with climate change will be made worse due to a direct effect of industrial activities of the urban areas. This leads to loss in vegetation because of environmental degradation especially in the urban periphery thereby affecting the quality of water, air and noise⁹⁸. The rise in temperature could also lead to devastating flooding which is widely regarded as a global challenge and made worsened by climate change^{99,100}.

Urbanisation has substantial negative effects on the health of poor and low-income city dwellers³⁹. These include: poor nutrition necessitated by poverty, poor sanitation which may result in diseases such as cholera, pollution-related health conditions and so on. It is also noted that the urban poor live in unregulated settlements with tendency for congestion and overcrowding³⁹. This may lead to the spread of both communicable and non-communicable diseases. Provision of healthcare services especially in the urban centers has become necessary due to the impacts of urbanisation on the health and wellbeing of the inhabitants. Majority of these impacts are negative⁹⁵. Traffic congestion in the cities which is also a fallout of urbanisation has a tremendous consequence on human health and the environment.

Inadequate quality housing is a major challenge of urbanisation in Nigeria, and this is a common challenge globally¹⁰¹. The demand for housing is directly proportional to some factors notably urbanisation and population growth⁸⁷. This challenge results in housing deficits that leads to the development of informal settlements, slums and shanties^{39,102,6}. Inadequate decent accommodation leads to overcrowding, self-help

development and slum life⁷¹. Cities are becoming more popular especially large megacities globally, and one of the challenges of the popularity is the surge in the demand for housing^{103,101}. This leads to a mirage of negative challenges which include the development of informal settlements, slums and shanties, urban crime and other health related issues³⁹.

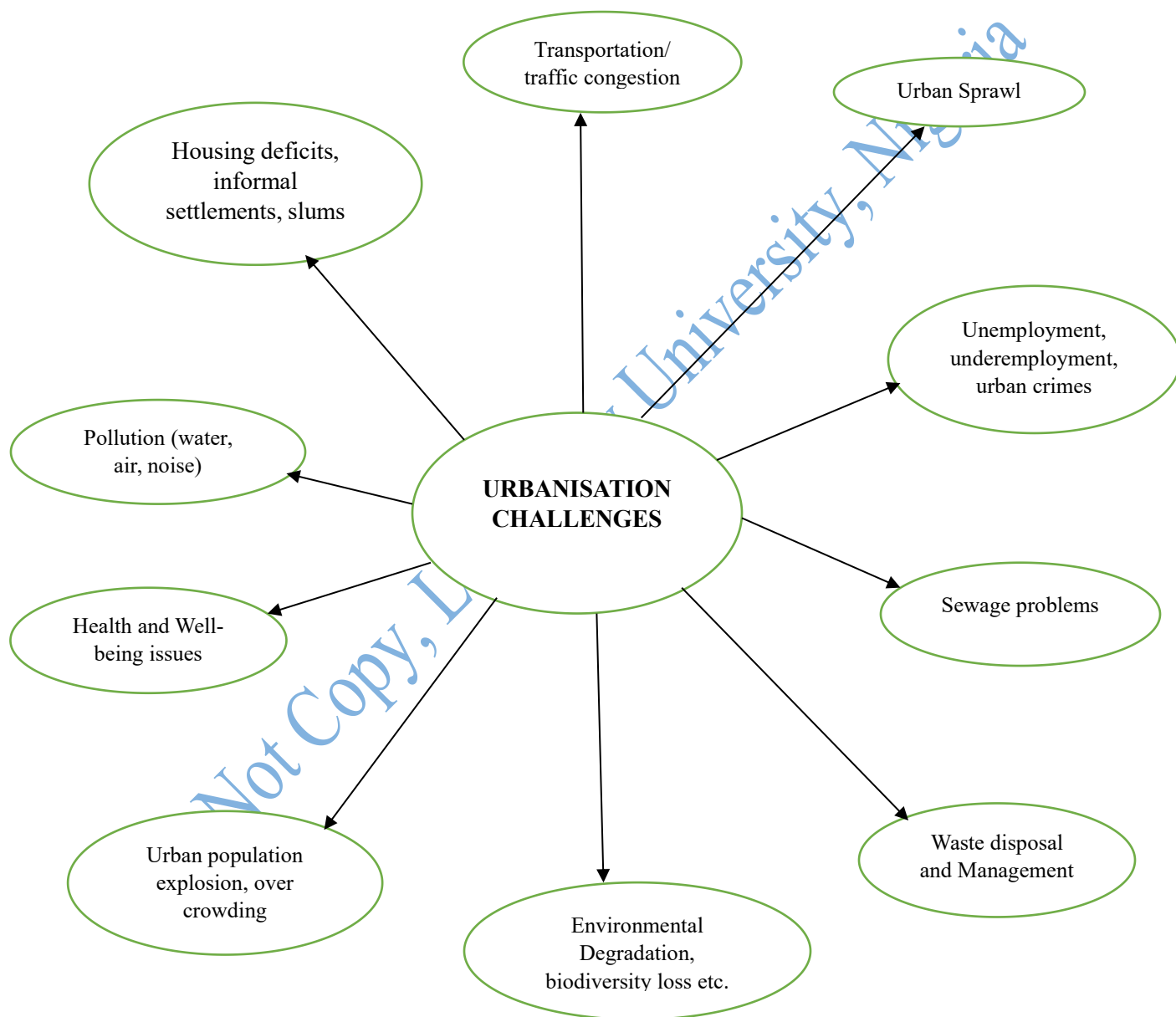


Figure 2.4: Urbanisation Challenges: Illustrative Presentation
Source: Author's Compilation, 2023

Figure 2.4 is a pictorial summary of the challenges of urbanisation. In spite of the challenging negative impacts, scholars and international organisations agreed that urbanisation is essential and beneficial for a country's sustainable development and growth^{75,46}.

2.3.3 Urbanisation and Housing in Nigeria: The Nexus

Urbanisation and housing have become increasingly important issues in Nigeria due to their significant influence on the country's socio-economic development. Urbanisation in Nigeria is a major phenomenon that has increased the population of many cities and the resultant housing needs. Urban housing is central to the relationship between urban dwellers and their social-physical and psychological environments; and faced with lots of challenges the foremost of which is urbanisation^{46,87}. These challenges include: crowded housing leading to certain communicable diseases, development of informal housing and squatter settlements as a result of deficit in housing supply, crime and other social menace among others¹⁰⁴. Housing challenges due to urbanisation lead to housing informality resulting from huge deficit in housing supply.

With housing becoming more difficult to acquire by low-income urban settlers especially in the developing economies, urban dwellers in need of shelter and other amenities in such areas have opted for self-help housing production⁴⁶. This is often done without regard to the necessary legal and institutional requirements³⁵. This self-help mechanism has become a major catalyst in the production of informally-built homes. This has contributed in no small measure to the development of slums and shanties in African cities⁸⁷.

The continuous rise in Nigeria's urban population has exerted enormous pressure on urban social services and infrastructure⁸⁷. These include urban land uses, transportation, traffic congestion, water supply and health services among others. With rapid urbanisation, housing supply in Nigeria's urban centers is glaringly and evidently insufficient resulting in uncontrolled, overcrowded and ill-planned urban areas⁸⁷.

Like other countries south of the Sahara, provision of suitable and affordable housing is a major challenge in Nigeria especially among the urban poor^{28,46}. This challenge led to deficit in legal housing stock¹⁰². Rapid urbanisation, rising population and uncoordinated housing institutions are some of the critical factors expanding the deficit in Nigerian legal housing stock¹⁰³. According to the Managing Director of Federal Mortgage Bank of Nigeria (FMBN) in 2019, Nigeria’s housing deficit gap is currently put at about 22 million units, the bulk of these are found in the urban areas of Abuja, Lagos, Port-Harcourt, Ibadan and other major cities. Furthermore, the bank noted that bridging this gap will require investment in the region of ₦6 trillion annually over a three- and half-year period.

Table 2.7: Housing Deficit of Five Selected African Countries (2016 – 2019)

S/N	Country	Year	Estimated Population (2016-2019)	Estimated Housing Deficit (2019)
1	Nigeria	2016-2019	185 – 200 million	18 – 22 million units
2	Ghana	2016-2019	28 – 30 million	1.7 – 2.6 million units
3	Kenya	2016-2019	45 – 52 million	2.0 million units
4	Uganda	2016-2019	37 – 43 million	1.7 – 2.0 million units
5	South Africa	2016-2019	56 – 58 million	2.5 million units
6	Ethiopia	2016-2019	98 – 103 million	1.2 million units

Source: Affordable Housing Investment Summit, 2019.

Table 2.7 showed the estimated population of some selected African countries between 2016 and 2019 including estimated housing deficits. According to Affordable Housing Investment Summit 2019, Nigeria with an estimated population of about 200 million inhabitants has a housing deficit of about 22 million units. Next are Ghana, South Africa, Kenya and Uganda with deficits of 2.6 million, 2.5 million and 2.0 million units respectively. The deficits are direct impact of urbanisation occasioned by migration and natural birth⁴².

The phenomenon is similar to what obtains in other selected African countries namely, Egypt, Zambia, Zimbabwe and Ethiopia among others where it is posited that informal housing provides shelter to the majority of the urban population^{105,75,46}. Observing from the situations in Makoko - Lagos (Nigeria); Kibera - Nairobi (Kenya); Riyadh - Alexandria (Egypt); George Settlement, Lusaka – (Zambia); Chimambahuyo - Harare (Zimbabwe); Alexandria - Johannesburg (South Africa) and so on, it is apparently safe to conclude that majority of the poor urban dwellers across Africa reside in informal settlements¹⁰⁵.

2.3.4 Housing Typologies in African Cities

Housing types are categorised according to their classifications and characteristics^{79,52}. Accordingly, the housing types and their classifications are as shown in Table 2.8. These classifications and characteristics are the most predominant across the cities of Africa.

- i. Housing types by design. Here, the design is used to describe the housing type and its characteristics. Examples are Brazillian type (face me I face you), Bungalows (detached, semi-detached and terrace), Duplex apartments, Flats, Mansions/Castles, Traditional compound type among others.
- ii. Housing types by density described as low, medium and high density and defined as the number of housing units per plot of a particular size, the site coverage and the room occupational ratio. A standard residential plot in Nigeria described as high density has a minimum plot size of 648 square meters, the medium density has 864 square meters while the low density has 1,080 square meters¹⁰⁶.
- iii. Housing types described by quality of amenities. This is identified by the house structural characteristics, provision or non-provision of in-house and environmental amenities.
- iv. Housing type described by materials used especially for the walls and roofs. Examples are: Mud building type, brick type, sandcrete type, wooden type, stone type, metal type, thatched and bamboo varieties and so on.
- v. Housing types by ownership rights described as private or public.

vi. Housing types by specialty described by the special use of the housing unit. Examples are mass housing, transient housing, students' housing (hostels), institutional housing (schools, barracks, correctional centers (prisons), government secretariats, special quarters and so on.

Table 2.8: Housing Classification and Characteristics

Housing Type/Classification	Characteristics
Housing Types by Design	Brazillian type (face me I face you), Bungalows (detatched, semi-detatched and terrace), Duplex apartments, Flats, Mansions/Castles, Traditional compound type among others.
Housing Types by Density (Low, Medium, High)	Housing units per plot, site coverage and room occupational ratio
Housing Type by Quality of Amenities	Housing units with all amenities, housing units with partial amenities or housing units without amenities
Housing Types by construction materials used especially for the walls and roof	Mud building type, brick type, sandcrete type, wooden type, stone type, metal type, thatched and bamboo varieties.
Housing Types by ownership rights	Private ownership, Public ownership
Housing Types by specialty	Mass housing, transient housing, students' housing (hostels), institutional housing (schools, barracks, correctional centers (prisons), government secretariats), special quarters among others.

Source: Author's Compilation, 2023

2.3.5 Institutional Housing

An estimated 330 million households do not have adequate and decent shelter worldwide, and by projection, this will increase to 440 million, or 1.6 billion people, by 2025¹⁰⁷.

This situation results in a pressure to increase the supply of decent and affordable housing especially in many cities of the Global South, where property prices have gone up and informal housing settlements are on the increase¹⁰⁸.

Conceptually, institutional housing is seen from the following perspectives namely:

- i. Institutional buildings that are provided for people who live or work in institutions usually not profit motivated as, for example, staff quarters. Thus, barracks housing the military and other para-military organizations, correctional centers, educational facilities, multinational companies among others have developed housing facilities to house their workforce.
- ii. State assisted and subsidized housing delivery programmes and usually executed by public-private funds.
- iii. Social housing made possible through better policy tools, and regulatory framework^{109,108}.

2.3.6 Regulated Self-help Housing

It has been posited that “good housing is fundamental to physical and financial security, economic productivity, healthy communities, and human well-being—but the housing gap is huge and growing”¹⁰⁷. The inability of the public and private sectors to meet housing demands of the ever-increasing urban population leads to self-help housing^{44,49,102}. This has become a popular solution to the housing needs of the urban poor in the developing countries globally⁷². As a result of weak capacity of the government, the informal practice through self-help is perceived as an approach where people remain responsible for solving their housing challenges^{43,102}. This usually comes with adherence to the rules and principles of law³⁷. The implementation of regulated self-housing projects is therefore an effective bottom-up approach and an authentic way of informal settlements’ regularisation, and construction of new housing projects¹¹⁰. Conceptually, while the term “slums” and “informal settlements” are often used synonymously, the terms do not have the same technical meanings⁷⁶. According to the researcher, slums have negative impressions and often ascribed to the urban poor. Conversely, some scholars argued against the believe that informal settlements are pro poor only and hold the view that the affluent also lives in informal settlements²⁶. The distinguishing factor, according to the author, is the lack of tenure security, infrastructure deficiency, disregard to planning rules/regulations and therefore made case for the understanding of the nature of

informal settlements housing the rich²⁶. Self-regulated informal housing development practices therefore is an effort by the system to slow down the proliferation and the consequences of the development of informal housing and consequently slums.

Housing development involves various practices, processes and regulations that have to do with legality and illegality. The regularizing authority plays a self-contradictory role as it may accommodate, through legislation, hitherto informal unacceptable practices²⁶. Accordingly, the informality of the rich is often accepted and regulated while land invasions for the urban poor are frequently punished by evictions and demolitions²⁶. The urban rich, through their closeness to the government, can influence the modification of the planning laws and regulations to make legitimate their informality²⁶.

Accordingly, even within the regulated informal settlements, there are segregations¹¹¹. The affluent neighborhoods have the highest housing standards with only about 15% of the dwellings regarded as substandard and less overcrowding rate. The less affluent settlements have more substandard dwelling stocks, more overcrowding and constitutes about 20% of the housing units¹¹¹.

The followings are some of the features of a regulated self-help housing development:

- i. The spatial developments are carried out usually with permit (regulated) but sometimes done in excess of permit¹¹².
- ii. Provision of social amenities and services are usually done through communal self-help.
- iii. Regulated self-help housing usually exhibit a high degree of living standard¹¹³.
- iv. Because it is regulated, security of tenure is guaranteed through land titling²¹.
- v. It is usually the rich urban dwellers mostly the middle-class and high-class urban residents who can afford the cost²⁶.

2.3.7 Unregulated Informal Housing Development

Like any country south of the Sahara, provision of adequate, quality and affordable housing is a major challenge in Nigeria especially among the urban poor²⁸. This situation has resulted into the development of unregulated self-help informal settlements with many socio-economic and environmental challenges¹⁰². One of such challenges is deficit in legal housing stock that results in informally-built houses in many cities across Nigeria¹⁰³. Studies have shown that this is as a result of poor land tenure system, high cost of building materials, poor access to housing finance due to poverty, rising population and rapid urbanisation¹¹⁴.

Unregulated informal housing development takes the form and shape of self-help settlements as defined by UN-Habitat in its 2011 report as follows:

- i. These are residential areas where housing units are developed on land to which the occupants have no legal claim, or which they occupy illegally;
- ii. Unregulated informal housing are unplanned settlements, areas where houses are developed without regard to the existing planning and building regulations.
- iii. In addition, unregulated informal housing is a neighborhood where houses are developed with infrastructure and amenities deficiency^{37,1}.

Table 2.9: Unregulated Settlements in Some Selected Cities in Nigeria

	State	City	Informal settlements
1	Lagos	Lagos	Ajegunle, Amukoko, Ijora Badia, Bariga, Ilaje, Makoko, Ijora Oloye, Ijora Olopa, Sari-Iganmu, Okobaba, Iwaya, Oko Agbon, Okokomaiko, Otto-Oyingbo and so on.
2	Oyo	Ibadan	Beere, Oje, Inalende, Mapo, Oke-Padi, Yemetu, Oniyanrin, Sabo, Agbokojo, Akobo-Ojuirin, Ojoo, Sasa, Agbowo, Orogun, Apete, Awotan, Ajibode, Km 110 area (powerline settlement), Jankata/Kuola (pipeline settlement), Odo-Ona (railway line settlement), Alegongo, Wakajaye, Bodija (Kongi) and so on.
3	Rivers	Port-Harcourt	Njemanse, Igbo Etche, Bundu, Waterside, Mile 1, Eleme, Afikpo Water front, Marine Base Waterfront.
4	Ogun	Abeokuta	Oke-Shokori, Adatan, Oke-Aregba, Itoko, Gbagura, Oke-Ona, Oke-Egunya, Totoro.
5	Plateau	Jos	Bayan-Rogo, Gangere, Katako, Angwar-Rukuba, Angwan Rogo.

6	Enugu	Enugu	Akwuke, Ugwuaji, Abakpa, Emene, Akegbeugwu.
7	Kano	Kano	Kurna Asebe, Sabongari, Nassarawa.
8	Kaduna	Kaduna	Angwar Kumin Gwari, Television, Nassarawa, Angwar Shanu.
9	Federal Territory	Capital Abuja	Mpape, Dutse Alhaji, Chika village, Wuse village, Zuba, Durumi, Dei-Dei, Garki village, Kubwa, Galadimawa, Mabushi village, Nyanya, Kpaduma, Chika, Tudunwada (Lugbe), Kuchingoro, Pyakassa, Karu Piwe, Ushafa and so on.
10	Benue	Markudi	Achusa, Adeke, Agan, Agwan Jukun, Apir Bambam, Beeste, Fiidi, Idye, Kanshio, Logo, Wadata, Ujamatue.

Source:³⁴

Table 2.9 showed some of the identified unregulated settlements in ten selected state capitals in Nigeria including the Federal Capital Territory. Makoko is reputed to be the largest in Nigeria with population of approximately 400,000 dwellers (2021 projected figures) living on water and land³⁴. According to the World Bank, a little above 85,000 of this live on land, while the rest live on water. The sprawling settlement has an area of about 72 Hectares and located within 500 meters boundary from the coastline³⁴.

Unregulated settlements are disadvantaged settlements where inferior dwellings are more prevalent¹¹¹. The most disadvantaged and the worst form of informal settlements are the slums, which from observation, are characterised by poor quality housing and deficient in basic amenities and services. Technically, slums have reached the last stage of obsolescence and due to be slated for urban renewal.

The followings are some features of an unregulated self-help housing development:

- i. Dwellings are constructed from non-permanent materials (wood, raffia palm, iron sheets, hard cardboards, containers among others) as shown in Plate 2.4.
- ii. Usually one, two or three-room dwellings with shared amenities.
- iii. Dwellings are sometimes in non-residential spaces (spaces earmarked for staircases, garages and shops among others).
- iv. Dwellings are built without a permit such as houses that did not abide by the applicable planning or building standards (setbacks, plot coverage, among others)^{34,37}.

- v. Settlements are built on illegally owned/occupied land, including squatter on state/public or privately-owned land, or built on legally owned land that was illegally converted from originally approved use.
- vi. Dwellings are built on legally owned land that was illegally subdivided (that is without land subdivision permit).
- vii. Dwellings are built outside of the urban boundaries or corridor, that is without planning permission (that is built under electricity power line, gas routes, railway corridors among others).
- viii. The dwellings are usually without security of tenure. They are products of self-help developments and they are designated as such because such developments do not adhere to codes, laws and regulations¹⁰. They also lack state control with disregard to planning and building codes¹.
- x. Informal trading is also a characteristic feature of informal settlements.



Plate 2.4: An Unregulated Settlement, Makoko, Lagos reputed to be the Largest in Nigeria.

Photo Credit: Bishop, African Water Cities Project

2.3.8 Typologies of Informal Housing

Cities across Africa have witnessed the emergence of informal settlements over the last decades as a result of rapid urbanisation as a result of rural-urban migration and natural birth, and this will continue into some decades to come⁴⁶.

It is agreed that there are various definitions to describe informal housing typologies of the urban poor. Researchers have therefore resorted to the use of the terms “informal” and “illegal” interchangeably. Another term often used interchangeably with these terms is “self-help”. Consequently, the standards for describing typologies of informal settlements are usually not the same across board^{115,116}.

Several definitions of informal settlements have been given by several scholars^{36,15,72,46}. Official UN-Habitat reports 2006 and 2016b relates the definition of the typologies to types of housing units and land tenure. One of such definitions classified informal housing typologies as follows:

1) Classification according to housing type/construction materials:

- i. Shacks and construction from non-permanent materials (wood, raffia palm, iron sheets, hard cardboards among others). These represent the major typology of informal housing, especially for new rural migrants settling in the cities’ peri-phery.
- ii. One-room dwellings with shared amenities.
- iii. Container dwellings.
- iv. Housing in non-residential buildings or spaces (spaces earmarked for staircases, garages and shops among others).
- v. Housing built without a permit is also considered informal, as with houses that did not abide by the applicable planning or building standards (setbacks, land coverage, among others).

2) Classification according to land tenure:

- i. Housing built on illegally owned/occupied land, including squatter on state/public or privately-owned land, or
- ii. Housing built on legally owned land that was illegally converted from originally approved use, or
- iii. Housing built on legally owned land that was illegally subdivided (that is without land subdivision permit), or
- iv. Housing built outside of the urban boundaries that is without planning permission (that is built under electricity power line, gas routes, railway corridors among others)

Descriptively, common typologies of informal settlements include:

Slums – Slums are substandard, decaying housing units and overcrowded living conditions usually of the urban poor. Slums differ in size and characteristics. Accordingly, to qualify as a slum, at least one of the following conditions must be lacking - clean water and reliable electricity, security of tenure, durability of the structures, sufficient living space and adequate sanitation. A typical Abuja slum is illustrated in Plate 2.5.



Plate 2.5: An Abuja Slum in Nigeria
Photo Credit: Scientific Research Publishing

The general perception of the term “informal settlement” is that it is synonymous with slum. Some researchers have, however, argued that there is a sharp difference between “slums” and “informal settlements” even though there is an overlap of the two terms conceptually^{116,113}. In an interview with Jason in 2018, Enrique Silva posits that slums are down town of urban areas characterised by poverty and poor living conditions. But informal settlements are areas developed without conformity to laid down regulations as well as lacking tenure security⁴. It is argued that slums are not part of the informal housing sector as some informal settlements may have a high degree of living standard¹¹³.

Furthermore, it has also been argued that informal settlement is a widely used substitute for slum. This is used to avoid a word capable of casting stigma on areas housing the urban poor¹¹⁶. Thus, it could be averred that all slums are informal settlements but not all informal settlements are slums.

Shanty Town or Squatter Area – (otherwise known as favela in Brazil, villa miseria in Argentina, gecekondur in Turkey) is a settlement of unplanned buildings known as shanties or shacks typically made of materials like mud and wood. Shanty town usually lack basic infrastructure like proper sanitation, safe water supply, reliable electricity and street drainage. Two major sources were identified as the causative factors: shortage of accommodation for the urban poor; and land speculative tendencies of the urban affluents⁴⁷. Shanty towns can metamorphose into middle income neighborhoods through improvement to their infrastructure. Shanty town or squatter settlements are illustrated in Plates 2.6 and 2.7.



Plate 2.6: A Shanty Town in Nigeria
Photo Credit: Science Photo Library

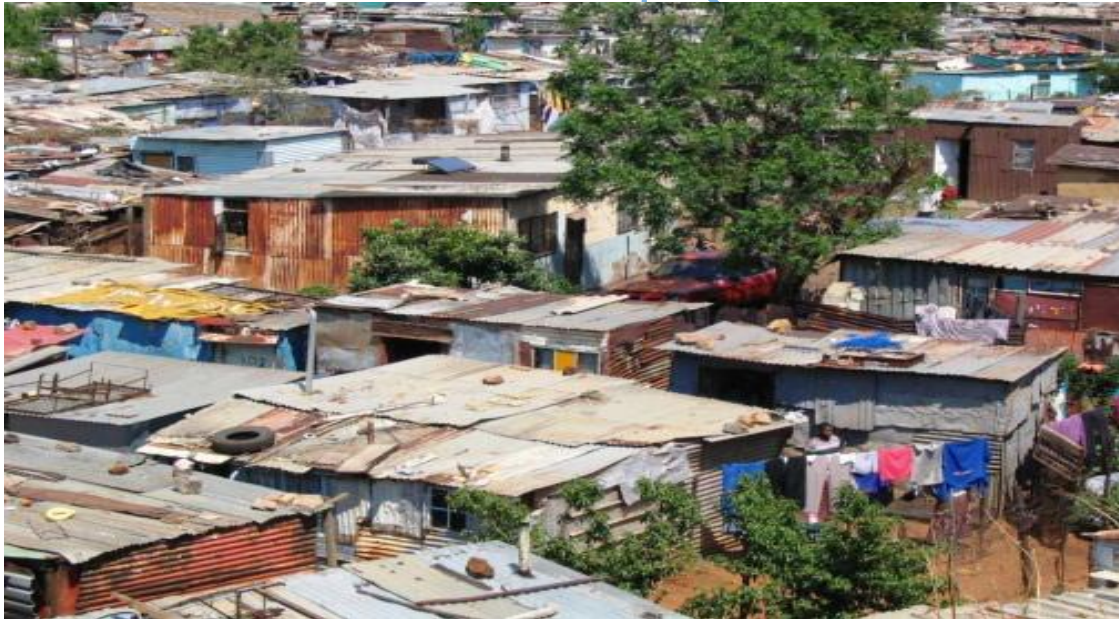


Plate 2.7: A South African Shanty Town
Source:³⁴

Another typology is **Squatting** which is occupation of abandoned land or building, usually residential, that the squatter does not own, rent or have lawful permission to occupy. This abounds across cities of Nigeria

especially the developing urban peri-phery. It is characteristically for the poor urban dwellers in urgent need of accommodation⁴⁷. A typical squatter settlement is illustrated in Plate 2.8.



Plate 2.8: A Squatter Settlement in Kubwa, Abuja, Nigeria
Source: Author's Fieldwork, 2023

Homelessness is the condition of lacking stable, safe and adequate housing accommodation. Its definition differs from country to country and may be classified as follows:

- i. Living on the streets.
- ii. Moving between temporary shelters such as houses of friend and relations.
- iii. Having no permanent house or place to live in safety.

An estimated 150 million people are living in homelessness globally¹¹⁷. A typical homeless family in Haiti is illustrated in Plate 2.9.



Plate 2.9: A Homeless Family in Haiti
Photo Credit: ReliefWeb

Internally Displaced Persons (IDP) Camps – these are temporary accommodation for persons compelled to leave their places of residence and remain as refugees within their home country usually as a result of internal conflicts. This typology abounds all over Nigeria in view of the security conflicts especially in the North Central and North East regions. An example of an IDP camp is shown in Plate 2.10.

Do Not Copy Lead City



Plate 2.10: The Kuchingoro IDP Camp, Abuja, Nigeria.
Photo Credit, Taylor-Robinson & Oleribe

2.3.9 Challenges of Informal Housing in Africa

The affordable housing gap worldwide is currently estimated at about 330 million urban families. This is projected to grow by more than 30% to 440 million families, or 1.6 billion inhabitants, by 2025¹⁰⁷. The quest for better living has, through movement from rural to urban centers led many to the cities resulting in urbanisation. Urbanisation results in population explosion in the cities and the attendant socio-economic, including institutional and environmental challenges⁶⁷.

All over Africa, the informal settlement dwellers engage in informal employment and live in vulnerable conditions. They lack access to public infrastructure and amenities and live regularly in fear of eviction¹¹⁸.

Other challenges experienced in informal settlements are high crime rate, high infant and maternal mortality rate as well as poor physical and mental health¹¹⁹.

Institutional Challenges

Rapid urban growth due to urbanisation has generated a spectacular increase in the need for urban land, urban amenities and services, and livelihood opportunities among others. The inability of the state to respond promptly and adequately to keep pace with complexity and scale of these needs has resulted in informal settlements devoid of infrastructure necessary for human liveability^{110,111}. This situation calls for institutional interventions capable of transforming an informal settlement into an acceptable and liveable environment¹¹⁰.

Management of informal settlements is one of the challenges of urban governance in developing economies due to difficulties in controlling the various drivers of the phenomenon^{120,70}. It has been suggested that problems of informal settlements can be approached through strategies of upgrading projects which should be demand driven coupled with basic amenities and services^{110,111}.

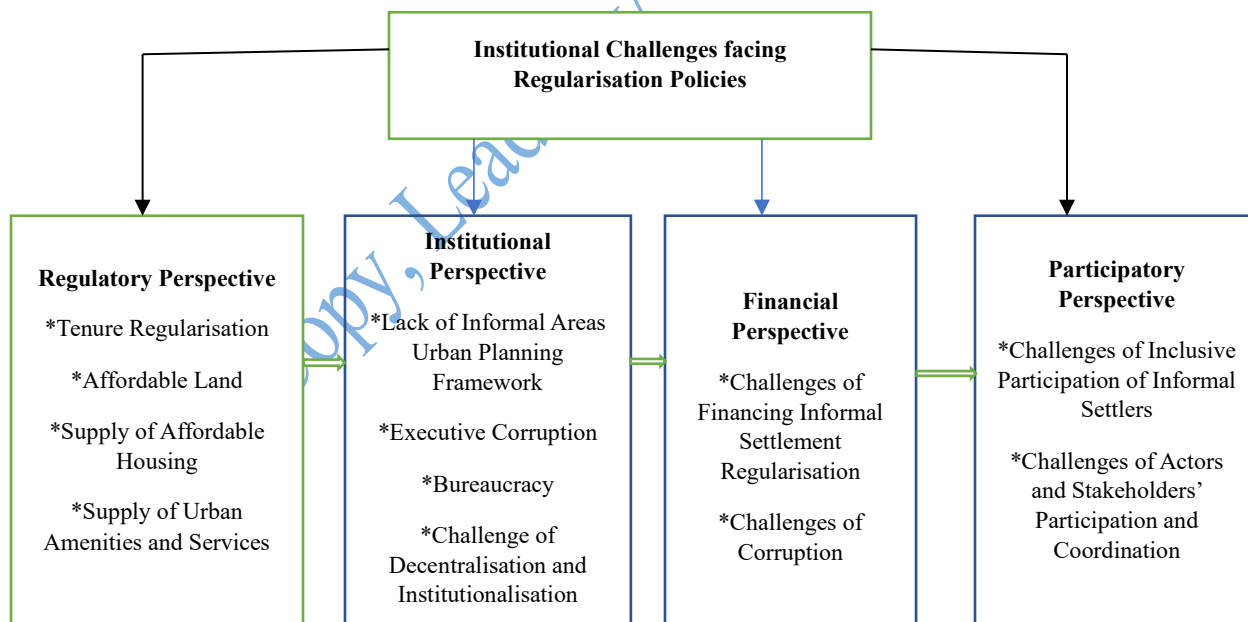


Figure 2.5: Institutional Challenges of Regularisation

Source:¹¹⁰

Socio-economic Challenges

Like many countries south of the Sahara, provision of suitable and affordable housing is a major challenge in Nigeria especially among the urban poor^{36,28}. This situation has resulted in the development of self-help

settlements with a mirage of socio-economic and environmental challenges⁶⁰. One of such challenges is deficit in legal housing stock that results in informally-built houses in many cities across Nigeria. Housing deficit results in self-help housing development which is seen as both a symptom and a potential remedy to unmet housing needs⁴⁸. Studies have shown that this is as a result of high cost of building materials, poor access to housing finance due to poverty, rising population and rapid urbanisation¹¹⁴.

Table 2.10: Nigeria’s Housing Deficit: 1991 – 2019

Year	Housing Deficit (units)	Estimated Population	Cause
1991-1993	4 – 7 million	104 million	Limited housing finance window
2007	8 – 10 million	145 million	Urban migration and slum clearance
2013 - 2015	16 – 17 million	178 million	Over population, urban expansion and rising poverty
2017 - 2019	18 – 22 million	185 million	Over population, increased poverty and rapid urbanisation

Source:⁶⁷

From Table 2.10, Nigeria’s current housing deficit is put any figure between 18 – 22 million units scattered across major cities of the country. According to the Managing Director of Federal Mortgage Bank of Nigeria in 2018, bridging this gap will require an investment in the region of ₦6 trillion annually over a three and half year period¹²¹. It is instructive to note that many respondents and stakeholders doubted the authenticity of this figure and called for a methodical study to determine the actual figure of Nigeria’s housing deficit.

This scenario is replicated in major cities across Africa as shown in Table 2.11:

Table 2.11: Housing Deficit of Five Selected African Countries (2016 – 2019).

S/N	Country	Year	Estimated Population (2016-2019)	Estimated Housing Deficit (2019)
1	Nigeria	2016-2019	185 – 200 million	18 – 22 million units
2	Ghana	2016-2019	28 – 30 million	1.7 – 2.6 million units
3	Kenya	2016-2019	45 – 52 million	2.0 million units
4	Uganda	2016-2019	37 – 43 million	1.7 – 2.0 million units
5	South Africa	2016-2019	56 – 58 million	2.5 million units
6	Ethiopia	2016-2019	98 – 103 million	1.2 million units

Source: Affordable Housing Investment Summit, (2019).

As a result of importance attached to urban housing, the sustenance of the cities is therefore proportional to the extent of meeting urban housing requirements⁴⁶. Unmet urban housing leads to many social-economic challenges among which is housing deficits. Housing deficits lead to informal housing developments when there is a shortfall in the number of housing units needed to accommodate the inhabitants of an area¹⁰³. Housing deficit is also seen as the state of disequilibrium between demand and supply for housing^{40,103,67}. These huge deficits in housing supply have pushed urban dwellers in need of shelter and other amenities to opt for self-help housing⁴⁹. This self-help mechanism has resulted in the increasing number of informally-built homes. This has contributed significantly to the development of slums and shanties across African cities leading to serious socio-economic and environmental problems²⁴.

Moreover, the informal settlement dwellers engage in informal employment, live in vulnerable conditions and lack access to public infrastructure and amenities¹¹⁸. They consequently live in constant fear of eviction. Other socio-economic challenges include, among others, putting pressure on public services and amenities, constitutes social and environmental vulnerabilities (as illustrated in Tables 2.11 and 2.12) where dwellers

are spotted searching for safe drinking water; socio-economic challenges of informal settlements negatively affects city economies, in addition to violating land and property rights^{122,50}. Other challenges experienced in informal settlements are high crime rate, high infant and maternal mortality rate as well as poor physical and mental health^{123,42}. Informal settlements that have developed into slums areas produce criminality and peopled by felonious characters. Informal settlements have, for many years, led to other social challenges like prostitution especially among teenage dwellers¹²⁴. Majority of this was noted in Abuja's informal settlements as illustrated in Plate 2.11.

Nigeria



Plate 2.11: Prostitution is a Common Social Menace among Dwellers of Informal Settlements¹²⁴. This is a Common Sight in many of Abuja's Informal Settlements.
Photo Credit:⁴²



Plate 2.12: Availability of Safe Drinking Water is a major Social Challenge in many of Abuja's Informal Settlements
Photo Credit: International Centre for Investigative Reporting



Plate 2.13: Searching for Safe Drinking Water in Makoko Informal Settlement, Lagos
Photo Credit:¹³⁸

Environmental Challenges

Environmental challenges occur when there are changes that interferes with the environmental balance as a result of human interference with the environment. These challenges led to outcomes or consequences that

are hostile to the environment. For example, effects of deforestation, flooding and erosion on the environment⁷⁰.

Across the African continent, environmental challenges occasioned by informal settlements range from poor land use including overgrazing, insufficient water, poor waste management, air pollution, and global warming^{110,125}. Informal settlements contributed to poor land use because informal settlement leads to land degradation through deforestation⁷⁰. Similarly, during the apartheid era, black South Africans do not have access to many government benefits like fertilizers making overgrazing a common environmental problem in South Africa till date¹²⁶. The combined consequences of these challenges lead to loss of biodiversity.

Ineffective waste disposal system is another environmental challenge brought about by informal settlements in many African cities¹²⁷. The socio-ecological context of these challenges is still under investigation¹²⁸. As a result of poor infrastructure, handling of waste from informal settlements is particularly a challenge. The lack of infrastructure and basic amenities in the informal settlements has led to serious negative impacts on the environment in terms of waste disposal as wastes are unethically disposed resulting in land and water pollution^{128,126}.

Scholars are focusing on the relationship that exists between urbanisation (that results in informal settlements) and climate change¹²⁹. Climate change that leads to global warming is a major global environmental challenge caused by most of the above-mentioned issues. This results from increase in temperatures through release of greenhouse gases as well as increasing release of dangerous carbon emissions^{130,131,132}. Climate change is one of the outcomes of rapid urbanisation that affects people in diverse ways globally¹²⁹.

Relationships have been established between urbanisation which is a driver of housing informality and human susceptibility to climate change¹³⁰. Through the activities of informal settlement dwellers, activities such as burning of wastes and use of alternative energy sources led to air pollution through which

hazardous gases are emitted into the atmosphere¹³⁰. This practice has serious impacts on the ozone layer and having global warming effects. It is contended that with continued maltreatment of the environment, global warming will continue to be a challenge to global inhabitants^{126,130}.

Environmental challenges of housing informality are similar across the nations of Africa especially among the urban poor²⁸. This situation has resulted in the development of self-help informal housing.



Plate 2.14: An Overcrowded Informal Settlement
Photo Credit: The Sun Nigeria

2.3.10 Existing Regularisation Strategies

Urban Renewal

Conceptually, the term ‘urban renewal’ also known as ‘urban regeneration’ in the United Kingdom started as a concept of urban redevelopment through the American Housing Act of 1949⁷. The term is, today, a common phrase used by built environment professionals aimed at regularizing informal settlements and solving the challenges of slum developments^{133,7}.

Various scholars have advanced different definitions for the concept of urban renewal^{8,134,135,7}. For example, urban renewal is seen as the “process of restoring sanity to the unsanitary conditions of a decaying urban area”. The concept is also described as a “deliberate effort to change the urban environment through

planned, large-scale adjustment of existing city areas to present and future requirements for urban living and working". Similarly, Egunjobi described urban renewal as an "inescapable response to the decaying nature of ageing cities". Osuide defines the phrase to mean "a planned attempt to transform the urban environment through structured large-scale control of existing urban areas to enhance both the present and future operations of urban populace". The concept is further described as a tool needed to solve the challenges of slum development through "a comprehensive improvement, functional renovation or demolition and construction works, which are carried out in urban built-up areas under the regulations of urban planning authorities"⁷.

It is noteworthy that an urban area of a city may not be considered for urban renewal if certain unsanitary conditions are not established. Such conditions are referred to in various terms as urban blight, squalor, obsolescence and slums among others; and areas with such conditions are designated urban renewal areas⁸. It should also be noted that urban renewal includes the following components - city expansion and redevelopment, comprehensive road development and redesigning, and beautification and settlement layout. Others include, upgrading of facilities and public amenities and services, construction and silting of drainage system within an urban center, and enforcing slum upgrading and city development⁷.

In summary, the major goal of urban renewal is directed at achieving better utilization of land in dilapidated urban areas to meet various development needs, to improve the physical, social-economic and ecological aspects of urban areas through various strategies which includes redevelopment, rehabilitation, and heritage preservation^{136,131}.



Plate 2.15: Demolition of an Urban Renewal Area
Photo Credit:⁷

With the establishment of such conditions, appropriate strategies are then employed. The choice of any strategy to be adopted depends on certain considerations. These include: an observed study of the area to ascertain the challenges, cost implications, the link of the alternative approaches, time frame and available technology for implementation⁸. Some of the strategies are discussed below:

Redevelopment/Total Clearance

This involves the complete demolition of blighted urban renewal area and the utilization of the recovered area for the execution of new projects. This strategy is illustrated in Plate 2.14. It naturally involves the displacement and relocation of the affected dwellers. A recent example is the slum clearance and redevelopment of Ajelogo in Kosofe Local Government Area of Lagos State. The major criticisms are that the strategy is expensive, it leads to displacement and disruption of family as well as destruction of workplace⁸. As an example, the slum clearance of the late '80s led to displacement of many families and

destruction of work places with Maroko (now Victoria Island Annex) in Lagos as a case study. The displaced are not usually resettled.

Rehabilitation

This strategy involves bringing to standard dwelling units that are substandard but are in sound structural conditions through repair and renovation, and through rehabilitation of public amenities and facilities. This is a less costly and people friendly strategy as opposed to comprehensive redevelopment. Technical difficulties and the time-consuming process are the major criticisms of the method.

Gentrification

Another form of urban renewal strategy is gentrification. This involves the restoration of the central business districts and conversion and upgrading of run-down residential neighborhoods from their earlier use to new standardized uses^{137,138}. Recently, the main purpose of this strategy is to release the latent value of properties along corridors with commercial activities. This strategy is prominent in areas close to existing Central Business Districts CBDs and along major arterial routes⁸. Examples abound along Ring Road, Ibadan, Arakale Street, Akure and Ikorodu Road in Lagos. Distortion in Land use pattern is the major shortcoming of this strategy.

Conservation

It has been noted earlier that urban renewal will not be necessary if certain unsuitable conditions are not present that will make the neighborhood to be designated an urban renewal area. It is therefore imperative to prevent such conditions to set in through preventive measures. The aim of this approach is basically to prevent the decaying of neighborhoods and preserve them in good conditions through constant maintenance practices. This is usually applied to planned residential areas.

Integration

This approach to urban renewal is considered as the most acceptable method to re-create or renew old neighborhoods. It involves the best combination aspects of redevelopment and rehabilitation to function in a way to complement one another. It entails the restoration of properties that can still be salvaged and the reconstruction of those that have decayed beyond mere restoration.

Unfortunately, none of the above urban renewal strategies is observed to have been effective regularisation strategy in Abuja, the study area.

2.3.11 Process of Urban Renewal

Urban renewal is a difficult project and had to be followed methodically through a structured process from redevelopment conception to implementation. This is to ensure coordinated activities through the adoption of appropriate and satisfactory standards. The following processes are imperative.

The first step is to conduct a condition study of the urban renewal site through reconnaissance. This is to ensure proper description of the area to be improved for quality criteria such as obsolete and deficient housing conditions, lack of adequate facilities and amenities, inadequate transportation and traffic congestion, and drainage challenges among others. Second, if blight is determined as a result of the above study, investigation and study of the existing conditions and characteristics of the study areas are then carried out. These areas are then designated Urban Renewal Areas.

The third step is the creation of a comprehensive redevelopment plan like land use plans, infrastructure plans and future improvement plan of the area for approval by the City/Town Planning Office. These redevelopment plans are frequently subject to review process in liaison with City/Town Planning Office.

If the project will involve displacement of the dwellers, the fourth step will be a planned relocation programme of the dwellers. The last step is project implementation to be followed by periodic review and

evaluation. All the processes are expected to involve citizen participation to ensure cooperation and effective implementation.

2.3.12 Challenges to Regularisation

It is argued that demands of the growing urban population in terms of housing and other social amenities were largely unmet as a result of rapid urbanisation^{4,103}. The consequence of this is the development of informal settlements in most cities across the world especially cities of the Global South¹¹. This makes regularisation of informal housing settlements a necessity to curb its proliferation and negative consequences.

Regularisation of informal settlements is a procedure that involves the upgrading of such settlements including legitimization of land holdings through titling and using urban planning tools^{139,11}. The strategy is seen to be most effective for the formalisation of informal settlements through regularisation¹¹. For effect, the implementation is often carried out using two planning approaches – top-down or state-led approach or bottom-up or participatory/community-led approach¹¹. There are however some challenges of implementation, some of which are examined sequentially.

Lack or insufficient planning data infrastructure (maps, development plans), including legal and technical frameworks. It has been observed that this, oftentimes, constitutes serious challenges to the federal and local planning authorities to effectively regulate developments in the informal settlements^{140,34,20}.

Regularisation of informal settlements is cost intensive making inadequate funding another serious challenge. This challenge necessitate support from local and international donor agencies such as The Sustainable Ibadan Project (SIP) whose fund was used to rehabilitate a toilet block and sank a motorized borehole in Bodija Market in 1997³⁴. Similarly, the European Commission supported the Participatory Slum Upgrading Programme (PSUP) of Kenya with funds to redevelop 190 cities and towns in Kenya in 2016 employing the participatory or bottom-up approach to planning³⁴.

Lack or poor resettlement plan is another challenge confronting regularisation. A good number of people is expected to be displaced especially when the process is through eviction and demolition. This will necessitate, in theory, building new structures to resettle the original dwellers¹⁴⁰. The reverse is, however, the case in practice. Effective resettlement plans usually pose severe funding challenges to the authorities, and lack of it leads to serious cost challenges to those needing resettlement.



Plate 2.16: Displacement Without Resettlement
Photo Credit:¹⁴⁰

Regularisation is also affected by socio-economic and environmental challenges as evidenced in pollution and traffic congestion during eviction, disruption to the economic base of the displaced, and possibility of the displaced turning to crimes for survival¹⁴⁰. Due to lack of trust in the authorities and low level of awareness among the general public on the need to salvage urban degradation, the process of urban regeneration is often criticized by the public¹⁴⁰. This is the case in Abuja at the moment as the efforts of the authorities in sticking with the Abuja Master Plan are seen as anti-people.

Other challenges include corrupt leadership and followership; differences in stakeholders' interest on the prioritization of informal or squatter settlements' regeneration issues; inadequate project monitoring and evaluation due to inadequate and adequately trained built environment professionals and many more.

2.4 Conceptual Framework

The conceptual framework for this research emanates from consolidating the findings in the literature review with the objectives of the study. Consequently, the research conceptual framework is structured based on the aim and objectives of the study. Accordingly, the framework is developed based on the theme of the topic and each of the objectives as follows:

Theme: Regularisation of Informal Housing

Objective One: Socio-economic Attributes and Housing Characteristics

Objective Two: Drivers of Informal Housing

Objective Three: Regularisation Strategies

Objective Four: Municipal/Social Services

Objective Five: Challenges

The framework subsequently identified the variables considered for each of the objectives and their connectivity as illustrated in Figure 2.6.

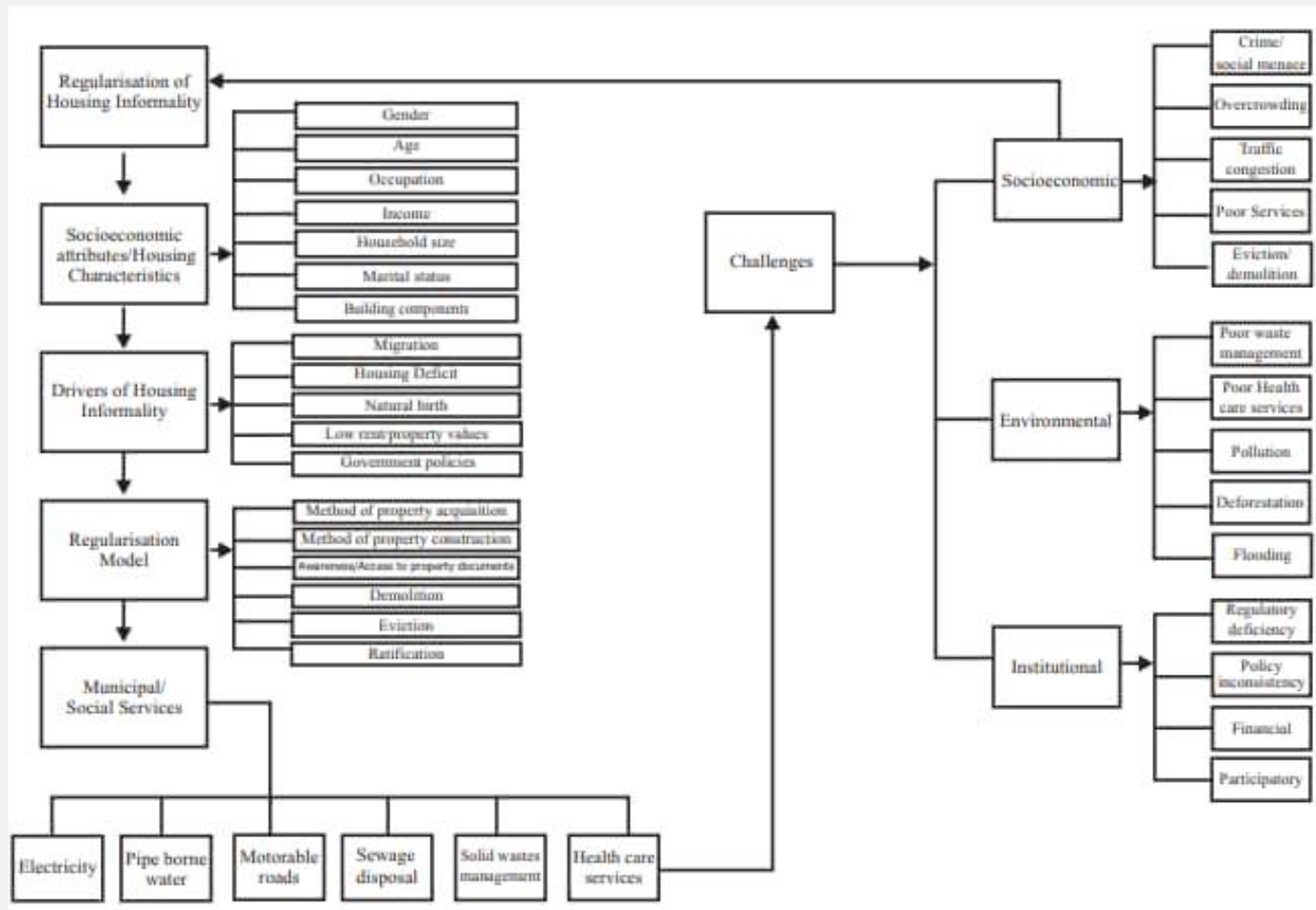


Figure 2.6: Operationalizing the Conceptual Framework
 Source: Author's Concept, 2023

2.5 Summary of Gaps in Literature Reviewed

The existing literature on the regularisation of informal housing in Abuja, Nigeria are scanty but have provided valuable insights into the challenges and opportunities associated with the process. However, there are several significant gaps that needed to be addressed to enhance our understanding of the phenomenon and inform policy interventions.

Firstly, while previous studies have examined the socio-economic implications of informal housing in Abuja, limited attention has been given to understanding the specific mechanisms and processes through

which regularisation programmes can effectively address the challenges faced by informal settlement dwellers. Further research is needed to explore the impacts of regularisation on access to basic services, tenure security and the overall improvement of living conditions for informal settlers.

Secondly, the existing literature primarily focuses on the perspective of government agencies and policymakers involved in the regularisation process especially the distortion of the Abuja Master Plan. There is a dearth of studies that capture the voices and experiences of the informal settlers themselves. It is crucial to engage with the residents of informal settlements to gain insights into their aspirations, needs and concerns regarding the regularisation process. Understanding their perspectives will facilitate the development of more inclusive and sustainable regularisation strategies.

Moreover, the majority of existing studies on the regularisation of informal housing in Abuja have adopted a qualitative approach, relying on interviews and case studies only. There is a need for quantitative research that employs robust statistical methods to assess the impacts of regularisation programs on housing affordability, property values, and the broader housing market dynamics. A quantitative analysis will provide a more comprehensive understanding of the outcomes of regularisation efforts and enable evidence-based policy recommendations.

Lastly, while some studies have touched upon the legal and institutional frameworks governing informal housing in Abuja, there is limited research on the effectiveness of these regulatory mechanisms. Exploring the gaps and challenges within the existing legal and institutional frameworks will help identify areas for improvement and contribute to the development of more effective policies and strategies for regularizing informal settlements.

In conclusion, the assessment of regularisation of informal housing in Abuja, Nigeria presents several research gaps that require further exploration. Addressing these gaps through qualitative and quantitative research incorporating the perspectives of informal settlers, and examining the effectiveness of legal and

institutional frameworks will contribute to a more comprehensive understanding of the regularisation process and inform evidence-based policy interventions.

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Chapter Three Methodology

This chapter discussed the research approaches adopted to investigate the issues raised in Sections 1.3 and 1.4 of this work. The chapter explained the research approach to the fieldwork and methods employed in the data acquisition and analysis during the research process. The methodology used is both qualitative and quantitative in nature. These methods were adopted in order to fully understand the phenomenon under investigation. The chapter also examined the variables mentioned in the conceptual framework and their linkage with each of the objectives as well as the research methodology adopted. The chapter further discussed in details the mode of data collection, the types of data collected, the research tools used and how the data were analysed and presented.

3.1 The Research Design

In this research work, a combination of multiple case studies and cross sectional (survey) approaches were adopted and data were collected through both primary and secondary means. Adopting multiple case studies permit comparison of the differences and similarities in the drivers and regularisation strategies of informal housing in the selected settlements. Furthermore, the use of multiple case studies is intended to strengthen the validity of the results by comparing replication and relationships in the different informal settlements. The research used a combination of quantitative and qualitative data collection procedures, which include household survey, households' and major stakeholders' interviews, administration of questionnaires and direct observation that was complemented by on-site photography. In addition, a 5-point Likert Scale was adopted to measure respondents' attitudes, opinions and behaviors towards some specific questions. The Likert Scale was adopted in situations where questions were asked and respondents had to choose the best options that align with how they feel about the questions. I have chosen the 5-point scale for this work because it is simple to understand by the respondents compared to higher point scales.

The stakeholders included in the study are the informal settlement dwellers and stakeholders (on-site and off-site), academics, professionals in the built environment, real estate developers/investors/property owners and government officials.

Respondents in the chosen study area were randomly selected for questionnaires administration. The questionnaires were coded for ease of scientific analysis of data. Data analysis was done using qualitative and quantitative techniques. The information obtained from the questionnaires were presented in a structured manner that allow for a thorough analysis of the data collected.

The research design/framework shown in Table 3.1 are both descriptive and explanatory. The research design was developed to show the clear linkages between the research questions, objectives, research methods and analysis.

Table 3.1: Research Framework.

Research Questions	Research Objectives	Variables	Data Sources	Data Analysis Methods	Data Display
What are the drivers of informal housing in Abuja, Nigeria?	examine the drivers of informal housing in the study area	*Population growth *Migration *Urbanisation *Housing deficit *Housing informality *Regulatory frameworks	*Desk-top literature review *Survey and administration of questionnaires *Survey and structured/semi-structured interviews *Observation and on-site photography *Land use map	*Quantitative analysis and frequency of distribution using SPSS	*Tables *Figures/Diagrams *Figures *Maps *Plates *Graphs
What are the socio-economic and environmental implications of informal housing in	evaluate the prevailing environmental and socio-economic challenges of informal	*Urban population explosion *Housing deficit *Self-help housing	*Observation and on-site photography *Structured and semi-structured interviews *Administration	*Quantitative analysis	*Figures *Plates *Maps

Abuja, Nigeria?	housing in the study area	*Housing informality *Poor health and well-being *Crime	of structured e-questionnaires *Satellite images *Aerial photographs		
What previous regularisation strategies have been put in place and what impacts does these strategies have on the study areas?	examine the level of regularisation of selected housing units in the study area	*Planning approaches *Eviction and demolition *Slum clearance *Urban renewal strategies	*Desk-top literature review *Survey and e-questionnaires *Structures and semi-structured interviews	*Qualitative and Quantitative analysis	*Tables *Figures/Diagrams *Plates
What are the socio-economic attributes and housing characteristic of informal settlements in the study area?	assess the socio-economic attributes of the respondents and housing characteristics in the study areas.	*Gender *Marital status *Ethnicity *Educational status *Employment status *Household size *Average monthly income *Ownership status *Length of stay *Housing components *Building materials	*Survey and administration of questionnaires *Survey and structured/semi-structured interviews *Observation and on-site photography	*Quantitative analysis and frequency of distribution using SPSS *Descriptive analysis	*Tables *Figures *Plates
What possible ways can the existing strategies be improved to extenuate housing informality in	determine possible ways of improving the existing regularisation strategies	*Participatory planning approach through bottom-up initiative *Robust housing	*Structured interviews *Sequential and structured face to face interview with electronic interview tools	Qualitative analysis	*Tables *Figures *Plates

Source: Author's Field Survey, (2022)

3.2 Population of the Study

The unit of investigation is the housing units, the population of which are obtained from the records of the various Community Development Associations (CDAs) operating in the study areas. For this study, the population of interest is the entire housing units in each of the informal settlement areas. The breakdown of the population and sample size of the study areas are presented in Table 3.2.

3.3 Sample and Sampling Techniques

Purposive sampling technique was used to select five informal settlements across the study area. This sampling method was informed by the author's knowledge of the various informal settlements clustered in the study area. The adoption of the technique was also based on the understanding that the selected samples will be a good representation of the informal settlements in the study area. The respondents, usually the heads of the households, were also purposively selected. This was informed by their ability to expertly clarify issues on the subject of investigation. Random sampling technique through systematic approach was used to select a representative of housing population for the study with a confidence interval of 5% and confidence level of 95%. This is a procedure where the first house to be sampled was chosen using simple random technique. Subsequent units of investigation were selected at equal interval of every fifth house, on each side of the street. This method affords good representation of housing units as well as permit generalizations to the population in each of the selected case study areas.

Table 3.2: Population and Sample Size of the Study

S/N	Settlements	Code	Nos of CDAs	Total Housing Population	Sample Size
1	Tudunwada	TW	4	800	160
2	Kuchingoro	KG	3	200	40
3	Jabi	JB	2	200	40
4	Garki Village	GK	2	250	50
5	Gishiri Village	GH	2	250	50
TOTAL				1,700	340

Source: Community Development Associations' Records, 2023

3.4 Description of Research Instruments

The study put to use primary data obtained through questionnaire administered to respondents in the selected study areas. In addition, several scholarly literature were extensively reviewed, the knowledge of which formed the basis for developing the questionnaire for the collection of data. The questionnaire divided into five sections were administered on three major categories of respondents, namely: residents, people in the academics and professionals in the built environment. The sections obtained information such as socio-economic/housing characteristics, drivers of informal housing, regularisation of informal housing, provision of municipal/social services and socio-economic/environmental challenges. An interview guide was also prepared to obtain information such as the effectiveness of the existing strategy from relevant stakeholders.

3.5 Validity of Research Instruments

The validity test carried out for this study in order to ensure accuracy was the pretesting of the questionnaires during a pilot survey at Tundunwada informal settlements where 95 questionnaires were administered to confirm the questions are appropriate and should be included in the questionnaire. This represented about 27.94% of the overall sample size. The purpose of the test was to check the stability, accuracy, and precision of measurement as a valid questionnaire must give similar results if administered at different times.

3.6 Reliability of the Research Instruments

Reliability helps in eliminating biases and errors in design of a questionnaire and ensures consistency. During the pilot survey, same or similar questionnaires but in different formats with the aim of achieving the same results were administered to the respondents as mentioned in Section 3.5. It was deduced from different responses from the pilot survey, for example, that questions on the concept of informality and security of tenure were misunderstood by the respondents. This necessitated the redesigning of the affected questions before final administration during field work. The ordinal data obtained on all the variables were subjected to reliability test using the Cronbach Alpha reliability coefficient test. The test result presented in Table 3.3 showed high Cronbach's Alpha above the recommended of 0.70 averages on such tests.

Table 3.3: Reliability Test by Objectives (Ordinal Variables)

Objectives	Cronbach's Alpha	No. of Items
Objective 1	-	-
Objective 2	.981	9
Objective 3	.988	4
Objective 4	.939	10
Objective 5	-	-

Source: Author's calculation using Cronbach's Alpha Reliability Coefficient Test

3.7 Administration and Method of Data Collection

The study adopted three types of data collection instruments for the collection of primary data for this work. These are the questionnaire, the semi-structured interview guide and observation schedule.

Sources of Data

Data were collected through two main sources, namely primary and secondary sources.

Primary Data

The sources of primary data are:

1. Physical observations;
2. Semi-structured interview and
3. Questionnaires.

To source for primary data on a variety of variables, structured questionnaires were designed and administered through personal interviews. One-on-one semi-structured interviews were held with all major stakeholders (residents, landlords, government agencies and professionals in the built environment) as primary source of data. The field survey instruments were designed and the personal interviews conducted to address the various research questions was in line with the study objectives.

Direct observation is one of the oldest methods of research in social science¹. It is equally one of the qualitative techniques of research methods². It is also said that the appropriate way to gain a better understanding of the daily ways of lives of city dwellers is through direct observation³. Accordingly, observation as a tool was employed and an observation schedule developed and used to capture other details that could not be captured with the structured questionnaires and face to face interviews. This is intended to capture relevant data on settlement patterns of development, housing typologies, housing layout, housing density, infrastructure development, environmental challenges and land use control system among others in all the investigated informal settlements.

Secondary Data

To complement the data from primary sources, secondary data were also sourced from the following means:

- i. I sourced materials from the archives like maps and pictures; other relevant documents and information like history of the settlement.
- ii. I carried out a desk-stop review of relevant publications like journal articles, books, reports, conference papers among others were used to source for secondary data.

The Questionnaire

A single questionnaire (Appendix XIII) divided into five sections was designed with each section addressing each objective of the study. The questions were formulated as closed ended type – this is necessary to give precise response by the respondents to the questions. The questions were designed to capture variables needed to address the research questions as well as the objectives of the study.

Interview Guide and Observation Schedule

An open-ended interview guide was prepared and divided into six sections by listing relevant issues to be addressed (Appendix XIV). The interview guide was designed to extract information from relevant stakeholders – heads of settlements, government agency officials, built environment professionals, academics, real estate developers, development control officials and other relevant target population for issues relevant to housing informality and regularisation. Similarly, an observation schedule (Appendix XV) was prepared to assist in recording the characteristics of each settlement under study and the housing typologies under investigation. Relevant data targeted through the observation method were settlement patterns of development, housing typologies, housing layout, housing density, infrastructure development, environmental challenges and land use control system in all the investigated informal settlements.



Figure 3.1: Research Methodology – The Link.
Source: Author’s Creation, (2023)

Research Strategy

- Mixed method
- Multi-case

Data Collection

***Primary**

- Questionnaire
- Interview
- Observation

***Secondary**

- Journals, Conference papers,
- Reports, Books, Archival materials

Research Design

- Cross sectional (survey)
- Qualitative
- Quantitative

Data Analysis

- Descriptive
- Inferential

Data Presentation

Tables, Figures

Research Philosophy

- Pragmatism (Realism/Practicality)

3.8 Method of Data Analysis

Analysis is a process of generating, developing, and verifying data. The process develops with the acquisition of data. In this study, both qualitative and quantitative analysis were used during data collection. This was achieved by recording and interpreting analytical insights drawn from the data collected during fieldwork. The process of data analysis was divided into four steps:

1. Data editing,

2. Coding,
3. Statistical adjustment of the data,
4. Data analysis and Data interpretation.

Data Editing

All returned questionnaires were edited to identify omissions and errors in the responses. Poorly completed questionnaires were discarded, and illegible or missing answers were coded as “missing”. In the research, 45 poorly completed questionnaires fell into this category.

Coding

Responses to all closed questions were coded using the Statistical Package for the Social Sciences 20 (SPSS 20) to generate the needed information. Data on socio-economic characteristics were analyzed through descriptive statistical methods and narrative analysis. Data associated with drivers of housing development were done using descriptive statistical method, namely the distribution of Frequency, cross tabulation and factor analysis for reduction of variables by SPSS (scientific package). Descriptive analysis was utilized to analyze data from direct observation to investigate the housing development characteristics. Data from both quantitative and qualitative method were triangulated and interpreted by narrative analysis. Data from planning personnel during multiple interviews were coded and categorized. The analysis of the coded data was done qualitatively by narrative analysis to answer the questions on challenges of informal housing.

Selection of Variables

After a review of various literature, relevant variables to this study have been collated as a guide. In the course of this study, the following variables were selected because of their relevance to the study areas.

Socio-Economic Variables

Socio-economic Attributes

- 1 Gender

- 2 Age
- 3 Ethnic Group
- 4 Marital Status
- 5 Household Size
- 6 Education Status
- 7 Employment Status
- 8 Income Bracket

Housing Characteristics

- 1 Wall
- 2 Doors
- 3 Flooring
- 4 Windows
- 5 Ceiling
- 6 Roof
- 7 Toilets

Drivers of Housing Informality

- 1 Land Tenure Issues
- 2 Migration
- 3 Natural Birth
- 4 Housing Deficit
- 5 Government Regulations/Policies

- 6 Land Affordability
- 7 Locational Advantage
- 8 Nearness to Kinship
- 9 Speculation

Regularisation of Housing Informality

- 1 Acquisition Method
- 2 Construction Method
- 3 Title Document
- 4 Building Regulations

Regularisation Strategy

- 1 Demolition
- 2 Site and Services
- 3 Ratification

Provision of Services

- 1 Pipe Borne Water
- 2 Electricity
- 3 Drainage System
- 4 Sewage Disposal
- 5 Solid Waste Disposal
- 6 Elementary Public School

- 7 Health Care Facilities
- 8 Security (Police Station)
- 9 Motorable Roads

Socio-economic Challenges

- 1 Unauthorized Eviction
- 2 Unauthorized Demolition
- 3 Poor Accessibility
- 4 Poor Services
- 5 Overcrowding
- 6 Crime and other Social Menace
- 7 Traffic Congestion
- 8 Arbitrary Taxes/Levies

Environmental Challenges

- 1 Pollution
- 2 Flooding
- 3 Poor Waste Management
- 4 Poor Health Facilities

Measurement of Research Variables

Measurable variables from the questionnaires are presented in this section. Economic factors such as sex, age, income, ethnicity, marital status, occupation, literacy status and household size are important in any study that involves housing units. Since respondents were chosen from principally the heads of household,

the economic composition of the target population is important in understanding most issues related to housing. Related variables to all objectives of the study are analysed below:

A. Socio-economic Attributes of Informal Housing Residents

1. Household Size: This refers to the total number of persons living in a household. It affords a means of analyzing the standard of living as demonstrated by overcrowding.

Do Not Copy, Lead City University, Nigeria

2. Gender (sex): This variable was used in defining the sex of household heads. It was also used to determine the ratio of female-headed household to male-headed household and to assess gender ownership of properties in African culture. It was also used employed to check the impacts of gender on quality and character of their dwellings.

3. Age: This refers to the real age of the respondents. It helps in determining the prevailing age bracket of the informal settlement residents.

4. Marital Status: This variable was used to establishing the marital position and its impacts on housing type and household size.

5. Occupation: This was taken as the actual employment status of the respondents. This variable was used in establishing relationships between the respondents' occupation and housing type as well as standard of housing. It was captured as an open-ended question in the research instrument.

6. Literacy Level of Respondents: This variable measured the respondent's ability to read and write. It was rated by using no education, elementary education, secondary/certificate/diploma, undergraduate and postgraduate. The variable helped in measuring the impacts of respondents' education on the character and quality of their dwellings.

7. Ethnicity: This refers to ethnic and social affiliation of the respondents. It was utilized to investigate cultural exclusion, residential isolation and settlement patterns. It was also used to confirm migration as a major driver of urbanisation.

8. Average Monthly Income: In this study, income as a variable is significant in defining the quality of housing, housing typology, size of household, quality neighbourhood and response to urban policy. This variable is considered because of its importance in determining many other factors in the housing study. Four levels of income were considered in this study namely, the low-income group (less than ₦50,000.00); the lower middle-income group (₦51, 000.00 -100,000.00); upper middle income (₦101,000 – 150,000) and high-income group (₦151, 000.00 and above).

B. Tenure

9. Length of Residency: This is defined as the length of years a household had been a dweller of the settlement as showed by the time the household moved into the neighbourhood. This variable helped in determining the frequency of movement as defined by security of tenure. This variable was classified into three groups namely: less than 5 years, between 5 and10 years, and above 10 years.

10. Ownership: This is defined as the ownership status of the respondents' housing units. This variable was designed to know if the housing unit is owner-occupied or rented. House ownership played a significant role in the quality of housing.

11. Land Tenure: This variable helps in establishing the type of title document on the land. Six types of tenure were identified and considered: purchase receipt, survey plan, deed of assignment, leasehold, right of occupancy and certificate of occupancy.

12. Building Materials: This variable showed the construction materials. Construction items used for building components like wall, roof, windows and doors were captured. It is important in ascertaining the quality of housing.

13. Neighbourhood Quality: This variable considered factors such as drainage system, environmental pollution, waste disposal system, good road networks among others. This variable helps to determine the quality of the neighborhood.

Return Rate and Confirmation of Returned Questionnaires

The selected study areas are populated mostly by civil servants and informal traders. The questionnaires were therefore administered mostly during weekends to ensure high response rate. A total of six weekends were used to administer questionnaires in the five selected settlements of Tudunwada, Kuchingoro, Jabi Village, Gishiri Village and Garki Village. A total of 340 questionnaires were administered in the study areas broken down as follows: Tudunwada, 160 questionnaires; Kuchingoro, 40 questionnaires; Jabi Village, 40 questionnaires; Gishiri Village, 50 questionnaires and Garki Village, 50 questionnaires. In all, 295 good and complete questionnaires were retrieved representing approximately 87% Questionnaire Return Rate (QRR) in the entire case study areas. With the aid of simple random sampling technique, respondents were selected from the 13 Community Development Associations (CDAs) across the selected five case study areas. Inappropriately completed questionnaires are considered as “void” or “missing” response in the analysis. This represents approximately 13% of the administered questionnaires.

Table 3.4: Research Instrument Return Analysis

S/N	Settlements	Sample Size	Number of Returned Instruments	% of Returned Instruments
1	Tundunwada	160	131	81.88
2	Kuchingoro	40	38	95
3	Gishiri Village	50	45	90
4	Jabi Village	40	33	82.5
5	Garki Village	50	48	96
TOTAL		340	295	86.8

Source: Author's Fieldwork, 2023

Data Processing and Mode of Presentation

Data processing and analysis for this study were carried out using the Statistical Package for Social Sciences (SPSS) 20 for windows. Content Analysis, a non-statistical tool, was used in processing data from interviews and observations. Statistical Package for Social Sciences (SPSS) was equally employed for the statistical analysis of the quantitative data in this study. Socio-economic attributes considered include gender, age, marital status, employment status, household size, literacy level, ethnicity, ownership status, income level and length of stay in the community. Descriptive analysis was mostly used to compile the returned questionnaires. The study considered various building components and materials in analyzing housing characteristics in the study area.

Link Between Research Objectives and Research Methodology

Each research objective was addressed with different but relevant data collection and analysis method. This section presented the various methods for gathering data, the characteristics and nature of data collected and the analysis of data.

Objective One: To Assess the Socio-economic Attributes of the Respondents and Housing Characteristics in the Study Areas

Characteristics of Data: The data for this objective are purely quantitative in nature. The quantitative data include the socio-economic attributes of respondents of the sampled housing units as well as the characteristics of the buildings.

Sources of Data: The data for this objective were obtained from the responses in the research instrument and the analysis of the observation schedule.

Analysis of Data: Data obtained from the responses were subjected to descriptive analysis, computation of frequencies and percentages and the results were presented in tables and Figures.

Objective Two: To Examine the Drivers of Informal Housing in the Study Areas

Characteristics of data: Data for this objective are obtained through qualitative means. The residents' perceived drivers of informal housing were assessed using nine indicators that constitute informal housing in the neighborhoods. Based on these indicators, residents were asked to rate their level of agreement to the nine factors using a 5-point Likert Scale of **'Strongly Disagree'**, **'Disagree'**, **'Neutral'**, **'Strongly Agree'**, and **'Very Strongly Agree'**. Analyzing the perceived drivers, an assigned values of 1, 2, 3, 4 and 5 were given to each of the ratings respectively.

Sources of Data: Data for this objective were derived using observation schedule and questionnaire instrument.

Analysis of Data: Analysis on the observation schedule were carried out using Content Analysis while Descriptive Analysis using frequency and percentage were used to present data in tables and Figures.

Objective Three: To Investigate the Level of Regularisation of Selected Housing Units in the Study Areas and Determine the Effectiveness of the Adopted Strategies

Characteristics of Data: The data for this objective are both quantitative and qualitative in nature and data obtained include means of property acquisition, methods of property construction, awareness to obtain title documents, existing regularisation strategies and residents affected by regularisation strategies. Two varieties of questionnaires were used to address this objective. The first addressed issues of building regularisation of housing informality by extracting information on documentation of their land and buildings. The second set is an open-ended structured interviews set out to address planning and control issues.

Sources of Data: Data for this objective were derived using observation schedule, interviews and questionnaire instrument.

Analysis of Data: Analysis on the observation schedule were carried out using Content Analysis while Descriptive Analysis using frequency and percentage was used to present data in tables and Figures.

Objective Four: To Examine the Level of Provision of Municipal and Social Services in the Study Areas

Characteristics of Data: Data for this objective are quantitative in nature. This data set investigates the availability and proximity of municipal and social services in the neighbourhood. They are the indicators of the neighbourhood quality and most of the data collected addressed quality, adequacy and nearness of municipal/social amenities to the point of use.

Sources of Data: The data for this objective was obtained from respondents of the sampled housing units through questionnaire instrument as well as observation.

Analysis of Data: Descriptive statistics were used in analyzing the data obtained. This involved the calculation of frequencies and percentages and the presentation of the results using tables and Figures.

Objective Five: To Investigate the Prevailing Environmental and Socio-economic Challenges of Informal Housing in the Study Areas

Characteristics of Data: The data for this objective are primarily qualitative in nature. The data collected addressed the environmental and socio-economic challenges of the respondents.

Sources Data: Data were obtained mainly from the respondents' survey questionnaire as well as observation in the sampled settlements.

Analysis of Data: Descriptive Analysis using frequency and percentage were used to present data in tables and Figures.

3.9 Ethical Approval

Ethical considerations play an important role in research. These are collection of principles and rules that need to be followed especially in the area of research methodology, data collection, interpretation and presentation. In this work, the following ethical norms were considered.

The respondents in the study area were engaged willingly. It was explained to them that participation in the study was voluntary and that they can withdraw at any stage of the engagement. Anonymity and confidentiality were also key considerations and the participants were assured of these factors. For example, while introducing the researcher to the respondents in the research instrument (questionnaire), a typical sentence read thus **“Your participation is however voluntary and you can withdraw your participation at any stage without penalty”**. This further assured the respondents of the absence of any liability whatsoever. Also considered as part of the ethics are the purpose and benefits of the research to the society which were, accordingly, explained to the participants.

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Endnotes

1. G. M. Fix; B. Kim, M. A. Ruben & M. B. McCullough, *Direct Observation Methods: A Practical Guide for Health Reseachers*, PEC Innovation, 1, 100036, 2022, 1 - 7.
2. H. Dzwigol & P. Barosz, *Observation as a Research Method in Social Science*, Scientific Papers of Silesian University of Technology Organisation and Management Series, 148, 2020, 141 - 149.
3. A. Crossman, *An Overview of Qualitative Research Methods*, Scientific Research, 2020, <https://www.thoughtco.com/qualitative-research-methods-3026555>.

Chapter Four

Results and Discussion of Findings

4.1 Data Presentation on Research Questions

This chapter contained the analysis and interpretation of data obtained from a survey conducted to assess the regularization of informal housing in Abuja, Nigeria. The study put to use primary data obtained through questionnaire administered on respondents in the selected study areas. In addition, several scholarly literature were extensively reviewed, the knowledge of which form the basis for developing the questionnaire for the collection of data. The questionnaire was divided into five sections (each section addressing each objective of the study) and administered to three major categories of respondents, namely: residents, people in the academics and professionals in the built environment (Architects, Builders, Estate Surveyors, Town Planners among others) and Government officials. Each section obtained information such as socio-economic/housing characteristics, drivers of informal housing, regularisation of informal housing, provision of municipal/social services and socio-economic/environmental challenges. An interview guide employed to obtain information through one-on-one interaction with relevant stakeholders.

The units of investigation (residents' houses) were selected using systematic random sampling where the first house to be sampled was chosen using simple random technique. Subsequent units of investigation were selected at equal interval of every fifth house, on each side of the street. This sampling method was considered appropriate and adopted because there were scanty and incoherent information on house

numberings. Many of the buildings are not numbered at all. A household head is taken to be an adult of at least 20 years in every selected building. This is based on the understanding that respondents in this age category of headship have better understanding on the subject matter under investigation. The household heads were purposively selected. From this sampling procedure, a total of 340 questionnaires were administered to stakeholders in five purposively selected informal settlements of the study area. These are: Tudunwada, Kuchingoro, Jabi, Garki and Gishiri. A total of 295 questionnaires were recovered from the stakeholders at the end of the survey; thus, giving a questionnaire recovery rate (QRR) of 86.8%. In administering the questionnaire, four trained but supervised research assistants were involved. A breakdown of the recovered questionnaires in each of the sampled settlements of Tudunwada, Kuchingoro, Jabi, Garki and Gishiri were 131, 38, 33, 48 and 45 respondents respectively (as shown in Table 3.3). Furthermore, data were analysed using SPSS 20 analytical software. Unless otherwise stated, all tables and Figures in this chapter were generated from author's fieldwork/survey carried out in 2023. The analysis presented in the ensuing sections are supported by 30 explanatory statistical Figures.

4.1.1 Socio-economic Attributes of Respondents

The socio-economic attributes of the respondents as well as housing characteristics in the sampled informal settlements are discussed in this section.

Gender of Respondents in the Study Area

From Table 4.1, findings revealed that majority (77.3%) of the respondents were male while 22.7% were female. A comparison of the gender distribution across the different settlements revealed a similar result as the overall study area. This finding indicates that majority of the household heads were male. Thus, the finding corroborates earlier studies where male dominance of property ownership in many African cultures were affirmed^{1,2,3}. Globally, it was avowed that 40% of countries place a limit on women's right to property. In 19 countries worldwide, women's right to property ownership is limited, and in another 44 countries,

male and female surviving children do not have equal rights to inherit properties⁴. As heads of the majority (77.3%) of the households, this finding is also an affirmation that household breadwinning falls mainly on the male gender in many African societies where he provides almost all the financial and physical needs^{5,6,7}.

Age Distribution of Respondents in the Study Area

The analysis on age distribution of respondents revealed that the mean, minimum and maximum age of respondents in the study area was approximately 43, 18 and 70 years respectively. Findings from the study as shown in Table 4.1. further revealed that majority (32.5%) of the respondents' age group was between 41-50 years. The next are those respondents with age group 31-40 years (22.4%), 51-60 years (20.7%) and below 31 years (18.6%). The least age group were respondents above 60 years which accounted for 5.8% only. The findings agreed with earlier studies that population is ageing worldwide⁸. This is evident with majority of the respondents in the age group 41-50 years age bracket (32.5%) and further 20.7% are between 51-60 years age bracket. A study has pointed out that Nigeria has the largest older persons in West Africa having older individuals of over nine million in 2016 with potential to rise to 26 million by 2050⁸. This comes with lots of socio-economic challenges including housing provision.

Marital Status of Respondents in the Study Area

As shown in Table 4.1, the marital status of respondents in the study area revealed a large proportion (65.4%) were married. On the other hand, 19.3% of the respondents had never been married while 4.4% spouses were deceased. Respondents who are separated accounted for 8.8% only while 2.0% account for respondents that have divorced. Similar findings were observed in other sampled settlements, as majority of the respondents were married. The finding is in sharp contrast to a perceived situation where many young and middle-aged adults are single parents made possible by separated couples.

Ethnic Diversity and Distribution in the Study Area

Findings on ethnic diversity and distribution in the settlements revealed that majority of the respondents (33.2%) do not belong to the main ethnic groups (Table 4.1). Findings from the study further revealed that 24.4% of the respondents were Igbo, 21.0% were Yoruba, 16.6% were Hausa and 4.7% were non-Nigerians. The dominance of the Igbo ethnic group in a non-Igbo enclave is of note here. This finding showed the migration tendencies of the Igbo nation worldwide and their resilience towards reconstruction, financial freedom and entrepreneurship abilities especially after the Nigerian civil war in 1970. Again, because of the belief in perceived marginalization in Nigeria's political architecture, the Igbo nationality usually strive to create a niche for themselves wherever they settle^{9,10,11}. This finding supports earlier studies that migration is a driver of urbanisation and consequently housing informality.

Respondents' Degree of Literacy in the Study Area

In terms of educational level as presented in Table 4.1, the study revealed that majority (37.3%) of the respondents were undergraduates. The next was 35.6% of the respondent with secondary/certificate/diploma level of education. Findings from the study further revealed that 11.9% and 11.8% of the respondents had elementary education and postgraduate degree respectively. Only 3.4% of the respondents had no education at all. According to the findings, it was established that majority of the respondents were educated and are able to understand and provide relevant information for the research. The high level of literacy here is linked to migration of other ethnic groups to the study area where education is treated with high premium.

Respondents' Employment Status in the Study Area

In relation to respondents' employment status as shown in Table 4.1, it was revealed that a high proportion (82.0%) of the respondents were employed either formally or informally while 7.8% were unemployed. Findings further revealed that 10.2% of the respondents were neither employed nor unemployed. Similar trends were observed across the selected informal settlements. Although majority of the respondents (82.0%) are employed either formally or informally, a large proportion (43.1%) falls in the lower middle-

income bracket. The implication is that the income is easily eroded by the impacts of high inflation although this is above the national minimum wage of ₦30,000/per month. This further impoverish the dwellers.

Respondents' Household Size in the Study Area

In terms of household size as shown in Table 4.1, findings revealed an average size of approximately 6 persons. Moreover, the minimum and maximum household size was 1 and 19 persons respectively. Furthermore, finding also depicted that a high percentage (41.7%) of the respondents had a household size of 7 persons and above. Next are respondents with household size of 4 - 6 persons (40.7%) and household with 1-3 persons (17.6%). The study further revealed that more of the respondents in Jabi community had a household size of 7 persons and above (72.7%) compared to Kuchingoro (55.3%), Tudunwada (38.9%), Garki (35.4%) and Gishiri (22.2%) settlements. This finding affirmed that overcrowding is a major challenge of informal settlements.

Respondents' Average Income Analysis in the Study Area

Findings revealed that majority of the respondents (43.1%) earned average monthly income between ₦50,000 and ₦100,000 as presented in Table 4.1. Findings further revealed that 29.5% of the respondents earned between ₦100,000 and ₦150,000 per month on the average. Furthermore, 25.8% of the respondents earned an average monthly income less than ₦50,000 with only 1.7% of the respondents earning above ₦150,000 per month on the average. From the analysis, comparable results were observed in other sampled settlements. The study revealed that there are noticeable pockets of poverty, this is however not material enough to conclude that housing informality is majorly poverty driven as posited by some scholars^{12,13}. Disorderly urban development and improper building structures (as a result of failed planning policies), tenure insecurity, lack of basic municipal/social services and poor environmental conditions are more

prevalent. From the study, 43.1% of the respondents earn an income of between ₦50,000 and ₦100,000 which is above the national minimum wage of ₦30,000.

Respondents' House Ownership Status in the Study Area

In terms of home ownership status, the study revealed that slightly above half (51.9%) of the sampled apartments were owner-occupied while 48.1% of the respondents were tenants. This is presented in Table 4.1. Further findings revealed a higher proportion (90.9%) of house owners among the residents in Jabi settlement compared to Gishiri (40.6%), Tudunwada (41.2%), Kuchingoro (57.9%) and Garki (60.4%) are owner occupiers. The 48.1% tenancy rate is an indication that slightly below half of the ownership are affluent absentee landlords who reside in posh areas of the city and probably outside the FCT. It is inferred that affluent landlords as stakeholders are major contributors to the continued proliferation of informal settlements in the study area although they live outside the settlements because of their affluence and social status.

Respondents' Length of Stay in the Study Area

Findings in this regard showed that more than half (51.9%) of the respondents had lived in the present settlement for upward of between 5 and 10 years. Furthermore, 31.5% of the respondents claimed to have stayed in the neighbourhood for less than 5 years. As shown in Table 4.1, the study revealed a similar trend in other sampled settlements apart from Kuchingoro settlement in which majority (48.5%) of the respondents have stayed in the neighbourhood for more than 10 years.

Table 4.1: Residents' Socio-Economic Attributes

	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>
	<i>N = 131</i>	<i>N = 38</i>	<i>N = 33</i>	<i>N = 48</i>	<i>N = 45</i>	<i>N = 295</i>
Gender						
Male	105 (80.2)	35 (92.1)	28	33	27	228

Female	26 (19.8)	3 (7.9)	(84.8 5 (15.2)	(68.8 15 (31.2)	(60.0 18 (40.0)	(77.3 67 (22.7)
Age						
≤ 30	27 (20.6)	5 (13.2)	-	6 (12.5)	17 (37.8)	55 (18.6)
31 – 40	31 (23.7)	9 (23.7)	3 (9.1)	16 (33.3)	7 (15.6)	66 (22.4)
41 – 50	44 (33.6)	14 (36.8)	16 (48.5)	12 (25.0)	10 (22.2)	96 (32.5)
51 – 60	23 (17.6)	8 (21.1)	12 (36.4)	100 (20.8)	8 (17.8)	61 (20.7)
Above 60	6 (4.6)	2 (5.3)	2 (6.1)	4 (8.3)	3 (6.7)	17 (5.8)
Marital Status						
Single	28 (21.4)	6 (15.8)	1 (3.0)	5 (10.4)	17 (37.8)	57 (19.3)
Married	78 (59.5)	30 (78.9)	27 (81.8)	33 (68.8)	25 (55.6)	193 (65.4)
Separated	18 (13.7)	1 (2.6)	-	6 (12.5)	1 (2.2)	26 (8.8)
Divorced	3 (2.3)	-	-	2 (4.2)	1 (2.2)	6 (2.0)
Widowed	4 (3.1)	1 (2.6)	5 (15.2)	2 (4.2)	1 (2.2)	13 (4.4)
Ethnicity						
Igbo	34 (26.0)	9 (23.7)	10 (30.3)	12 (25.0)	7 (15.6)	72 (24.4)
Hausa	14 (10.7)	6 (15.8)	5 (15.2)	17 (35.4)	7 (15.6)	49 (16.6)
Yoruba	33 (25.2)	10 (26.3)	5 (15.2)	8 (16.7)	6 (13.3)	62 (21.0)
Non-Nigerian	-	-	-	-	14 (31.1)	14 (4.7)
Others	50 (38.2)	13 (34.2)	13 (39.4)	11 (22.9)	11 (24.4)	98 (33.2)

Highest Level of Education

No education	3 (2.3)	1 (2.6)	2 (6.1)	1 (2.1)	3 (6.7)	10 (3.4)
Elementary education	10 (7.6)	4 (10.5)	9 (27.3)	-	12 (26.7)	35 (11.9)
Secondary/Certificate/Diploma	36 (27.5)	15 (39.5)	19 (57.6)	17 (35.4)	18 (40.0)	105 (35.6)
Undergraduate Degree	56 (42.7)	14 (36.8)	3 (9.1)	28 (58.3)	9 (20.0)	110 (37.3)
Postgraduate Degree	26 (19.8)	4 (10.5)	-	2 (4.2)	3 (6.7)	35 (11.9)

Employment Status

Employed	109 (83.2)	33 (86.8)	29 (87.9)	41 (85.4)	30 (66.7)	242 (82.0)
Unemployed	9 (6.9)	4 (10.5)	3 (9.1)	1 (2.1)	6 (13.3)	23 (7.8)
N/A	13 (9.9)	1 (2.6)	1 (3.0)	6 (12.5)	9 (20.0)	30 (10.2)

Household Size

1 – 3	31 (23.7)	2 (5.3)	1 (3.0)	8 (16.7)	10 (22.2)	52 (17.6)
4 – 6	49 (37.4)	15 (39.5)	8 (24.2)	23 (47.9)	25 (55.6)	120 (40.7)
7 & above	51 (38.9)	21 (55.3)	24 (72.7)	17 (35.4)	10 (22.2)	123 (41.7)

Monthly Income

< ₦50,000	29 (22.1)	11 (28.9)	11 (33.3)	3 (6.2)	22 (48.9)	76 (25.8)
₦50,000 – ₦75,000	65 (49.6)	18 (47.4)	15 (45.5)	14 (29.2)	15 (33.3)	127 (43.1)
₦75,001 – ₦150,000	34 (26.0)	9 (23.7)	7 (21.2)	30 (62.5)	7 (15.6)	87 (29.5)
> ₦150,000	3 (2.3)	-	-	1	1 (2.2)	5 (1.7)

(2.1)

House Ownership Status

Owner	54 (41.2)	22 (57.9)	30 (90.9)	29 (60.4)	18 (40.0)	153 (51.9)
Tenant	77 (58.8)	16 (42.1)	3 (9.1)	19 (39.6)	27 (60.0)	142 (48.1)

Length of Stay

< 5 years	50 (38.2)	10 (26.3)	4 (12.1)	18 (37.5)	11 (24.4)	93 (31.5)
5 – 10 years	70 (53.4)	19 (50.0)	13 (39.4)	20 (41.7)	27 (60.0)	149 (50.5)
Above 10 years	11 (8.4)	9 (23.7)	16 (48.5)	10 (20.8)	7 (15.6)	53 (18.0)

Source: Result of Author’s Fieldwork, (2023)

The socio-economic attributes of the respondents are presented in Figures 4.1 to 4.10 for further pictorial understanding.

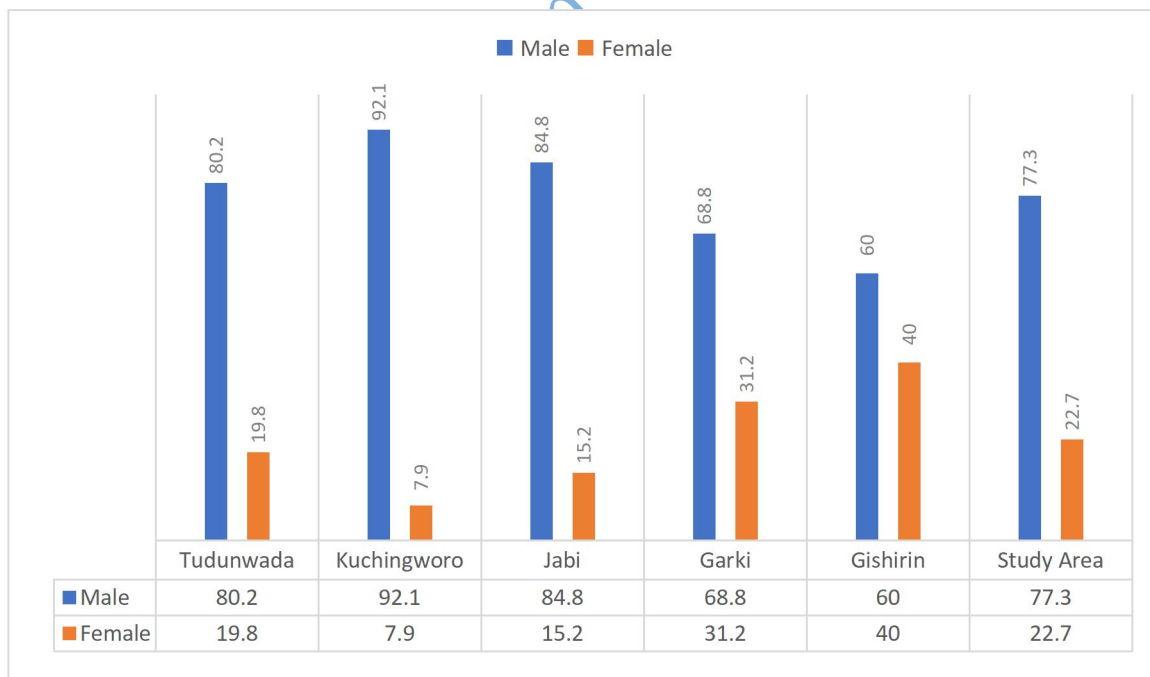


Figure 4.1: Respondents’ Gender Distribution in the Study Areas

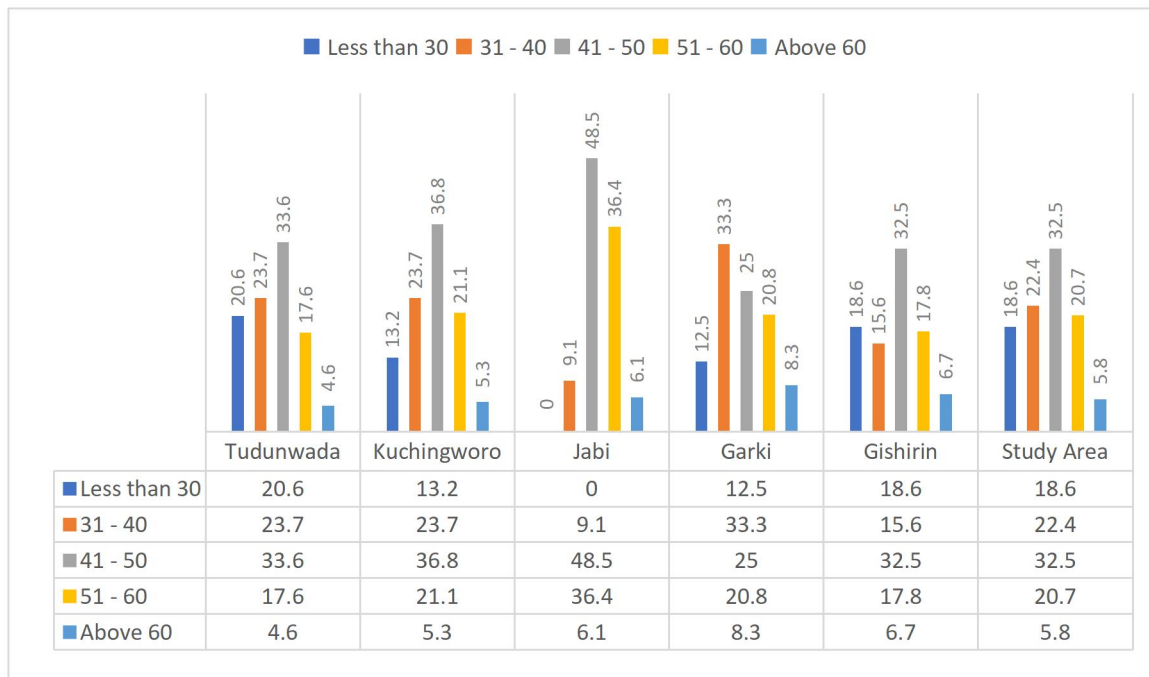


Figure 4.2: Respondents' Age Grouping in the Study Areas

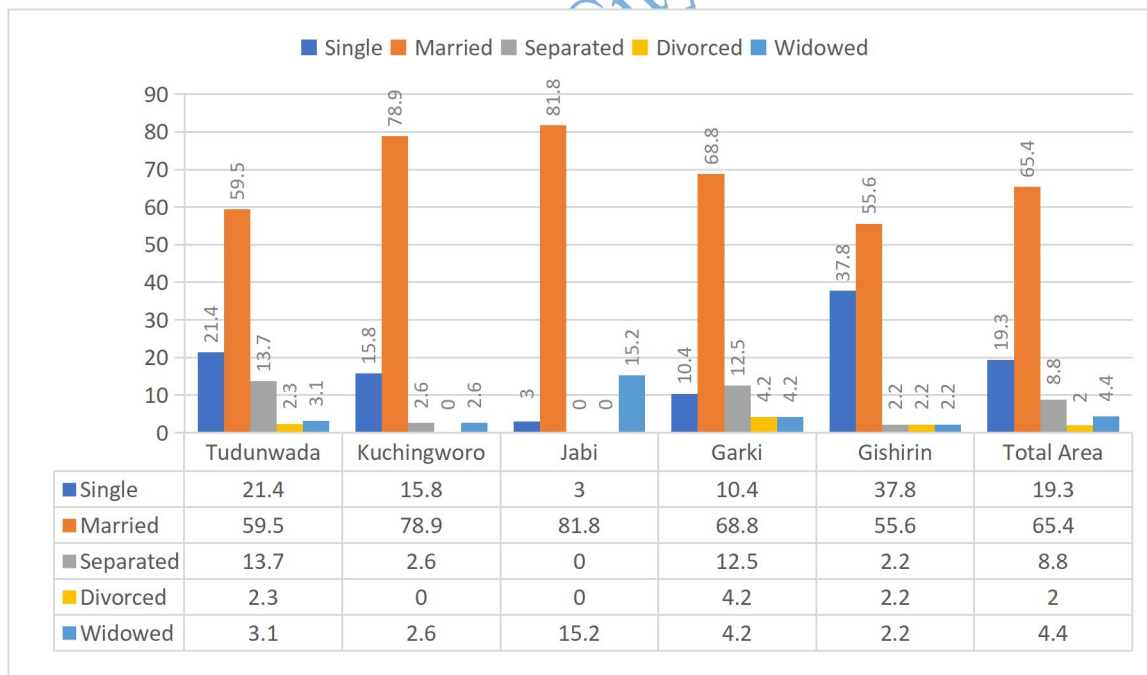


Figure 4.3: Analysis of Respondents' Marital Status in the Study Areas

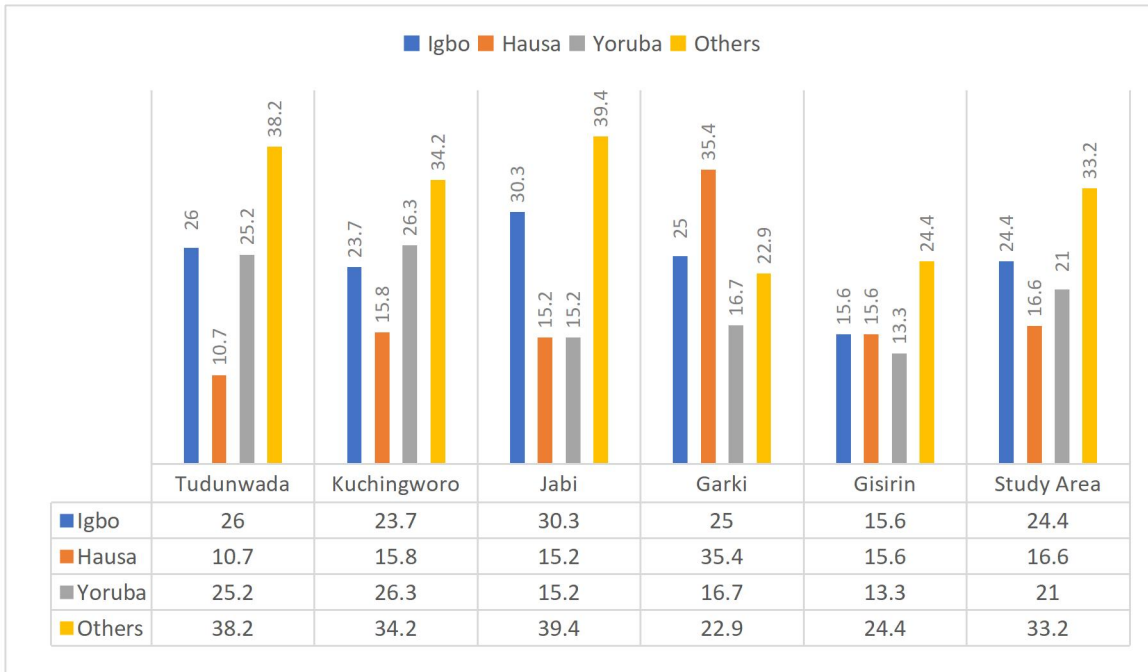


Figure 4.4: Analysis of Respondents' Ethnic Groupings in the Study Areas

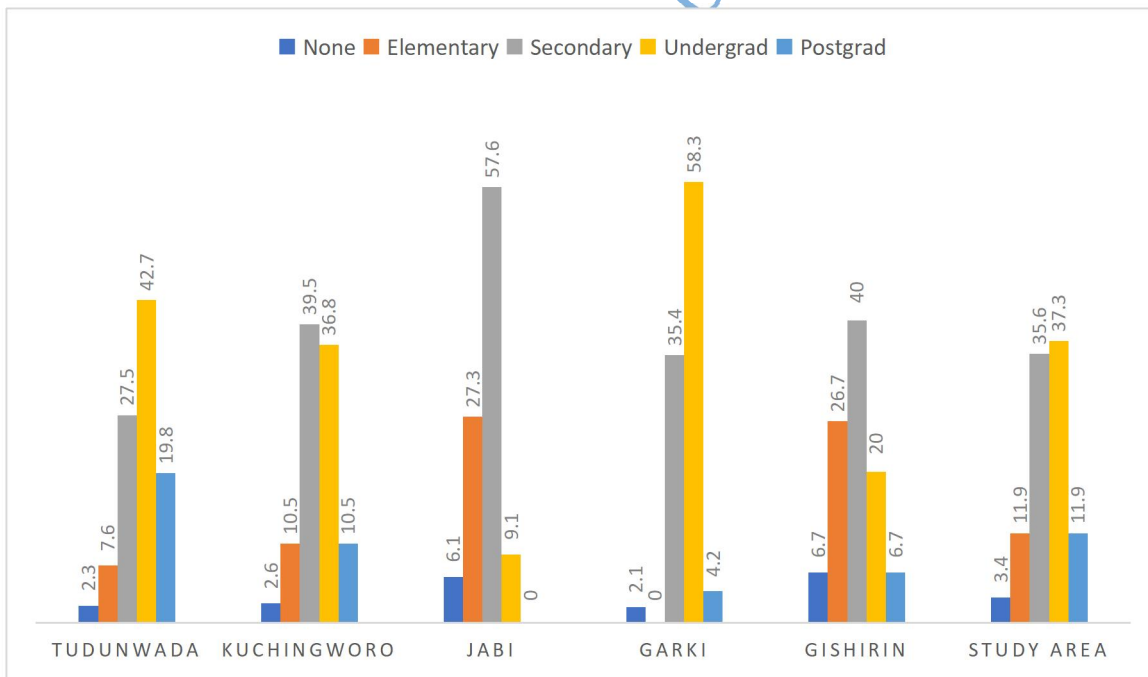


Figure 4.5: Analysis of Respondents' Educational Level in the Study Areas

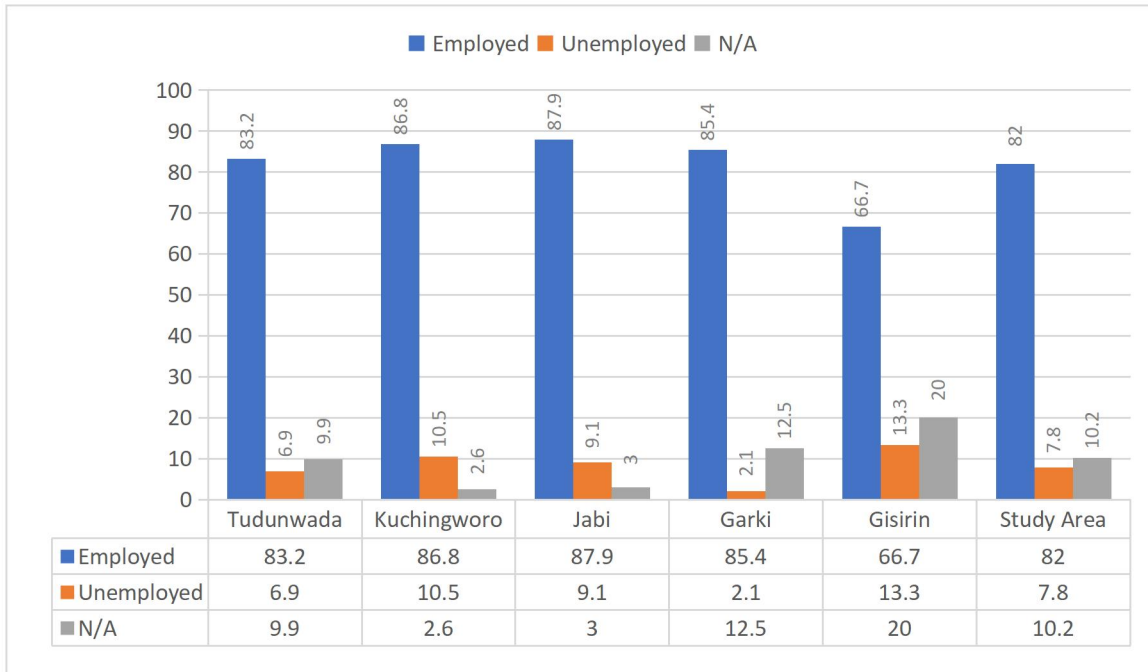


Figure 4.6: Analysis of Employment Status of Respondents in the Study Areas

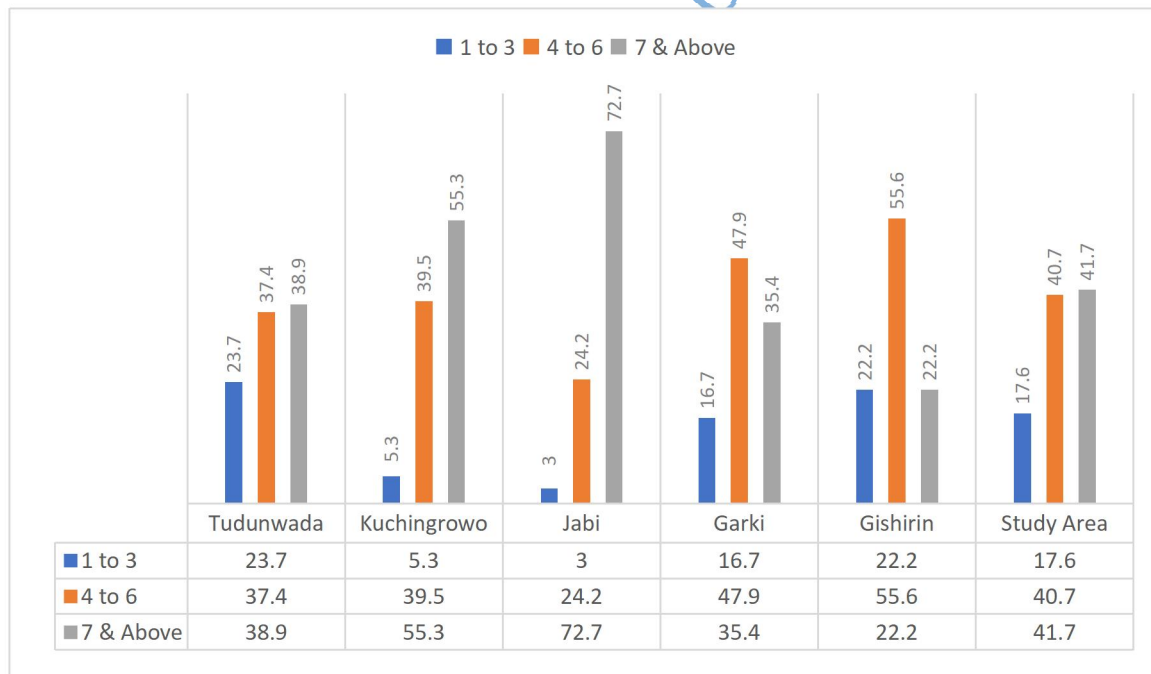


Figure 4.7: Analysis of Respondents' Household Size in the Study Areas

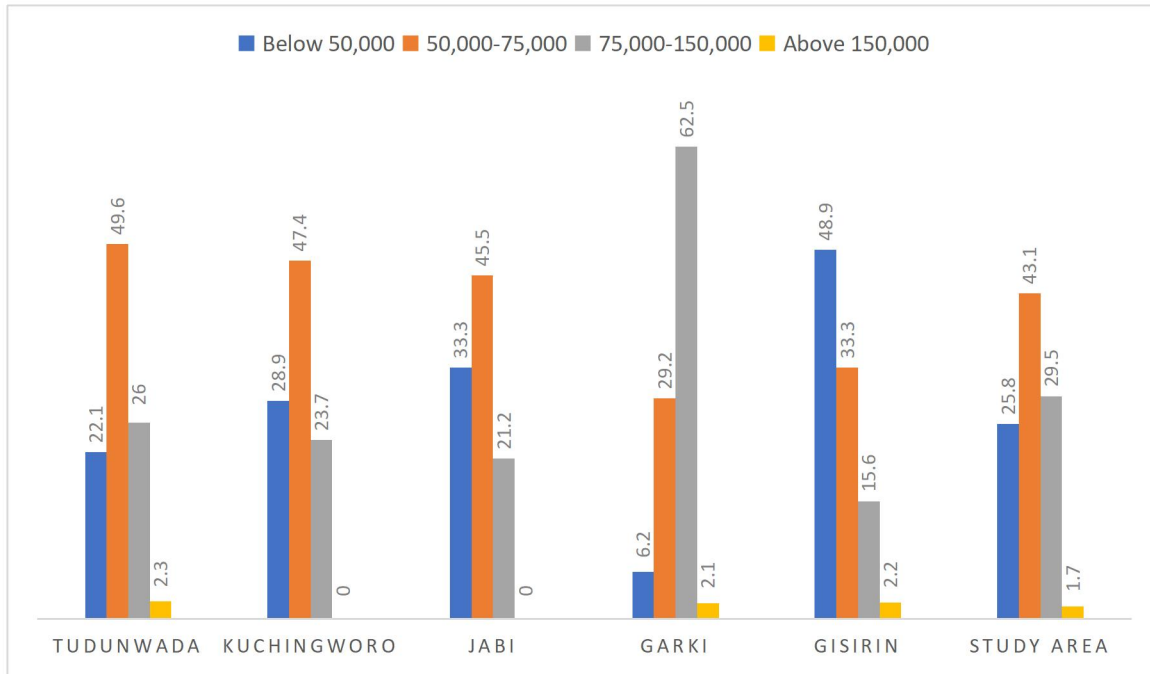


Figure 4.8: Analysis of Average Monthly Income of Respondents in the Study Areas

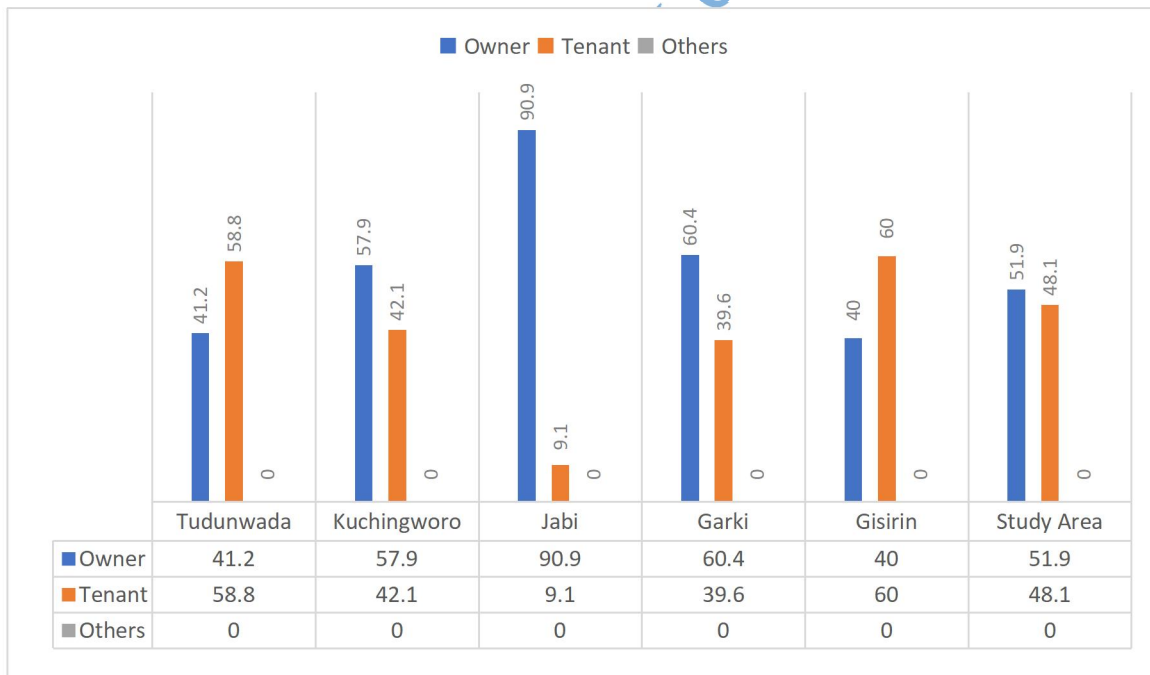


Figure 4.9: Analysis of Ownership Status of Respondents in the Study Areas

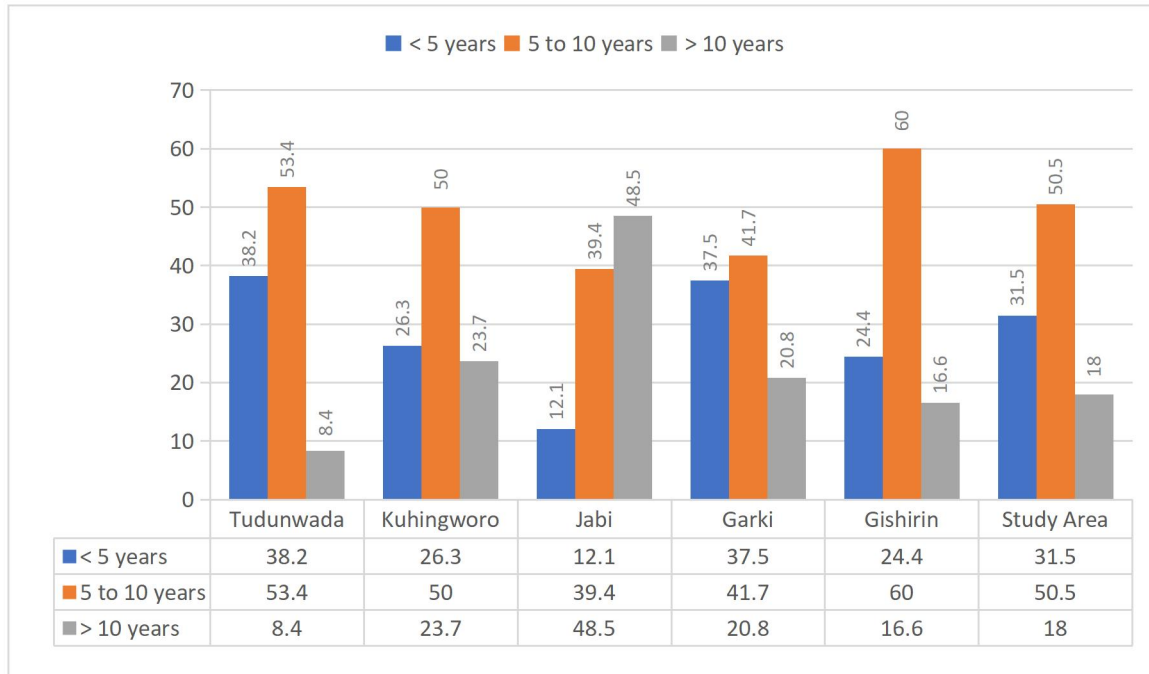


Figure 4.10: Analysis of Respondents' Length of Stay in the Study Areas

4.1.2 Housing Characteristics in the Study Areas

Building Components

The materials/components of building parts in the sampled informal settlements are discussed in Table 4.2. As such, the building material used for building walls, doors, flooring, window, and ceiling were assessed.

Walls

In terms of the wall component as presented in Table 4.2, results revealed that majority (83.1%) of the respondents' building walls in the study area was made of sandcrete blocks. In addition, 8.8% of the respondents used mud, 6.4% used wood, 0.7% used corrugated iron sheets, another 0.7% of the respondent's used cardboard while 0.3% used tarpaulin. For door materials, more than half of the respondents (59.0%) in the study area used wooden doors. These are mainly internal doors. Respondents who used steel door, glazed aluminum, and glazed steel accounted for 36.9%, 3.8% and 0.3% respectively. The 36.9% steel door usage is for security purposes and are mainly external doors. Similar trends were observed across the selected settlements.

Floorings

In relation to the flooring component, a high proportion of the respondents (57.3%) made use of tiles and 28.7% use mass concrete as shown in Table 4.2. Further findings in the study showed that some respondents used earth (9.2%), and marbles (3.8%) for flooring materials in the study area. Only 1% of the respondents claimed to use other types of flooring materials. A similar trend was observed across the selected informal settlements.

Windows

The result of the window components revealed that 44.8% of the respondents use aluminum sliding and 22.9% used wooden casement. Findings in the study further showed that 18.4% of the respondents used aluminum casement, 9% used aluminum projected while 4.9% used other materials.

Ceiling

Findings into ceiling component as shown in Table 4.2 revealed that majority (43.0%) of the respondents used Polyvinyl Chloride (PVC) for their ceiling. A further 26.7% of the respondents who used Asbestos. Other ceiling materials such as wood, cardboard and Plastic of Paris (POP) accounted for 10.1%, 10.1% and 8.7% respectively of the respondents' ceiling material used in the study area. Other types of ceiling materials accounted for 1.7%.

Roofing

In terms of respondents' roofing components, the study revealed that majority (46.5%) used corrugated iron sheets while 38.1% used aluminum. Other roofing materials used in the study such as concrete, thatched and other materials accounted for 15.4%.



Plate 4.1: Housing Type by Construction Materials: A typical Fulani Settlement at Gbazango, Abuja

Source: Author's Fieldwork, (2023)

Plate 4.1 showed a typical Fulani settlement constructed of mud materials but plastered. This construction material/component accounted for 8.8% of the sampled housing units.

Toilets

Findings revealed that majority (73.6%) of the toilets in the study area used water cistern. In addition, a further 20.2% and 6.2% of the respondents are using pit and bucket latrine respectively. Similar results were observed across the selected informal settlements. Generally, housing characteristics in terms of materials/components of building parts conform with modern materials usage and quality. However, provision of infrastructure and amenities, developments that are not in conformity with rules and regulations, tenure insecurity and so on prevailing in the neighborhoods are evidence of housing informality in the study areas.

Table 4.2: Materials/Components of Building Parts

	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	
Wall						
Sandcrete blocks	99 (75.6)	36 (94.7)	30 (90.9)	48 (100.0)	32 (71.1)	245 (83.1)
Mud	10 (7.6)	1 (2.6)	3 (9.1)		12 (26.7)	26 (8.8)
Wood	18 (13.7)	1 (2.6)			-	19 (6.4)
Corrugated iron sheets	1 (0.8)				1 (2.2)	2 (0.7)
Cardboard	2 (1.5)					2 (0.7)
Tarpaulin	1 (0.8)					1 (0.3)
Total	131 (100.0)	38 (100.0)	33 (100.0)	48 (100.0)	45 (100.0)	295 (100.0)
Door						
Wooden	64 (49.2)	22 (57.9)	24 (72.7)	46 (95.8)	17 (38.6)	173 (59.0)
Steel	58 (44.6)	14 (36.8)	9 (27.3)	2 (4.2)	25 (56.8)	108 (36.9)
Glazed Aluminum	7 (5.4)	2 (5.3)	-		2 (4.5)	11 (3.8)
Glazed Steel	1 (0.8)	-	-			1 (0.3)
Total	130 (100.0)	38 (100.0)	33 (100.0)	48 (100.0)	44 (100.0)	293 (100.0)
Flooring						
Earth	13 (9.9)	9 (23.7)	2 (6.1)	-	3 (6.8)	27 (9.2)
Mass concrete	29 (22.1)	27 (44.7)	21 (63.6)	2 (4.3)	15 (34.1)	84 (28.7)

Tiles	81 (61.8)	12 (31.6)	10 (30.3)	44 (93.6)	21 (47.7)	168 (57.3)
Marbles	5 (3.8)			1 (2.1)	5 (11.4)	11 (3.8)
Other	3 (2.3)					3 (1.0)
Total	131 (100.0)	38 (100.0)	33 (100.0)	47 (100.0)	44 (100.0)	293 (100.0)

Window

Wooden casement	19 (15.0)	3 (8.1)	4 (12.1)	29 (60.4)	11 (25.6)	66 (22.9)
Aluminum casement	39 (30.7)	9 (24.3)	2 (6.1)	-	3 (7.0)	53 (18.4)
Aluminum sliding	41 (32.3)	24 (64.9)	24 (72.7)	19 (39.6)	21 (48.8)	129 (44.8)
Aluminum projected	22 (17.3)	1 (2.7)	-	-	3 (7.0)	26 (9.0)
Others	6 (4.7)	-	3 (9.1)	-	5 (11.43)	14 (4.9)
Total	127 (100.0)	37 (100.0)	33 (100.0)	48 (100.0)	43 (100.0)	288 (100.0)

Ceiling

Plastic of Paris	11 (8.7)	-	4 (12.1)	4 (8.3)	6 (14.0)	25 (8.7)
PVC	60 (47.2)	17 (45.9)	11 (33.3)	12 (25.0)	23 (53.5)	123 (42.7)
Asbestos	15 (11.8)	14 (37.8)	16 (48.5)	32 (66.7)	-	77 (26.7)
Wooden	26 (20.5)	2 (5.4)	-	-	1 (2.3)	29 (10.1)
Cardboard	13 (10.2)	4 (10.8)	2	-	10 (23.3)	29 (10.1)
Others	2 (1.6)	-	-	-	3 (7.0)	5 (1.7)
Total	127 (100.0)	37 (100.0)	33	48	43	288

			(100.0)	(100.0)	(100.0)	(100.0)
Roofing						
Concrete	36 (28.6)	2 (5.4)	-	-	-	38 (13.3)
Aluminum	62 (49.2)	18 (48.6)	9 (27.3)	7 (14.6)	13 (31.0)	109 (38.1)
Corrugated iron sheet	26 (20.6)	17 (45.9)	23 (69.7)	41 (85.4)	26 (61.9)	133 (46.5)
Thatched	-	-	1 (30.0)	-	2 (4.8)	3 (1.0)
Others	2 (1.6)	-	-	-	1 (2.4)	3 (1.0)
Total	126 (100.0)	37 (100.0)	33 (100.0)	48 (100.0)	42 (100.0)	286 (100.0)
Toilet						
Water cistern	85 (66.4)	24 (63.2)	30 (90.9)	48 (100.0)	28 (62.2)	215 (73.6)
Pit latrine	32 (25.0)	9 (23.7)	3 (9.1)	-	15 (33.3)	59 (20.2)
Bucket latrine	11 (8.6)	5 (13.2)	-	-	2 (4.4)	18 (6.2)
Total	128 (100.0)	38 (100.0)	33 (100.0)	48 (100.0)	45 (100.0)	292 (100.0)

**N.B. Reduced sample size due to missing response*

Source: Result of Author's Fieldwork, (2023)

The housing characteristics in the study are presented in Figures 4.11 to 4.17 for further pictorial understanding.

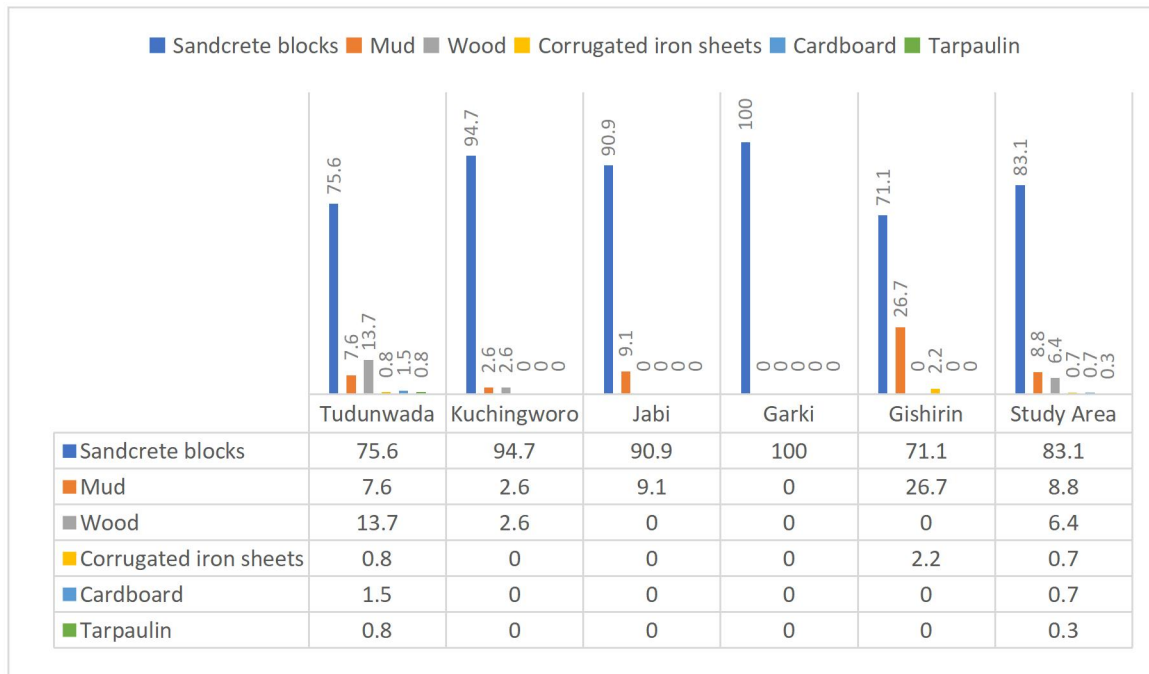


Figure 4.11: Analysis of Building Materials/Components (Wall)

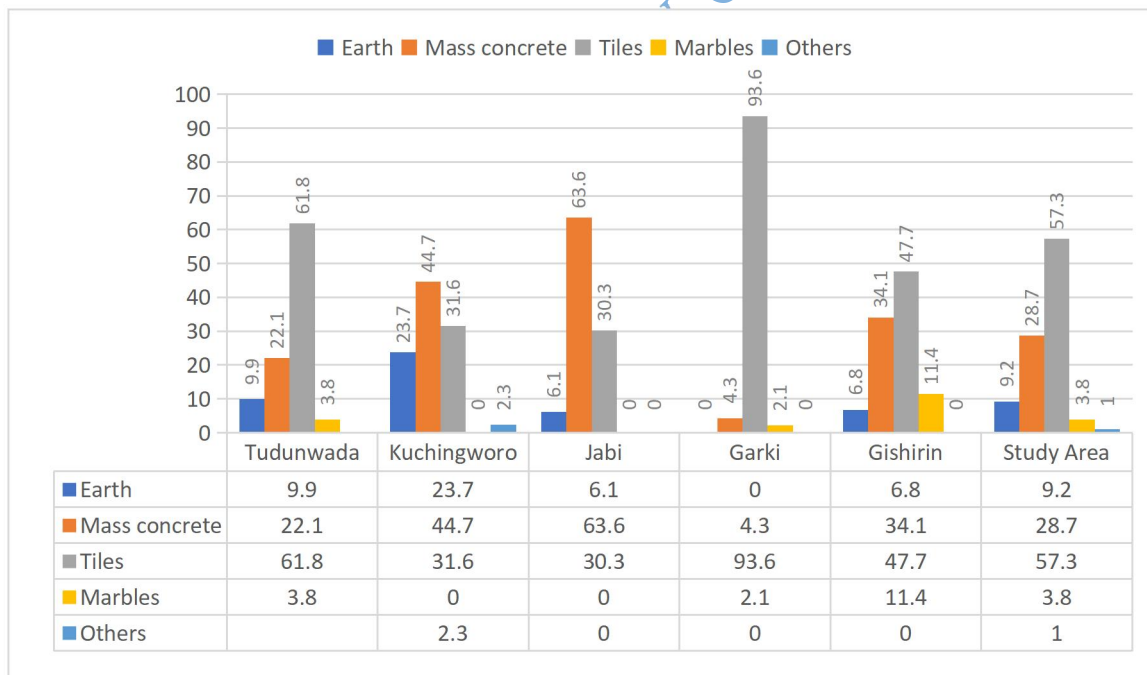


Figure 4.12: Analysis of Building Materials/Components (Flooring)

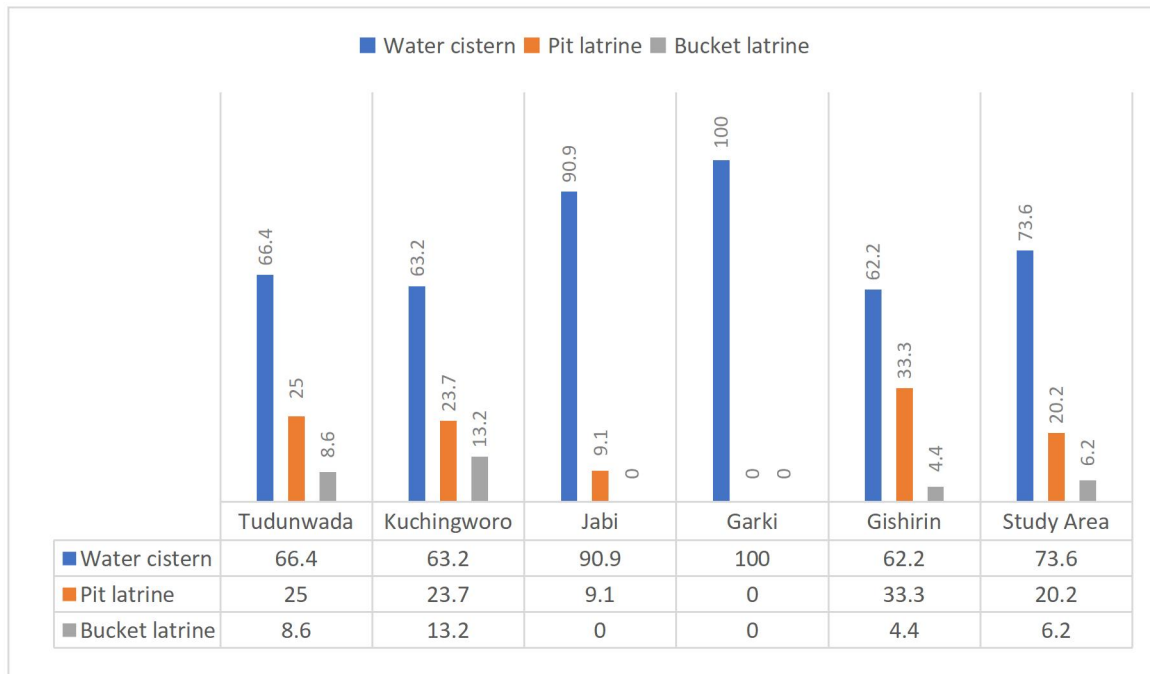


Figure 4.13: Analysis of Building Materials/Components (Toilets)

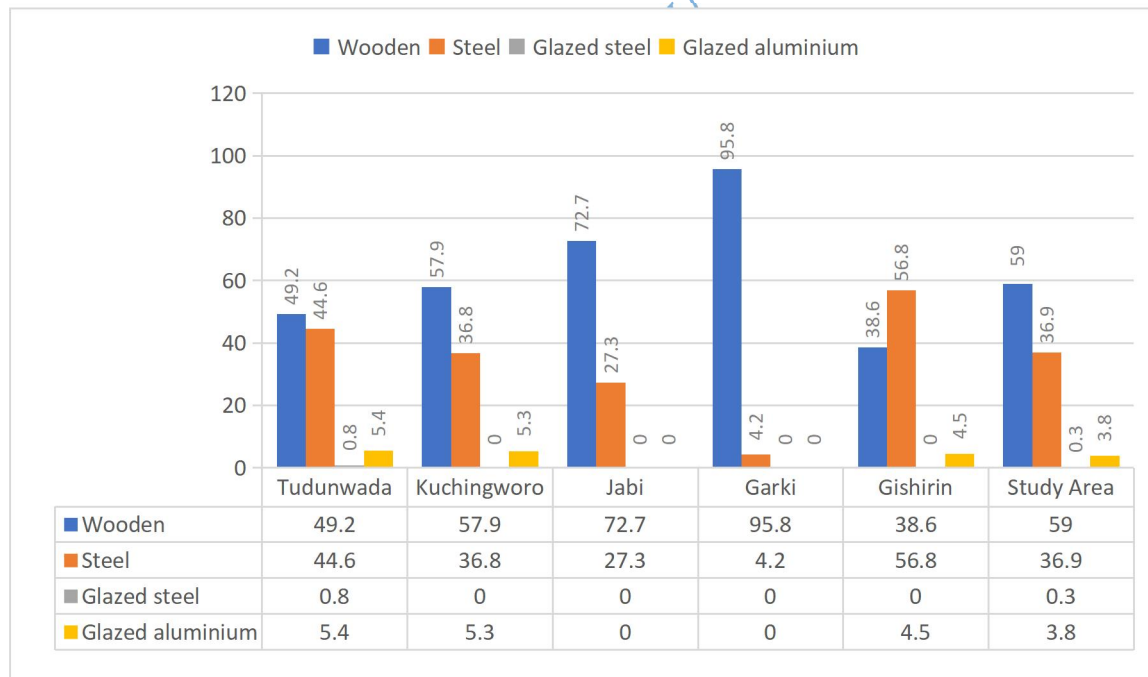


Figure 4.14: Analysis of Building Materials/Components (Doors)

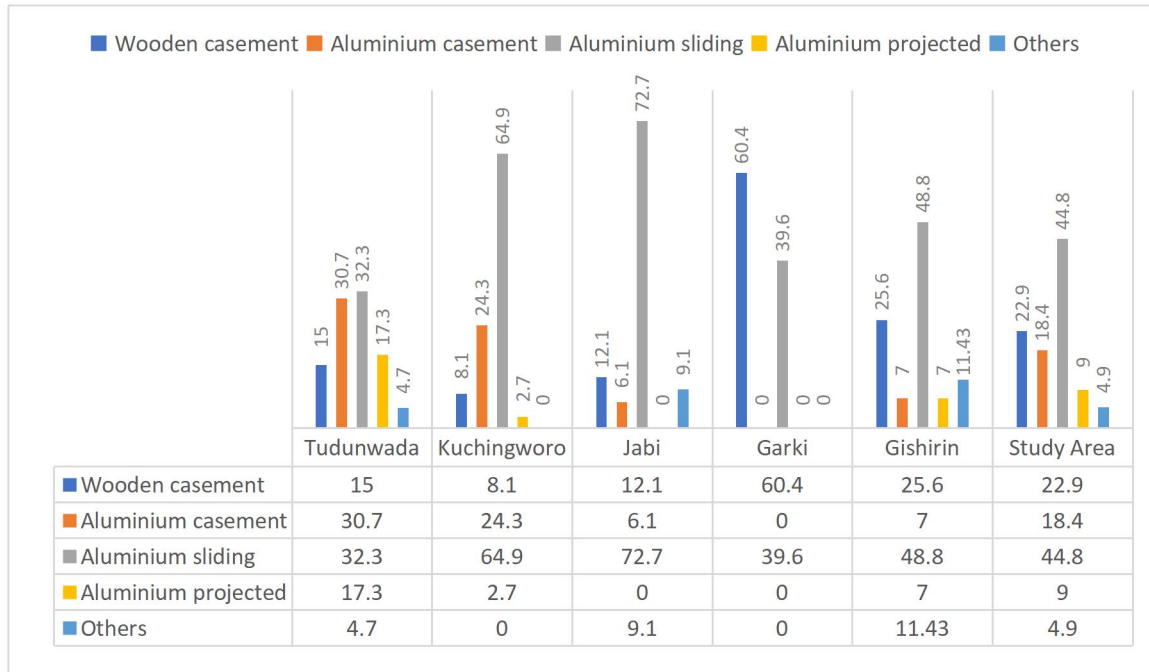


Figure 4.15: Analysis of Building Materials/Components (Windows)

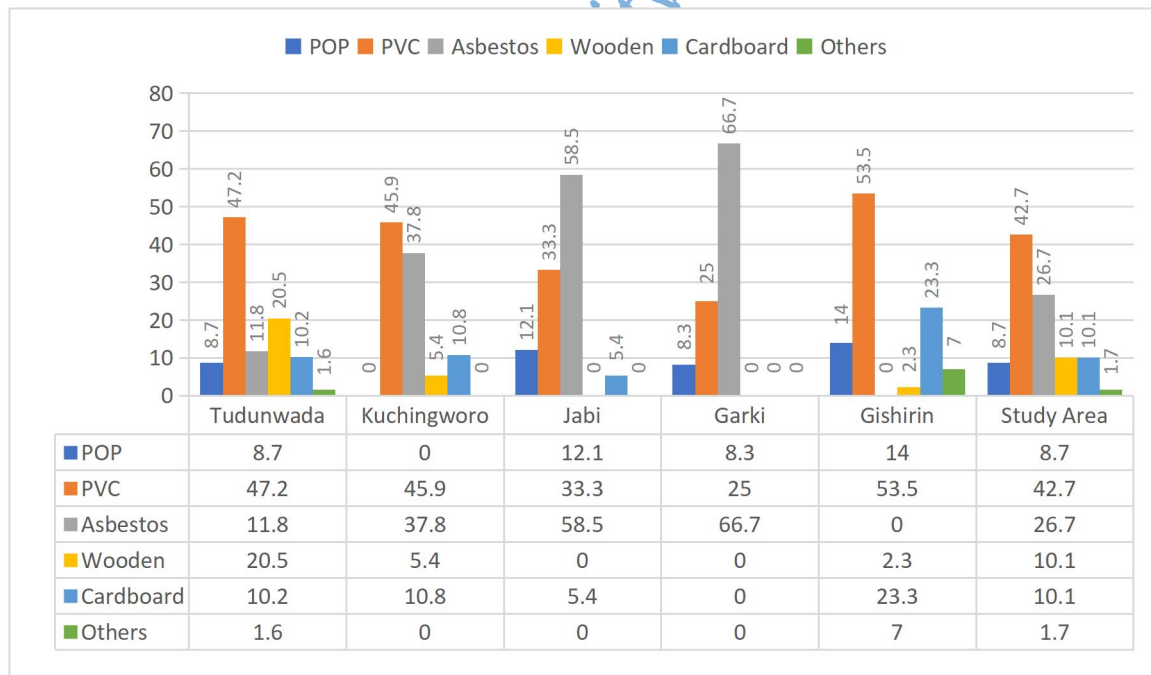


Figure 4.16: Analysis of Building Materials/Components (Ceilings)

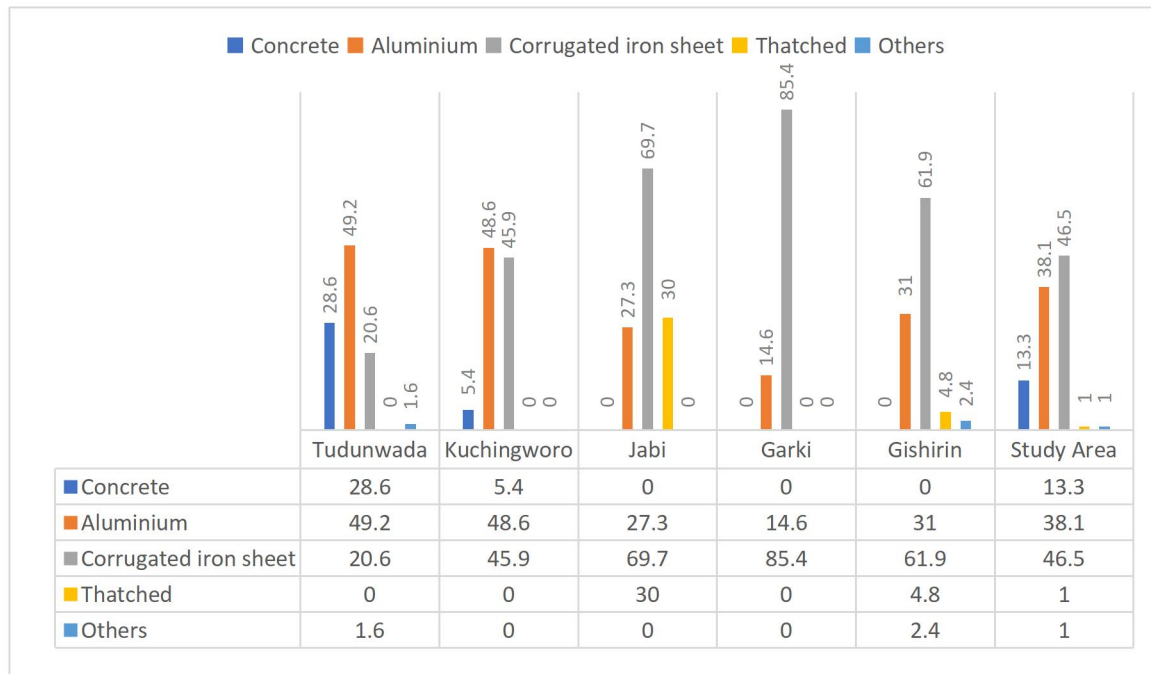


Figure 4.17: Analysis of Building Materials/Components (Roofing)

The above findings were corroborated through observation across the five selected informal settlements of the study area as shown in Table 4.2.

4.1.3 Drivers of Housing Informality in the Study Area

The residents' perceived drivers of housing informality were assessed using nine indicators that constitute housing informality in the neighborhoods. Based on these indicators, respondents were asked to rate their level of agreement with the nine factors using a 5-point Likert Scale of **Strongly Disagree**, **Disagree**, **Neutral**, **Agree**, and **Strongly Agree**. Analyzing the professed drivers, values of 1, 2, 3, 4 and 5 were respectively assigned to each of the ratings.

As established in Table 4.3, the aggregate mean computed for residents' level of agreement to the nine identified drivers of neighborhood housing informality in Tudunwada, Kuchingoro, Jabi, Garki, Gishiri was 2.91, 4.11, 4.23, 4.01, and 3.69 respectively. Generally, the aggregate mean score for the perceived drivers of housing informality in the study area was 3.51. According to the findings, it was established that

residents in Jabi, Kuchingoro and Garki had a higher perception score for drivers of housing informality compared to residents in Tudunwada and Gishiri settlements.

Furthermore, the mean scores of each of the identified drivers revealed that, migration (4.06), low rent/land use (4.02), natural birth (3.88), housing deficit in urban areas (3.87) and land affordability (3.56) were the top-five perceived drivers of informality in the overall study area. These drivers had a mean score higher than the aggregate mean score of 3.51 for the study area; thus, suggesting that residents agreed that such factors contribute more to housing informality in the study area. On the other hand, the least perceived drivers of neighborhood housing informality in the study were factors associated with government regulations/policies (3.26), nearness to kinship (3.09), locational advantage (2.93) and speculations (2.93). These drivers have a mean score lower than the aggregate score and ranked 6th, 7th, 8th, and 9th respectively of all the driving factors of housing informality identified across the study area.

In each of the sampled settlements, it was observed that migration ranked topmost of all the drivers of housing informality identified by residents in Tudunwada (3.35), Kuchingoro (4.79) and Jabi (5.0). However, in Garki and Gishiri settlements, residents opined that low rent/land uses constitute the main driver of informality in the neighborhood. This finding aligns with previous studies that migration is a major driver of housing informality in African cities¹⁴. This is also reflected in the ethnic distribution where non-natives notably Igbo and Yoruba are in the majority of the dwellers. The mean score for the identified factors was 3.15 in the settlements. In terms of the least perceived driver of housing informality, locational advantage was considered by residents in Tudunwada (2.43) and Garki (2.46) while factor of speculation was opined by residents in Jabi (3.21) and Gishiri (2.51) settlements.

Table 4.3: Drivers of Neighborhood Informality

	SETTLEMENT					Overall
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	Area
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Drivers						
Migration	3.35	4.79	5.0	4.73	4.13	4.06
Low rent/land values	3.15	4.71	4.67	4.88	4.62	4.02
Natural birth	3.17	4.76	5.0	4.81	3.42	3.88
Housing deficit in urban areas	2.98	4.76	4.79	4.79	4.04	3.87
Land affordability	2.69	4.37	4.06	4.44	4.11	3.56
Government regulation/policy	2.72	4.11	4.15	4.07	2.64	3.26
Nearness to kinship	2.91	2.97	3.82	2.98	3.29	3.09
Locational advantage	2.43	3.13	3.36	2.46	4.40	2.93
Speculation	2.86	3.42	3.21	2.92	2.51	2.93
Aggregate Mean	2.91	4.11	4.23	4.01	3.69	3.51

**Note: Mean scores assumes value of 1=Strongly disagree, 2=Disagree 3=Neutral, 4=Agree, 5=Strongly Agree*

Source: Result of Author's Fieldwork, (2023)

The drivers of neighbourhood informality are presented in Figure 4.18 for further pictorial understanding.

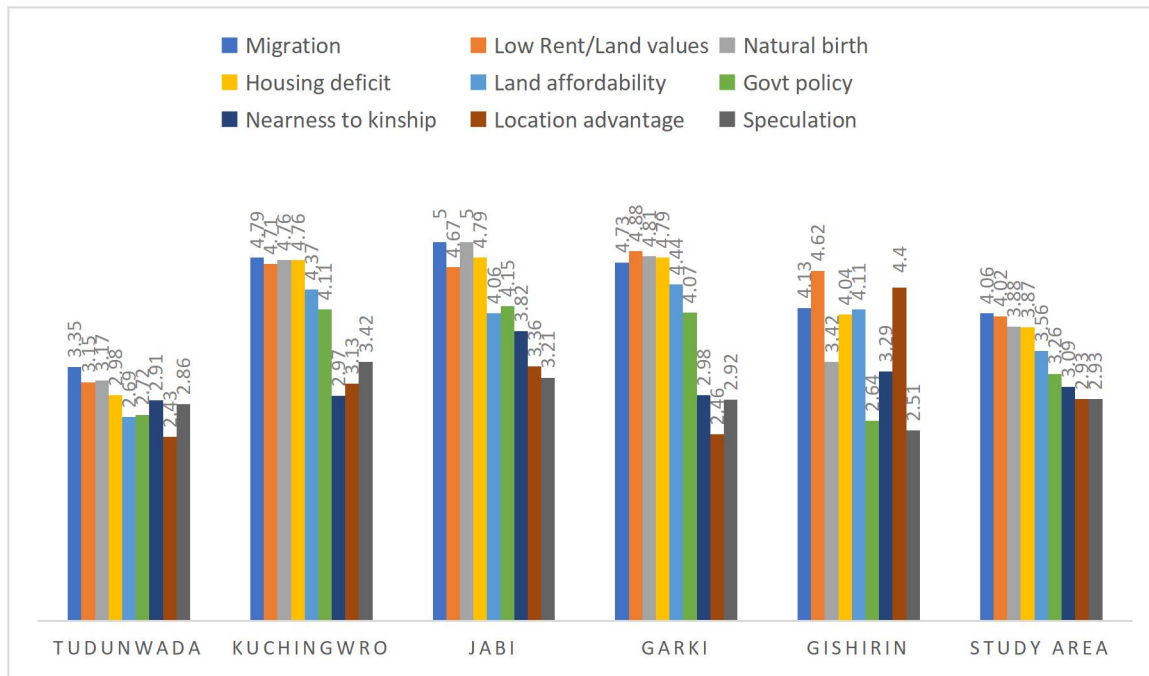


Figure 4.18: Analysis of Drivers of Housing Informality

4.1.4 Existing Regularisation Strategies and Effectiveness

Means of Property Acquisition

The various means of property acquisition presented in Table 4.4 revealed that majority of the respondents (44.4%) acquired their properties through cooperative/private purchase. In addition, 17.3% of the residents' properties were acquired through inheritance, 9.3% through gifts and 0.9% through government allocation. Other forms of acquisition accounted for 28.0% only. In the study, residents claimed to have acquired their properties through cooperatives/private purchase in the sampled settlements as follows: Tudunwada (40.0%), Kuchingoro (56.7%), Jabi (68.8%) and Garki (44.7%). A similar finding was observed in other sampled settlement of Gishiri as 24.4% of the respondents claimed to have acquired their properties through cooperative/private purchase (Table 4.4). However, majority (61.0%) of the residents in Gishiri settlement acquired their properties through other means. In terms of property acquisition through government allocation, only a few residents (6.7%) in Kuchingoro settlements indicated to have acquired their properties through such means. Probing further through interview and observations, it was discovered that some of the purported allocation papers do not emanate from the issuing authorities. The implication of

this is that property holdings in the settlements lack security of tenure as only 2% of the holdings are government allocation.

Table 4.4: Means of Property Acquisition

	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	
Property Acquisition						
Inheritance	20 (26.7)	2 (6.7)	7 (21.9)	4 (8.5)	6 (14.6)	39 (17.3)
Gift	15 (20.0)	2 (6.7)	1 (3.1)	3 (6.4)	-	21 (9.3)
Cooperative/Private purchase	30 (40.0)	17 (56.7)	22 (68.8)	21 (44.7)	10 (24.4)	100 (44.4)
Government allocation	-	2 (6.7)	-	-	-	2 (0.9)
Others	10 (13.3)	7 (23.3)	2 (6.2)	19 (40.4)	25 (61.0)	63 (28.0)
*Total	75 (100.0)	30 (100.0)	32 (100.0)	47 (100.0)	41 (100.0)	225 (100.0)

**N.B. Reduced sample size due to missing response*

Source: Result of Author's Fieldwork, (2023)

The means of property acquisition by the respondents are presented in Figure 4.19 for further pictorial understanding.

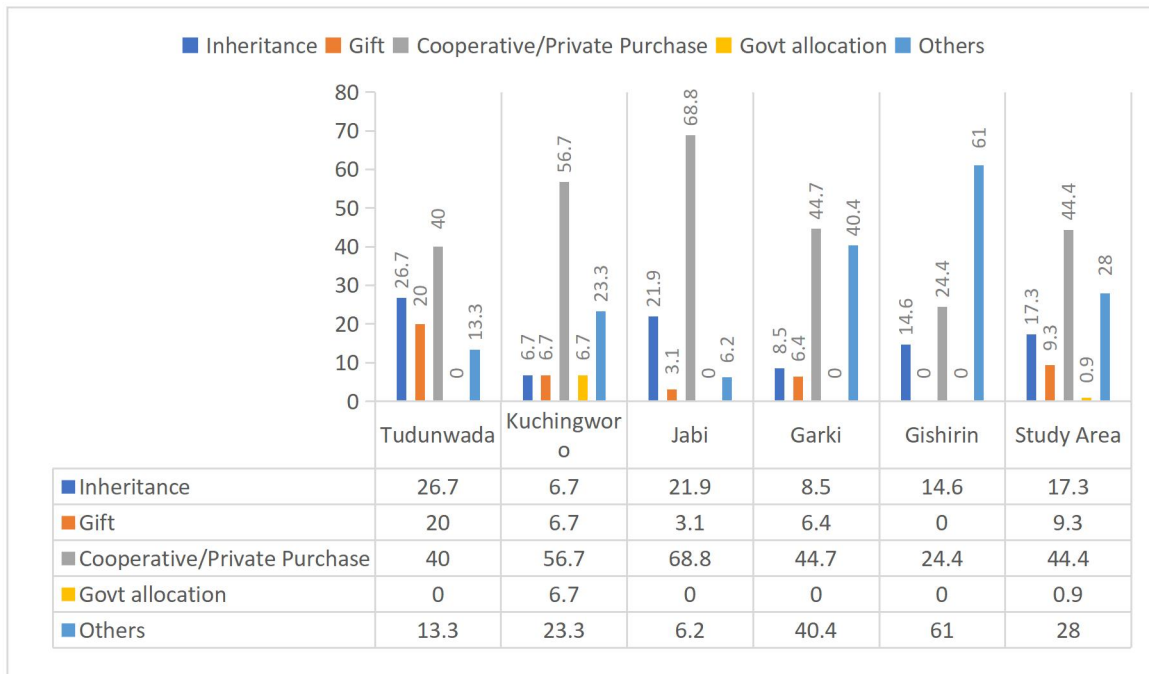


Figure 4.19: Analysis of Means of Property Acquisition

Methods of Property Construction

Findings showed that the methods and procedures used in the construction of properties is largely self-help approach (82.2%) as represented in Table 4.5. Furthermore, 12.8% and 3.9% of the residents who employed the service of developers and cooperative societies respectively. Only 2.6% of the residents in Tudunwada settlement claimed to have constructed their properties through government assistance. Furthermore, it was observed from the study that the self-help method was largely adopted by respondents in Garki, Jabi, Kuchingoro and Gishiri settlements with self-help rate above 90% compared to Tudunwada settlement with 63.6% self-help rate. Informal housing construction in informal settlements are largely through self-help and this is affirmed by this finding.

**Table 4.5: Residents' Adopted Choice of Property Construction
SETTLEMENT**

	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	Overall Area
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>
Categories						
Self-help	49 (63.6)	22 (95.7)	29 (96.7)	30 (100.0)	18 (90.0)	148 (82.2)
Cooperative society	5 (6.5)	1 ((4.3)	1 (3.3)	-	-	7 (3.9)
Developers	21 (27.3)	-	-	-	2 (10.0)	23 (12.8)
Government development	2 (2.6)	-	-	-	-	2 (1.1)
*Total	77 (100.0)	23 (100.0)	30 (100.0)	30 (100.0)	20 (100.0)	180 (100.0)

**N.B. Reduced sample size due to missing response*

Source: Result of Author's Fieldwork, (2023)

The choice of property construction by the respondents are presented in Figure 4.20 for further pictorial understanding.



Figure 4.20: Analysis of Respondents' Method of Property Construction

Response to Acquisition of Title Documents

Findings as shown in Table 4.6 revealed that, purchase receipt remained the mostly obtained title document by residents in the study areas. This proportion accounted for 44.4% of title documents indicated by residents in the study areas. Further, respondents with leasehold interest accounted for 10.8% while respondents with survey plans accounted for 5.6% of the title documents. On the other hand, 1.7% of the respondents possessed unregistered deed of assignment. For title documents such as right and certificate of occupancy, it was established that less than 1.0% of the respondents had obtained the document. These documents are however not Abuja Geographic Information System (AGIS) certified. With these findings, it was established that a considerable proportion (35.8%) of the residents obtained none of the identified title documents for their properties. These findings suggest that majority of the respondents lack security of tenure for their property holdings.

In addition, findings from the study revealed that respondents in the study had incomplete title documents needed to actualize the regularization of informality of their properties. It was further revealed that only

15.6% of the residents had development permits while a large proportion (84.4%) of the respondents had no development permits as presented in Table 4.6. However, the high level of non-compliance in obtaining development permit by the resident was not as a result of the poor awareness of obtaining such documents. As revealed in Table 4.6, only 5.6% of the respondents claimed non-awareness of the need to obtain development permit; thus, establishing the awareness of a large majority (94.4%) of the respondents in the study area. Through stakeholders' interview, the high level of non-compliance was hinged majorly on cost elements and unnecessary bureaucracy of the government agency responsible for this function. The implication is that respondents' ability to obtain title documents is hampered by bureaucratic tendencies of government officials.

Table 4.6: Access to Title Documents

	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>
Types of Title Document						
Purchase receipt	48 (56.5)	10 (40.0)	22 (71.0)	11 (26.7)	12 (26.7)	103 (44.4)
Deed of assignment	3 (3.5)	1 (4.0)	-	-	-	4 (1.7)
Leasehold	2 (2.4)		-	-	23 (51.1)	25 (10.8)
Survey plan	7 (8.2)	6 (24.0)	-	-	-	13 (5.6)
Right of occupancy	1 (1.2)	1 (4.0)	-	-	-	2 (0.9)
Certificate of Occupancy	2 (2.4)		-	-	-	2 (0.9)
None	22 (25.9)	7 (28.0)	9 (29.0)	35 (76.1)	10 (22.2)	83 (35.8)

Total	85 (100.0)	25 (100.0)	31 (100.0)	46 (100.0)	45 (100.0)	232 (100.0)
Access to Development Permit						
Yes	40 (30.5)	3 (7.9)	-	1 (2.1)	2 (4.4)	46 (15.6)
No	91 (69.5)	35 (92.1)	33 (100.0)	47 (97.9)	43 (95.6)	249 (84.4)
Total	131 (100.0)	38 (100.0)	33 (100.0)	48 (100.0)	45 (100.0)	295 (100.0)
Awareness of Development Permit						
Extremely aware	60 (65.2)	16 (45.7)	6 (18.8)	17 (37.0)	7 (15.9)	106 (42.6)
Moderately aware	15 (16.3)	15 (42.9)	10 (31.2)	13 (28.3)	20 (45.5)	73 (29.3)
Somewhat aware	10 (10.9)	3 (8.6)	4 (12.5)	14 (30.4)	9 (20.5)	40 (16.1)
Slightly aware	4 (4.3)	1 (2.9)	6 (18.8)	2 (4.3)	3 (6.8)	16 (6.4)
Not at all aware	3 (3.3)	-			5 (11.4)	14 (5.6)
Total	92 (100.0)	35 (100.0)	32 (100.0)	46 (100.0)	44 (100.0)	249 (100.0)

**N.B. Reduced sample size due to missing response*

Source: Result of Author's Fieldwork/survey, (2023)

Respondents' access to title documents are presented in Figures 4.21 to 4.23 for further pictorial understanding.

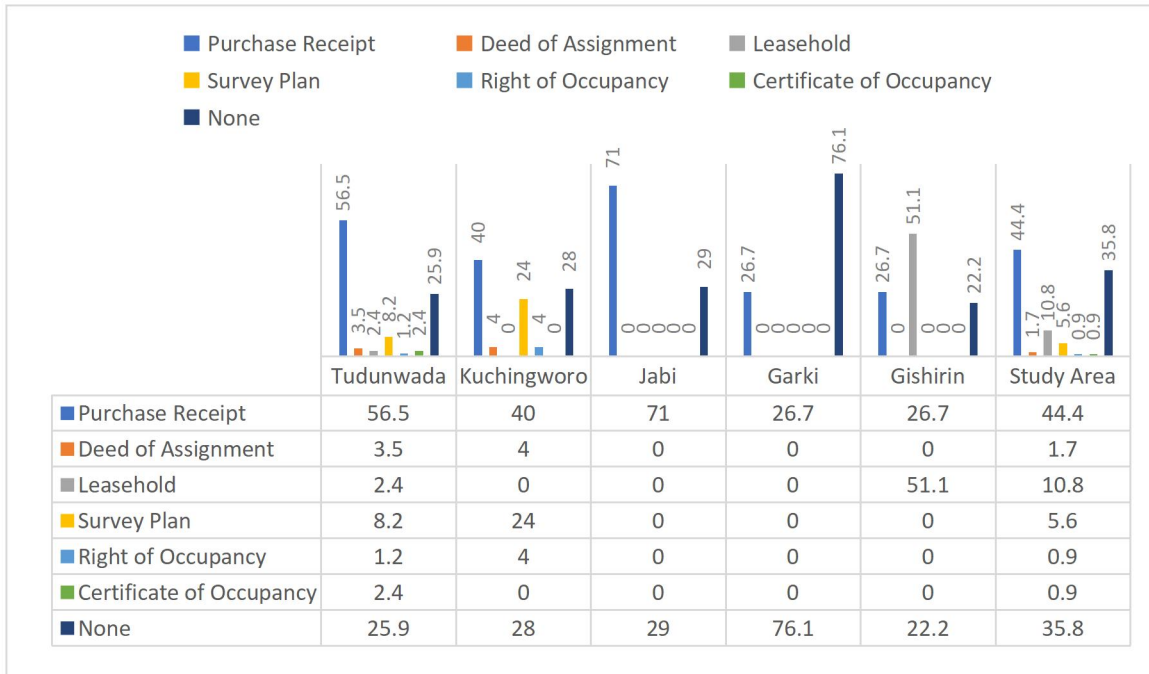


Figure 4.21: Analysis of Types of Title Documents held by Respondents

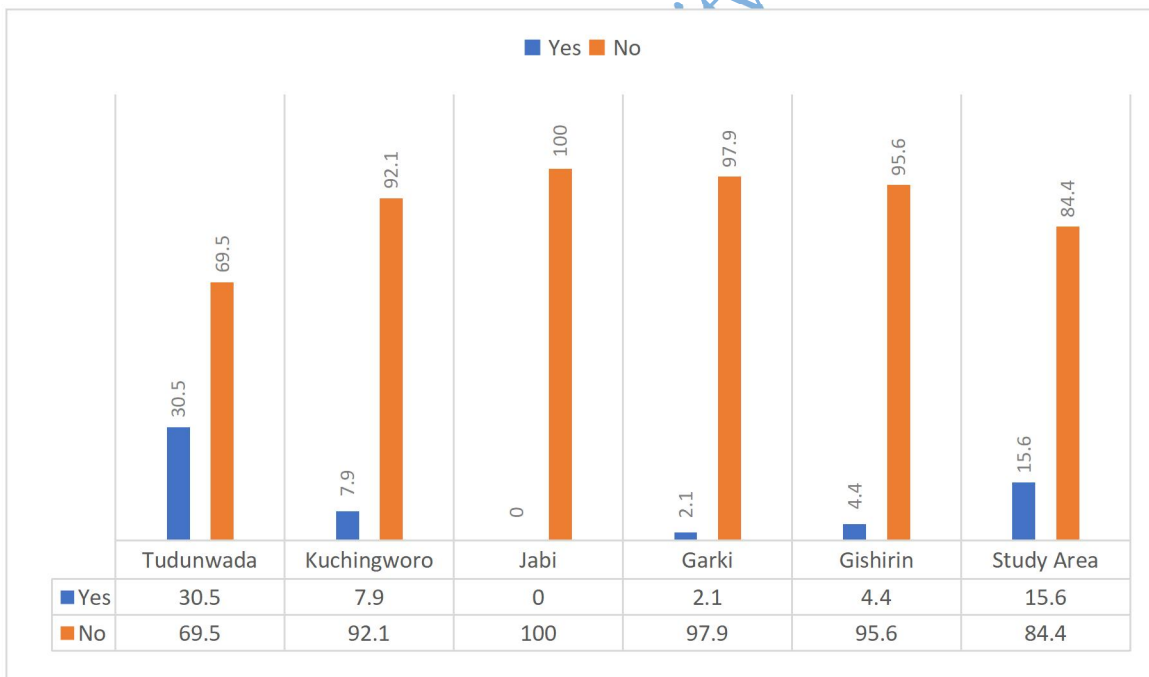


Figure 4.22: Analysis of Respondents' Access to Development Plan Permit

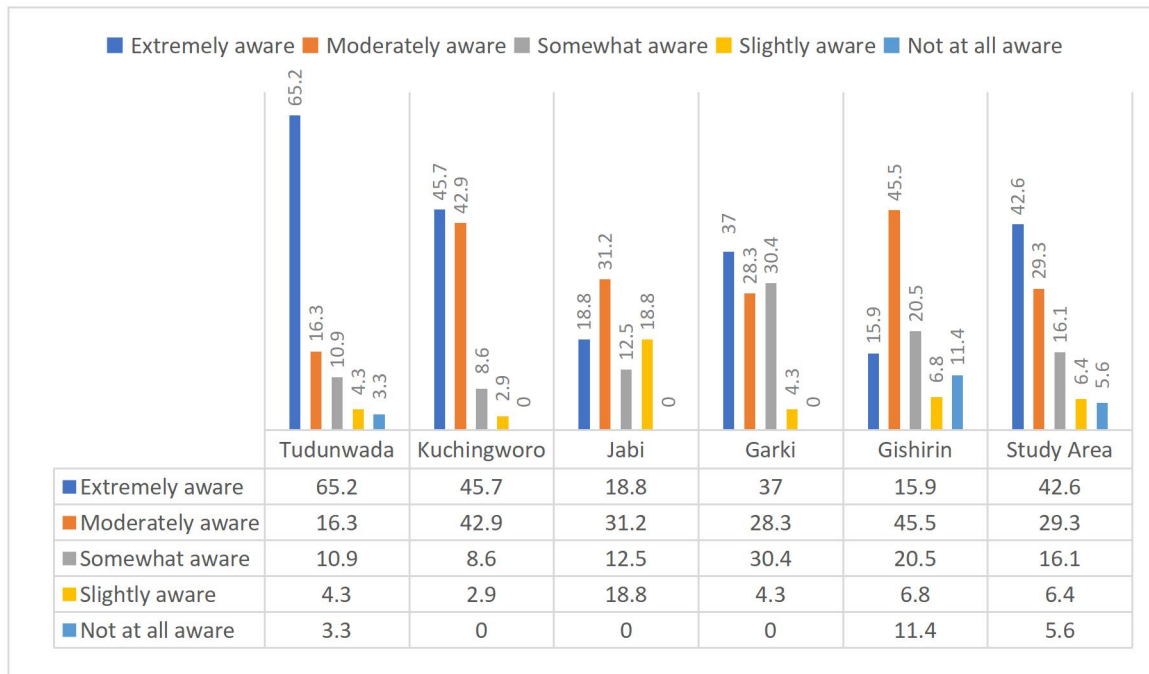


Figure 4.23: Analysis of Respondents' Awareness of Development Permit

Existing Regularisation Strategies

The existing regularization strategies in which respondents were acquainted with in the study areas were examined and findings presented in Table 4.7. Respondents were asked to rate their level of agreement to three regularisation strategies (demolition, site and services and ratification) using a 5-point Likert scale of 'Always', 'Often', 'Sometimes', 'Rarely', and 'Never'. Values of 1, 2, 3, 4 and 5 were respectively assigned to each of the scales.

The aggregate mean for the study as summarized in Table 4.7 was 2.50. This explains that on the average, respondents agreed to the fact that regularisation strategies were often practiced in the study areas. Based on the three regularisation strategies identified, demolition had a mean score of 2.00. With this score, the mean response revealed that demolition as a regularisation strategy was often observed in the study areas by the respondents, compared to site and service (2.71) and ratification (2.80), both having a mean score closer to 'sometimes' with assigned value of 3.

Specifically, a comparison of regularisation strategies in the identified settlements revealed that in Gishiri settlement, the average response of the respondents regarding the existence of regularisation strategies was that the three strategies (that is demolition, site/services and ratification) sometimes constitute regularisation strategies in the settlements. However, in Jabi, Kuchingoro, Garki and Tudunwada, it was observed that respondents were largely familiar with the demolition strategy as observed in the mean scores of 1.00, 1.53, 1.58 and 2.21 respectively. The least experienced regularisation strategy for Tudunwada, Kuchingoro, Jabi and Garki settlements was ratification with mean scores of 2.81, 2.21, 2.24, 3.44 respectively. However, for Gishiri settlement, site and services strategy was less experienced as compared to other forms of regularisation strategies.

In various interviews and discussions with residents and other stakeholders, participants agreed that the strategies are not effective. For example, upon eviction and demolition, the affected residents simply move to other locations to settle, through self-help development. This practice leads to further proliferation of informal settlements. Additionally, the cost of regularisation is too high for both the authorities and the displaced informal dwellers.

Table 4.7: Existing Regularisation Strategies

	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Existing Strategies						
Demolition	2.21	1.53	1.00	1.58	3.11	2.00
Site and Services	2.66	2.05	2.12	3.41	3.14	2.71
Ratification	2.81	2.21	2.24	3.44	3.02	2.80
Aggregate Mean	2.55	1.93	1.79	2.81	3.07	2.50

**Note: Mean scores assumes value of 1=Always, 2=Often 3=Sometimes, 4=Rarely, 5=Never*

Source: Result of Author's Fieldwork, (2023)

The existing regularisation strategies are presented in Figure 4.24 for further pictorial understanding.

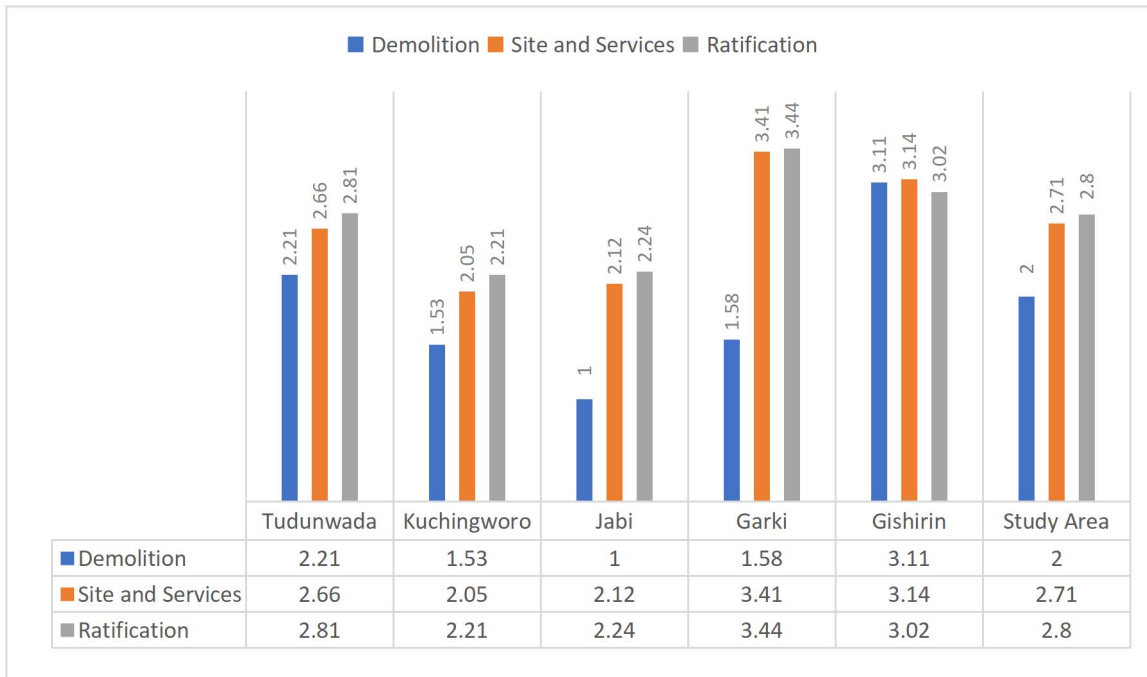


Figure 4.24: Analysis of Existing Regularisation Strategies in the Study Areas



Plate 4.2: Ongoing Development “In Excess of Permit” at Jabi, Abuja
 Source: Author’s Fieldwork, (2023)

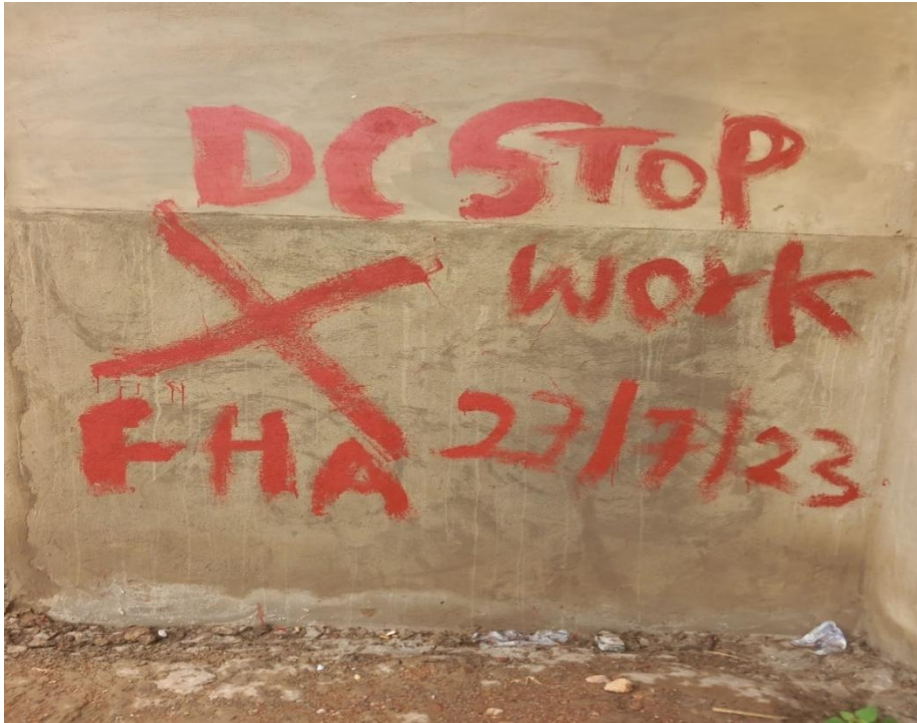


Plate 4.3: A Typical “Stop Work Order” at Jabi, Abuja.
Source: Author’s Fieldwork, (2023)



Plate 4.4: Final Demolition Notice for Informally Developed Housing Estate at Kubwa, Abuja.
Source: Author’s Fieldwork, (2023)



Plate 4.5: Demolition by the FCTA at Gishiri Community, Abuja.
Photo Credit: Leadership Newspaper, 18 May 2023



Plate 4.6: Demolition of Shops at DC Market, Phase IV, Kubwa, Abuja
Photo Credit: The Authority Newspaper, 4 June 2023

Plates 4.2 to 4.6 are consequences of adopted regularisation strategies in the study area. Plate 4.2 is a development in excess of permit, a catachrestic of informal development. Plate 4.3 is a “stop worker order” issued out of disregard to the instruction of Plate 4.2. Plate 4.3 is a demolition notice while Plates 4.5 and 4.6 are actual demolition exercise.

Residents Affected by Regularisation Strategies

Findings in Table 4.8 revealed the experience of respondents as regards regularisation strategies in the study. It was observed that about 42.0% of the respondents claimed to have been affected by demolition as a form of regularisation strategy in their settlement. Next are respondents affected by forced eviction. This proportion accounted for 41.2% of the respondents. In the case of ratification, 17.0% of the respondents have experienced this form of regularization strategy. This implies respondents are constantly been displaced through forced eviction and demolition usually without replacement. This practice led to further proliferation of informal settlements.

Table 4.8: Residents Affected by Regularisation Strategies

Strategies	SETTLEMENT					Overall Area
	Tudunwada <i>Freq. (%)</i>	Kuchingoro <i>Freq. (%)</i>	Jabi <i>Freq. (%)</i>	Garki <i>Freq. (%)</i>	Gishiri <i>Freq. (%)</i>	<i>Freq. (%)</i>
Ratification	59 (25.7)	7 (10.4)	8 (11.1)	-	12 (26.1)	86 (17.0)
Forced Eviction	85 (37.0)	30 (44.8)	32 (44.4)	45 (50.0)	16 (34.8)	208 (41.2)
Demolition	86 (37.4)	30 (44.8)	32 (44.4)	45 (50.0)	18 (39.1)	211 (41.8)
Total	230 (100.0)	67 (100.0)	72 (100.0)	90 (100.0)	46 (100.0)	505 (100.0)

**Note: Total exceeds sample size due to multiple response to the question*

Source: Result of Author's Fieldwork, (2023)

Respondents affected by existing regularisation strategies are presented in Figure 4.25 for further pictorial understanding.

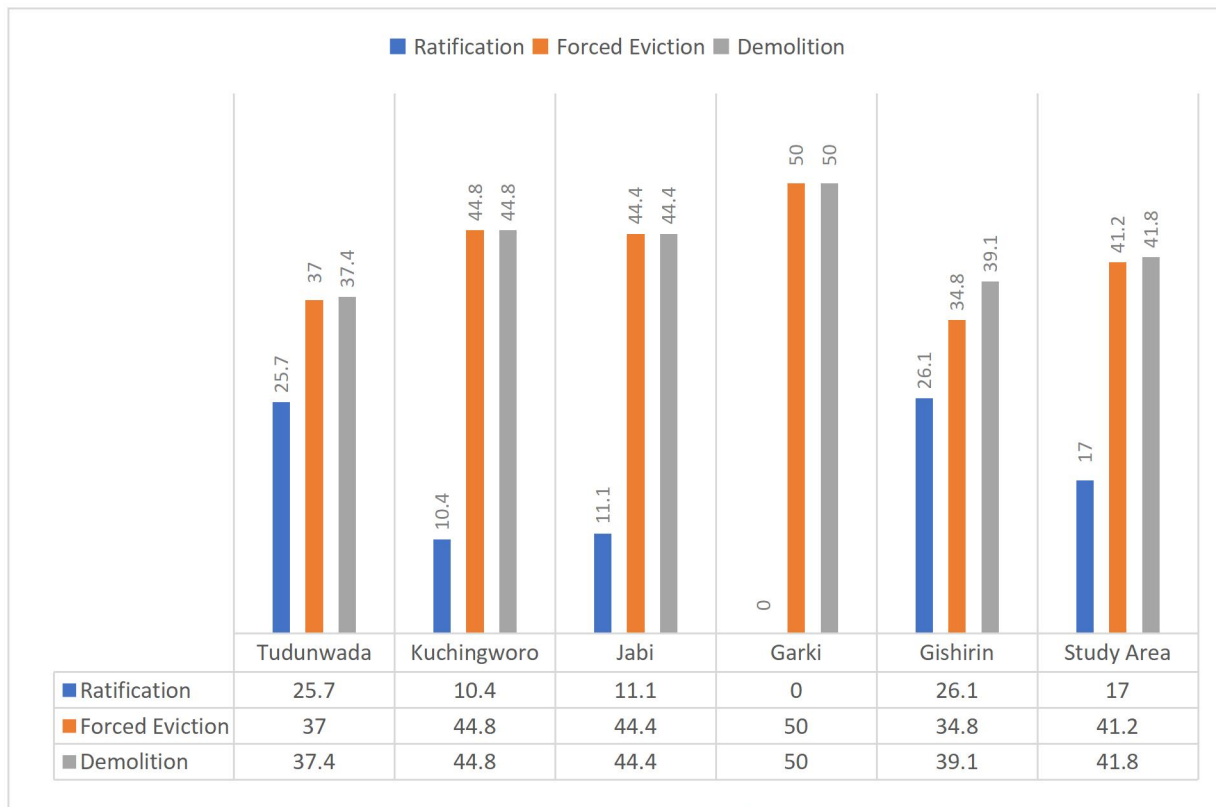


Figure 4.25: Analysis of Residents Affected by Existing Regularisation Strategies

Effectiveness of the Existing Regularisation Strategies

Engagements with residents and relevant stakeholders showed that the strategies adopted for regularisation in the study areas are not effective in any way. As the authorities are embarking on eviction and demolition of a particular settlement, the affected residents move further into the urban peri-phery to satisfy their housing needs usually through the informal means. In a separate focused group discussion held with the officials of Real Estate Developers Association of Nigeria (REDAN) and palace officials of the chief of Jabi Village, it was unanimously settled that the current regularisation methods are not in any way effective. Title regularisation is costly and the procedures are lengthy and cumbersome. Obtaining planning permits is also costly and slowed down with bureaucratic bottlenecks. Some participants especially the indigenes believed there is no need to obtain title documents and planning permits on their ancestral lands.



Plate 4.7: A Focused Group Discussion at the Palace of the Chief of Jabi on Saturday, 6 May 2023

Source: Author's Fieldwork, (2023)

4.1.5 Levels of Provision of Municipal/Social Services and Degree of Satisfaction

Availability and Proximity of Municipal and Social Services in the Study Areas

Available municipal/social services identified by residents in the study area are shown in Table 4.9. Findings from the study revealed that most of the identified municipal services were available in the study areas but not in adequate and satisfactory proportion. In order of availability ranking, electricity ranked topmost (14.8%) of all social services as indicated by findings of the study. Next is police station (14.1%), elementary primary schools (13.6%), motorable roads (11.9%), health care facilities (11.4%), solid waste disposal (9.4%), drainage system (8.9%), pipe borne water (8.8%) and sewage disposal (7.3%). However, it is important to note that in Kuchingoro, Jabi and Gishiri settlements, none of the respondents attested to the availability of drainage system, health facilities and sewage disposal. This implied that municipal/social services are not adequate across the sampled settlements.

Plate 4.7 showed a young girl performing domestic washing at a dirty fountain in Gbazango, Abuja. This attested to the non-availability of portable water in the locality. This corroborates research findings that poor amenities and services are characteristics of informal settlements.



Plate 4.8: A Young Girl Performing Domestic Washing at a Dirty Fountain in Gbazango, Abuja Attesting to Poor Provision of Clean Water.

Photo: Author's Fieldwork, (2023)

Table 4.9: Available Municipal/Social Services in the Study Areas
SETTLEMENT

		Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	Overall Area
		<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>
Municipal/Social Service							
Electricity		131 (12.9)	38 (16.8)	33 (12.7)	48 (14.8)	45 (25.6)	295 (14.8)
Police stations		123 (12.2)	38 (16.8)	33 (12.7)	43 (13.2)	44 (25.0)	281 (14.1)
Elementary schools	public	121 (12.0)	37 (16.4)	33 (12.7)	44 (13.5)	36 (20.5)	271 (13.6)

Motorable roads	118 (11.7)	38 (16.8)	33 (12.7)	47 (14.5)	2 (1.1)	238 (11.9)
Health care facilities	119 (11.8)	38 (16.8)	-	47 (14.5)	23 (13.1)	227 (11.4)
Solid waste disposal	101 (10.0)	13 (5.8)	32 (12.3)	40 (12.3)	1 (0.6)	187 (9.4)
Drainage system	102 (10.1)	-	32 (12.3)	43 (13.2)	1 (0.6)	178 (8.9)
Pipe borne water	94 (9.3)	22 (9.7)	32 (12.3)	4 (1.2)	24 (13.6)	176 (8.8)
Sewage disposal	103 (10.2)	2 (0.9)	32 (12.3)	9 (2.8)	-	146 (7.3)
Total	1012 (100.0)	226 (100.0)	260 (100.0)	325 (100.0)	176 (100.0)	1999 (100.0)

**Note: Total exceed sample size due to multiple responses to the question. Services arranged based on the frequency of availability in the study areas*

Source: Result of Author's Fieldwork, (2023)

The available municipal/social services are presented in Figure 4.26 for further pictorial understanding.

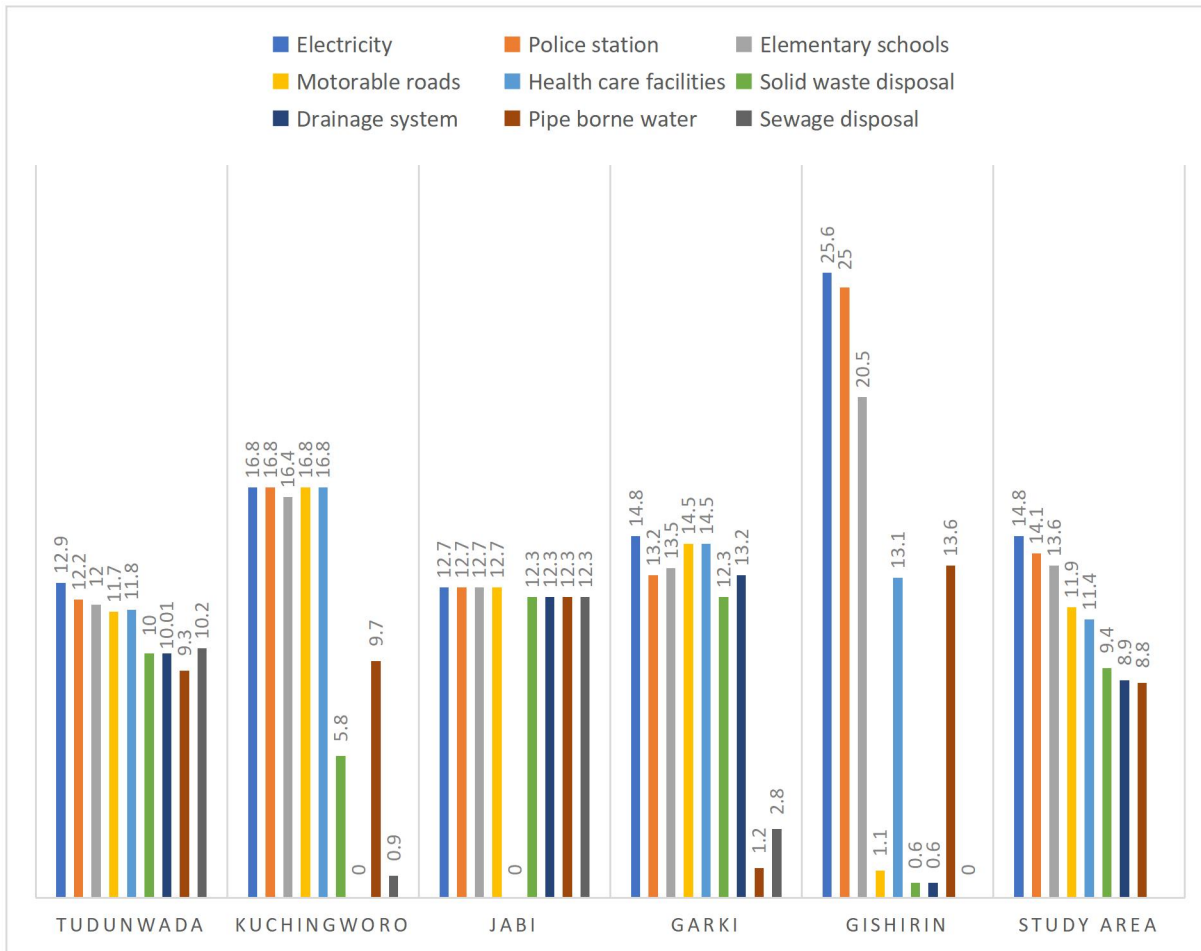


Figure 4.26: Analysis of Available Municipal/social Services in the Study Areas

Apart from the arterial highways bordering the urban corridor of the settlements that are paved with asphalt or laid with interlocking stones, majority of the minor roads in the settlements are ungraded earth roads. The state of these roads makes a significant contribution to traffic congestion prevalent in these settlements especially at peak periods. This is the general observation across the five selected settlements for this study. While Plate 4.8 showed first class road infrastructure in Abuja, Plate 4.9 showed poor road infrastructure lacking drainage system. This implies that there is formality in informality. Similarly, Plate 4.10 showed a non-motorable street view of Tudunwada with poor road infrastructure. This is an indication that poor road infrastructure is one of the major characteristics of informal settlements.



Plate 4.9: Formality in Informality - The Six-lane Obafemi Awolowo Highway, Jabi, Abuja. Jabi Village Informal Settlement is Located Directly off this Highway.

Source: Author's Fieldwork, (2023).



Plate 4.10: Approach to the Informal Settlement of Jabi Village Showing Poor Road Infrastructure and lacking Drainage System. At the Background is the Refurbished ECWA Church, the first Church built in the Neighbourhood in 1942.

Photo: Author's Fieldwork, (2023).



Plate 4.11: Non-motorable Street View at Tudunwada Informal Settlement, Abuja
Source: Author's Fieldwork, (2023)

Closeness of Municipal and Social Services

In terms of closeness of the municipal social services, 44.4% of the respondents opined that the available social services in their settlements are extremely close, 33.2% indicated that the social services are very close, and 14.9% affirmed it is close. Only 1% of the respondents claimed that the services are not close. These findings are presented in Table 4.10. This implies that although the services are not adequate, they are however significantly close to the respondents thereby saving them travel time to the services.

Table 4.10: Closeness of Municipal Services

	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	
Proximity						
Extremely Close	94 (71.8)	17 (44.7)	3 (9.1)	1 (2.1)	16 (35.6)	131 (44.4)
Very Close	20 (15.3)	18 (47.4)	29 (87.9)	19 (39.6)	12 (26.7)	98 (33.2)
Close	8 (6.1)	3 (7.9)	1 (3.0)	24 (50.0)	8 (17.8)	44 (14.9)
Fairly Close	7 (5.3)	-	-	4 (8.3)	8 (17.8)	19 (6.4)
Not Close	2 (1.5)	-	-	-	1 (2.2)	3 (1.0)
Total	131 (100.0)	38 (100.0)	33 (100.0)	48 (100.0)	45 (100.0)	295 (100.0)

Source: Result of Author's Fieldwork, (2023)

The analysis of closeness of services to the respondents are presented in Figure 4.27 for further pictorial understanding.

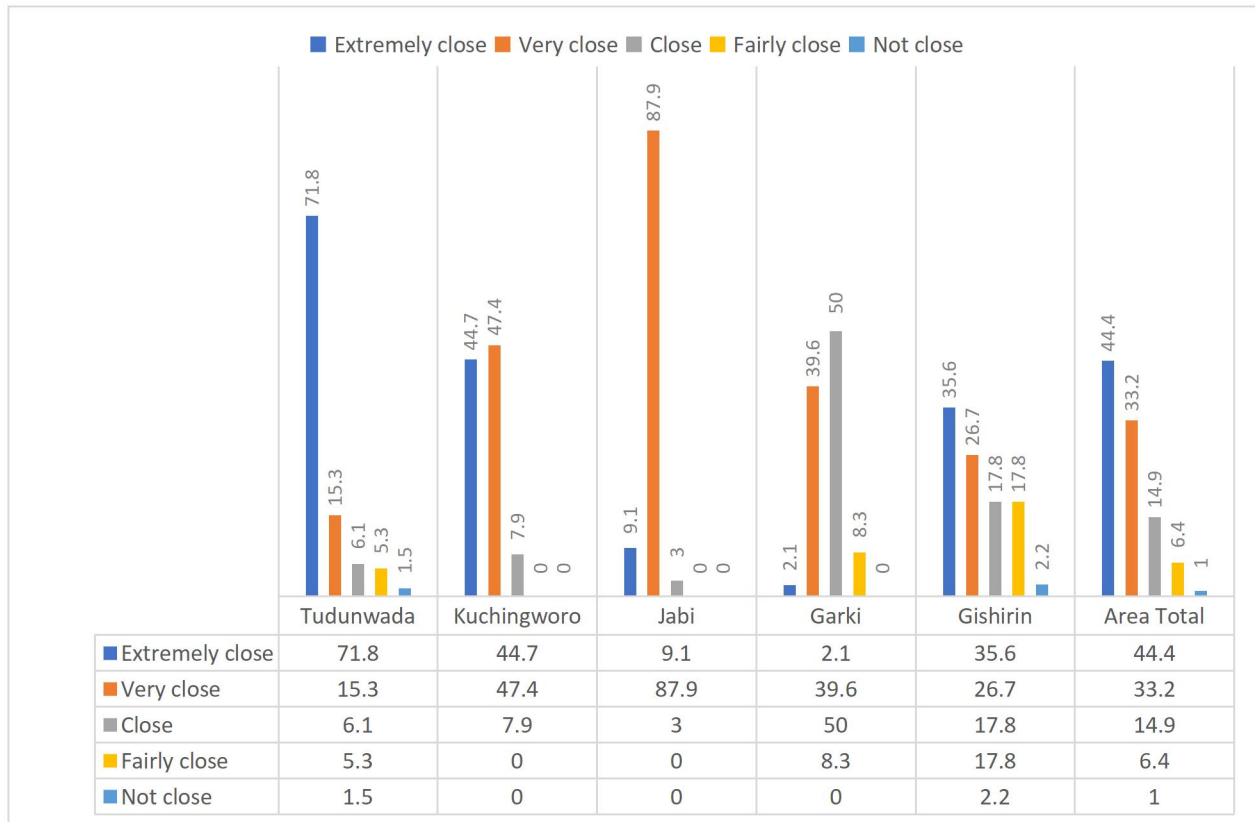


Figure 4.27: Analysis of Respondents’ Closeness to Municipal/Social Services in the Study Areas

Degree of Satisfaction with Municipal and Social Services

The level of satisfaction residents derived from the available municipal/social services in the settlements was assessed and summarized in Table 4.11. In achieving this, the residents assessed their level of satisfaction using a 5-point Likert Scale of ‘**Very Dissatisfied**’, ‘**Dissatisfied**’, ‘**Unsure**’, ‘**Satisfied**’, and ‘**Very Satisfied**’. Values of 1, 2, 3, 4 and 5 were respectively assigned to the ratings.

Based on the mean scores generated from respondents’ satisfaction ratings, it was observed that of the nine social services available in the settlements, respondents were uncertain in regards to deriving satisfaction from the existing social services. This was evident as the aggregate mean score of the nine identified social services was 2.96; a value closer to the ratings assigned to ‘Unsure’ (Table 4.11). This was also reflected in the satisfaction mean scores for each social services such as elementary primary school (3.46), electricity (3.35), pipe borne water (3.23), police station (3.20), motorable roads (2.87), solid waste disposal (2.72),

drainage system (2.70), sewage disposal (2.60) and healthcare facilities (2.57). The observed mean scores were closer to the assigned value of 3 which signifies uncertainty in terms of the satisfaction level of the residents in the study areas.

In Jabi settlement, the ratings of the respondents showed that they were satisfied with social services such as pipe borne water (4.97), elementary public school (4.76), drainage system (4.16), electricity (4.12), sewage disposal (4.09), solid waste disposal (4.06), police station (3.97) and motorable roads (3.88). However, the residents opined to be very dissatisfied with the level of health care facility (1.21) in the settlement. In addition, findings in Kuchingoro settlements revealed that residents were satisfied with social services such as elementary primary schools (4.32), electricity (4.29), police station (4.08), health care facilities (4.00), motorable roads (3.84) and pipe borne water (3.66).

On the other hand, respondents in Gishiri settlement opined to be dissatisfied with a number of the available social services such as health care facilities (1.93), drainage system (1.66), solid waste disposal (1.65), sewage disposal (1.60) and motorable roads (1.50). In Garki settlement, the mean score for social facilities such as electricity (2.46), solid waste disposal (2.40), drainage system (2.38), pipe borne water (2.16), sewage disposal (2.06) was considered dissatisfactory by the residents in the settlement. Based on the mean satisfaction level score of residents in Tudunwada settlement, it was revealed that on the average, residents were neither satisfied nor dissatisfied with the available social facilities in the settlement. This was evident as the mean score for the different social services lies within the range of 2.56 and 3.09 respectively.

Table 4.11: Residents' Degree of Satisfaction with Municipal/Social Services

		SETTLEMENT					Overall Area
		Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
		<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Satisfaction							
Elementary schools	public	2.96	4.32	4.76	3.78	2.87	3.46
Electricity		3.06	4.29	4.12	2.46	3.76	3.35
Pipe borne water		3.09	3.66	4.97	2.16	2.62	3.23
Police stations		2.72	4.08	3.97	3.34	3.09	3.20
Motorable roads		2.57	3.84	3.88	3.42	1.50	2.87
Solid waste disposal		2.56	3.34	4.06	2.40	1.65	2.72
Drainage system		2.71	2.89	4.16	2.38	1.66	2.70
Sewage disposal		2.65	2.76	4.09	2.06	1.60	2.60
Health care facilities		2.57	4.00	1.21	3.00	1.93	2.57
Aggregate Mean		2.76	3.69	3.91	2.82	2.39	2.96

**Note: Mean scores assumes value of 1=Very dissatisfied, 2=Dissatisfied, 3=Unsure, 4=Satisfied, 5=Very satisfied*

Source: Result of Author's Fieldwork, (2023)

Respondents' level of satisfaction with neighbourhood services are presented in Figure 4.28 for further pictorial understanding.



Plate 4.12: A Polluted and Unhygienic Stream Flowing Through a Section of Tudunwada Informal Settlement, Abuja
Photo: Author's Fieldwork, (2023).

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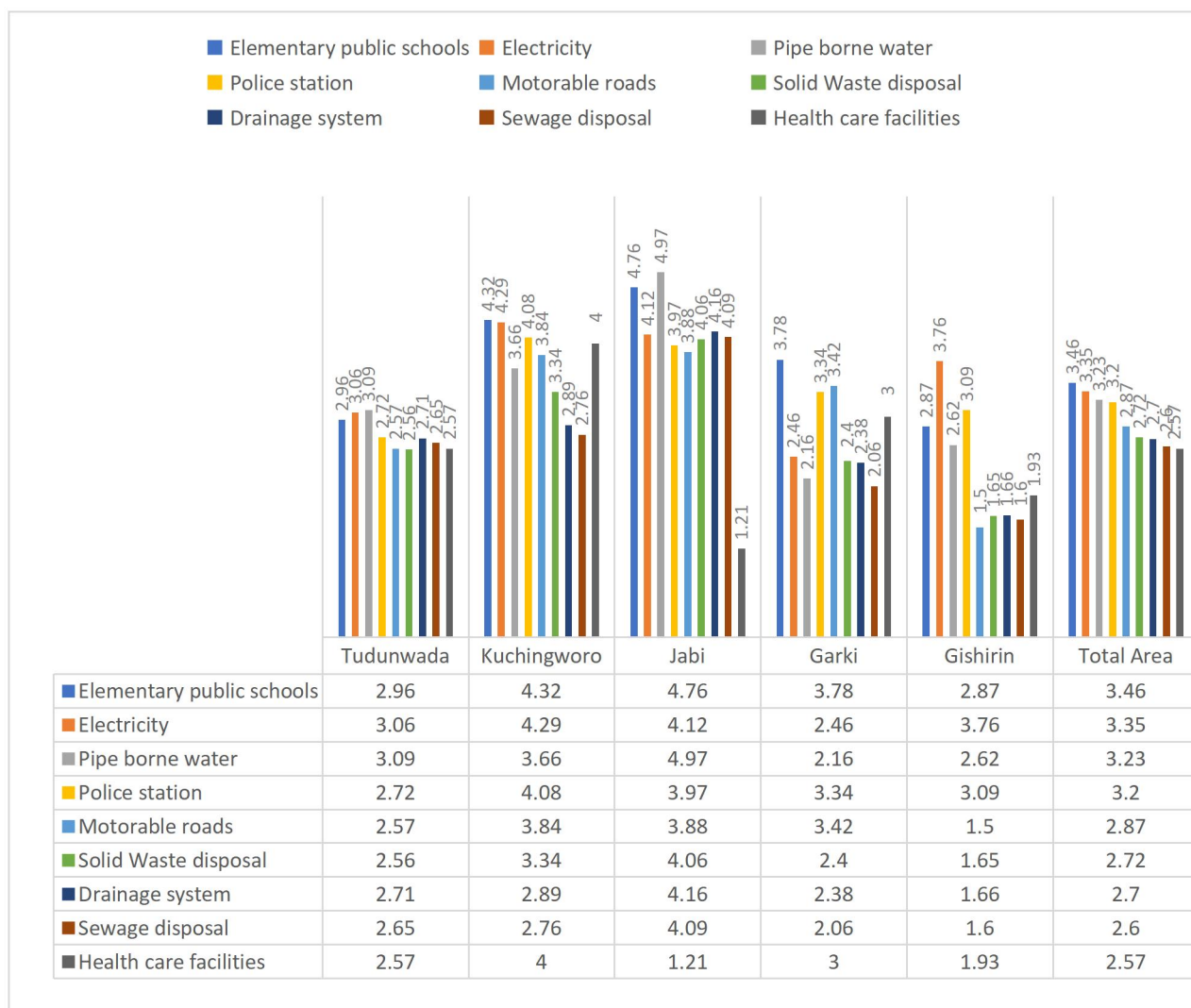


Figure 4.28: Analysis of Respondents' Level of Satisfaction with Municipal/social Services

4.1.6 Prevailing Socio-economic and Environmental Challenges of Housing Informality

Socio-economic Challenges

Presented in Table 4.12 is the summary of residents' response to socio-economic challenges encountered in the different informal housing settlements selected for this study. The most popular socio-economic challenge in the entire study areas was crime and social vices. This accounted for 14.2% of all responses in the study in addition to unauthorized demolition, overcrowding and unauthorized eviction. These accounted for 13.4%, 13.4% and 13.0% of the experienced challenges by residents in the study areas respectively.

Other socio-economic challenges as revealed by the respondents were those associated with poor services (12.6%), poor accessibility (11.9%), traffic congestion (11.6%) and arbitrary levies/taxes (9.9%).

Across the informal residential settlements, the top-five socio-economic challenges in Tudunwada settlement was stated by the residents to include poor services (13.2%), poor accessibility (13.1%), overcrowding (13.0%) and traffic congestion (12.7%). In addition, majority of the residents in Gishiri settlement affirmed to the prevalence of socio-economic challenges such as poor accessibility (14.3%), poor services (14.3%), arbitrary levies/taxes (14.3%), crime/social menace (14.0%) and traffic congestion (13.7%). Furthermore, it was detected that residents in the other settlements of Kuchingoro, Jabi and Garki, had similar socio-economic challenges as observed in the overall study areas.

Table 4.12: Residents' Social-Economic Challenges

Socio-economic Challenges	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>
Crime / Social menace	122 (12.8)	38 (16.3)	33 (19.0)	48 (14.4)	41 (14.0)	282 (14.2)
Unauthorized demolition	117 (12.3)	37 (15.9)	33 (19.0)	48 (14.4)	32 (10.9)	267 (13.4)
Overcrowding	124 (13.0)	37 (15.9)	31 (17.8)	48 (14.4)	26 (8.9)	266 (13.4)
Unauthorized eviction	113 (11.8)	37 (15.9)	33 (19.0)	48 (14.4)	28 (9.6)	259 (13.0)
Poor services	126 (13.2)	31 (13.3)	5 (2.9)	46 (13.8)	42 (14.3)	250 (12.6)
Poor accessibility	125 (13.1)	21 (9.0)	2 (1.1)	47 (14.1)	42 (14.3)	237 (11.9)

Traffic congestion	121 (12.7)	18 (7.7)	7 (4.0)	44 (13.2)	40 (13.7)	230 (11.6)
Arbitrary levies/taxes	107 (11.2)	14 (6.0)	30 (17.2)	4 (1.2)	42 (14.3)	197 (9.9)
*Total	955 (100.0)	233 (100.0)	174 (100.0)	333 (100.0)	293 (100.0)	1988 (100.0)

**Note: The total number of responses exceeded the number of residents in the survey due to multiple response to the question*

Source: Result of Author's Fieldwork, (2023)



Plate 4.13: A Traffic Gridlock along Abuja - Mararaba - Masaka Road.

This is a Fallout of Informality Along the Axis

Source: leadershipng.org/inside-chaotic-life-of-mararaba-residents-road-users

Respondents' socio-economic challenges are presented in Figure 4.29 for further pictorial understanding.

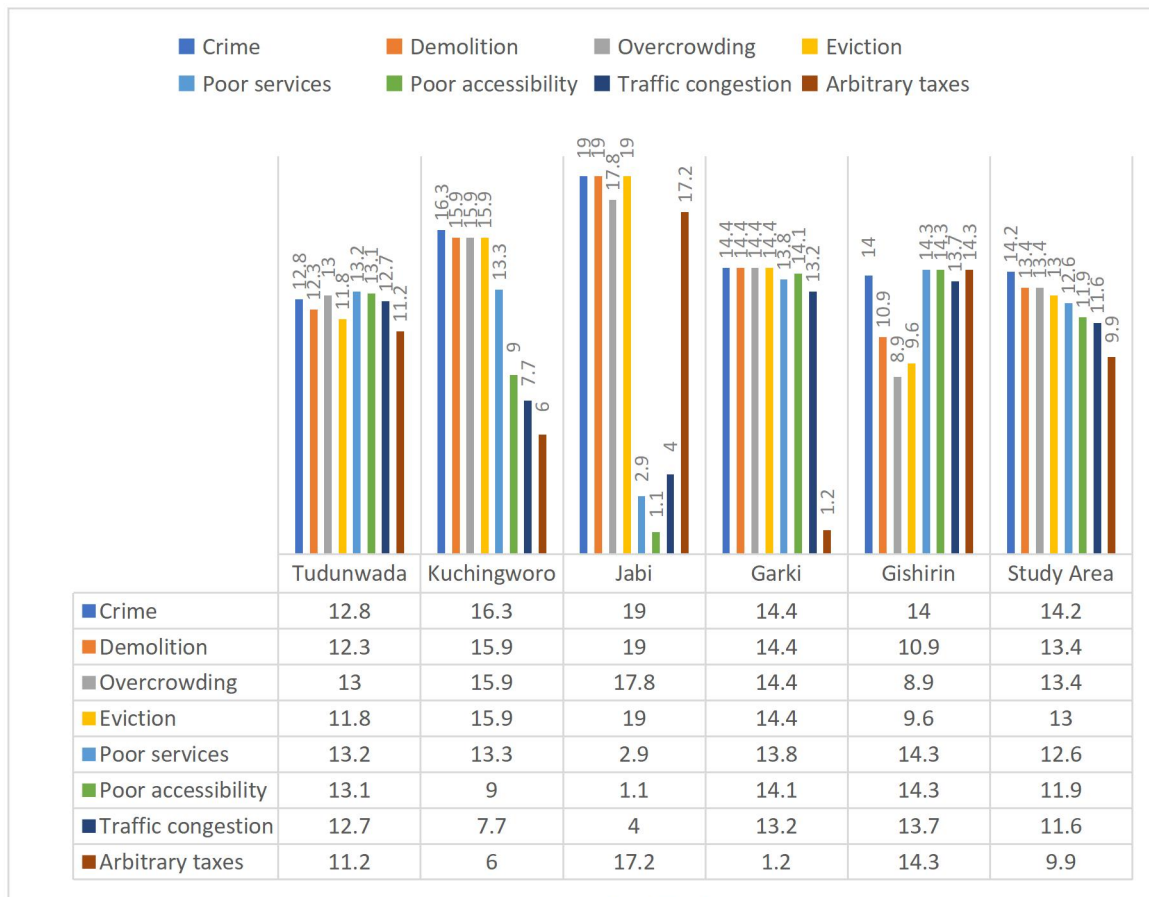


Figure 4.29: Analysis of Respondents’ Socio-economic Challenges in the Study Areas

Environmental Challenges

The results of environmental challenges revealed that a high proportion (22.3%) of the respondents attested to poor state of health facilities in the study (Table 4.13). This proportion accounted for 22.3% of all responses on environmental challenges encountered in the study. Other environmental challenges encountered by the residents include pollution (22.1%), poor waste management (20.2%), flooding (13.4%) and deforestation (11.5%). Furthermore, across the sampled settlements, environmental challenges with topmost concern revealed that, in Tudunwada settlement residents affirmed to the state of poor waste management (18.3%) and pollution (18.3%). In the case of Kuchingworo and Gishiri settlements, poor health facilities and waste management was identified by the residents. Although, a similar trend was observed in Garki settlement, however, the residents indicated no experience of deforestation. The prevalent environmental challenges as indicated by residents in Jabi settlement was poor health facilities (45.8%) and

pollution (45.8%). Based on these findings, it was established that the entire study areas were characterized by existing environmental challenges and differed across the sampled settlements.



Plate 4.14: Polluted Stream in Tudunwada Informal Settlement with potentials to Spread both Communicable and Non-communicable Diseases leading to Health Challenges

Photo: Author's Fieldwork, (2023)

Pollution (Plate 4.13) and poor urban waste management (Plate 4.14) are characteristic features of informal settlements. These characteristics have serious impacts on the health and well-being of the dwellers.



Plate 4.15: An Unmanaged Refuse Dump in Gishiri Village, Abuja. Such sight is a common occurrence in many of Abuja's Informal Settlements
Photo: Author's Fieldwork, (2023)

Table 4.13: Residents' Environmental Challenges

Environmental Challenges	SETTLEMENT					Overall Area
	Tudunwada	Kuchingoro	Jabi	Garki	Gishiri	
	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	<i>Freq. (%)</i>	
Poor Waste Management	126 (18.3)	38 (24.2)	5 (6.9)	48 (33.3)	44 (19.2)	261 (20.2)
Poor Health Facilities	125 (18.1)	38 (24.2)	33 (45.8)	48 (33.3)	44 (19.2)	288 (22.3)
Pollution	126 (18.3)	37 (23.6)	33 (45.8)	47 (32.6)	42 (18.3)	285 (22.1)
Flooding	111 (16.1)	18 (11.5)	-	1 (0.7)	43 (18.8)	173 (13.4)
Others	96 (13.9)	10 (6.4)	1 (1.4)	-	30 (13.1)	137 (10.5)

Deforestation	106 (15.4)	16 (10.2)	-	-	26 (11.4)	148 (11.5)
*Total	690 (100.0)	157 (100.0)	72 (100.0)	144 (100.)	229 (100.0)	1292 (100)

**Note: The total number of responses exceeded the number of residents in the survey due to multiple response to the question*

Source: Result of Author’s Fieldwork, (2023)

Respondents’ environmental challenges are presented in Figure 4.30 for further pictorial understanding.

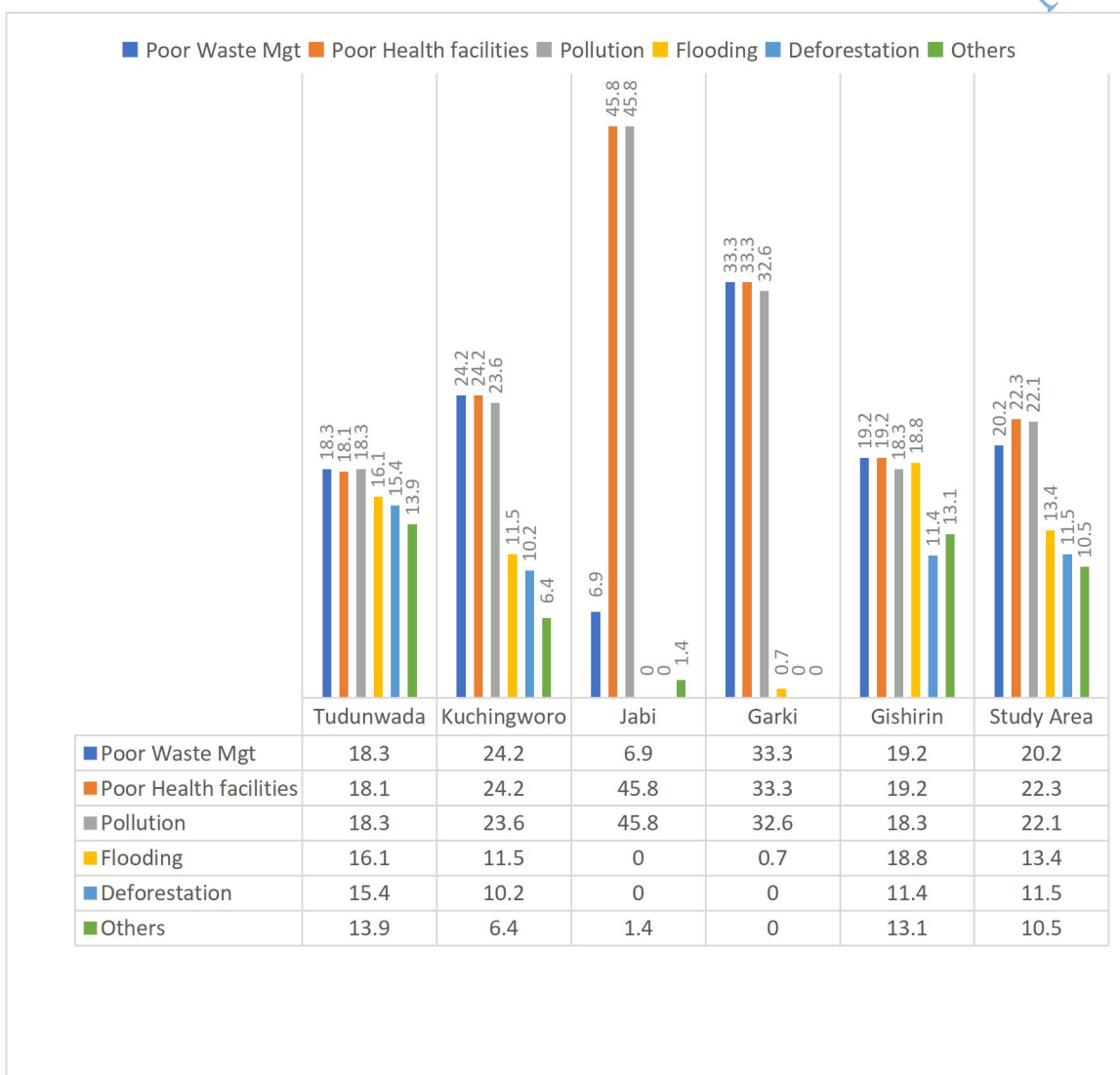


Figure 4.30: Analysis of Respondents’ Environmental Challenges

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Chapter Five Conclusion

5.1 Summary of Findings

This chapter presents the summary of the findings in the study areas. Inferences are drawn from the comparisons of the findings in the five informal settlements examined. The findings are shown in order of the objectives of this study as stated in chapter one.

5.1.1 Objective One: Assessment of Socio-economic Attributes of Respondents and Housing Characteristics in the Study Areas

In this study, ten socio-economic attributes of the respondents and five housing characteristics were considered. The socio-economic attributes include gender, marital status, age distribution, occupation, level of literacy, ethnic grouping, average monthly income, household size, ownership status and length of stay of the respondents. The summary of the findings on each of these attributes are summarized in the subsequent sections.

Gender of Respondents in the Study Areas

Findings revealed a male dominated respondents across the five examined settlements. There is no significant difference in gender distribution in the five informal settlements examined.

Age Distribution of the Respondents in the Study Areas

The study revealed that the most predominant age group of the total study area was between 41 to 50 years with majority of the respondents in the middle and low-income category who are search of affordable accommodation with easy access to the city center. This is because housing in the city center attract high rent and therefore not affordable to most of the low- and medium-income earners, and they needed to acquire one that is not only affordable but accessible to the central business district. Most of the accommodation are provided through self-help. These findings are in agreement with earlier positions that

inadequate and unaffordable urban housing leads to self-help development especially in the urban periphery.

Respondents' Marital Status

Findings revealed that majority of the respondents who are the household heads were married in the areas examined by the study. Others were either unmarried, separated or divorced. This corroborates earlier findings on the marital status of most settlers in African peri-urban.

Respondents' Ethnic Groupings

The study revealed that the study area is populated predominantly by Igbo, Yoruba and Hausa ethnic nationalities. It was also revealed that the indigenous people are the minority in terms of ethnic groupings.

Respondents' Educational Level

The level of education of the respondents is encouraging as majority of them read to the undergraduate, secondary, diploma and certificate levels. A pocket of the dwellers also possessed postgraduate degrees.

Respondents' Employment Status

Findings showed that majority of the respondents are employed either in the formal or informal sector. However, some of the respondents are not sure whether they are employed or not while some of them claimed they have no identifiable means of livelihood.

Respondents' Average Monthly Income

About a quarter of the respondents in the study area earn an average monthly income that falls within the national minimum wage. In all, the findings suggest a heterogeneous mix of low income and middle-income earners commonly found in peri-urban settlements.

Respondents' Length of Stay

Majority of the respondents have lived in the settlements between 5 to 10 years. In Tundunwada, about 53.4% have lived in the settlement between 5-10 years. The attachment of the respondents to the settlements could be attributed to the low rent/land values prevalent in the settlements. It was discovered

that majority of respondents that have lived in the study area for over 10 years are natives of the settlements. The trend in the length of stay of respondents showed the transient nature of most informal settlement dwellers. This mobile nature of informal settlement dwellers, in search of improved infrastructure and services contribute to their lack of commitment and sense of cohesion to the development of their neighborhoods.

Respondents' Household Size

The minimum and maximum household size of the respondents was 1 and 19 persons respectively. However, the average household size is 7 persons of mixed gender in a housing unit accommodating 3 bedrooms. These findings suggest that overcrowding as a challenge of informal settlements is common in all the sampled settlements.

Study Area Housing Characteristics

All the settlements examined exhibit all the characteristic features of informal settlements. Three different types of houses are distinctly identified in the study area. They are single family bungalow unit, single family storey housing and tenement buildings. Through observation, the commonest typology across the study areas was the single-family bungalow units. The study did not show any significant differences in the use of building materials across the sampled informal settlements.

The variables usually considered for informality in housing are all present in the sampled informal settlements. These include but not limited to building setbacks, availability of building regularisation documents and state of building design. Findings showed that majority of the buildings in the sampled study areas did not conform with these requirements.

5.1.2 Objective Two: Identifying the Drivers of Housing Informality in the Study Areas

Nine indicators that constitute housing informality in the neighborhoods were assessed using a 5-point Likert Scale. The mean scores of each of the identified drivers revealed that migration, low rent/land use,

natural birth, housing deficit in urban areas and land affordability were the top-five perceived drivers of housing informality in the overall study area. Similarly, factor of speculation and locational advantage were considered by residents to be least perceived driver of housing informality in the study area.

5.1.3 Objective Three: Investigating the Level of Regularisation of Selected Housing Units in the Study Areas and the Degree of Effectiveness of the Adopted Strategies

According to the research, majority of the respondents acquired their properties through private purchase, this is evident in unstamped purchase receipts. This suggests that majority of the respondents do not have title document resulting in low tenure security.

Moreover, majority of the respondents constructed their properties through self-help mechanism. On regulatory matters, close to half of the respondents claimed they are extremely aware of the need to obtain development permit but majority claimed they do not have access to it. These findings suggest that obtaining title documents and permits are laden with cost and official bureaucratic challenges.

Three regularisation strategies were considered for the study namely: demolition, site/services and ratification. Findings revealed that demolition is the most observed by the respondents in addition to site/services and ratification.

5.1.4 Objective Four: Examining the Level of Provision of Municipal and Social Services in the Study Areas the Degree of Satisfaction with such Provisions

Nine municipal/social services were identified in the course of the study with most of them available in the study area drainage system, health facilities and sewage disposal. Availability of these services notwithstanding, respondents were uncertain in regards to deriving satisfaction from the existing social services.

5.1.5 Objective Five: Investigating the Prevailing Socio-economic and Environmental Challenges of Housing Informality in the Study Areas

Socio-economic Challenges

Eight socio-economic variables were considered for the study. The greatest challenge in this regard was linked with crime and other social vices such as prostitution. Next is unauthorized demolition, overcrowding, unauthorized eviction and poor services. Generally, it was observed that respondents in the selected settlements had similar socio-economic challenges in the overall study area.

Environmental Challenges

Five variables were considered in examining the environmental challenges encountered by the respondents. These are: Poor waste management, poor health facilities, pollution, flooding and deforestation. Findings revealed that majority of the respondents are faced with poor state of health, poor waste management and environmental pollution. Overall, the least experienced environmental challenges by the respondents were flooding and deforestation.

5.2 Conclusion

The three major characteristics of informal housing are Tenure insecurity, infrastructure deficits and failed planning policies. Findings in this study showed that respondents as well as other stakeholders exhibit little perception of the concept of housing informality especially in the area of tenure insecurity. Through focused discussions with stakeholders, majority of the participants lack the perceptual knowledge of informal settlements in terms of ecological development practices to protect the ecosystems, compact and aesthetic urban land design, urban quality, social cohesion and community participation in managing such developmental challenges in the various settlements. Findings have also revealed that informality challenges cut across mostly the peri-urban settlements of Abuja and these challenges are not, generally, location-specific. It was also observed that informal trading and informal employment are characteristic features of informal settlements. The study has equally shown substantial growth in informal settlements and significant departure from the Abuja Master Plan. This accounts for the spate of eviction and demolition experienced almost daily across the city. The study also revealed that various forms of urban renewal strategies

needed to rejuvenate the city is not effective in Abuja generally. The research objectives provided a template for this study and hence findings are in response to the stated research questions. Major findings in this study are presented in a bid to highlight the specific challenges of informal housing not only in the study areas but across Nigeria generally. It is intended that this will attract engagements from various stakeholders and interest groups in the promotion of sustainable urban development in the various informal settlements across the cities and the country in general.

In line with objective one that is, **to assess the socio-economic attributes of respondents as well as housing characteristics in the study area**, respondents' socio-economic characteristics revealed predominantly married and mixed population of various ethnicity, age grouping and occupational activities. The existence of diverse informal economic activities is evident that informal trading and other informal activities are characteristic features of informal settlements in the study areas. The literacy level of the respondents is reasonable but does not help in the appreciation of the concept of informal housing through individual knowledge thus making regularisation efforts difficult. The existence of low-income and middle-income earners cohabiting in the same settlement have direct impact on the creation of residential and socio-cultural segregation in the study area. In terms of building materials, most of the housing units were constructed mainly with sandcrete blocks, glazed aluminium windows, wooden doors and aluminium roofing. Majority of the constructions violate the need for planning permits. Informal development which in this case means illegal development is aided by government poor policy towards the method and cost of housing regularisation in the informal settlements. Violation of planning permits is attributed to ineffective and globally accepted policy responses to residents' character. The only "effective" sanction obviously put in place as a control mechanism is eviction and demolition. This is counterproductive as the affected residents simply move to other peri-urban informal settlements to start a "new life". This leads to further violation of planning laws by individuals and corporate bodies and consequently housing informality. Moreover, official corruption and bureaucratic procedures are other factors to contend with. While housing characteristics exhibits majorly the same external

features, internal features showed some levels of socio-economic segregation. High income earners with more economic capacity are shown in the quality of their dwellings, fixtures, furniture and fittings. From the study, pockets of dwellings are discovered to have excellent internal finishings – good quality doors, vitrified floor tiles, marble floors, POP ceilings and so on. Obviously, these categories of residents are not poor. Findings revealed that the level of education and economic capability also affect housing quality in the study area. In conclusion, the prevailing socio-economic attributes have to be put into considerations by provision of affordable housing for the diverse income groups in the study area.

Findings have shown that the top five variables (migration, natural birth, low rent/land values, housing deficit and land affordability) identified through objective two that is, **to examine the drivers of housing informality in the study area**, are in line with previous research findings. It is therefore necessary for governments (local, state, federal) and institutions to put in place policies and bodies saddled with the following responsibilities: to refine the efficient use of urban land; to address land prices and housing deficits; to protect farmland and ecosystems in the rural areas and the peri-urban; and to check land hoarding, urban sprawl and informal settlements. It is expected that findings should guide dwellers to know the areas of knowledge deficiency in each settlement and appropriate measures taken to educate the residents on the negative effects of informal settlements.

Objective three that is, **to investigate the level of regularisation of selected housing units in the study area, and the effectiveness of the strategies adopted**; findings revealed the strategies adopted for regularisation of housing informality in Abuja are not effective, and not in line with global best practices in any way. It is always eviction and demolition. Findings of the study also revealed that housing informality thrives in the absence of effective development control measures resulting from failed planning policies. For planning to be effective in Abuja informal settlements, there must be a responsive planning and policy frameworks to take care of the different interests of all actors and stakeholders. This measure will further control the unsustainable housing development in the study areas. The involvement of the local community

in the planning, through the bottom-up strategy will aid in the reduction of distortionary practices of land use. The study emphasized the need to implement appropriate urban planning, land and housing policies aimed at improving the efficient use of urban land. Furthermore, findings agreed with previous studies and showed that housing informality is almost inevitable and will continue to grow as no meaningful economic development will occur without urbanisation and given the fact that government and other stakeholders cannot meet the housing needs of the urban dwellers.

In line with objective four, that is **to examine the level of provision of municipal and social services in the study areas and the degree of satisfaction with such provisions**; findings of the study revealed that the identified services are available but not evenly distributed. Generally, electricity ranked topmost as indicated by the respondents with sewage disposal ranked the least. In Kuchingoro, Jabi and Gishiri settlements, none of the respondents affirm the availability of sewage disposal, drainage system and health facilities. The study further revealed that road infrastructure in the selected settlements are poor and prone to traffic congestion at peak periods. Majority of the respondents affirmed that the services, where available, are close to them. The study maintained that the satisfaction level of the respondents differs from settlement to settlement. Jabi and Kuchingoro showed higher satisfaction levels compared to the other three settlements. Overall, respondents showed highest satisfaction level for elementary public schools and health facilities the least satisfaction level.

Objective five is **to investigate the prevailing socio-economic and environmental challenges of housing informality in the study areas**, the study revealed the top-five socio-economic challenges to include crime/social menace, unauthorized demolition, overcrowding, unauthorized eviction and poor services. The study further revealed that crime and social menace ranked topmost of all the socio-economic challenges. The poor state of health facilities, pollution and poor waste management are the topmost environmental challenges encountered by the respondents. Generally, the study established that the entire study areas were

characterised by existing environmental challenges the magnitude of which differ from settlement to settlement.

5.3 Recommendations

Since it is globally accepted that urbanisation that birthed informal housing is a necessary evil and has come to stay, this study will only recommend a number of mitigating factors. The author recommends as follows:

1. Governments' attention should be drawn towards regularisation through sustainable urban renewal strategies accommodating the needed infrastructure and amenities in the study area.
2. The study further suggests improvements in planning, land use, and land administration policies. This is aimed at ensuring sustainable development through effective regularisation of informal settlements. Some of these policy measures may include: increasing window to housing finance, improving security of tenure through formalisation and regularisation of land tenure; and greater collaboration between government and community stakeholders. These will assist in the effective implementation of the policies.
3. The study further suggests that in view of non-availability of housing finance and effective mortgage window especially for the low-income earners, self-help or incremental development should be encouraged provided security of tenure and adherence to planning regulations are guaranteed.
4. Formulation and implementation of alternative regularisation strategies through alternative policy options such as slum upgrading, resettlement and land readjustment is further recommended.

5. The author further suggests the formulation of a policy framework that will ensure adherence with the overall development plan of the FCT. Moreover, the Federal Capital Territory Administration (FCTA) should intercede in the process of self-built housing development through sustainable regularisation to check the proliferation of informal developments.
6. Furthermore, the end users should be included, through the bottom-up strategy, in the design and implementation stages of projects targeting the dwellers of informal settlements. This will assist in attaining suitable housing delivery approach in terms of the provision of efficient and sustainable housing delivery system.
7. As a matter of deliberate policy, the author suggests that government should reduce the cost of acquiring title documents, property development permits and removal of bureaucratic bottlenecks impeding the acquisition of such documents.
8. Finally, there is need for better and accurate data on housing deficit and informal settlements not only in the study area but in Nigeria generally.

5.4 Contributions to Knowledge

5.4.1 Implications for Researchers

1. Contrary to popular beliefs that informal housing is majorly pro poor, the study established that the affluents also form a part of the settlers and established stakeholders in informal settlements from information gathered through the socio-economic attributes. It thus contributes to the growing literature on the social and economic status of informal settlement dwellers.
2. The study revealed that the concept of informal housing is not understood even among some very literate settlers and stakeholders in the housing sector. To some stakeholders, informality in housing is equivalent to slums lacking basic infrastructure and failed urban planning policies.
3. The study contributes to existing literature on the housing informality discourse.

5.4.2 Implications for Practitioners

1. In spite of previous studies on the subject matter, the study still showed serious defects in the implementation of planning policies, the role of unproductive building regularisation plans of action and the failure of development control measures in the regularisation of housing informality in Abuja, Nigeria.
2. Finally, the study exposes the ineffectiveness of the existing regularisation strategies and the need to have a paradigm shift in order to achieve Sustainable Development Goals 1, 3, 6 and 11 of the United Nations.

5.5 Suggestions for Further Studies

This study has succeeded in assessing the existing regularisation methods and challenges posed in some selected informal settlements of Abuja. Further research work is however expected to be carried out in the areas suggested below:

1. This study noted that majority of existing studies on the regularisation of housing informality in Abuja have adopted a qualitative approach (with minimal quantitative method), relying mostly on interviews and case studies. There is a need for quantitative research that employs robust statistical methods to assess the impacts of regularisation programs on housing affordability, property values, and the broader housing market dynamics. A quantitative study of this sort will provide a more comprehensive understanding of the outcomes of regularisation efforts and enable scientific and evidence-based policy recommendations.
2. There is the need to investigate the nexus between informal trading and informal settlements as it affects local economic development. Further research is needed to explore the impacts of regularisation on access to basic services, tenure security and the overall improvement of living conditions for informal settlers.

3. There is also the need to investigate the roles of local authorities in the continued proliferation of informal settlements in their various jurisdictions in relation to economic base of the settlements.
4. There is the need to carry out a detailed study on the numerical quantity of housing deficits in Nigeria. This is needed for planning purposes.
5. Mpape, reputed to be the largest informal settlement in the FCT is outside the scope of this work. It is therefore suggested that similar study is conducted on the sprawling settlement especially as it shares boundary with one of Abuja's high-class areas – Maitama.
6. Similar studies can be carried out in other urban centers in Nigeria for comparisons of the regularisation strategies and the challenges encountered in such areas for cross fertilization of ideas.

Do Not Copy, Lead City University, Nigeria

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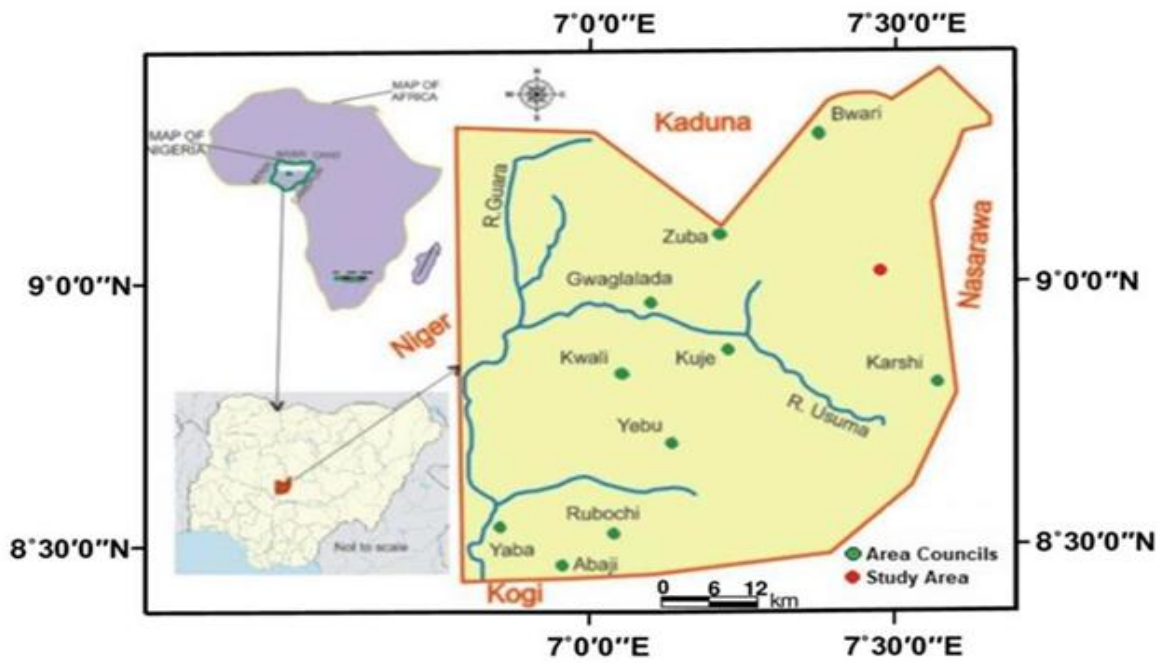
Appendix I: The Centrality of FCT on the Map of Nigeria

Nigeria



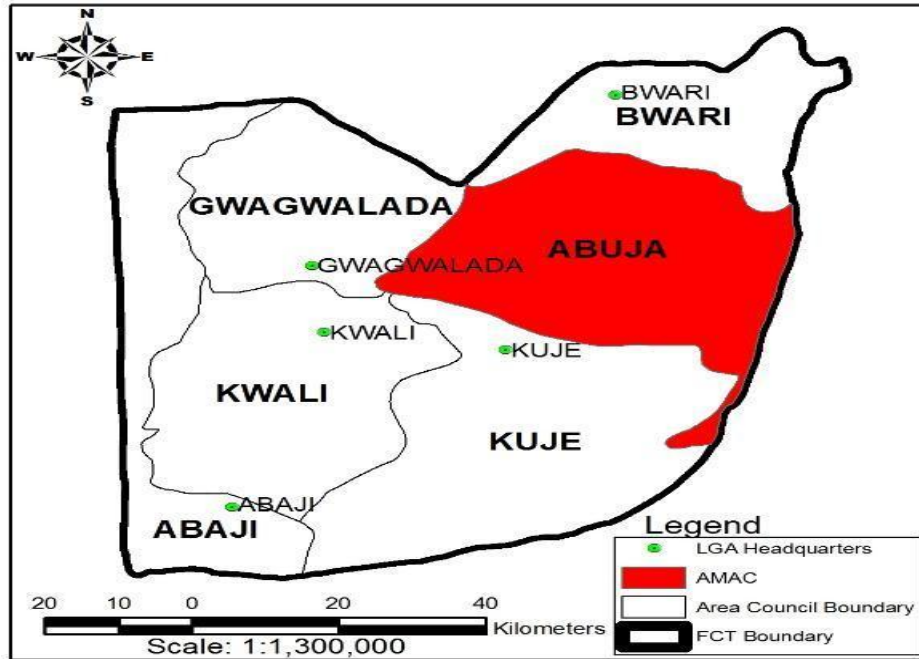
Source: Map Adapted from Orisakwe, Nwofor, Njoku & Ezedigboh (n.d)

Appendix II: FCT in Relation to Nigeria and Africa



Source: ResearchGate

Appendix III: FCT Area Councils (The Study Area, AMAC is marked in Red)



Source: ResearchGate

Appendix IV: Indigenous Languages of the FCT by Area Councils

Area Council (LGA)	Indigenous Languages Spoken
Abaji	Dibo, Gupa-Abawa, Ebira, Ganagana
Abuja (AMAC)	Gade, Gbagyi (Gwari), Nupe, Hausa
Bwari	Gwandara, Ashe, Gbagyi (Gwari)
Gwagwalada	Gbari, Egibra, Hausa
Kuje	Gade, Gbagyi (Gwari)
Kwali	Gwandara, Gbagyi (Gwari), Ebira, Kami, Ganagana, Nupe, Hausa

Source: Author's Compilation, (2023)

Appendix V: Typical Gbagyi Women Carrying Loads on their Shoulders



Photo Credit: Nigerian Nostalgia Project

Appendix VI: The City Gate, Abuja

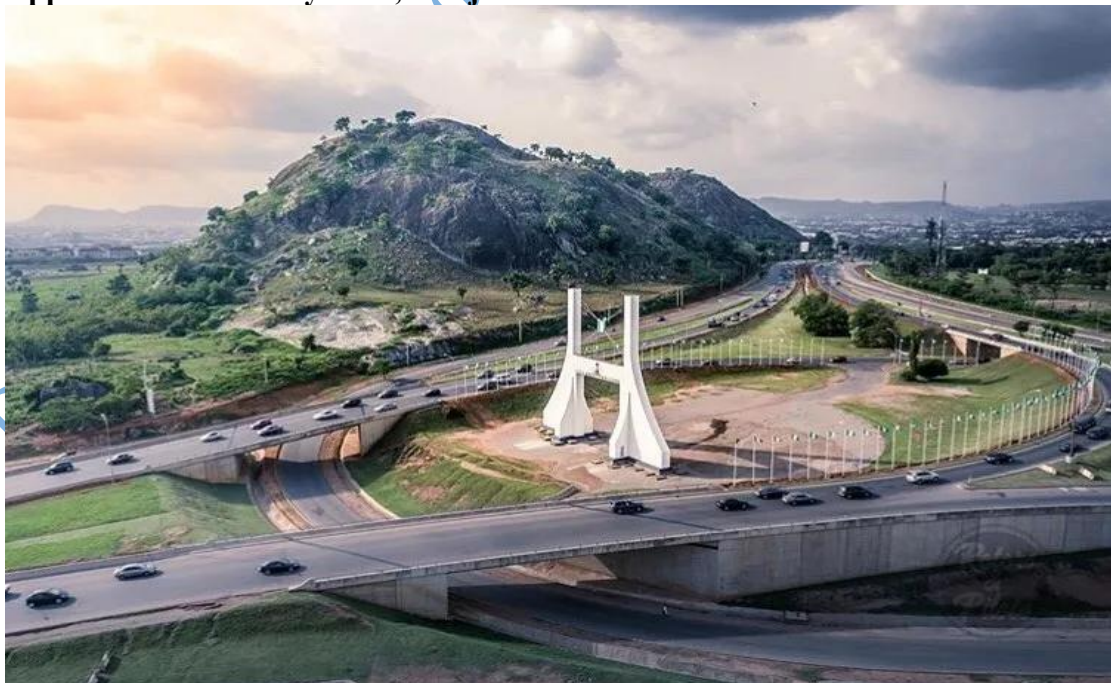


Photo Credit: Getty Images

Appendix VII: MKO Abiola Stadium, Abuja



Photo Credit: AY Supa Images

Appendix VIII: Abuja-Lokoja Highway



Photo Credit: Adamu, Lowe & Manase (n.d)

Appendix IX: First Class Infrastructure – Road, Underground Drainage, Street Lights, Flyovers, Pedestrian Bridges at Central Area, Abuja

Do Not Copy, Lead City University, Nigeria

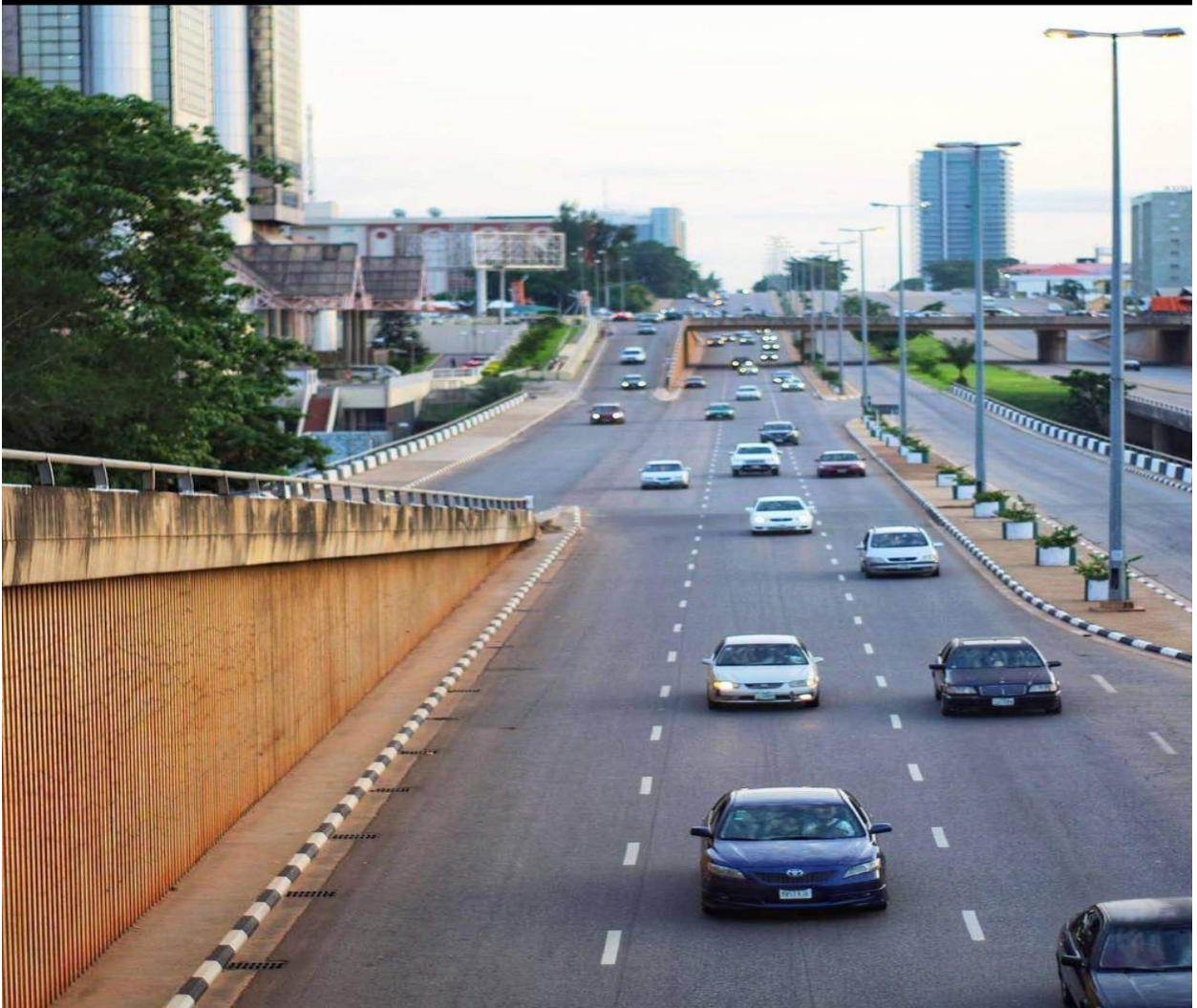


Photo Credit: Charles Demola Lens

Appendix X: A Street View in Tudunwada, Lugbe with Poor Road and Drainage Infrastructure



Photo Credit: ICIR Nigeria

Appendix XI: The Chief's Palace, Jabi Village



Source: Author's Fieldwork, (2023)

Appendix XII: A Street View in Garki Village, Abuja



Photo Credit: sunnewsonline.com

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Appendix XIII: Research Questionnaire



**Lead City University, Ibadan, Nigeria
Department of Urban and Regional Planning
Structured Interview Questionnaire**

**Survey on Assessment of Regularisation of Housing
Informality in Abuja, Nigeria**

INSTRUCTIONS FOR RESPONDENTS' FOR COMPLETING THE QUESTIONNAIRE

I am a PhD student in the Department of Urban and Regional Planning, Faculty of Environmental Design and Management, Lead City University, Ibadan – Nigeria. My research topic is “Assessment of Regularisation of Housing Informality in Abuja, Nigeria” The aim of the study is to assess the impacts of existing regularization strategies on Housing Informality in Abuja, Nigeria by examining the drivers, the existing methods of regularization, the processes involved and making positive recommendations to extenuate housing informality in the study area. This questionnaire is intended to investigate the drivers of housing informality in a number of households in some informal settlements of Abuja, Nigeria. It is also intended to identify the socio-economic and environmental impacts of housing informality in the neighbourhood. The questionnaire must be completed by the head of the household. This research is purely for academic purposes and academic publications related therewith. Your participation is however voluntary and you can withdraw your participation at any stage without penalty. Individual responses will be treated with strict confidentiality and no personal details or information obtained through this exercise will be made available to any person not involved in data capturing, interpretation and analysis. You will be contributing to knowledge through your participation in this survey, you will also be joining a research effort to improve the lives of Abuja informal settlement dwellers through recommendations that will follow this research effort. The following instructions will assist you in the accurate completion of the questionnaire:

This survey questionnaire will take about 20 – 25 minutes to complete

The researcher as well as trained research assistants will assist where more clarity is needed

Answer all questions, but exclude those that are not applicable or where you are not sure of the answer

Read all options in each question before ticking an option

Provide exact figures, or tick () applicable options within boxes

By selecting “Yes” option below, I hereby agree and give my permission to participate in this anonymous survey. The nature and the objectives of this research have been explained to me and I understand them. I understand that I reserve the right to participate or not in the research survey and that the information provided will be kept confidential. I am equally aware that the result of the research survey is intended for academic purposes and related academic publications.

Yes

No

I thank you for your time in completing this questionnaire.

Researcher’s Name: Falegan, Abayomi Vincent

Contact details: +234 802 211 7155; +234 803 577 4065

E-mail: talk2yomi.falegan@gmail.com; falegan.abayomi@lcu.edu.ng

Section 1(a). Socio-Economic Economy/Housing Characteristics

1(a).1. What is your gender? (Please tick one)

Male

<input type="checkbox"/>
<input type="checkbox"/>

Female

1(a).2. What is your ethnic group? (Please tick one option only)

Igbo

Hausa

Yoruba

Non-Nigerian

Others

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

1(a).3. What is your age (in years)? (Please fill in)

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1(a).4. What is your marital status? (Please tick one)

Single (never married)

Married

Separated

Divorced

Widowed

1(a).5. What is the size of your household, including yourself? (Please fill in)

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1(a).6. What is the highest level of education that you have completed?

No education

Elementary education

Secondary/Certificate/Diploma

Undergraduate Degree

Postgraduate Degree

1(a).7. What is your current employment status? (Please tick one option only)

Employed (permanently/temporarily/self-employed)

Unemployed (but looking for work)

N/A (either student/retiree or pensioner)

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

1(a).8. What is your total monthly gross income? (Please tick one option only)

Less than ₦50,000

₦51,000 – ₦100,000

₦101,000 – ₦150,000

₦151,000 and above

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Section 1(b). Information on Housing Characteristics

1(b).1. Which of the following characteristics best describe your property in terms of Building Materials and Components?

Building Parts

Materials/Components

Building Parts	Materials/Components	
Wall	Sandcrete blocks	<input type="checkbox"/>
	Mud	<input type="checkbox"/>
	Wooden	<input type="checkbox"/>
	Corrugated Iron Sheets	<input type="checkbox"/>
	Cardboards	<input type="checkbox"/>
	Tarpaulin	<input type="checkbox"/>
	Others	<input type="checkbox"/>
Doors	Wooden	<input type="checkbox"/>
	Steel	<input type="checkbox"/>
	Glazed aluminium	<input type="checkbox"/>

Glazed steel

Provision of burglary protection

Yes	
No	

Flooring

- Earth
- Mass concrete
- Tiles
- Marbles
- Others

Windows

- Wooden casement
- Aluminium casement
- Aluminium sliding
- Aluminium projected
- Others

Provision of burglary protection

Yes	
No	

Ceilings

- Plaster of Paris (POP)
- PVC
- Asbestos
- Wooden
- Cardboard
- Others

Roofing

- Concrete
- Aluminium
- Corrugated Iron Sheets
- Thatched

Others

Toilets

Water system

Pit latrine

Bucket latrine

None

Provision of Septic tank/Soak-away Pits

Yes	
No	

Section 2. Drivers of Housing Informality

2.1. Ownership status of this property (Please tick one option only)

Owner occupied

Tenant

2.2. How long have you been living in this neighbourhood? (Please tick one option only)

Less than 5 years

Between 5 and 10 years

More than 10 years

2.3. To what extent does any of the following factors constitute drivers of informality in your neighbourhood?

Variables	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Migration					
Natural birth					
Housing Deficit in Urban Areas					
Government Regulation/Policies					

Land Affordability					
Locational Advantage					
Low Rent/Land Values					
Speculation					
Nearness to Kinship					

Section 3: Regularisation of Housing Informality

3.1. How do you acquire your property in this settlement? (You may tick more than one option)

Inheritance	<input type="checkbox"/>
Gift	<input type="checkbox"/>
Co-operative/Private Purchase	<input type="checkbox"/>
Government allocation	<input type="checkbox"/>
Others	<input type="checkbox"/>

3.2. How do you construct your property? (You may tick more than one option)

Self-help	<input type="checkbox"/>
Co-operative Society	<input type="checkbox"/>
Developers	<input type="checkbox"/>
Government Development	<input type="checkbox"/>

3.3. Which title document do you have? (You may tick more than one option)

Purchase Receipt	<input type="checkbox"/>
Deed of Assignment	<input type="checkbox"/>
Leasehold	<input type="checkbox"/>
Survey Plan	<input type="checkbox"/>

Right of Occupancy	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Certificate of Occupancy	
None	

3.4. Do you obtain development control permit for your development? (Please tick one option only)

Yes	<input type="checkbox"/> <input type="checkbox"/>
No	

3.5. Are you aware that it is necessary to obtain one? (Please tick one option only)

Extremely Aware	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Moderately Aware	
Somewhat Aware	
Slightly Aware	
Not at all Aware	

3.6. Does any of these constitute regularisation strategy in your settlement?

Existing Regularisation Strategies	Always	Often	Sometimes	Rarely	Never
Demolition					
Site and Services					
Ratification					

3.7. Have you been affected by any of these regularisation strategies?

Regularisation Strategies		
Ratification		
Forced Eviction		
Demolition		

Section 4: Provision of Services.

4.1. What municipal/social services are available in this settlement
(You may tick more than one option)

Pipe borne water	<input type="checkbox"/>
Electricity	<input type="checkbox"/>
Drainage system	<input type="checkbox"/>
Sewage disposal	<input type="checkbox"/>
Solid waste disposal	<input type="checkbox"/>
Elementary Public Schools	<input type="checkbox"/>
Health care facilities	<input type="checkbox"/>
Police station	<input type="checkbox"/>
Motorable roads	<input type="checkbox"/>

4.2. How close are these services to you (Please tick one option only)

Extremely close	<input type="checkbox"/>
Very close	<input type="checkbox"/>
Close	<input type="checkbox"/>
Fairly close	<input type="checkbox"/>
Not close	<input type="checkbox"/>

4.3. Please indicate your level of satisfaction with these services.

Services	Very Dissatisfied	Dissatisfied	Unsure	Satisfied	Very Satisfied
Pipe borne water					
Electricity					
Drainage System					
Sewage Disposal					
Solid Waste Disposal					
Elementary Public Schools					
Health Care Facilities					
Police Stations					

Motorable Roads					
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4.4. Of what importance are these services to you as a settler in this settlement (Please tick one option only)

Extremely Important	<input type="checkbox"/>
Very Important	<input type="checkbox"/>
Moderately Important	<input type="checkbox"/>
Low Importance	<input type="checkbox"/>
Not at all Important	<input type="checkbox"/>

4.5. Do you agree that these services are essential for healthy living? (Please tick one option only)

Strongly Agree	<input type="checkbox"/>
Agree	<input type="checkbox"/>
Disagree	<input type="checkbox"/>
Strongly Disagree	<input type="checkbox"/>
Neither Agree nor Disagree	<input type="checkbox"/>

4.6. Is there any developmental strategy in this neighbourhood? (Please tick one option)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

4.7. If yes, how is this executed?

Through Individual Participation	<input type="checkbox"/>
Through Community Participation	<input type="checkbox"/>
Through CDA Levy	<input type="checkbox"/>
Through Co-operative Society	<input type="checkbox"/>
Local Government Development	<input type="checkbox"/>

Others (NGO)

Section 5: Socio-economic/Environmental Challenges

5.1. Which of the following Socio-economic/environmental challenges are you confronted with as a settler in this neighbourhood?

Socio-economic Challenges		
Unauthorized Eviction		
Unauthorized Demolition		
Poor Accessibility		
Poor Services		
Overcrowding		
Crime and other Social menace		
Traffic Congestion		
Arbitrary Levies/Taxes		
Environmental Challenges		
Pollution		
Poor Waste Management		
Poor Health Facilities		
Flooding		
Deforestation		
Others		

Respondent's description:

- i. Neighbourhood residents of the case study areas.
- ii. Local Development Authority officials
- iii. Developers
- iv. Academic experts in urban resilience (Urban planner, Architect, Geographers).
- v. Business owners in the peripheral settlements
- vi. Community heads and Housing Association Heads.
- vii. Others, please specify

Appendix XIV: Interview Guide

Section 1: Interview Guide for Heads of Settlements (CDA Chairman/Local Chief)

1. What is the history of this settlement and how long have you been living here? What is the housing population of this settlement?
2. What motivated your relocation to this settlement and how did you acquire your property?
3. What is the title to your property and did you obtain development control permit for your development?
4. In your opinion, why do you think this type of settlement continue to grow in Abuja?
5. Has government taken any attempt at regularisation and if yes, what are the processes?
6. What do you consider as challenges in this settlement and how do you think these can be mitigated?
7. Can you elaborate on past regularisation strategies in this settlement?
8. In your opinion, how effective are these strategies?

Section 2: Interview Guide for Government Agency Officials (FCDA/AGIS)

1. What is your perception of 'informal settlement'?
2. Obviously, the Abuja master plan is not being executed. Why is this so and what are your Agency's efforts at turning around the situation?
3. Which government agency is responsible for land allocation, what are the procedures and what are the tenure security provided?
4. How long does it generally take and how many stages need to be negotiated to register a plot of land and to obtain permission to build on it?
5. What are the major challenges faced by the Area councils in the management of informal settlements in Abuja?
6. Does your agency collect taxes and levies from settlers of informal settlements and what services do your agency provide for them in return?
7. Can you elaborate on past regularisation strategies carried out by your agency?
8. How effective are these strategies?

Section 3: Interview Guide for Built Environment Professionals

1. What is your perception of 'informal housing'?
2. What in your opinion are the drivers and challenges?
3. Do you think prevention of informal housing is possible in a low-income country like Nigeria and what are your suggestions towards the prevention?
4. As a professional in the built environment, what reform would you suggest in our planning and land administration policies to prevent the proliferation of informal settlements?

5. Are you aware of any efforts by the government aimed at regularisation of informal settlements in Abuja?
6. If yes, how productive are these efforts?

Section 4: Interview Guide for the Academics

1. What sort of planning strategies do you think can deliver better housing and neighborhoods and how would you wish the actors in the informal housing delivery system be integrated and participate in the planning system and processes?
2. What has been the influence of planning practice in terms of standards, regulations and procedures on low-income urban housing development in Nigeria and how user-friendly are the regulatory guidelines to the end users especially the urban poor?
3. Could you please identify the common planning regulations, standards and administrative procedures and explain the ways they have adversely impacted on housing development?

Section 5: Interview Guide for Development Control Officials

1. What is your understanding of ‘informal housing’ and what, in your opinion, are the drivers?
2. What are the processes involved in obtaining development permits and how are the permits enforced?
3. Why do you think most settlers of informal settlements failed to obtain development permits for their developments and do you think total prevention of informal housing is possible in a low-income country like Nigeria?
4. How long does it generally take and how many stages need to be negotiated to register a plot of land and to obtain permission to build on it?
5. Can you elaborate on past regularisation strategies carried out by your agency?
6. How effective are these strategies?

Section 6: Interview Guide for Real Estate Developers Association of Nigeria (REDAN) Officials

1. What is the strength of REDAN nationwide and what are your contributions to housing development in Nigeria especially Abuja?
2. In your opinion, why do you think housing informality continue to grow in Abuja, what are the drivers and challenges and how do you think the phenomenon can be mitigated?
3. What is Nigeria’s housing deficit and how can these deficits be reduced?
4. As a player in the housing sector, please suggest effective regularisation strategies for the government.

Respondent’s description:

- a. CDA Chairman/Local Chief
- b. FCDA
- c. Built Environment Professionals
- d. Academics
- e. Development Control Officials

- f. Developers (REDAN)
- g. Others, please specify

Appendix XV: Observation Schedule

Settlement Code:.....

Housing Type	Building Materials	Infrastructure/ Social Services	Supporting Facilities	Environmental Challenges	Pattern o Developm
Bungalow	<u>Wall</u> Sandercrete Mud Wood Others	Water	Police Station	Waste Management	Irregular Plots
Tenement	<u>Floor</u> Earth Mass Concrete Tiles Marbles Others	Electricity	Worship Centers	Pollution	Setbacks
Studio	<u>Door</u> Aluminium Steel Wooden Others	Drainage	Play Grounds/ Open Spaces	Flooding	Gated Not Gated
Storey, (Detac Semi- Detached, Terrace)	<u>Window</u> Aluminium Wooden	Health Care Facilities		Overcrowding	

	Others	—							
	<u>Ceiling</u>		Waste Management			Traffic Congestion		Erection on Vulnerable Areas	
	Asbestos	—							
	PVC	—							
	POP	—							
	Others	—							
	<u>Roofing</u>		Public Schools						
	Corrugated Iron Sheets	—							
	Aluminium	—							
	Concrete	—							
	Others	—							
	<u>Toilet</u>		Motorable Roads						
	Water Cistern	—							
	Pit Latrine	—							
	Bucket Latrine	—							
	Others	—							

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