

# Urbanization and Housing Typologies in an Urbanizing City: Ado-Ekiti, Nigeria as a Case Study

Awe Foluso Charles<sup>1,\*</sup>, Akinluyi Muyiwa Lawrence<sup>2</sup>

<sup>1</sup>Department of Architecture, Faculty of Environmental Design and Management, University of Oye-Ekiti, Oye-Ekiti, Nigeria

<sup>2</sup>Department of Architecture, Faculty of Environmental Science, Bamidele Olumilua University of Education, Science and Technology, Ikere Ekiti, Nigeria

## Email address:

[foluso.awe@fuoye.edu.org](mailto:foluso.awe@fuoye.edu.org) (A. F. Charles)

\*Corresponding author

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**Abstract:** The study addressed housing typologies as a result of urbanization of Ado-Ekiti, Nigeria. Ado-Ekiti is growing with an influx of people and its attendance housing infrastructure. Urbanization has given rise to different types of buildings, and changes in status, however these housing typologies are not yet researched, recorded and captured. Structured questionnaires of 1,500 were administered to the respondents who are the landlords or oldest tenants and 1311 responded. The town was structured into three zones: Urban core, Transitional and Periphery. Statistical tables were generated for the variables. Two hypotheses were formulated: there is no significant variation in the housing typologies in the study area and there is no significant difference in the status of housing units in the study area. Analysis of Variance (ANOVA) and Pearson Product Moment Correlation statistics at 0.05 level of significance were used to test the two hypotheses. It was found out that one single family bungalow and face-me-face-you typologies were more significant at the urban core area with 48.1% and 34.2% respectively while semi-detached and storey typologies were more significant at transitional and periphery with 14.6% and 1.7% at Transitional 11.4% and 11.1% respectively. The study revealed that there is a significant difference between housing typologies and significant difference in status in the three zones. The study recommended that there should be an urban renewal programme at the urban core and owners of dilapidated buildings should be encouraged to reconstruct.

**Keywords:** Housing, Residential, Zones, Typology, Status, Urbanizing, Quality

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## 1. Introduction

Urbanization is the process of human agglomerations in multifunctional settlements of relatively substantial size [1]. It depicts migration from rural to urban areas, with population growth corresponding to urban migration. UN-Habitat [2] described it as the increased concentration of people in cities rather than in rural areas. Urbanization contributes to sustained economic growth which is critical to poverty reduction. According to the World Bank [3], the process of urbanization also includes the renewal of cities, the optimization of urban spatial organization, and the improvement of urban function. Its potential to assist economic development, social development, health systems, and poverty alleviation is directly related to how it is handled

and administered [4].

In contrast to industrial and commercial regions, a residential area is one where housing predominates. Housing can differ dramatically within and within residential regions. Single-family housing, multi-family housing, and mobile homes are examples. Residential zoning may allow some services or labor opportunities, or it may completely prohibit business and industry. It may allow for high density land use or only allow for low density land usage. The FAR (floor area ratio) of residential zoning is typically lower than that of commercial, industrial, or manufacturing zoning. It could be a large or small area [5].

Housing delivery initiatives in Nigeria, according to Kabir and Bastani [6], are described as structures or other shelters in which people reside, a place to live, and a habitation. It

may also be thought of as an important part of the social and economic fabric. They also said that shelter is one of the most fundamental human needs. It has a significant impact on the community's health, efficiency, social behavior, satisfaction, and overall welfare as a unit of the environment. Housing, they say, implies shelter to most people, but it also means more to others since it is one of the finest markers of a person's level of living and social status. It is critical in both rural and urban settings for the accomplishment of a higher level of life. These characteristics cause housing demand to have no bounds as population expansion and urbanization accelerates, widening the gap between housing demand and supply. Despite the importance of housing, sufficient supply has remained a fantasy for all social classes in Nigeria. Most emerging nations are in a unique scenario, with population growth at an exponential pace, fast urbanization becoming the norm, and a large gap between housing demand and supply.

According to Osuide and Dimuna [7], the urbanization movement in many developing nations, notably Nigeria, has been accompanied by a lack of suitable housing, basic utilities, and infrastructure. Because of increased demand for urban goods that are becoming scarcer by the day, the cost of living has risen in response to the fast growth in the population in urban centers. As a result, there is a scarcity of urban land and a high cost of housing, both of which are typically in limited supply and out of reach for the majority of urban families, who also happen to be low-income. The slum areas of the city are home to the majority of the impoverished in the city. This is mostly due to the low cost of poor housing in the area, as well as the closeness of their jobs [8].

The study undertook the identification of various housing typologies in the city of Ado – Ekiti and also evaluated the status of these housing types. It also looks into the effect of Urbanization such that as the city grows the typologies change from the three zones.

## 2. The Research Area

Ado Ekiti is one of Nigeria's most ancient cities. Its history may be traced back to before the Ewi dynasty was established in 1310 A. D. It became a renowned town some 700 years ago when the 'Oba Ado, also known as 'Elewi,' joined the princely adventure started by numerous offspring of Oduduwa (from Ile-Ife) to establish their own lands. The community began as a farmhouse in three locations: Odo-Ado, Okesa, and Adebayo. It consisted of dispersed farmsteads and houses intermingled with areas of bush and dense forest growth [9].

The city's gradual growth started in 1953, when it was designated as the headquarters of the Ekiti Division. In the first republican regime, when Ekiti Division was designated as one of Nigeria's key regional development regions in 1963, Ado-Ekiti saw rapid growth. The establishment of further states in Nigeria in 1979 brought more changes to Ado-Ekiti, as the headquarters of the Ado-Ekiti Local Government Area

was designated one of the seventeen (17) local governments (councils) in old Ondo State. The ancient Western Region was divided into nineteen (19) states, with Ondo being one of them. The formation of Ekiti State on October 1, 1996, and the designation of Ado-Ekiti as the capital city marked the pinnacle of changes to the status quo [10].

Between latitudes 7°19' N and 7°29' N north of the equator, and longitudes 5°3' E and 5°22' E east of the Greenwich meridian, Ado-Ekiti is situated. It is surrounded by a number of satellite settlements. Iworoko is approximately 16 kilometers north of the city; Are and Afao are about 16 kilometers east; Iyin and Igede Ekiti are about 20 kilometers west; and Ikere is about 18 kilometers south. Ado-Ekiti has the advantage of being a nodal town in the state's center; as a result, routes leading to other regions of the state converge at the city [11]. In 1956, Ado-Ekiti had a land area of 2.5 square kilometers (sq km), but by 1996, it had expanded to 19.6 sq km. The city has a current size of 36.7 square kilometers [12].

The spread of Ado-Ekiti development is towards transportation routes, or, to put it another way, the settlement's evolutionary structure and expansion is a copy of Homer Hoyt's 1939 sector theory, which asserts the spread of physical development in the direction of transportation lines. The major transportation routes in Ado-Ekiti which the settlements/developments follow are: 1) Ikere-Ekiti route (towards Akure, Ondo state), 2) Ilawe-Ekiti route (towards Akure Ondo state), 3) Iyin Ekiti route old and new (towards Aramoko Ekiti and Ilesa Osun State), 4) Iworoko-Ekiti/Ifaki route 5) Afao-Ekiti route, and 6) Ikare Akoko, Ondo State route, these routes are all connected by the road network that extends from the CBD in all directions. In Ekiti State, there are sixteen (16) Local Government Areas, one of which is Ado-Ekiti, which also serves as the state capital and headquarters. Ado-Ekiti witnessed improved urbanization immediately it became a state capital.

## 3. Review of the Literature

According to Misilu, Nsokimieno and Zhang [13], urbanization was defined by the United Nations Habitat in 2006 as the greater concentration of people in cities rather than rural regions. Urbanization promotes long-term economic development, which is necessary for poverty alleviation. In addition, Ibimilua [14] listed insufficient housing, unplanned growth, and inappropriate maintenance of existing buildings, aging, and a lack of social infrastructure, as well as waste management threats, crime, and health hazards as urbanization concerns. In addition, dwellings in urban core regions are characterized by insufficient infrastructure, poor ventilation, the lack of an in-built bathroom and kitchen, and a poor waste disposal system. Other issues with urban housing include a lack of good planning, the growth of shanty settlements, and the availability of decaying buildings.

Many individuals migrate to cities as a consequence of urbanization and a lack of economic prospects in rural

regions, according to Kabir and Bastani [6]. They relocate to cities that are already experiencing overcrowding, poor infrastructure, and high living costs. As a result, they are forced to seek refuge in slums. According to UN-Habitat [2], 90% of slum dwellers live in poor countries with weak economies. This has an impact on housing availability and affordability, forcing millions of people to live in substandard housing. Because of increased demand for urban goods that are becoming scarcer by the day, the cost of living has risen in response to the fast growth in the population in urban centers. As a result, there is a scarcity of urban land and a high cost of housing, both of which are typically in limited supply and out of reach for the majority of urban families, who also happen to be low-income. The slums of the city are home to the majority of the destitute. This is mostly due to the low cost of poor housing in the area, as well as the closeness of their jobs.

The percentage of the world's population living in cities climbed from less than 5.0% in 1800 to 47.0% in 2000, and is anticipated to reach 66.5% by 2030 [15]. However, cities in emerging nations will account for more than 90.0 percent of projected population increase, with a major proportion of this population being impoverished. Africa and Asia, where urbanization is currently relatively low (about 40%), are anticipated to be 54% urbanized by 2025 [16]. Despite the fact that urbanization drives modernity, economic advancement, and development, there is growing concern about the impact of developing cities, notably on human health, livelihoods, and the environment. The concern is whether the present trend in urban expansion is sustainable, particularly in emerging nations like Nigeria, given the attendant urban difficulties of unemployment, slum development, poverty, and environmental degradation [17].

According to Aderamo and Ayobolu [18], urbanization has been a prevalent characteristic of emerging global cities during the previous century. This has shown itself in the form of fast population increase and city development. The massive influx of able-bodied young men and women from rural regions has had a significant influence on the metropolis. As a result, cities are no longer able to offer the fundamental services required to support their burgeoning populations. However, the pace of urbanization and the number of cities is increasing, which is both worrying and frightening, and the situation in cities is unsatisfactory. The supply of essential infrastructure and services such as water, power, transportation, housing, sewage, and drainage is a serious issue in Nigeria's rapidly growing metropolitan centers. When urban services are under too much strain, cities become inefficient, unworkable, and unlivable. This creates a severe problem for city planners.

Housing issues are very widespread in many Nigerian cities, and this is an ongoing component of the urbanization process. As a consequence of urbanization, there is currently enormous pressure on housing, to the point that the gap between supply and demand in Nigeria is widening. The most prominent of all urban challenges in Nigeria, induced by the fast increase of the urban population, is the lack of

housing facilities for the burgeoning urban population (Megbolugbe noted in Aderamo and Ayobolu [18]. In all of Nigeria's metropolitan centers, high rates of overcrowding, inadequate structures, and infrastructure deficiencies have been recorded. As a result, over 60% of city people live in slums, which are characterized by overcrowding, poor sanitary conditions, a lack of or insufficient basic utilities and amenities, crime, and poverty, among other things.

Future increases in the size of the world's urban population are expected to be highly concentrated in just a few countries. Together, India, China and Nigeria will account for 35% of the projected growth of the world's urban population between 2018 and 2050. Fast-paced urban expansion has had a profound impact on the physical structure of Nigerian cities. Urban growth and expansion has transformed them into complex urban formations. Contemporary urban settlements in the country are dynamic entities marked by the – frequently unordered – assemblage of the traditional core city and its residential, commercial and industrial zones with a variety of new, typically suburban peripheral areas, which arise in an array of configurations and social realities, and which contain a diverse range of economic functions and social activities [19].

When managed, urbanization has the ability to contribute to the social and economic development of a country. However, with the unprecedented pace and scale of the urban transition in many developing countries currently outstripping the capacity of local governments to provide the necessary housing, infrastructure, and amenities to cope with a growing urban population, such outcomes are not guaranteed. It is thus important that policymakers gain greater insights into the dynamics underpinning the urban transition. Only then will they be able to establish effective policies and provide more targeted interventions for managing the urban transition in a more strategic manner [20].

Although urbanization has become an irreversible phenomenon, some have argued that to resolve the problems of the city, we must tackle the root causes of the problem, such as improving the socio-economic situation of the urban poor. Until the conditions in rural areas improve, populations will continue to migrate to urban settings. Given the challenges that rural development poses, the root causes are unlikely to be addressed in the near future. Therefore, governments and development agencies should concentrate on adapting to the challenges of urbanization, while seeking to reduce unplanned urbanization. Some examples of policies and practices that should be considered include (i) policies that consider whole-of-life journeys, incorporating accessible employment, community participation, mobility/migration and social transition, to break generational poverty cycles; (ii) policies addressing urban environmental issues, such as planned urban space [21]. Urbanization and sustainable cities in Nigeria have been examined and came up with several lessons. Urban population is increasing fast, while the population in the largest city is rising and falling, caused by migration of people from the megacities to neighboring cities

due to overcrowding, housing challenges and housing cost among other reasons [22].

## 4. Methodology of Research

The study was interested in evaluating housing types in Ado-Ekiti as a result of urbanization, hence comprehensive coverage of the whole town was critical. Three residential zones in the town were clearly specified to obtain effective coverage. Olajuyigbe [23] in the study of Ado Ekiti water supply identified three types of urban areas: urban core, transitional, and urban periphery. Also, Olotua [24] used three zones as: the city centre, the periphery neighborhood to the core, and the suburb. The following is a list of the three zones used in this study:

### 4.1. The Urban Core

This zone is located in the heart of the city. Because it is the most traditional neighborhood in most towns, it contains the historic structures of any city. This is usually where the city begins and expands. It is mostly occupied by low-income individuals, with a few rich indigenes who want to live in the region because of traditional connections, ceremonies, rites, and fraternity.

### 4.2. The Transitional Zone

As the name indicates, this is the area around the city's urban center. This zone has superior living circumstances than the city core. There are several examples of modern projects that are in a superior physical setting than the urban core.

### 4.3. The Urban Periphery

As the name indicates, this zone is located on the outskirts of the city; it has contemporary structures and projects, it is characterized with residences under construction and many empty plots. Buildings in this zone are majorly residential and new.

The city was divided into the three (3) zones stated above: the urban center, the transitional zone, and the urban periphery. The basic assumption for the number of dwellings in these zones was that twenty-five percent (25%) of the entire population lives in the urban core, fifty percent (50%) lives in the transitional zone, and twenty-five percent (25%) lives in the peri-phery zone. The data for the study was gathered via the use of structured questionnaires. The questionnaire was created with the goal of making it as simple as possible to complete. Landlords were targeted, and if none were available, spouses or the house's longest-serving tenants. In all, 1500 questionnaires were distributed.

There were 83 streets altogether, with 24, 40, and 22 in the urban center, transitional, and peri-phery, respectively. According to the percentages of the three zones, 375 (25%) questionnaires were distributed in the urban core, 750 (50%) in the transitional zone, and 375 (25%) in the outer zone, for a total of 1500 questionnaires. 1311 questionnaires were

retrieved with percentages for the urban core, transitional, and peri-phery, respectively, were 78.66%, 92.23%, and 86.4%, for a total of 87.4%.

The following variables were used to extract the data for this study: i) ARCHDE (kind of architectural design), ii) AGEBLD (age of building), iii) NOBER (number of bedrooms), iv) MATHON (building materials), v) NATHOU (nature of the home), and vi) GENCON (general condition of the house). The data was presented in tables based on these factors. Furthermore, the following hypotheses were developed: i) There is no significant variance in housing typologies in the research region; and ii) There is no significant difference in the status of housing units in the study area. The hypotheses were tested using analysis of variance (ANOVA) and Pearson Product Moment Correlation.

## 5. Discussions and Results

i) ARCHDE (type of architectural design), ii) AGEBLD (age of building design) iii) NOBER (number of bedrooms), iv) MATHON (construction materials), v) NATHOU (house nature), and vi) GENCON (general condition of the house) were the variables that influenced the typologies and housing status as they relates to urbanization were used in the research.

### 5.1. Construction Age (AGEBLD)

Table 1 reveals that 58.7% of the residences in the city are less than ten years old, with 23.3% being eleven to twenty years old, 9.4% being twenty one to thirty years old, 5.4% being thirty one to forty years old, and 3.1% being more than forty years old. From the urban core to the peri-phery, the number of houses less than or equal to ten years old increased. The urban center had 26.1%, the transitional had 65.9%, and the peri-phery had 73.1%. However, the number of residences that are twenty one to thirty years old or older has decreased. It was 14.6% urban core, 9.5% transitional, and 4.3% peri-phery for houses between twenty and thirty years old, and 14.9% urban core, 3.0% transitional, and 1.9% peri-phery for houses over thirty years old. These findings implied that there are many old houses in the urban core, and physical inspection revealed that the buildings lack modern housing facilities and are dilapidated, with faded walls, cracked floors, and damaged roofs. Many of the houses were built after Ekiti State was established in 1996, indicating that Ado Ekiti's housing situation improved after it became the state capital, buildings that are less than 10 years old are also new, featuring contemporary housing design and amenities, these are reflection of the effect of urbanization of Ado-Ekiti as a state capital.

### 5.2. The Architectural Design Type (ARCDE)

The research discovered four distinct typologies: i) Single-family bungalow flat ii) Semi-detached iii) Face-me-face-you iv) multi-storey structure. 49.8% of the buildings in the study area are single family bungalows, 12.4% are semi-detached homes, 26.8% are rooming apartment (Face-me-face-you),

and 11.0% are Storey Buildings, according to the city-wide result of (ARCHDE) (Table 2).

*Table 1. Age of the Buildings.*

| Age of Buildings   |       | Zones      |              |            | City Wide |
|--------------------|-------|------------|--------------|------------|-----------|
|                    |       | Urban Core | Transitional | Peri-Phery |           |
| Less than 10 years | Count | 77         | 456          | 237        | 770       |
|                    | %     | 26.1       | 65.9         | 73.1       | 58.7      |
| 11-20 years        | Count | 99         | 140          | 67         | 306       |
|                    | %     | 33.6       | 20.2         | 20.7       | 23.3      |
| 21-30 years        | Count | 43         | 66           | 14         | 123       |
|                    | %     | 14.6       | 9.5          | 4.3        | 9.4       |
| 31-40 years        | Count | 44         | 21           | 6          | 71        |
|                    | %     | 14.9       | 3.0          | 1.9        | 5.4       |
| >40 years          | Count | 32         | 9            | 0          | 41        |
|                    | %     | 10.8       | 1.3          | 0.0        | 3.1       |
| TOTAL              | Count | 295        | 692          | 324        | 1311      |
|                    | %     | 100.0      | 100.0        | 100.0      | 100.0     |

Source: Authors' Fieldwork, 2021.

*Table 2. Type of Architectural Design.*

| Architectural Design        |       | Zones      |              |            | City Wide |
|-----------------------------|-------|------------|--------------|------------|-----------|
|                             |       | Urban core | Transitional | Peri-Phery |           |
| Single family bungalow flat | Count | 142        | 329          | 182        | 653       |
|                             | %     | 48.1       | 47.5         | 56.2       | 49.8      |
| Semi-detached               | Count | 25         | 101          | 37         | 163       |
|                             | %     | 8.5        | 14.6         | 11.4       | 12.4      |
| Face-me-face-you            | Count | 101        | 181          | 50         | 351       |
|                             | %     | 34.2       | 26.2         | 15.4       | 26.8      |
| Storey Building             | Count | 27         | 81           | 55         | 144       |
|                             | %     | 9.2        | 11.7         | 17         | 11.0      |
|                             | Count | 295        | 692          | 324        | 1311      |
|                             | %     | 100.0      | 100.0        | 100.0      | 100.0     |

Source: Authors' Fieldwork, 2021.

The pattern, however, varies from zone to zone. Single family bungalow flat in the urban core accounted for 48.1%, 47.5% in the transitional zone, and 56.2% in the peri-phery. The proportion of semi-detached homes was greatest in transitional, at 14.6%, and lowest in the urban core, at 8.5%, while it was 11.4% in the peri-phery. The number of apartment buildings decreased in proportion across the zone (face-me-face-you), with 34.2% in the urban core, 26.2% in the transitional, and 15.4% in the peri-phery. These results indicate that, as the town grows, get urbanized and housing constructions expand; apartment buildings (face-me-face-you) are no longer fashionable or desirable. This could be due to the economy, the size of the family, or the inclusiveness of family life. The number of storey buildings is lowest in the urban core at 9.2%, 11.7% in the transitional zone and 17% at the peri-phery zone.

### 5.3. Number of Bedrooms (NOBER)

Another variable worth mentioning in housing typologies was the number of bedrooms, which was used in the evaluation. Table 3 shows that one bedroom houses account for 6.6% of houses in the study area, two bedroom houses for 16.8%, three bedroom houses for 28.5%, four bedroom houses for 22.8%, five bedroom houses for 6.5%, and houses with more than five bedrooms for 18.8%. In each zone, the amount of bedrooms varies. The number of residences with

one bedroom grows significantly from the urban center to the peri-phery, with 5.1% in the urban core, 6.8% in the peri-phery, and 7.4% in the peri-phery. In residences with five bedrooms, the trend was similar: 3.4% urban core, 6.8% transitional, and 8.5% peri-phery. However, the number of residences with more than five rooms is decreasing, with 29.2% in the urban core, 17.1% in the transitional zone, and 13.3% in the peri-phery. As previously indicated, the face-me-face-you residences with more than five bedrooms were more prevalent in the urban core. The majority of the residences in the research region had three or four bedrooms. In addition, the face-me-face-you residences are out of style, and family sizes are shrinking. Houses with several rooms will draw a large number of occupants, there will be pressure on facilities, infrastructure and building elements and these will no doubt results in facility mis-use and damage.

### 5.4. Wall Materials (MATHON)

Table 4 reveals that 13.1% of the buildings in the study region were made of mud, 77.2% of the houses were made of cement block, 7.3% of the houses were made of bricks, and 1.9% of the houses were made of timber. The majority of the homes were built with Cement Blocks, and physical examination proved that the usage of Cement Blocks in the study region was responsible for the construction of numerous Cement Block Industries and Cement Shops.

**Table 3.** Number of Bedrooms in the Buildings.

| Number of bedrooms in the building |       | Zones      |              |            | City Wide |
|------------------------------------|-------|------------|--------------|------------|-----------|
|                                    |       | Urban core | Transitional | Peri-Phery |           |
| 1 Bedroom                          | Count | 15         | 47           | 24         | 86        |
|                                    | %     | 5.1        | 6.8          | 7.4        | 6.6       |
| 2 Bedrooms                         | Count | 56         | 110          | 54         | 220       |
|                                    | %     | 19.0       | 15.9         | 16.7       | 16.8      |
| 3 Bedrooms                         | Count | 67         | 213          | 94         | 374       |
|                                    | %     | 22.7       | 30.8         | 29.0       | 28.5      |
| 4 Bedrooms                         | Count | 61         | 157          | 81         | 299       |
|                                    | %     | 20.7       | 22.7         | 25.0       | 22.8      |
| 5 Bedrooms                         | Count | 10         | 47           | 28         | 85        |
|                                    | %     | 3.4        | 6.8          | 8.6        | 6.5       |
| More than 5 Bedrooms               | Count | 86         | 118          | 43         | 247       |
|                                    | %     | 29.2       | 17.1         | 13.3       | 18.8      |
| Total                              | Count | 295        | 692          | 324        | 1311      |
|                                    | %     | 100.0      | 100.0        | 100.0      | 100.0     |

Source: Authors' Fieldwork, 2021.

**Table 4.** Wall Material Used in Constructing the Houses of Respondents.

| Wall materials used |       | Zones      |              |            | City Wide |
|---------------------|-------|------------|--------------|------------|-----------|
|                     |       | Urban core | Transitional | Peri-Phery |           |
| Mud                 | Count | 76         | 74           | 22         | 172       |
|                     | %     | 25.8       | 10.7         | 6.8        | 13.1      |
| Cement Block        | Count | 193        | 537          | 282        | 1012      |
|                     | %     | 65.42      | 77.6         | 87.1       | 77.2      |
| Bricks              | Count | 16         | 64           | 16         | 96        |
|                     | %     | 5.4        | 9.3          | 4.9        | 7.3       |
| Timber              | Count | 5          | 12           | 4          | 21        |
|                     | %     | 1.69       | 1.7          | 1.2        | 1.69      |
| Others              | Count | 5          | 5            | 0          | 10        |
|                     | %     | 1.69       | 0.7          | 0          | 0.8       |
| Total               | Count | 295        | 692          | 324        | 1311      |
|                     | %     | 100        | 100          | 100        | 100       |

Source: Authors' Fieldwork Report, 2021.

### 5.5. Nature of Housing (NATHOU)

The variable of dwelling type is also an essential one to consider. The variable measured the number of historic and contemporary housing structures in the research region. Table 5 shows that the number of modern buildings has risen from 51.9% in the urban core to 74.3% in the transitional and 90.4% in the peri-phery, while the number of old buildings has decreased from 48.1% in the urban core to 25.7% in the

transitional and 9.6% in the peri-phery. According to citywide statistics, contemporary residences made up 73.2% of the total, while historic structures made up 26.8%. The results indicate that people are migrating out from the city core and building new homes on the outskirts. According to physical examination, the new dwellings are of high quality while the old structures at the urban core are getting dilapidated, abandoned and some are being sold off.

**Table 5.** Nature of Housing Units in your Area.

| Housing Unit         |       | Zones      |              |            | City Wide |
|----------------------|-------|------------|--------------|------------|-----------|
|                      |       | Urban core | Transitional | Peri-Phery |           |
| Modern housing units | Count | 153        | 514          | 293        | 960       |
|                      | %     | 51.9       | 74.3         | 90.4       | 73.2      |
| Ancient buildings    | Count | 142        | 178          | 31         | 351       |
|                      | %     | 48.1       | 25.7         | 9.6        | 26.8      |
|                      | Count | 295        | 692          | 324        | 1311      |
|                      | %     | 100.0      | 100.0        | 100.0      | 100.0     |

Source: Authors' Fieldwork, 2021.

### 5.6. General Condition (GENCON)

Table 6 reveals that 15.2% of respondents believed that the

residences are in very good overall condition. 41.6% of respondents said the house's overall condition is good, 27.2% said it is fair, and 16.0% said it is bad. The 'very good'

general condition of the houses in the study area increases from urban core to peri-phery at 8.5%, 15.9% and 19.8% respectively while 'bad' general condition decreases from urban core to peri-phery at 35.3%, 11.6% and 8.3% respectively. Awe and Afolabi [25] submitted that the building elements: roofs, doors, windows, floors, ceiling and

walls in the urban core are in deplorable conditions and they make the buildings to be in a bad state which in most cases are not suitable for human habitability.

It is concluded that as the city gets urbanized there is a significant general conduction improvement in housing status.

**Table 6.** General Condition of Houses.

|           |       | Zones      |              |            | City Wide |
|-----------|-------|------------|--------------|------------|-----------|
|           |       | Urban core | Transitional | Peri-Phery |           |
| Very Good | Count | 25         | 110          | 64         | 199       |
|           | %     | 8.5        | 15.9         | 19.8       | 15.2      |
| Good      | Count | 88         | 309          | 148        | 545       |
|           | %     | 29.8       | 44.7         | 45.7       | 41.6      |
| Fair      | Count | 78         | 193          | 85         | 356       |
|           | %     | 26.44      | 27.8         | 26.2       | 27.2      |
| Bad       | Count | 104        | 80           | 27         | 211       |
|           | %     | 35.3       | 11.6         | 8.3        | 16.0      |
|           |       | Count      | 295          | 692        | 1311      |
|           |       | %          | 100          | 100        | 100       |

Source: Authors' Fieldwork Report, 2021.

## 6. Testing of Hypotheses

At the 0.05 level of significance, the study's research hypotheses were examined using Analysis of Variance

(ANOVA) and Pearson Product Moment Correlation statistics.

Hypothesis 1: There are no significant variance in house typologies in the study area.

**Table 7.** ANOVA showing variation in housing typologies in the study area.

| Source         | SS       | Df   | MS     | F       | Sig. |
|----------------|----------|------|--------|---------|------|
| Between Groups | 128.083  | 2    | 64.041 | 13.069* | .000 |
| Within Groups  | 6409.354 | 1308 | 4.900  |         |      |
| Total          | 6537.437 | 1310 |        |         |      |

p<0.05.

At the 0.05 level of significance, Table 7 demonstrates that there is substantial variety in house typologies in the research region ( $F_{6,1308} = 13.069$ ,  $p < 0.05$ ). The null hypothesis is shown to be false. This indicates that the house typologies in

the research region vary significantly. Scheffe Posthoc was used to discover the origins of substantial variance in house typologies among the zones in the research region. The outcome is shown in Table 8.

**Table 8.** Scheffe posthoc analysis showing variation in housing typologies in the study area.

| Zones        | Urban core | Transitional | Peri- phery | N   | Mean |
|--------------|------------|--------------|-------------|-----|------|
| Urban core   |            | *            | *           | 295 | 7.38 |
| Transitional |            |              | *           | 692 | 6.86 |
| Peri- phery  |            |              |             | 324 | 6.48 |

\*p<0.05.

At the 0.05 level of significance, Table 8 shows that there is a substantial difference between dwelling typologies in the urban core and transitional, urban core and peri-phery,

transitional and peri-phery.

Hypothesis 2: There is no significant difference in the status of housing units in the study area.

**Table 9.** ANOVA showing status of housing units in the study area.

| Source         | SS        | Df   | MS       | F       | Sig. |
|----------------|-----------|------|----------|---------|------|
| Between Groups | 2309.506  | 2    | 1154.753 | 20.336* | .000 |
| Within Groups  | 74274.766 | 1308 | 56.785   |         |      |
| Total          | 76584.272 | 1310 |          |         |      |

\*p<0.05.

Table 9 demonstrates that at the 0.05 level of significance,

there is a significant difference in the state of housing units in

the research region ( $F_{6,1308} = 20.336$ ,  $p < 0.05$ ). The null hypothesis is shown to be false. This indicates that the state of dwelling units in the studied region varies significantly.

Scheffé Posthoc was used to find the origins of substantial differences in dwelling unit status among the zones in the research region. Table 10 shows the final outcome.

**Table 10.** Scheffe posthoc analysis showing status of housing units in the study area.

| Zones        | Urban core | Transitional | Peri- phery | N   | Mean  |
|--------------|------------|--------------|-------------|-----|-------|
| Urban core   |            | *            |             | 295 | 96.29 |
| Transitional |            |              | *           | 692 | 93.07 |
| Peri- phery  |            |              |             | 324 | 94.85 |

\* $p < 0.05$ .

At the 0.05 level of significance, Table 10 shows that there is a substantial difference in the status of urban core and transitional housing units. Similarly, at the 95% confidence level, the mean difference in the status of transitional housing units varies considerably from phery-phery.

## 7. Conclusion and Recommendations

The research found out that in Ado-Ekiti, there are four different typologies of buildings: single family flats, semi-detached houses, apartment buildings, and storey buildings. In addition, the number of homes with multiple bedrooms is decreasing, while the number of houses with two or four bedrooms is increasing. The research found that as Ado Ekiti becomes increasingly urbanized, architectural typologies are changing and shifting from zone to zone, with more face-me-face-you structures in the urban core and semi-detached bungalows and storey buildings in the transitional and periphery. Building status shifted from urban core to transitional to peripheral, all for the better. The study concluded that as the city is increasingly urbanized the general status of houses is improving from urban core to the peri-phery.

The following are the recommendations:

- 1) There should be an Urban Renewal Program since there are so many old structures in the study area's urban core.
- 2) Government Development Agencies and Parastatals must find a means to encourage owners of decaying old buildings to sell them outright, lease them, or form a partnership to renovate, remodel, or demolish and rebuild them.
- 3) Government, non-governmental organizations, professional bodies, and other relevant stakeholders should conduct advocacy and education programs on the need of instilling a culture of housing upkeep among homeowners.
- 4) The concept of change of use should be encouraged.

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