

## Socioeconomic Characteristics and Housing Development in the Peri-Urban Areas of Akure, Nigeria

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### Abstract

Akure's rapidly growing population and increased economic activity have led to the expansion of the city into surrounding peri-urban areas. Many households, unable to afford decent accommodation in the town, have migrated to these peri-urban regions in search of rental or personal housing. In response to this trend, a study was conducted to examine the relationship between the socioeconomic characteristics of households and housing development in the peri-urban areas of Oba-Ile, Oda, and Ibule-Soro. In this study, households served as the unit of analysis, with one household head per building selected for administration of the questionnaire. Using the average household size of five persons per family (5ppf) and five households per building (5hpb) in Ondo State, the total estimated number of households in the three locations was forty-seven thousand one hundred and ten (47110). From these households, eight hundred (800), representing 1.7% of the total, were randomly selected for the survey. Data from the field survey were subjected to statistical analysis. The results revealed, among other findings, that most of the housing units were headed by males aged 45 to 54, who fall within Nigeria's economically active population. In addition, 67.2% of the respondents in Ibule-Soro, 65.1% in Oda, and 46.4% in Oba-Ile lived below the poverty line. The majority of the housing units were developed within the past ten years. Based on these findings, credible recommendations were made to improve the socioeconomic conditions of residents, which

are essential for promoting the development of adequate housing in peri-urban areas.

**Key words:** Socioeconomic; Households; Housing development; Peri-urban Areas; Akure

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### 1. INTRODUCTION

Housing plays a critical role in the lives of households. Worldwide, it is one of the necessities of life and a vital precondition for human growth and economic development. The socioeconomic attributes of households, such as income, education, household size, marital status, sex, and religion, largely determine their ability or inability to secure decent and adequate housing. Hall and Soskice (2001) stated that the socioeconomic characteristics of households influence their housing. As urbanization, industrialization, commercialization, globalization, and transportation development intensify globally, the tendency toward city living continues to rise. However, the mass migration of people to urban areas, coupled with low purchasing power, unemployment, and underemployment, reduces their ability to access decent and adequate housing.

In response to these challenges, housing development in peri-urban areas is largely influenced by both push and pull factors. On the one hand, push factors such as high demand for limited land in the urban core, rising land costs, intense land speculation, and the low purchasing power of many city dwellers hinder their ability to secure adequate housing within the city. On the other hand, pull factors such as the availability and relative affordability of

land in peri-urban areas make these locations attractive for residential development, especially for low and middle-income earners who are priced out of urban housing markets. As a result, many individuals and households are either compelled or choose voluntarily to relocate from the city to peri-urban areas in pursuit of more affordable land and housing opportunities. Guided by limited resources, low- and middle-income groups have found peri-urban areas more suitable for personal or rental housing (Allen, 2010). Supporting this view, Adedire, Iweka, and Adebamowo (2017) noted that land within the urban core is often too expensive for these income groups, thereby prompting the expansion into peri-urban areas for housing and industrial development by households and corporate organizations. This trend is evident in Akure, Nigeria.

Since Akure became the administrative capital of Ondo State in 1976, the city has experienced an influx of migrants as well as significant socioeconomic, morphological, and environmental transformations. Notably, the areas undergoing major changes in land use, agricultural activities, income sources, infrastructure development, and waste management lie between the fully urbanized core and the rural hinterlands (Rakodi, 1999). These transitional zones have increasingly been used for housing and other physical development projects. In light of this, a study was conducted to examine the relationship between the socioeconomic characteristics of households and housing development in Akure's peri-urban areas. The findings of the research informed strategic recommendations for enhancing socioeconomic conditions and promoting adequate housing in the study area.

## 2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

### 2.1 Literature Review

#### 2.1.1 Socioeconomic Attributes of Households

Socioeconomic attributes refer to the social and economic factors that describe and influence the conditions of individuals or groups within a society. They can be used to assess the housing needs of the human population. According to Nwogu and Iwueze (2006), socioeconomic variables determine the relationship between population and housing facilities. The household is the basic unit influencing society's housing needs. National Population Commission (2004) stressed that emerging countries have large household sizes because of rapid population growth, family structures, and social organization in Africa. The population's steady growth rate has increased the demand for various dwellings. Demographic parameters such as population size, structure, composition, distribution, and change played an important part in defining the housing demands of households. The number of households in a country is one approach to estimating housing needs. In

many cases, housing shortfalls can be known using the following criteria: the number of households in a building, the number of rooms occupied by a household, household size, the number of people per room, and the number of people per house. The United Nations used an average occupancy ratio of 2.5 persons per room or six rooms per house to determine housing shortfalls in a country. In the same vein, Hanson (1992) stated that the number of persons living in inadequate housing units, uncompleted buildings, under flyover bridges, pavement of public buildings, shanties, slums, and squatter settlements could be used in obtaining housing shortfalls.

#### 2.1.2 Housing Development

Housing development represents a group of houses or apartments of different sizes and designs erected on land over time by individuals, estate developers, and the government for living, renting, and community service. It refers to constantly constructing buildings and supporting facilities in an area. Housing development aims to provide safe, affordable, sustainable housing options for individuals and families in Nigeria and across the globe. In addition, housing development ensures that an area is livable, functional, effective, and aesthetically pleasing. Socioeconomic factors such as household size, religion, gender, marital status, ethnicity, education, occupational status, income, age, family patterns, and home ownership status have a substantial influence on housing development (Jiboye, 2004; Jiboye and Ogunshakin, 2010). The links between socioeconomic attributes and housing development in peri-urban areas are discussed below:

**Age:** This refers to the length of time a person has lived, generally expressed in years. It influences housing demand and choice in peri-urban areas. The younger population in their 20s and 30s may prefer to live in peri-urban settlements due to access to affordable housing and the attraction of suburban lifestyles (Haase *et al.*, 2013). Adults, especially those nearing retirement, may find peri-urban areas appealing for many reasons. Some of these include seeking tranquility and a slower pace of life in the peri-urban and rural areas without losing access to urban infrastructure (Milbourne, 2007). The migration of people to the peri-urban areas can be connected to their desire for a good quality of life, cleaner and safer environments, reduced noise pollution, and lower crime rates compared to urban centres. The availability and accessibility of basic services and infrastructure for different age groups can shape the development of peri-urban areas.

**Gender:** These are socially created roles, behaviours, and attributes that societies consider right for men and women. Gender is hierarchical, resulting in inequalities that connect with other social and economic disparities. For example, women in peri-urban areas frequently face economic disadvantages due to lower income, more informal work, and limited access to financial services (Tacoli, 2012). These economic disadvantages limit

women's capacity to obtain suitable housing compared to men. For example, Chant (2013) asserts that women's financial constraints sometimes force them into low-quality homes or informal settlements, increasing their vulnerability to environmental and social disorders. Traditional gender roles remain in many peri-urban settings, with women taking major responsibility for household administration and caregiving (Halkatti, Purushothaman, & Brook, 2003). This hinders women's access to formal housing markets and the decision-making processes associated with housing development. Furthermore, cultural norms may limit women's mobility and access to public spaces, impairing their ability to participate in housing-related activities (Moser, 2016). Access to land and the right to homeownership are important factors in gender and housing relationships. Land tenure regimes in peri-urban settings are commonly informal and patriarchal, favouring men over women (Ranganathan, 2015). Women often lack legal ownership of property and housing. Statistically, they account for 15% of land and property ownership globally. This affects their security and financial stability.

**Marital Status and Household Size:** Marital status represents whether an individual is single, married, divorced, separated, or widowed. On the other hand, households are groups of people who share the same living space, pool some or all of their income and resources, and jointly consume certain sorts of goods and services, primarily housing and food. Marital status and household size are significant socioeconomic variables that influence housing demand, types of housing structures, and community engagement in the built environment. Marital status has a direct impact on housing demand in periurban settings. The rising demand for family-friendly housing propels the growth of residential zones with larger lots and more extensive dwelling construction (Lichter et al., 2016). Conversely, single individuals or couples without children may prefer smaller, more economical housing units, such as apartments or townhouses, influencing the diversity of housing types in peri-urban areas (Zhigang & Fulong, 2013). Household size is strongly associated with marital status. It helps to shape housing development in peri-urban areas. Large households require larger accommodations (Luis, 2016), whereas smaller households may select smaller, affordable options. Also, the number of families with children may increase the demand for educational facilities, playgrounds, and family-friendly services, spurring deliberate development in these areas (UN-Habitat, 2020). These different demands have an impact on the housing market and urban planning in peri-urban areas (Oyalowo, 2022).

**Education:** Higher levels of educational achievement typically result in improved financial prospects, allowing individuals and families to invest in better housing. Educated people are more likely to find steady, well-paying occupations, which can provide the financial

means needed to buy or renovate a property (Lloyd and Juliet, 2009). Education promotes financial stability, while financial stability in turn promotes residential development. Highly educated and financially stable residents can afford permanent structures, improve their living conditions, and access formal housing markets (Durand-Lasserve & Royston, 2002). Education promotes community development and increases social capital in peri-urban areas. Educated residents are more likely to participate in community affairs and local administration, resulting in collaborative efforts to improve infrastructure and services (Huchzermeyer, 2011).

**Occupation:** Occupation is linked to an individual's socioeconomic status, both directly and indirectly (Marmot & Wilkinson, 2006). It plays a critical role in shaping housing development patterns in peri-urban areas, serving as a key determinant of income levels, land accessibility, and the overall quality of housing. As peri-urban zones continue to expand due to urbanization pressures, the nature of residents' occupations, whether in the formal or informal sector, significantly influences their capacity to acquire land and develop adequate housing. Adewoyin, Falegan, Ajijola, Adediran, and Adedire (2024) observed that many peri-urban settlements in Nigeria experience high levels of unemployment and underemployment. Residents often rely on informal sector activities, seasonal labour, or subsistence farming to sustain their livelihoods. These forms of occupation are typically characterized by low and unstable income, which restricts the ability of individuals to invest in durable housing. Factors such as a lack of vocational training, limited job opportunities, gender-based employment disparities, and broader economic instability further constrain income generation and job security. The prevalence of informal sector employment with low earnings helps explain the widespread substandard housing that dots the peri-urban landscapes across Nigeria.

**Income:** Income levels significantly influence the type and quality of housing occupied by households in the transitional zone. Rakodi and Lloyd-Jones (2002) argue that higher-income households have greater access to formal housing markets, enabling them to purchase or build standard dwellings with adequate infrastructure. In contrast, lower-income households often face financial constraints that force them into informal settlements or substandard housing lacking basic amenities such as clean water, sanitation, and electricity (Durand-Lasserve & Royston, 2002). The literature consistently affirms that rapid urbanization has intensified housing challenges for low-income urban residents in Nigeria (Aduwo et al., 2016), a situation further compounded by the pace of economic growth. These challenges disproportionately impact the urban poor due to factors such as rapid population increase, rising real estate costs, increased migration of impoverished individuals to urban centres, and inadequate urban planning. As a result, there has

been a significant proliferation of slums in both central business districts and urban peripheries across Nigerian cities. Supporting this view, Marutlulle (2021) notes that slums, informal settlements, and inadequate housing are visible manifestations of urban poverty and inequality.

**Length of Stay:** This refers to the number of years or months one has stayed in a particular neighbourhood or housing unit. Longer residency is associated with increased investment in housing upgrades and community development, resulting in more stable and organized peri-urban surroundings. Long-term residents of peri-urban areas are more likely to make home improvements. This investment may include permanent construction, material upgrades, and the addition of utilities such as sanitation, road networks, and electricity (Durand-Lasserve & Royston, 2002). Longer stays generally result in occupants feeling a deeper sense of ownership and security, even in the absence of formal land titles, motivating them to improve their living conditions (Huchzermeyer, 2011).

Building on the various socioeconomic attributes discussed earlier, the widespread presence of informal settlements in the urban peripheries of Africa serves as a striking indicator of informal development (Orkpeh & Adedire, 2024). This phenomenon arises from multiple factors, including economic constraints and governance challenges. Moreover, the rapid pace of urbanization and population growth in sub-Saharan Africa has outstripped government capacity to provide adequate housing and essential services, further driving the expansion of informal settlements (Ooi and Phua, 2007). In many communities, gender disparities in access to land and other productive resources stem from the assumption that men, as household heads, control and manage land. In most African patriarchal societies, “husband power” perpetuates women’s landlessness. This concept dictates that women must exhibit unwavering loyalty to their husbands in marriage, rendering them vulnerable within the male-dominated structure of the institution. Studies by Chigbua (2019a, 2019b) and Ntihinurwa *et al.* (2019) reveal that regulations imposed by patriarchal marriage systems shape societal perceptions of women, often leading to their marginalization and significantly restricting their access to and ownership of land for housing development. Mbiba and Huchzermeyer (2002) and Bloch, Fox, Monroy, and Ojo (2015) provide critical insights into peri-urban challenges, particularly in Nigeria. Mbiba and Huchzermeyer (2002) examine the complexities of land tenure systems, demonstrating how rapid urban expansion frequently gives rise to informal settlements, land disputes, and tenure insecurity. Similarly, Bloch *et al.* (2015) analyze governance and institutional frameworks in managing urbanization pressures, emphasizing that weak regulatory mechanisms contribute to environmental degradation and inadequate infrastructure. Collectively, these studies underscore the urgent need for sustainable planning strategies to address

the socio-economic and environmental challenges facing Nigeria’s peri-urban areas.

## 2.2 Conceptual Framework

### 2.2.1 Adequate Housing and Improved Socioeconomic Attributes

Adequate housing describes a living arrangement that meets basic requirements for health, security, comfort, and dignity. Adequate housing must be spacious, free from environmental dangers, and have access to basic amenities such as clean water and sanitation. It must also be well-ventilated, affordable, and located in an area with access to economic opportunities, healthcare, education, and other social services. Housing adequacy can be measured by the security of tenure, which protects tenants from forced evictions (Tsenkova, 2016). Adequate housing is more than just a roof over one’s head. The definition of adequate housing includes adequacy of space and privacy, physical accessibility, security, structural stability, adequate lighting, heating, ventilation, basic infrastructure (e.g., water supply, sanitation, waste management), appropriate environmental and health factors, and an easily accessible location for work and basic amenities at an affordable cost.

Improved socioeconomic characteristics refer to improvements in parameters such as income, education, employment, and health that lead to a more satisfactory standard of living and stability in the economy. Gains in these characteristics are often associated with progress in one area, leading to better outcomes in others. For example, access to quality education can lead to more job opportunities, a higher income, and better health outcomes (World Bank, 2018). Likewise, improving socioeconomic conditions is crucial for sustainable development because it allows individuals and communities to escape the vicious cycle of poverty and attain long-term prosperity (UNDP, 2016). From the above background, it can be inferred that enhancing socioeconomic attributes will assist in achieving adequate housing in human societies. Therefore, the two concepts are inseparable variables that should be considered in promoting safe, resilient, sustainable cities and human settlements.

### 2.2.2 Capability Approach and Right to Housing

This approach acknowledges the multidimensional nature of social disadvantage (Sen and Anand, 2003) and broadens the framework for assessing poverty. Capability theory, developed by Amartya Sen (Kuhumba, 2017), is relevant for understanding housing development in peri-urban areas. It shifts the focus from income or access to resources to what individuals can do and become, which are referred to as their capabilities. In the context of housing, this means evaluating not only the physical structure of a dwelling but also the opportunities it creates for individuals to live a meaningful and dignified life. In peri-urban areas, where access to basic infrastructure and services may be limited, housing must enable access to essential amenities, economic opportunities, and social participation to support



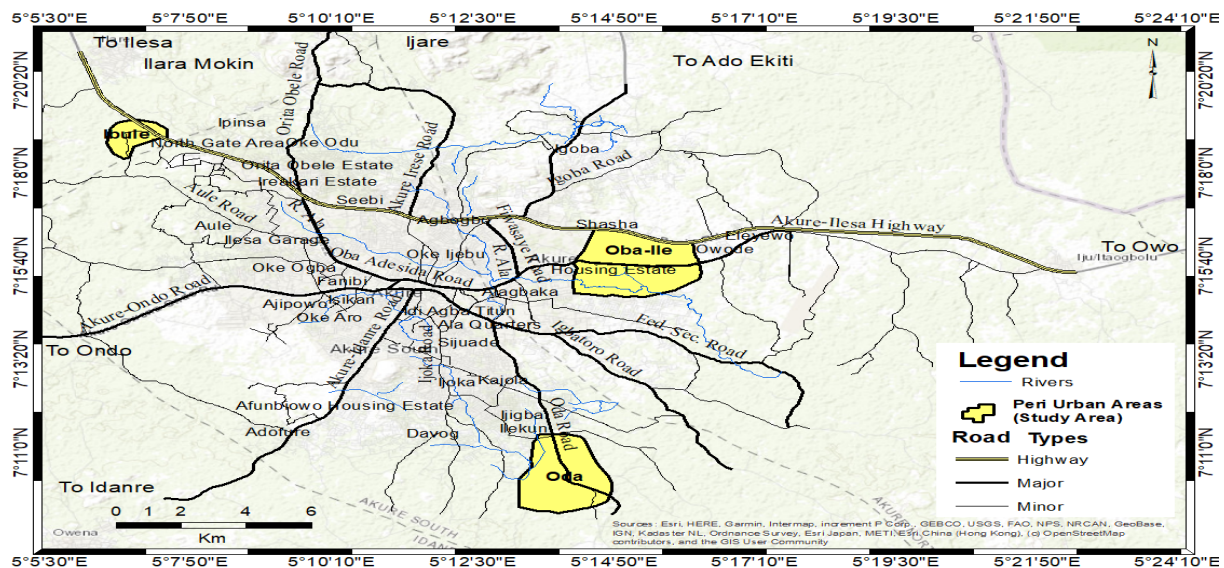
improved well-being. The Theory emphasizes that the value of housing lies not only in providing shelter but also in enhancing the ability of individuals to pursue life goals, maintain health, and engage in their communities. In peri-urban areas, as in other parts of the world, access to adequate housing can significantly improve individuals' economic opportunities, physical and mental well-being, personal safety, self-esteem, and overall social standing. From this perspective, housing is not merely a shelter but a vital asset that individuals can use to strengthen their capabilities, depending on their circumstances and access to complementary resources (Coates, Anand & Norris, 2015). Housing is not just a commodity but a fundamental human right (United Nations, 2019; Kapoor and DiBellonia, 2022) that must ensure dignity, security, and well-being. Adequate housing goes beyond merely providing shelter; it must fulfill several essential conditions. At its core, it requires security of tenure to protect occupants from forced eviction and threats; access to basic services and infrastructure such as clean water, sanitation, and energy; and affordability so that housing costs do not undermine other fundamental rights. Additionally, housing must ensure habitability, providing sufficient space and protection from environmental hazards; be accessible to all, particularly marginalized groups; be well-located, offering proximity to jobs and essential services; and uphold cultural adequacy, respecting the cultural identity and expression of its residents. These criteria are indispensable for any shelter to be genuinely considered adequate housing. In light of these essential criteria, housing development in peri-urban areas must be approached with a rights-based perspective that prioritizes adequacy over mere availability. As urban

expansion pushes low- and middle-income earners to the peripheries, it becomes imperative that the housing solutions provided in these areas meet the fundamental conditions of adequacy. This ensures that residents are not simply relocated to substandard environments but are afforded the dignity, safety, and opportunity for well-being that come with proper housing. Recognizing housing as a universal human right underscores the need for inclusive policies and planning strategies that guarantee equitable access to adequate housing for all, regardless of socioeconomic status or location. Only by embracing this holistic view can peri-urban development contribute meaningfully to sustainable urban growth and social justice.

### 3. METHODOLOGY

#### 3.1 Research Locale

Three peri-urban areas of Oda, Oba-Ile, and Ibule-Soro were selected for this study. Their essential features are as follows: Oda is a developing community in the South-Eastern part of Akure, Ondo State. It is about eleven kilometres from the capital and shares boundaries with Idanre and Owo Local Government Areas of Ondo State. It lies on Latitude  $7^{\circ}10'6''$  N to  $7^{\circ}10'43''$  N of the Equator and Longitude  $5^{\circ}13'6''$  E to  $5^{\circ}14'18''$  E of the Greenwich meridian. Oda's population growth and physical development are due to several factors, including the Psychiatric Hospital, Shoprite at Oda Road, and government offices/ministries at Alagbaka. Many workers in these offices and other areas of Akure city are moving to Oda town for housing development.



**Figure 1**  
**Locational map of Akure and the selected peri-urban areas**

Source: Owwoye and Omole, 2012; Updated by the Author

Oba Ile is situated in the Akure North Local Government Area of Ondo State. It lies at latitude  $7^{\circ}$

$16'0''$  North of the Equator and longitude  $5^{\circ}15'0''$  East of the Greenwich Meridian. Notable landmarks

in Oba Ile include Oba Ile Housing Estate, Sunshine Gardens Estate, NTA, and the Ondo State Oil Producing Area Development Commission (OSOPADEC) office. Also, Akure Local Airport is close to Oba-Ile. This has contributed to the dualization of the main road passing through Oba Ile. Ibule-soro, on the other hand, is an agrarian community in the Ifedore Local Government Area of Ondo State. Its geographical coordinates are latitude  $7^{\circ} 18' 0''$  North of the Equator and longitude  $5^{\circ} 7' 0''$  East of the Greenwich Meridian. Akure Ilesha Expressway, the Federal University of Technology, Akure, and the FUTA Annex in Ibule have contributed to the area's development.

Overall, the three chosen peri-urban areas are experiencing continuous growth in population and housing development due to the expansion of Akure. The urban area of Akure is physically and functionally expanding to these peri-urban areas, with the co-existence of rural-urban features. Markedly, Oda, Oba-Ile, and Ibule-Soro peri-urban areas tend to be transformed fully into urban space over time due to a combination of factors/processes such as infrastructure provision, rapid population growth, high level of in-migration, land use conversion, expansion, densification, gentrification, globalization process and change in economic structure in Akure and surrounding peri-urban areas. Supporting this view, Owioye and Akinluyi (2018) projected that Akure could evolve into a fully developed conurbation by 2034, as it continues to merge with surrounding communities.

### 3.2 Method

This study adopted the survey research design. The peri-urban areas or settlements in the three local government areas of Akure were identified using criteria established in the literature. From the identified peri-urban areas, a Random Number generator developed by calculator.net was used to select one peri-urban area in each local government for questionnaire administration. The choice of one peri-urban area per local government was predicated on having data sets that are manageable, time-efficient, and cost-effective. Based on the above, the peri-urban areas randomly selected are Oda in Akure South, Oba-Ile in Akure North, and Ibule-Soro in Ifedore Local Government areas. The number of residential buildings was obtained through Google Earth Imagery. To determine the total population, the imagery was digitized, and the number of residential buildings was counted using GIS and validated by ground truthing.

From the digitized map, there were six hundred eighty-two (682) residential buildings in Ibule-Soro, three thousand four hundred and sixty-eight (3468) residential buildings in Oda, and five thousand two hundred and seventy-two (5272) residential buildings in Oba-Ile. Altogether, there were nine thousand four hundred and twenty-two (9422) residential buildings in the three areas. Using the average household size of five people per family (5ppf) and five households per building (5hpb) in Ondo State (Ondo State Bureau of Statistics, 2012), the estimated households and population (residents) for the study were

forty-seven thousand one hundred and ten (47110), and two hundred and thirty-five thousand five hundred and fifty (235550), respectively. In this study, households in the selected peri-urban areas were considered as the unit of analysis. A simple random sampling technique was used to distribute 800 questionnaires, representing 1.7% of the total households, to household heads in these areas. This sample size was deemed adequate, reliable, and valid, aligning with the 100-1000 sample range recommended by Casley and Lury (1991) for district and regional studies. The selection of 800 households (1.7% of the unit of analysis) is further justified by its consistency with the 753-sample size used by Adedire and Iweka (2017) in a related study in Lagos, Nigeria. Additionally, Ige and Ohiro (2020) sampled 320 respondents in a similar study in Akure, Nigeria, while Adu-Gyamfi (2021) surveyed 24 homeowners and 54 caretakers in a comparable study in Ghana. These precedents support the appropriateness of the chosen sample size for this research. To facilitate questionnaire administration, 800 copies were distributed randomly to household heads across residential buildings in the study area. Based on the digitized maps, residential buildings were sampled as follows: 295 in Oda, 447 in Oba-Ile, and 58 in Ibule Soro. The digitized maps were processed using ArcMap software. During this process, the software was programmed to randomly select the specified number of residential buildings for questionnaire distribution. The X and Y coordinates of these selected buildings were then extracted. For the field survey, the researcher and trained field assistants input these coordinates into a Global Positioning System (GPS) device and Google Maps on mobile devices. The GPS provided precise navigation, directing enumerators to the designated residential buildings for questionnaire administration. One household was surveyed in each building. Where a selected building was deemed unsuitable, a simple random sampling method with replacement was used to identify the nearest suitable building instead.

The household questionnaires were administered from Monday to Friday, 4:00 pm-7:00 pm, for three months. Also, all heads of government Ministries saddled with physical planning and urban/community/housing development were interviewed using a structured interview guide. Data obtained from the field survey were analysed using univariate and bivariate statistical techniques, including frequency tables, charts, and correlation analyses. The hypothesis examining the relationship between socioeconomic attributes and housing development was tested using Bivariate measures, specifically Pearson's Product-Moment Correlation, Spearman's Rank Correlation, Chi-Square with the Phi coefficient, and Chi-square with Cramer's v. Pearson's Correlation assesses the linear relationship between two continuous variables, assuming that the data are normally distributed and measured on an interval or ratio scale. Variables such as age, income, household size, and length

of stay are numerical and can be measured on a continuous scale. Similarly, housing development, represented in this study by the number of houses built per year, can also be treated as a continuous variable, making Pearson's correlation an appropriate statistical tool for analysis. Spearman's Rank Correlation is used when at least one variable is ordinal or does not meet normality assumptions (Bryman and Cramer, 2011). Since education level is often classified as primary, secondary, and tertiary, rather than measured on a strict numerical scale, Spearman's correlation is suitable for evaluating its relationship with housing development. The chi-squared test is appropriate for categorical variables to assess the association between

gender and housing development. The Phi Coefficient quantifies the strength of this association, providing insights into potential gender disparities in housing development patterns. Similarly, Cramer's V was used to measure the association between employment status and housing development. This method is useful when analyzing categorical variables with multiple categories. This study helped determine whether employment patterns significantly influenced housing development choices in peri-urban settlements. In conclusion, all statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 22 and Microsoft Office Excel (2019) to ensure accuracy and reliability.

**Table 1**  
**Selected Peri-Urban Areas and Questionnaire Administration**

Peri-urban Areas	Distance from the City (Km)	Residential Buildings	Estimated Households	Estimated Population	Sample Size(1.7% of H/hs)
Oda	10.9	3468	17340	86700	295
Oba-Ile	6.8	5272	26360	131800	447
Ibule-Soro	11.7	682	3410	17050	58
Total		9422	47110	235550	800

Source: Author's Field Survey, 2023

## 4. RESULTS AND DISCUSSIONS

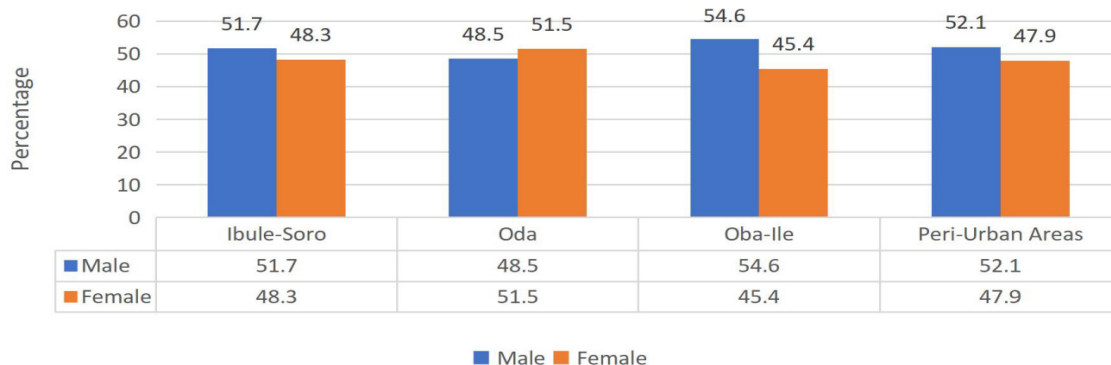
The analysed data on socio-economic attributes of households, the number of houses built per year (housing development) in Ibule-Soro, Oda, and Oba-Ile, and the test of hypothesis are presented below:

### 4.1 Socioeconomic Attributes of Respondents

#### 4.1.1 Gender

The heads of household were targeted in this section. However, where they were not available to provide the needed answers to the questionnaire, a member of the household who was knowledgeable enough to answer the questions raised was interviewed. In Ibule-Soro, 51.7% of the sampled respondents were males and 48.3% were females. In Oda, 48.5% of the respondents were males and 51.5% were females. In Oba-Ile, 54.6% of the respondents were males and 45.4% were females. In Oba-Ile, 54.6% of the respondents were males, and 45.4% were females. Across the peri-

urban areas, 52.1% of the sampled respondents were males and 47.9% were females. The findings indicated a predominance of men in housing development in the peri-urban areas of the study. This aligns with Adeoye's (2018) report, which indicated that men were responsible for 72.8% of housing developments in Southwestern Nigeria. It also revealed that most residential units in the peri-urban areas had men as the heads of household. This may not be unconnected to the fact that men are naturally heads of households and are mainly responsible for home ownership in Nigeria. This finding agrees with a survey in Nigeria between 2006 and 2010, where male-headed households constituted 84.8%, while female-headed households were 15.2% (National Bureau of Statistics, 2012). To further substantiate the NBS findings, Akanbi (2016) maintained that this pattern of male-headed households has not changed.



**Figure 2**  
**Gender of Respondents**

Source: Author's Field Survey, 2023



#### 4.1.2 Age

Carstensen, Isaacowitz, and Charles (1999) and Antonucci, Fiori, Birditt, and Jackey (2010) maintained that age plays a key role in social experience and behaviour. As such, age should be given premium consideration in research of this magnitude. According to the data analysed and presented in Table 2, majority (53.4%) of the sampled respondents in Ibule-Soro were between 45 and 54 years old; 17.2% were between 35 and 44 years old; 13.8% between 65 years and older; 10.3% between 25 and 34 years old; and 5.2% between 18 and 24 years old. In Oda, 38.6% of the sampled respondents were between 45 and 54 years old, 18.3% between 35 and 44 years old, 15.3% between 25 and 34 years old, 13.2% between 18 and 24 years old, 10.8% between 55 and 64 years old, and 3.7% were 65 years and older. For Oba-Ile, most (33.3%) of the sampled respondents were between 45 and 54 years old; 18.1% between 35 and 44 years old; 16.3% were between 25 and 34 years old; 14.1% between 18 and 24 years old; 9.6% between 55 and 64 years old; and 8.5% were 65 years and older. Comparatively, most of the sampled respondents across the three locations were between 45 and 54 years old. In addition, Ibule-Soro, being a village peri-urban area, had more aged respondents compared to the other two locations.

Altogether, majority (36.8%) of the sampled respondents were between 45 and 54 years old, followed in descending order of magnitude by 18.1% that were between 35 and 44 years old, 15.5% between 25 and 34 years old, 13.1% between 18 and 24 years old,

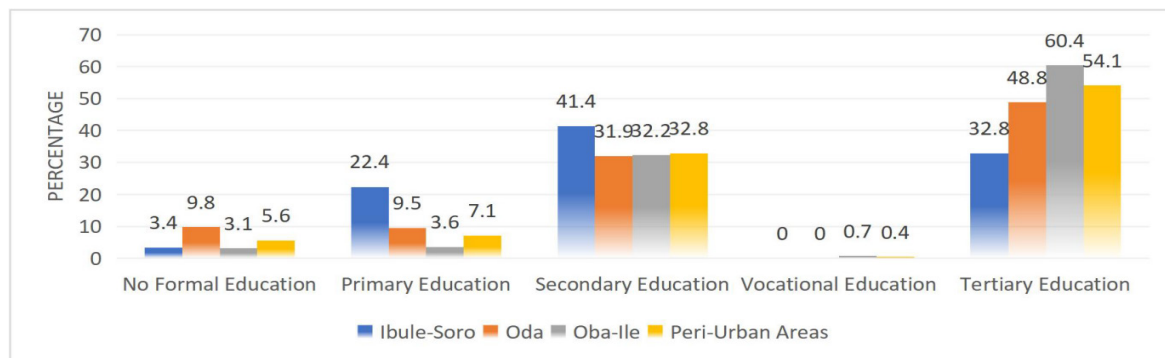
9.4% between 55 and 64 years old, and 7.1% were 65 years and older. The above shows that over 90% of the sampled respondents were within Nigeria's economically active or working-age population of 15-64 years, as stipulated by the National Bureau of Statistics. Again, these respondents who settled in the peri-urban areas were close to the city, to access job opportunities in the city, and to rent or own a house in the urban area. Substantiating the above, Basorun and Daramola (2015) maintained that the peri-urban environment is characterised by a high level of emigration, primarily by young school leavers seeking greener pastures in cities where their aspirations of better jobs and lives are not generally realised.

**Table 2**  
**Age of Respondents**

Age	Ibule-Soro		Oda		Oba-Ile		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
18-24 years	3	5.2	39	13.2	63	14.1	105	13.1
25-34 years	6	10.3	45	15.3	73	16.3	124	15.5
35-44 years	10	17.2	54	18.3	81	18.1	145	18.1
45-54 years	31	53.4	114	38.6	149	33.3	294	36.8
55-64 years	0	0.0	32	10.8	43	9.6	75	9.4
65 years & above	8	13.8	11	3.7	38	8.5	57	7.1
Total	58	100	295	100	447	100	800	100

Source: Author's Field Survey, 2023

#### 4.1.3 Level of Education



**Figure 3**  
**Educational Status**

Source: Author's Field Survey, 2023

Education plays a strategic role in national development. It sharpens or enhances citizens' decision-making processes and increases human capital, labour productivity, and wages (Anyanwu, 2013). It can, to a great extent, determine the level of development in human settlements. Realising the all-important role of education in human society, the level of education in the

study areas was investigated. In Ibule-Soro, 3.4% of the respondents had no formal education, 22.4% had primary education, 41.4% had secondary education, and 32.8% had tertiary education. In Oda, 9.8% of the respondents had no formal education, 9.5% had primary education, 31.9% had secondary education, and 48.8% had tertiary education. In Oba-Ile, 3.1% had no formal education,



3.6% had primary education, 32.2% had secondary education, 0.7% had vocational education, and 60.4% had tertiary education. Comparatively, the sampled residents of Oba-Ile were more educated than those of Ibule-Soro and Oda. This is expected because over 60% of their respondents had tertiary education, compared to Oda (48.8%) and Ibule-Soro (32.8%). The above may be attributed to the fact that many of their inhabitants were civil servants, Ondo state government functionaries, enlightened traders, and contractors, as seen in Figure 4.6. Likewise, Oba-Ile had the least (3.1%) inhabitants with no formal education when compared to Ibule-Soro (3.4%) and Oda (9.8%).

Across the peri-urban areas, 5.6% of the respondents had no formal education, 7.1% had primary education, 32.8% had secondary education, 0.4% had vocational education, and 54.1% had tertiary education. The above implies that most respondents were literate, as over 94% have acquired literacy between primary and tertiary education. It goes to show that the peri-urban areas were not only inhabited by people with low academic attainments but also by intellectuals with high educational attainments who could leverage their level of education, exposure, and expertise for the all-round development of their dwelling unit and neighbouring environment.

#### 4.1.4 Marital Status

Marital status can be categorised as single, married, or other variants such as separation, divorce, and bereavement. Studies have shown that married-couple

households have significantly higher wealth than other types of households (Wilmoth & Koso, 2002). Marriage is also associated with a higher chance of attaining affluence for a lifetime when compared with nonmarriage (Hirschl, Altobelli, & Rank, 2003). Marital status is significant in housing development, demands, and utilisation by different population segments. Considering the above, marital status was investigated. In Ibule-Soro, 1.7% of the respondents were single, 89.7% were married, and 8.6% were widows or widowers. In Oda, 29.8% were single, 68.5% married, and 1.7% were widows or widowers. In Oba-Ile, 18.3% of the sampled respondents were single, 74% were married, 6.3% were widows or widowers, 0.9% were separated, and 0.4% were divorced. Judging from the above data, the majority of the respondents (89.7%, 68.5%, and 74.0%) in Ibule-Soro, Oda, and Oba-Ile were married, respectively, leaving relatively few in the other variants of marriage.

Altogether, 21.4% of the sampled respondents were single, 73.1% were married, 4.8% were widows or widowers, 0.5% were separated, and 0.35% were divorced. This revealed that most of the sampled respondents in the peri-urban areas were married. This further confirmed the outcome of the 2006 census on the distribution of household members by marital status in Ondo State. Also, it is consistent with the findings of Wizar and Wali (2019) that the majority (62.71%) of the respondents in Choba Peri-urban areas of River State, Nigeria, were married.

**Table 3**  
**Marital Status**

Marital Status	Ibule-Soro		Oda		Oba-Ile		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Single	1	1.7	88	29.8	82	18.3	171	21.4
Married	52	89.7	202	68.5	331	74.0	585	73.1
Widow/Widower	5	8.6	5	1.7	28	6.3	38	4.8
Separated	0	0.0	0	0	4	0.9	4	0.5
Divorced	0	0.0	0	0	2	0.4	2	0.3
Total	58	100	295	100	447	100	800	100

Source: Author's Field Survey, 2023

#### 4.1.5 Household Size

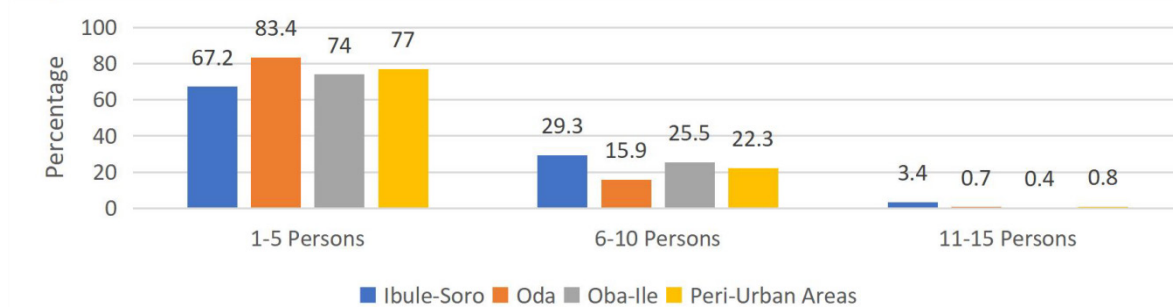
The National Population Commission (NPC) of Nigeria (2014) defined a household as a person or group of persons, related or unrelated, who usually live together in the same dwelling unit and have a common cooking and eating arrangement. It is one of the main variables in determining population and is central to the planning of the socioeconomic sector of any country. Policies and programs bordering on housing, health, education, and other aspects of governance are planned with household data (Akanbi, 2016). With this background information, the household size of the inhabitants of the peri-urban areas was investigated. In Ibule-Soro, 67.2% of the

respondents had between 1 and 5 persons per family, 29.3% had 6–10 persons, and 3.4% had 11–15 persons. In Oda, 83.4% had between 1 and 5 persons per family, 15.9% had 6–10 persons, and 0.7% had 11–15 persons. In Oba-Ile, 74% had 1–5 persons per family, 25.5% had 6–10 persons, and 0.4% had 11–15 persons. Cumulatively, 77% of the respondents had 1–5 persons per family, 22.3% had 6–10 persons, and 0.8% had 11–15 persons.

Subjecting the above different household sizes to further mathematical calculations, the average household size in the peri-urban areas was 4.47 people per family. This was higher than the average household size of 3.88 persons per family in Ondo State, as reported by the

National Bureau of Statistics (2020). The computation revealed that Ibule-Soro had an average household size of 4.9 persons per family, Oba-Ile with 4.5 persons per family, and Oda with 4.3 persons per family. By interpretation, Ibule-Soro had the highest average household size, followed by Oba-Ile and Oda with the least average household size. Predictably, a household size higher than the average household has various benefits. These include social support, economic benefits,

cultural and social bonds, child care, and education. Conversely, negative consequences of households not properly planned and catered for in the human environment include overcrowding, financial limitations, deprivation, demand for and pressure on resources, infrastructure, and increased responsibilities. The absence of necessary services and infrastructure for the teeming population may impair healthy living and/or general well-being.



**Figure 4**  
**Household Size**

Source: Author's Field Survey, 2023

#### 4.1.6 Employment Status

Since informal delivery of housing has been the norm in Sub-Saharan Africa (peri-urban areas under study, inclusive), there is a need to find out the number of inhabitants of the peri-urban areas that are absorbed in the formal and informal sectors of the economy, as well as those that are not employed. In Ibule-Soro, 1.7% of the respondents were unemployed, 60.3% were self-employed, 27.6% were employed, and 10.3% were retired. In Oda, 6.4% were unemployed, 53.2% were self-employed, 36.6% were employed, and 3.75% were retired. In Oba-Ile, 4% were unemployed, 0.4% were apprentices, 52.8% were self-employed, 30.4% were employed, and

12.3% were retired. Altogether, 4.8% of the respondents were unemployed, 0.3% were apprentices, 53.5% were self-employed, 32.5% were employed, and 9% were retired.

The distribution of employment among the inhabitants of the peri-urban areas shows that a major proportion of the labour force was in the self-employment segment, followed by those in wage and salary employment. These findings conform with the submissions of Fadayomi and Ogunrilola (2014), Folawewo (2013), and Medina, Onelis, and Cangul (2017) that the informal sector is not only large in developing countries (Nigeria inclusive) but is also a major provider of employment.

**Table 4**  
**Employment Status**

Employment Status	Ibule-Soro		Oda		Oba-Ile		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Unemployed	1	1.7	19	6.4	18	4.0	38	4.8
Apprentice	0	0	0	0	2	0.4	2	0.3
Self-employed	35	60.3	157	53.2	236	52.8	428	53.5
Employed	16	27.6	108	36.6	136	30.4	260	32.5
Retired	6	10.3	11	3.7	55	12.3	72	9.0
Total	58	100	295	100	447	100	800	100

Source: Author's Field Survey, 2023

#### 4.1.7 Nature of Occupation

Experience in developing countries indicates that most of the occupants of peri-urban areas are engaged in informal economic activities (Pradoto, 2012; Oduro, 2010). Informal employment in Nigeria can be categorized as self-employment in agricultural and nonagricultural

activities, unpaid family business, and wage employment. This reflects the heterogeneous nature of the informal sector (Folawewo & Orija, 2020). With the above understanding, the nature of the occupation of inhabitants of the peri-urban areas in the self-employed and employed sectors of the economy identified earlier in Table 5

was investigated. In Ibule-Soro, as presented in Table 5 below, 31.4% of the respondents were farmers, 27.5% were traders, 9.8% were artisans or craftsmen, 2% were drivers, and 29.4% were civil servants. In Oda, 10.2% were farmers, 30.9% were traders, 18.1% were artisans or craftsmen, 1.5% were clergy, 4.2% were in salary or wage employment in private organisations, and 35.1% were civil servants. In Oba-Ile, 2.1% of the respondents were farmers, 38.9% were traders, 20.9% were artisans or craftsmen, 3.2% were clergy, 2.6% were in salary or wage employment in private organisations, 1.1% were contractors (road construction, furniture, fixtures, fittings, importation, and exportation, among others), 0.5% were involved in apprentice, estate, and catering services, respectively, and 29.7% were civil servants.

Comparatively, most of the inhabitants of Ibule-Soro were engaged in farming practices. This is at variance with what was obtained at Oda and Oba-Ile, where many of the respondents, 30.9% and 38.9%, were engaged in trading. Across the peri-urban areas, 7.2% of the respondents were farmers, 35% were traders, 19% were artisans or craftsmen, 0.1% were drivers, 2.3% were clergy, 3% were in salary or wage employment

in private organisations, 0.6% were contractors (with expertise in road construction, furniture, fixtures, fittings, importation, and exportation, among others), 0.3% were involved in apprentice, estate, and catering services, respectively, 31.8% were civil servants. A significant proportion (31.8%) of the sampled respondents were engaged in the formal sector of the economy as civil servants, while the greatest proportion (68.2%) was in the informal sector, operating as self-employed in agricultural and nonagricultural activities. The above aligns with the World Bank Report that 80.4 percent of Nigeria's employment is in the informal sector (Adenuga, 2021). Furthermore, the three (3) major ranked occupations of the peri-urban areas of Akure were trading, civil service, and artisans/craftsmen. Unexpectedly, farming, which is an age-old occupation in Nigeria, ranked fourth. Again, many of those employed as civil servants and in private establishments used the selected peri-urban areas as their place of abode and provided a labour force to the urban area. By implication, they not only act as a catalyst for the physical development of the peri-urban areas but also serve as a source of labour for the urban area and tax generation for the government.

**Table 5**  
**Nature of Occupation of Respondents**

	Ibule-Soro		Oda		Oba-Ile		Total		Rank 1-11
	Freq	%	Freq	%	Freq	%	Freq	%	
Farming	16	31.4	27	10.2	8	2.1	50	7.2	4
Trading	14	27.5	82	30.9	147	38.9	243	35.0	1
Artisans/Craftsmen	5	9.8	48	18.1	79	20.9	132	19.0	3
Driver	1	2.0	0	0.0	0	0.0	1	0.1	11
Clergy	0	0.0	4	1.5	12	3.2	16	2.3	6
Private Organization	0	0.0	11	4.2	10	2.6	21	3.0	5
Contractor	0	0.0	0	0.0	4	1.1	4	0.6	7
Estate Agent	0	0.0	0	0.0	2	0.5	2	0.3	8
Catering Service	0	0.0	0	0.0	2	0.5	2	0.3	8
Apprentice	0	0.0	0	0.0	2	0.5	2	0.3	8
Civil Service	15	29.4	93	35.1	112	29.7	221	31.8	2
Total	51	100	265	100	378	100	694	100	

Source: Author's Field Survey, 2023

#### 4.1.8 Monthly Income

O'Sullivan (2000) maintained that the cost of land in peri-urban areas is relatively cheaper than that of the main city, making the areas attractive to different income groups. By extension, Adedire and Adegbile (2018) declared that low-income migrants mostly inhabit peri-urban areas. Grgic, Magdalena, Ljiljana, and Ornella (2012); and Saleem, Khan, Ghaffar, Kamboh, and Ali (2014) stated that the pressure generated in the land market owing to the increasing rate of urbanisation has propelled the urban poor to take over most of the undeveloped land in the peri-urban areas for their urban land and housing needs.

Allen (2003) stated that peri-urban areas are territories where farmers, informal settlers, and the urban middle class, among others, coexist. To validate the findings, the average monthly income of residents in the study areas was examined. For global comprehensibility, Nigeria's average monthly earnings were converted to U.S. dollars using the Central Bank of Nigeria's official exchange rate of \$1 (₦ 890) as recorded on the Investors' and Exporters' FX Window on January 19, 2024.

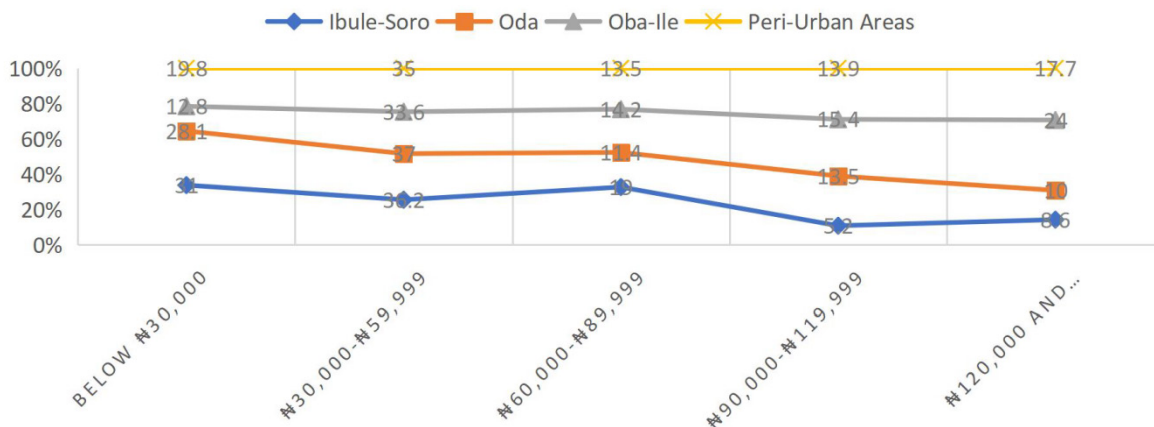
In Ibule-Soro, 31% of the respondents earned below ₦30,000 (\$33.71) monthly, 36.2% earned between ₦30,000 and ₦59,999 (\$33.72 and \$67.41), 19% between



₦60,000 and ₦89,999 (\$67.42 and \$101.12), 5.2% between ₦90,000 and ₦119,999 (\$101.13 and \$134.83), and 8.6% earned ₦120,000 and above (\$134.84 and above). In Oda, 28.1% earned below ₦30,000 (\$33.71) monthly, 37% between ₦30,000 and ₦59,999 (\$33.72 and \$67.41), 11.4% between ₦60,000 and ₦89,999 (\$67.42 and \$101.12), 13.5% between ₦90,000 and ₦119,999 (\$101.13 and \$134.83), and 10% earned ₦120,000 and above (\$134.84 and above) monthly. In Oba-Ile, 12.8% of the respondents earned below ₦30,000 (\$33.71) monthly, 33.6% between ₦30,000 and ₦59,999 (\$33.72 and \$67.41), 14.2% between ₦60,000 and ₦89,999 (\$67.42 and \$101.12), 15.4% between ₦90,000 and ₦119,999 (\$101.13 and \$134.83), and 24% earned ₦120,000 and above (\$134.84 and above) monthly. Across the peri-urban areas, 19.8% of the respondents earned below ₦30,000 (\$33.71) monthly, 35% between ₦30,000 and ₦59,999 (\$33.72 and \$67.41), 13.5% between ₦60,000 and ₦89,999 (\$67.42 and \$101.12), 13.9% between ₦90,000-₦119,999 (\$101.13 and \$134.83), and 17.7% earned ₦120,000 and above (\$134.84 and above) monthly.

The monthly salary distribution indicates that most sampled respondents were low- to middle-income earners.

Altogether, 19.8% earned below the Nigerian minimum wage of ₦30,000 (\$33.71) monthly. Based on the World Bank's international poverty line, which was updated in September 2022 from \$1.90 (₦1,691) to \$2.15 (₦1,913.5) per person per day (World Bank, 2022), this translates to approximately \$65.36 (₦58,170) per person per month. Using this benchmark, it can be concluded that 54.8% of the respondents in peri-urban areas were living below the poverty line. This trend was more pronounced in Ibule-Soro, where 65.1% lived below the poverty line, followed by Oda (52.2%) and Oba-Ile (46.4%). The relatively lower poverty rate in Oba-Ile can be attributed to the higher proportion of residents earning ₦120,000 ( \$134.84) and above per month. This is likely due to a greater concentration of civil servants, contractors, and individuals engaged in higher-paying formal sector employment in the area. Generally, these findings are consistent with Nigeria's 2022 Multidimensional Poverty Index, which revealed that 72% of rural dwellers and 42% of urban residents live in poverty (NBS, 2022). They also reinforce the study by Olori, Nwahia, and Sièwé (2021), which found that 56% of households in the peri-urban settlements of Kwali and Bwari in Abuja were classified as poor.



**Figure 5**  
**Monthly Income**

Source: Author's Field Survey, 2023

#### 4.1.9 Length of Stay in the Area

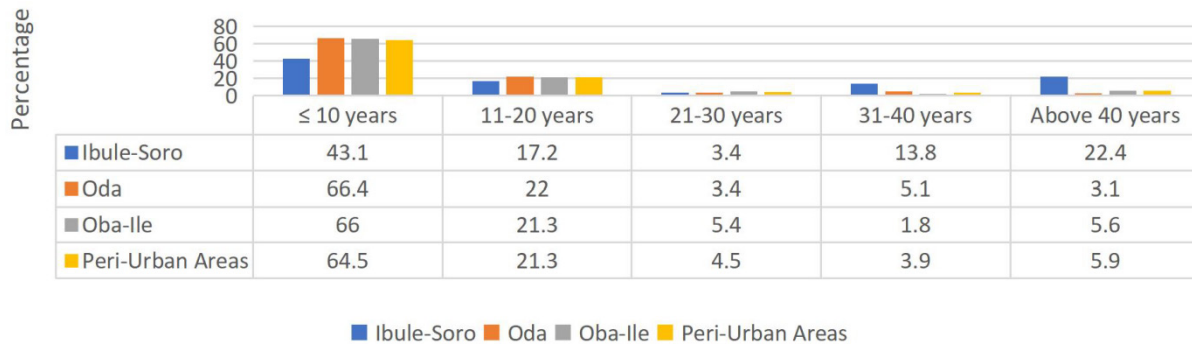
To a reasonable extent, the length of stay in a built environment determines the level of the inhabitant's awareness and/or understanding of the state of events in such an area. The length of stay will not only provide information about the period of migration into the area but will also enable researchers to gain access to detailed information on the state of issues, in this case, the housing development under investigation. The length of stay of respondents in Ibule-Soro revealed that majority (43.1%) had stayed in the area for a period of ≤ 10 years, 17.2% between 11 and 20 years, 3.4% between 21 and 30 years, 13.8% between 31 and 40 years, and 22.4% for above 40 years. In Oda, the majority (66.4%) of the sampled

respondents had stayed in the area for a period of ≤ 10 years, 22% between 11 and 20 years, 3.4% between 21 and 30 years, 5.1% between 31 and 40 years, and 3.1% for above 40 years. In Oba-Ile, the majority (66%) of the respondents had stayed in the area for a period of ≤ 10 years, 21.3% between 11 and 20 years, 5.4% between 21 and 30 years, 1.8% between 31 and 40 years, and 5.6% for above 40 years.

Across the peri-urban areas, the majority (64.5%) of the sampled respondents had stayed in the area for a period of ≤ 10 years, 21.3% between 11 and 20 years, 4.5% between 21 and 30 years, 3.9% between 31 and 40 years, and 5.9% for above 40 years. Specifically, Ibule-Soro had the highest number (36.2%) of residents who

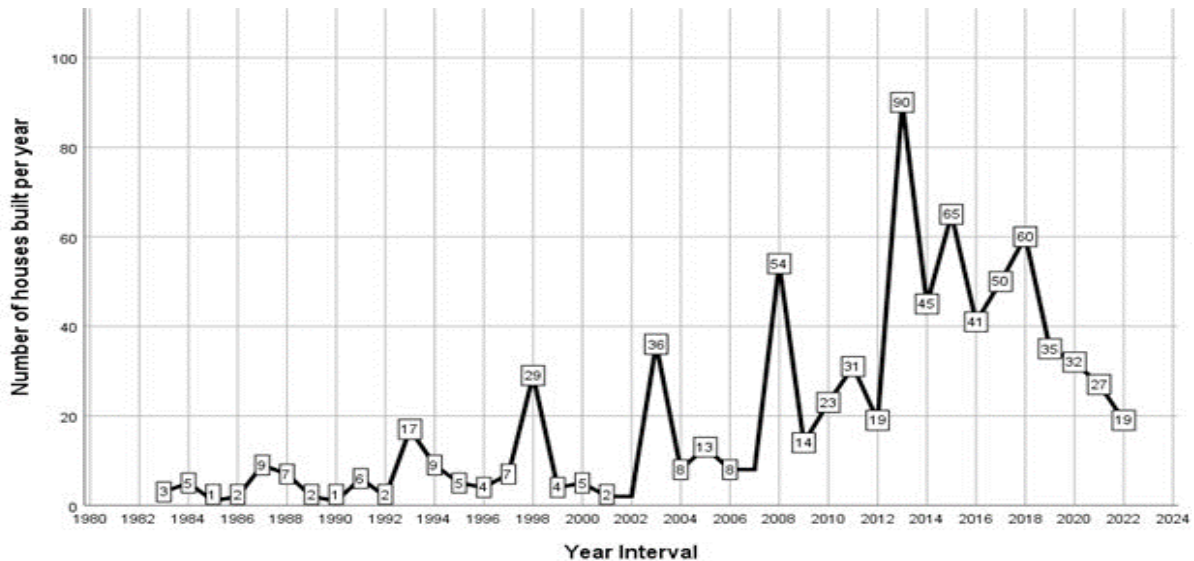
had stayed in the area for 30 years and above, compared to Oda with 8.2% and Oba-Ile with 7.4%. Generally, it could be deduced that most of the physical developments in the peri-urban areas were traceable to the past ten years, as significant proportions of the inhabitants (64.5%) got to their residential locations within the past ten years, as shown in Figure 6. To better understand the annual rate of housing development in peri-urban areas, Figure 7 presents a time-series graph (1980-2022) based on the analysis of eight hundred (800) sampled residential

buildings. The graph shows that housing construction peaked in 2013, with ninety (90) buildings constructed and occupied that year. During this period, real estate activities were predominantly concentrated in the lower end of the market. This segment includes areas with infrastructure and development, where housing growth is primarily driven by investments from individuals and, to a lesser extent, corporate entities, mostly as residential buildings (NBS, 2013).



**Figure 6**  
**Length of Stay**

Source: Author's Field Survey, 2023



**Figure 7**  
**Number of Houses Built in the Peri-Urban Areas from 1980 to 2022**

Source: Author's Field Survey, 2023

#### 4.1.10 Housing Development

In this study, the age of the building was used as a proxy variable for housing development. The age of a building refers to the year the building was partially and/or fully constructed and put into productive use (inhabited). It reflects its outlook and quality. Based on the questionnaires administered to residents occupying various types of residential units in peri-urban areas

(as reflected in Table 6), the age of the buildings was assessed. In Ibule-Soro, the majority of the buildings (48.3%) had been inhabited for 1 to 10 years, 27.6% for 31 to 40 years, 15.5% for 21 to 30 years, and 8.6% for 11 to 20 years. In Oda, most buildings had existed for 1 to 10 years, 29.8% for 11 to 20 years, 7.8% for 21 to 30 years, and 2% for 31 to 40 years. In Oba-Ile, 57.7% of residential buildings were between 1 and 10 years, 27.1%

between 11 and 20 years, 11.6% between 21 and 30 years, and 3.6% between 31 and 40 years. Overall, 58% of the sampled residential buildings had existed for 1 to 10 years, 26.8% for 11 to 20 years, 10.5% for 21 to 30 years, and 4.8% for 31 to 40 years. Comparatively, the majority of residential buildings became functional within the last ten years. However, Ibule-Soro had the highest proportion (27.6%) of older and worn-out buildings that have existed for 30 to 40 years, compared to other locations.

**Table 6**  
**Age of Building**

Age of Building	Ibule-Soro		Oda		Oba-Ile		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
1-10 years	28	48.3	178	60.3	258	57.7	464	58.0
11-20 years	5	8.6	88	29.8	121	27.1	214	26.8
21-30 years	9	15.5	23	7.8	52	11.6	84	10.5
31-40 years	16	27.6	6	2.0	16	3.6	38	4.8
Total	58	100	295	100	447	100	800	100

Source: Author's Field Survey, 2023

## 4.2 Relationship Between Socioeconomic Attributes of Households and Housing Development

The relationship between socioeconomic attributes of households and housing development was tested with the hypothesis stated below:

H<sub>0</sub>: There is no significant relationship/association between the socio-economic characteristics of households and housing development in the area.

H<sub>1</sub>: There is significant relationship/association between the socio-economic characteristics of households and housing development in the area.

In considering the above, households' socio-economic characteristics are held as the independent variable (x), and housing development is held as the dependent variable (y). To determine the above relationship and/or association, data obtained on age, income, household size, length of stay, education, gender, and employment (independent variables) were tested against data on the number of houses built per year (dependent variables) using an appropriate test of measurements. Specifically, age, income, household size, and length of stay were correlated against housing development with the aid of Pearson moment correlation; education with housing development using Spearman rank correlation; the differences between gender and housing development using Chi-square with the Phi coefficient; and differences between employment and housing development using Chi-square with Cramer's v. The result of the analysis presented in Table 7 shows that there was a statistically significant moderately positive relationship between age and the number of houses built per year ( $r = .559^{**}$ ,  $p$

$<.001$ ,  $N=800$ ) across the peri-urban areas. This implies that as the human population grows in size and age, there is an increased demand for housing. The relationship between age and housing development becomes stronger as people age and start having families. At this stage, more housing units are required, which creates more demand for housing units to some extent. It is worth mentioning that over 90% of the sampled populations were economically active or working-age populations that migrated to urban centres in search of employment and better living opportunities. This significantly increased demand for urban housing and the development of new housing projects, some of which were in peri-urban areas, to accommodate the growing active population. Substantiating the above, Bloch et al. (2015) affirmed that the growth of Nigeria's urban population in absolute and relative terms has expanded the existing built-up areas and led to the emergence of new and noticeable 'urban' settlements.

Also, income had a strong positive relationship with housing development ( $r = .667^{**}$ ,  $p <.001$ ,  $N = 800$ ). It implies that income is a crucial determinant of housing types, quality, and affordability in peri-urban areas. *Ceteris paribus*, the higher the income, the greater the likelihood of improvement in the quality of residential housing units constructed. It was earlier established that over 54.8% of the respondents across the peri-urban areas lived below the poverty line. This, to a certain degree, heightened the informality of settlements that were lacking in property rights, infrastructure, and basic services in the peri-urban areas. Income inequality within and across peri-urban areas worsens disparities in housing development. While a significant proportion of the sampled populations were struggling to access decent housing, a relative few had access to deluxe housing options. The informality of the settlements was more pronounced in Ibule-Soro, where 67.2% of the respondents lived below the poverty line.

Again, household size had a very strong positive relationship with housing development ( $r = .918^{**}$ ,  $p.000$ ,  $N=800$ ). From the results, one can infer that economically active populations, including those with a large proportion of children and young adults (large household size), tend to drive higher housing demand as they form new households and seek independent living arrangements. Corroborating the above submission, Mulder (2006) affirmed that population growth, and particularly growth in the number of households, leads to a growth in housing demand, while population decline might lead to a decrease in housing demand.

Equally, there is a very strong positive relationship between length of stay and housing development ( $r = .869^{**}$ ,  $p <.001$ ,  $N = 800$ ) across the peri-urban areas. The strong positive relationship was expected to contribute to neighbourhood stability and development. It is believed that residents who have lived in an area for a long period may have a strong sense of belonging and



affinity with the community. This stability could create a basis for housing development and investments in local businesses, infrastructure, and community services. In addition, the length of stay is equally associated with home ownership. It is believed that residents who have lived in a neighbourhood for a long time are more desirous of their own homes.

In addition, it was established that there was a significant, moderately positive relationship between education and the number of houses built per year ( $r = .519^{**}$ ,  $p < .001$ ,  $N = 800$ ) across the peri-urban areas. This suggests that the number of houses built per year can be linked to levels of educational attainment.

Growing evidence portrays that improved or higher levels of education bring about increased levels of income, greater employment opportunities, improved property values, robust community engagement, and demand for essential social and physical infrastructure. All things being equal, these, individually and/or collectively, will stimulate housing development. Grant (2017) affirmed that education is a leading determinant of economic growth, employment, and earnings, to strengthen the above submission. Since many Nigerians derive pride in home ownership in the face of the current high rent, a significant number will want to build their home when their employment status and earnings improve.

**Table 7**  
**Socio-economic Characteristics of Households and Housing Development**

	Test of Measure	Ibule-Soro	Remark	Oda	Remark	Oba-Ile	Remark	Peri-Urban Areas	Remark
Age	Pearson Correlation	$r = .320^{*}$ $p < .014$	Significant with a weak positive relationship	$r = .728^{**}$ $p < .001$	Significant with a strong positive relationship	$r = .532^{**}$ $p < .001$	Significant with a moderate positive relationship	$r = .559^{**}$ $p < .001$	Significant with a moderate positive relationship
Income	Pearson Correlation	$r = .491^{**}$ $p < .001$	Significant with a moderate positive relationship	$r = .725^{**}$ $p < .001$	Significant with a strong positive relationship	$r = .677^{**}$ $p < .001$	Significant with a strong positive relationship	$r = .667^{**}$ $p < .001$	Significant with a strong positive relationship
Household Size	Pearson Correlation	$r = .743^{**}$ $p < .001$	Significant with a strong positive relationship	$r = .965^{**}$ $p < .001$	Significant with a very strong positive relationship	$r = .947^{**}$ $p < .001$	Significant with a very strong positive relationship	$r = .918^{**}$ $p < .000$	Significant with a very strong positive relationship
Length of stay	Pearson Correlation	$r = .883^{**}$ $p < .001$	Significant with a very strong positive relationship	$r = .837^{**}$ $p < .001$	Significant with a very strong positive relationship	$r = .875^{**}$ $p < .001$	Significant with a very strong positive relationship	$r = .869^{**}$ $p < .001$	Significant with a very strong positive relationship
Education	Spearman Correlation	$r = .678^{**}$ $p < .001$	Significant with a strong positive relationship	$r = .490^{**}$ $p < .001$	Significant with a moderate positive relationship	$r = .516^{**}$ $p < .001$	Significant with a moderate positive relationship	$r = .519^{**}$ $p < .001$	Significant with a moderate positive relationship
Gender	Chi-Square with Phi Coefficient	$X^2(3) = 4.097$ $P = .251$ $\Phi = .266$	Not significant	$X^2(3) = 10.157$ $P = .017$ $\Phi = .186$	Significant with a very weak positive association	$X^2(3) = 5.998$ $P = .112$ $\Phi = .116$	Not Significant	$X^2(3) = 10.648$ $P = .014$ $\Phi = .115$	Significant with a very weak positive association
Employment	Chi-Square with Cramer's V	$X^2(9) = 27.760$ $P = .001$ $V = .399$	Significant with a weak positive association	$X^2(9) = 54.452$ $P < .001$ $V = .248$	Significant with a weak positive association	$X^2(12) = 40.285$ $P < .001$ $V = .173$	Significant with a weak positive association	$X^2(12) = 64.390$ $P < .001$ $V = .164$	Significant with a weak positive association

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

Source: Author's Field Survey, 2023

Also, a statistically significant differences ( $X^2(3) = 10.648$ ,  $P = .014$ ,  $\Phi = .115$ ) exist between gender and housing development. The differences can be understood from the angle that gender alone does not determine the level of housing development. Gender, along with various factors and principles, influences housing development in peri-urban areas. In Nigeria, for example, gender inequalities in access to housing, property rights, affordability, and housing design can significantly impact women's housing experiences. As observed in peri-urban areas, gender disparities in homeownership persist, with

women owning fewer homes than men due to deep-rooted socio-economic inequalities and discriminatory practices. In Nigeria, peri-urban women are often marginalized and face four key dimensions of vulnerability: physical vulnerability, limited access to productive resources, exclusion from decision-making processes, and income insecurity (Daley and Pallas, 2014). Njieassam (2019) further highlighted that the lack of proper recognition and the continued marginalization of Indigenous women significantly affect their ability to own and control land. These women are frequently viewed only as child-

bearers, housekeepers, and food providers, which reinforces restrictive gender roles and limits their access to property. To overcome these barriers, Beebeejaun (2017) emphasizes the importance of creating truly inclusive urban environments. Such environments must be intentionally planned to meet the needs of both women and men by prioritizing gender mainstreaming in urban and regional planning.

In the same vein, Table 7 reveals a statistically weak positive difference ( $X^2(12) = 64.390, P = <.001, V = .164$ ) between employment and housing development. The positive association depicts that education and housing development are interconnected and mutually inclusive. This implies that improved education can stimulate improved housing conditions, and adequate housing can also boost educational opportunities. The weak association suggests that education alone cannot promote housing development without addressing the issues of income inequalities, infrastructure, and governance. To validate the above submission, the International Institute for Applied Systems Analysis (2008) stated that better education results in higher individual income and is a critical precondition for long-term economic growth. This growth can be seen in the areas of housing development, per capita income, and the human development index, among others.

## 5. CONCLUSION AND POLICY RECOMMENDATION

This study established that socioeconomic characteristics are directly related to housing development. Improvements in households' socioeconomic characteristics will lead to better home development outcomes. Poor socioeconomic qualities, on the other hand, contribute to the rapid expansion of slums and insufficient housing in urban areas. In Ibule-Soro, Oda, and Oba-Ile, 67.2%, 65.1%, and 46.4% of households, respectively, live below the poverty line and should be empowered economically, financially, infrastructurally, and environmentally. Addressing these challenges requires a coordinated government-led approach. A government consortium should be established to develop a comprehensive action plan, with the federal, state, and local governments forming a joint Housing and Economic Development Task Force to implement targeted poverty alleviation and housing improvement programmes. The consortium should leverage public-private partnerships (PPPs) to attract investments in affordable housing and community development. Additionally, households should actively participate in infrastructure projects through a Community-Based Infrastructure Development (CBID) model, where local labourers are engaged in constructing roads, drainage systems, schools, sanitation facilities, health centres, markets, and electricity networks.

Participants, particularly unemployed or underemployed residents, should receive stipends or daily wages for their contributions to housing, water supply, and sanitation projects. Furthermore, incentive programmes, such as tax relief or service discounts, should be introduced for households that contribute to infrastructure development and maintenance. Supporting small and medium-scale enterprises (SMEs) is also essential. Establishing Microfinance Loan Schemes will provide grants, low-interest loans, and flexible repayment plans to low-income households and entrepreneurs, fostering small-scale manufacturing, agriculture, trade, and decent housing.

Additionally, tax incentives and regulatory waivers should be offered to startups and SMEs in the housing and construction sector. Expanding healthcare subsidies and cash transfers will further provide relief to vulnerable households in peri-urban areas. To enhance employment and skill development, Technical and Vocational Training Centres (TVTCs) should be established in each peri-urban area, offering training in bricklaying, carpentry, plumbing, electrical work, and renewable energy installation. These programmes should follow a Train-and-Earn model, where participants receive a stipend while acquiring practical skills that enhance their employment prospects. Sustainability initiatives should be prioritized, including the development of green housing that incorporates eco-friendly materials, solar energy, and rainwater harvesting systems to reduce housing costs. Likewise, households should participate in waste-to-wealth programmes, earning financial incentives through recycling and environmental conservation efforts. Also, land-use planning regulations must be strictly enforced to prevent informal settlements while ensuring that low-income households have access to affordable and legally recognized housing. Land titling reforms should streamline registration processes, reduce costs, and provide tenure security, preventing land disputes and forced evictions. Furthermore, gender-inclusive housing policies should ensure equal access to land and housing for women, offer legal protections against discrimination, and target financial assistance and housing subsidies to female-headed households. Effective and efficient implementation of these measures will strengthen socioeconomic conditions, reduce poverty, improve housing affordability and security, and promote inclusivity in peri-urban areas.

**Ethics Approval:** The questionnaire and research methodology for this study were approved by the Department of Urban and Regional Planning, School of Environmental Technology, Federal University of Technology, Akure, Ondo State, Nigeria. The study was then presented to the School of Environmental Technology Postgraduate Studies Advisory Committee for review, modifications, and ratification. After incorporating the necessary revisions, the advisory committee ratified the questionnaire and methodology. Subsequent research reports were also reviewed and ratified by the department.

**Consent to Participate:** Informed consent was obtained from all participants involved in the study. The analysis used aggregate data and ensured that individual identities remained anonymous throughout the research.

**Consent to Publish:** All participants were informed that the data collected would be used for PhD research and could contribute to scholarly publications. Their consent to use the data for the PhD study and publication in reputable journals was sought and obtained.

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