APPRAISAL OF CONDITIONAL ATTRIBUTES OF RESIDENTIAL BUILDINGS IN AKURE, NIGERIA

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ABSTRACT
The situation of residential buildings in urban areas must be assessed to ascertain their form and age, functions, convenience, and liveability. As a result, this paper evaluates selected aspects of the condition of residential buildings in Akure, Nigeria. The study’s objectives include examining the types of housing units, plot coverage, the number of rooms, and building setbacks. Other factors include housing tenure, the condition of the in-house tap, the type of toilet facilities, and the age of the buildings. The study drew on both primary and secondary data sources. A total of 1,369 people were polled, with 684, 480, and 205 representing the core, transition, and peripheral zones. According to the findings, tenement buildings accounted for 62.3 percent of Akure's residential buildings. In the city core, 88.6 percent of the respondents developed their lands above 50 percent, while 20.0 percent developed their lands above 50 percent on the outskirts. The paper suggests that the relevant stakeholders should enforce the subsisting building regulations, introduce environmental inspectors and mobile courts, and the Ondo State government should invest in urban infrastructure.

Keywords: Condition, Enforcement, Facility, Regulations, Residential buildings

INTRODUCTION
Housing could be viewed as a permanent structure for human habitation. It is also known as a house, a home, building, or structure that serves as a dwelling or place of residence (Listokin & Burchill, 2007). However, Omole (2002) asserted that housing conditions could be explained as the totality of a particular dwelling unit's "state" of physical, environmental, and satisfaction level as measured against some livability variables at a given time. Among these factors are the age and type of building, as well as the material used in construction, the variety and the adequacy of in-house facilities provided. Housing is a significant social component that is embedded in society (Ruonavaara, 2018; Hansson & Lundgren, 2019), and it is vital to humanity (United Nations Habitat, 2011; Herbert, 2018; Ebekozien et al., 2019a, 2019b).

Many Nigerian cities have high residential density, congested neighborhoods, insufficient open space between houses, poor health, substandard housing units, and acute environmental and sanitary problems. As a result, a lack of affordable and decent housing for the urban poor is a major housing issue in Nigeria (Wahab, 1990). Nonetheless, adequate housing or well-designed residential buildings in a planned environment with basic livability facilities are required for people to live well. As a result, assessing the condition of residential buildings in urban areas becomes critical to determine their form and age, functions, convenience, and livability (Gabriel, 2017). Residential density zones used to be fairly distinct, especially after independence, this was due to the establishment of density-based Government Reserve Areas (GRAs) and Housing Estates (HEs). Nigeria, with a population of nearly 200 million people, now has a plethora of cities characterized by leap-frog residential development in the absence of clear-cut density divisions. This trend is caused in part by a failure of planning regulations (Fasakin et al., 2019).

According to the physical observation of this study, some residential buildings in Akure city are in a state of housing decay. However, this deterioration is prevalent at the core as well as in pockets at the transitional and peripheral zones. There were also unplanned housing units, excessive development of building plots, overcrowding, incipient slums, and evidence of open defecation in the areas. Furthermore, there was a lack of adequate government policy that could address obvious housing issues (Gabriel, 2017). As a result, the purpose of this study is to assess the types of housing units, plot coverage, number of rooms, and the setback to buildings, housing tenure, and state of in-house tap, type of toilet facilities, age of buildings, and other associative factors affecting liveability in Akure.

This paper, therefore, assesses selected characteristics of the condition of residential buildings in Akure, with a focus on the core, transitional and peripheral zones. The objectives of the research include assessment of the type of housing unit, plot coverage, number of rooms, and the setback to buildings, housing tenure, and state of in-house tap, type of toilet facility, and age of buildings in the study area. This was done to propose measures for improving Akure's housing situation to promote long-term development.

REVIEW OF LITERATURE
Housing is identified as a residential environment that man uses for shelter as well as the surroundings of the structure that are designed for physical and mental well-being (Omole, 2001). A city's physical form, built environment characteristics (including conditional attributes of residential buildings), the extent and pattern of open spaces in addition to its density relationship to destinations and transit corridors, all interact with natural and
other urban characteristics to constrain transportation options, energy use, drainage, and future growth patterns (UN-Habitat, 2016).

The lamentable state of residential buildings in many Nigerian cities is something that deserves careful consideration. Since man's creation, it has been a major concern of mankind to keep the environment suitable for his survival. The capacity of man to sustain the environment determines his ability to live for a longer period on Earth. However, various activities and situations around him, such as increased density in the housing area, inadequate urban monitoring and control policies, a high rate of poverty among urban dwellers, and a lack of political will and commitment of policymakers have all exacerbated and contributed significantly to the series of events that cause discomfort and unpleasant conditions of residential buildings in Akure, Ondo State (Aribigbola, 2005; Owodeye et al., 2012; Alako & Ogunsote, 2013; Alako & Ogunsote, 2013; Gabriel, 2017).

Besides that, many dwelling units in Akure's core area were in very poor condition, with less than 5% of them in sound condition (Olotuah, 2006), and Amao (2012) mentioned that these buildings require one type of repair or the other to make them structurally sound and aesthetically pleasing. According to Anthony et al. (2015), an urban setting’s ability to meet the needs of its inhabitants is largely determined by the availability, adequacy, and effectiveness of physical infrastructure, including the state of its housing. Some of these housing concerns in Nigeria were noted by Aduwo, Edewor and Iben (2016); Fakare and Ayoola (2018); Ebekozien et al. (2019b); and Ezennia and Hoskara (2019).

However, a few other developing countries such as Ghana, Kenya, and Malawi, have already seen significant increases in urban growth, which is putting a strain on accommodation and, as a result, reflects on living conditions in these countries' urban centers (Wapwera et al., 2016). According to Laimdota et al. (2017), many Latvians live in standard high-rise apartment complexes built between 1950 and 1992; however, these buildings are now obsolete; additionally, the durability and reliability levels of those edifices were anticipated to be grossly inadequate during the construction process. Given the existence of the European Union (EU) and government support, as well as co-financing of building renovation projects, homeowners of standard multi-buildings in Riga do not encourage building renovation but are extremely passive (Laimdota, Ineta & Iveta, 2017). To the best of this paper's knowledge, pieces of evidence show that some authors who already have worked in this direction focused on uncontrollable growth in the residential environment, unsatisfactory environmental governance, and housing control policies, but much has not been done concerning conditional attributes of residential buildings in Akure and by extension other Nigerian cities. Even so, millions of city dwellers find it difficult to access quality housing as well as basic services and amenities (Akinbamiju, 2004). Besides this, previous studies (Fadojo, 2013; Adeoye, 2016; Fakere et al., 2017; Fakere & Ayoola, 2018; Adegun & Olusoga, 2019) dealt with issues such as self-help housing; socioeconomic characteristics, and provision of infrastructure; house design and contentment; and housing for the urban poor. Consequently, all of the preceding studies as well as many others influenced the choice of this study.

MATERIAL AND METHODS

Research locale

The area of study is Akure, a Nigerian city that like other traditional Yoruba towns in the country predates British colonial rule, modern planning standards, and practices. The City is located in Ondo State, one of Nigeria's 36 states, in the southwest part of the country. It is located at an altitude of 370 meters above sea level between latitudes 7°05' and 8°00' North of the Equator and longitudes 5°45' and 6°00' East of the Greenwich Meridian. Akure is a medium-size city that served as the provincial capital of old Ondo province in 1939, and in 1979, it was also designated as the capital city of Ondo State and a Local Government Headquarters. These dual political roles of Akure have since acted as an incentive and pull factor to the influx of people into the City (Olujimi & Olamiju, 2011; Gabriel & Fasakin, 2017; Gabriel, 2017).

Akure is about 700 kilometres South-West of Abuja, Nigeria's Federal Capital, and about 350 kilometres from Lagos, the country's former capital. It is situated in Nigeria's tropical rainforest region, where rainfall is abundant throughout the year (Nigerian Meteorological Agency-NIMET, 2013). Bello and Nwosu (2011) reported that since 1976, Akure's increased relative power and influence as the state capital has greatly aided its explosive growth and socioeconomic activities, resulting in its spatial expansion from about 16 square kilometres in 1980 to about 30 square kilometres in 2000. However, according to the 1991 National Population Census (NPC), Akure had a population of 239,124 in 1991, and 353,211 in 2006. (NPC, 2006).

Using a growth rate of 3.18 percent to project the population for 2020, the City was estimated to have 547,484 people using the formula for projection thus:

\[ P_t = P_0 \left(1 + \frac{r}{100}\right)^t \]

The formula for projection thus;
METHODS

The primary data for this study were gathered through the distribution of a structured questionnaire. The questionnaire was designed for household heads or any adults residing in buildings in the study area. This paper looked into, among other things, the types of housing units, plot coverage, the number of rooms, the setback to buildings, housing tenure, the condition of the in-house tap, the type of toilet facility, and the age of the buildings. The secondary data were collected from the Ministry of Lands and Housing, Ondo State Development and Property Corporation, Physical Planning Department, and Survey Department in the Ministry of Works Akure, Ondo State, and property maps from the National Population Commission.

According to the 2006 population census, Akure had a population of 353,211 people (NPC, 2006). The population was estimated to be 547,484 people in 2020, based on a 3.18 percent annual growth rate officially determined by the National Population Commission. The total number of buildings in Akure was calculated using the following formula, where ppf is persons per family and hpb is households per building (Gabriel, 2017), that is:

Current population figure \( \times 7 \) ppf x \( 4 \) hpb = 19,553 buildings

A sample size of 7% was used for the questionnaire data collection yielding 1,369 responses. This proportion was reasonable given the homogeneity of the study area, which included the form and age of buildings, physical conditions of housing units, and the condition of neighbourhood infrastructure as well as the respondents' profile. Using a random number table, 24 Enumeration Areas (EAs) were chosen from the NPC's 2006 EAs in the following ratios: 50:35:15 for the core, transition, and peripheral zones respectively (Rotowa, 2014; Gabriel, 2017). Twelve (12) EAs were sampled for the core, nine (9) for the transition zone, and three (3) for the peripheral zone. The sample size of 1,369 people was divided into 684, 480, and 205 respondents for the core, transition, and peripheral zones correspondingly. A total of 955 questionnaires were retrieved and analysed accounting for 70.00 percent of the total of 1,326 administered. When previous studies that used EAs were taken into account, the selection of twenty-four (24) EAs was reasonable. For example, the Federal Ministry of Health (FMH) employed two EAs per Local Government, and the Nigeria National Population Commission (NNPC) employed...
two EAs for the 2008 National Demographic and Health Survey (ND&HS). To administer the questionnaire, twenty-four field assistants (one for each EA) were used for three months. Tables were used to present, interpret and discuss research findings through SPSS version 25 and Microsoft Excel 2013 (Gabriel & Fasakin, 2017; Gabriel, 2020).

RESULTS AND DISCUSSION
Introduction
This section examines the condition of residential buildings in the study area. Therefore, Tables 1 to 10 present the descriptive analysis of the condition of residential buildings in Akure metropolis, Nigeria. The results are shown in the following tables and discussed as presented.

Table 1: Types of Housing Unit

| Housing Unit Type     | Core                  | Transition | Periphery | Total  |
|-----------------------|-----------------------|------------|-----------|--------|
|                       | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| Tenement (Face-to-face) | 405   | 85.8       | 164   | 48.1       | 20    | 14.2       | 589   | 61.7       |
| 1 - bedrooms flat     | 0     | 0          | 21    | 6.2        | 5     | 3.3        | 26    | 2.7        |
| 2 - bedrooms flat     | 11    | 2.4        | 40    | 11.8       | 38    | 26.7       | 89    | 9.3        |
| 3 - bedrooms flat     | 21    | 4.5        | 85    | 24.9       | 53    | 36.7       | 159   | 16.7       |
| 4 - bedrooms flat     | 35    | 7.3        | 23    | 6.9        | 13    | 9.2        | 71    | 7.4        |
| Duplex                | 0     | 0          | 7     | 2.1        | 14    | 10.0       | 21    | 2.2        |
| Total                 | 472   | 100.0      | 340   | 100.0      | 143   | 100.0      | 955   | 100.0      |

Source: Fieldwork, 2020

Plot coverage
Table 2 shows that in Akure urban core, 88.6 percent of respondents developed their lands above 50 percent, followed by 9.7 percent that built up their lands between 26 and 50 percent, and only 1.7 percent used up their lands between 0 and 25 percent. Similarly, above 50 percent plot coverage had 68.9 percent; 26-50 percent plot coverage had 26.3 percent; and 0-25 percent plot coverage had 4.8 percent in the transition zone. The inverse of the core was reflected at the periphery, with 43.3 percent for 0-25 percent plot coverage, 36.7 percent for 26-50 percent plot coverage, and 20.0 percent for plot coverage above 50 percent. According to Section 31 of the Plot Area, Coverage, and Setbacks, Table C (Regulation 28) of the Ondo State Building and Subdivision Regulations (1984), the minimum plot coverage for regulated densities should be as follows: Low density (35%), Medium density (40%), and High density (50%).

Furthermore, the research findings show that more than 88.6 percent of the housing developments in the city's core were built above the required standard. As a result, the buildings' crowding index is extremely high. Consequently, with 20 percent of the buildings covering more than 50 percent of the maximum permissible plot coverage at the periphery, the possibility of slum dwellers developing properties at the periphery would soon become a reality.

Table 2: Plot Coverage

| Plot Coverage | Core                  | Transition | Periphery | Total  |
|---------------|-----------------------|------------|-----------|--------|
|               | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| 0 – 25%       | 8     | 1.7        | 16    | 4.8        | 61    | 43.3       | 85    | 8.8        |
| 26 – 50%      | 46    | 9.7        | 90    | 26.3       | 53    | 36.7       | 189   | 19.4       |
| Above 50%     | 418   | 88.6       | 234   | 68.9       | 29    | 20.0       | 681   | 71.8       |
| Total         | 472   | 100.0      | 340   | 100.0      | 143   | 100.0      | 955   | 100.0      |

Source: Author’s Fieldwork, 2020

Number of rooms
The study looked at the number of rooms in residential properties in the three residential zones of Akure. Seven (7) or more (number of rooms per residential building) were found to be 70.4 percent at the core and 67.1 percent at the transition. While on the outskirts, it was discovered that residential buildings had fewer rooms, with 3-4 rooms per building having the highest percentage in the zone at 40.8 percent. When this result is compared to the findings of Aribigbola (2005), which showed that the majority of householders...
in the study area preferred flat apartments and household size of six, it could be deduced that people in the study area's current housing is insufficient to meet their needs. According to Aduwo et al. (2016), Ezennia and Hoskara (2019), and Ebekozien et al., (2019b), this is the trend in Nigerian cities. According to Aduwo et al. (2016), increasing urbanization is to blame for the housing challenges faced by the urban low-income group in Nigerian cities. One of the consequences is the spread of urban slums and poverty which may exacerbate social vices. According to Ezennia and Hoskara (2019), low-income residents in Abuja have no choice but to live in slum areas due to a lack of access to habitable and affordable housing.

Table 3: Number of Rooms

| Number of Rooms | Core | Transition | Periphery | Total |
|-----------------|------|------------|-----------|-------|
|                 | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| 1 – 2           | 12    | 2.6        | 25    | 7.3        | 32    | 22.5        | 68    | 7.1         |
| 3 – 4           | 41    | 8.5        | 29    | 8.7        | 58    | 40.8        | 126   | 13.2        |
| 5 – 6           | 87    | 18.5       | 58    | 17.0       | 15    | 10.0        | 160   | 16.7        |
| 7 and above     | 332   | 70.4       | 228   | 67.1       | 38    | 26.7        | 601   | 62.9        |
| Total           | 472   | 100.0      | 340   | 100.0      | 143   | 100.0       | 955   | 100.0       |

Source: Author’s Fieldwork, 2020

Setback to buildings

Table 4 shows the results of residential building setbacks in the study area. The buildings on the outskirts had better setbacks. Around 80.0 percent had a setback of more than 15 meters from the access roads, while 16.7 percent had a setback of 11-15 meters. At the transition, 29.4 percent of the buildings were recessed, while 11.1 percent were 11-15 meters backward. As investigated, the core area of Akure had 7.1 percent and 68.5 percent for less than 5 metres and 6-10 metres separately. Section 31 of the Plot Area, Coverage, and Setbacks, Table C (Regulation 28) of the Ondo State Building and Subdivision Regulations (1984) states that the minimum setback from the property line is 7.5 metres for low density, 6.0 metres for medium density, and 4.5 metres for high density. As a result, approximately 7.1 percent of individual homes in the core did not meet the required minimum setback. At the transition, however, approximately 87.5 percent of the residential buildings met the required minimum threshold setback for this zone. This suggests that flooding, plumbing, and various types of vehicular accidents, refuse collection, and management issues may exist at the core.

Table 4: Setback to Buildings

| Setback to Buildings | Core | Transition | Periphery | Total |
|----------------------|------|------------|-----------|-------|
|                      | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| Less than 5 metres   | 34    | 7.1        | 43    | 12.5       | 5     | 3.3         | 80    | 8.4         |
| 6 - 10 metres        | 323   | 68.5       | 160   | 47.1       | 0     | 0           | 488   | 51.1        |
| 11 - 15 metres       | 28    | 5.9        | 37    | 11.1       | 24    | 16.7        | 89    | 9.3         |
| Above 15 metres      | 87    | 18.5       | 100   | 29.4       | 114   | 80.0        | 298   | 31.2        |
| Total                | 472   | 100.0      | 340   | 100.0      | 143   | 100.0       | 955   | 100.0       |

Source: Author’s Fieldwork, 2020

Housing tenure

According to the results of the analysis, 60.9 percent of the population lived in rented apartments, 27.3 percent were owner-occupiers, and 11.8 percent lived in free (family) housing, as shown in Table 5. At the core of the study area, 61.1 percent of respondents lived in rented apartments, 22.7 percent were owner-occupiers, and 16.1 percent were in free (family) housing. The transition zone shared characteristics with the study area's core, with 63.7 percent rental, 26.0 percent owner-occupier, and 10.4 percent free (family) housing. While the outcomes at the periphery revealed the highest proportion of owner-occupiers at 46.7 percent. This is due to a variety of factors including more lands available for expansion on the outskirts, reasonably priced lands that are adequately accessible, and issues where some people were evicted from their rented houses due to circumstances beyond their control. According to available statistics documented in the National Housing Policy (1991), rental accommodation is the most prevalent form of tenure in many Nigerian cities, accounting for more than 90% of the country's housing supply.

Table 5: Housing Tenure

| Housing Tenure | Core | Transition | Periphery | Total |
|----------------|------|------------|-----------|-------|
|                | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| Owner occupier | 108   | 22.7       | 88    | 26.0       | 67    | 46.7        | 261   | 27.3        |
| Rental         | 288   | 61.1       | 217   | 63.7       | 76    | 53.3        | 582   | 60.9        |
Free (family) housing | 76 | 16.1 | 35 | 10.4 | 0 | 0 | 112 | 11.8
Total | 472 | 100.0 | 340 | 100.0 | 143 | 100.0 | 955 | 100.0

Source: Author’s Fieldwork, 2020

Condition of bathroom
The results presented in Table 6 show the state of bathrooms in buildings across Akure's three residential zones. The proportion of bathrooms in poor condition was 17.5 percent at the core and 8.0 percent at the transition, and 0.0 percent reported at the periphery. While those in good shape made up 25.6 percent of the core, 48.8 percent of the transition, and 96.7 percent of the periphery. The proportion of those in fair condition, on the other hand, was 56.9 percent at the core, 43.3 percent at the transition, and 3.3 percent at the periphery.

Table 6: Condition of Bathroom

| Condition of Bathroom | Core | Percentage (%) | Transition | Percentage (%) | Periphery | Percentage (%) | Total | Percentage (%) |
|-----------------------|------|----------------|------------|----------------|-----------|----------------|-------|----------------|
| Good                  | 121  | 25.6           | 166        | 48.8           | 138       | 96.7           | 419   | 43.9           |
| Fair                  | 269  | 56.9           | 147        | 43.3           | 5         | 3.3            | 424   | 44.4           |
| Bad                   | 83   | 17.5           | 27         | 8.0            | 0         | 0              | 112   | 11.7           |
| Total                 | 472  | 100.0          | 340        | 100.0          | 143       | 100.0          | 955   | 100.0          |

Source: Author’s Fieldwork, 2020

Condition of the water closet
Table 7 describes Water Closet (W.C.) in the research area. Spatially, the percentage of W.Cs. found to be in good condition at the core was 20.4 percent, 42.9 percent at the transition, and 87.5 percent at the periphery. The condition of W.C found to be fair in the study area, on the other hand, was 29.9 percent at the core, transition 37.7 percent, and 1.7 percent at the periphery. In addition, as shown in Table 7, some buildings lacked restrooms. Buildings without W.C. were found in 37.2 percent of the study area's core, 12.1 percent in the transition, and 10.8 percent on the periphery.

Table 7: Condition of Water Closet (W.C.)

| Condition of W.C | Core | Percentage (%) | Transition | Percentage (%) | Periphery | Percentage (%) | Total | Percentage (%) |
|------------------|------|----------------|------------|----------------|-----------|----------------|-------|----------------|
| Good             | 96   | 20.4           | 146        | 42.9           | 125       | 87.5           | 362   | 37.9           |
| Fair             | 141  | 29.9           | 128        | 37.7           | 2         | 1.7            | 272   | 28.5           |
| Bad              | 60   | 12.6           | 25         | 7.3            | 0         | 0              | 85    | 8.9            |
| No W.C           | 175  | 37.2           | 41         | 12.1           | 16        | 10.8           | 236   | 24.7           |
| Total            | 472  | 100.0          | 340        | 100.0          | 143       | 100.0          | 955   | 100.0          |

Source: Author’s Fieldwork, 2020

Condition of in-house water tap
Table 8 depicts the condition of the in-house water tap across the separate housing densities in the study area. According to the table, 29.7 percent of the households investigated did not have an in-house water tap but at the periphery, 93.3 percent had in-house water taps that were in good working order. The study, however, revealed that the in-house taps in the zones were installed by individuals without the assistance of the government. The residents in this area had everything they needed to keep their in-home faucet in good working order. The transition zone's in-house water taps revealed that 39.8 percent were in good condition, 31.5 percent were fair, 8.3 percent were bad, and 20.4 percent did not have an in-house water tap. That being said, in Akure's central business district, 44.5 percent of the buildings examined had no in-house tap and 19.9 percent were in poor condition. As a result, the 44.5 percent at the core without an in-house tap could be attributed to apartment complexes whose wells were not linked to a personal pumping machine and water tank to initiate and improve water supply to the buildings.
Some of the inadequate road setbacks. It was discovered that inadequate housing inhabitants live in tenement shelters, in overcrowding, Nigeria condition. The findings of this study revealed disparities in housing

CONCLUSION AND POLICY GUIDELINES
The findings of this study revealed disparities in housing conditions in the three residential zones of Akure metropolis, Nigeria. The research results found that more than half of the inhabitants live in tenement shelters, in overcrowding, inadequate housing, and inadequate road setbacks. It was discovered that 60.9 percent of the residents live in rented apartments, approximately 24.7 percent of buildings had no

Table 8: Condition of In-house Water Tap

| Condition of In-house Tap | Core | Transition | Periphery | Total |
|---------------------------|------|------------|-----------|-------|
|                           | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| Good                      | 69    | 14.7       | 135   | 40         | 133   | 93.3        | 332   | 34.8        |
| Fair                      | 99    | 20.9       | 107   | 32         | 10    | 6.7         | 215   | 22.5        |
| Bad                       | 94    | 19.9       | 28    | 8          | 0     | 0.0         | 124   | 13.0        |
| No in-house tap           | 210   | 44.5       | 70    | 20         | 0     | 0.0         | 284   | 29.7        |
| Total                     | 472   | 100.0      | 340   | 100.0      | 143   | 100.0       | 955   | 100.0       |

Table 9: Type of Toilet Facility

| Type of Toilet Facility | Core | Transition | Periphery | Total |
|-------------------------|------|------------|-----------|-------|
| W.C                     | 296  | 62.8       | 299       | 87.9  | 128   | 89.2       | 719   | 75.3        |
| Pit latrine             | 169  | 35.8       | 38        | 11.1  | 12    | 8.3        | 222   | 23.2        |
| Open space              | 7    | 1.4        | 3         | 1.0   | 3     | 2.5        | 14    | 1.4         |
| Total                   | 472  | 100.0      | 340       | 100.0 | 143   | 100.0      | 955   | 100.0       |

Table 10: Age of Building

| Age of Building | Core | Transition | Periphery | Total |
|-----------------|------|------------|-----------|-------|
|                 | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) | Freq. | Percent (%) |
| Less than 10 years | 47    | 10.0       | 61    | 18.0       | 76    | 53.3        | 181   | 19.0        |
| 11 - 20 years    | 22    | 4.7        | 126   | 37.0       | 67    | 46.7        | 210   | 22.0        |
| 21 - 30 years    | 78    | 16.4       | 41    | 12.1       | 0     | 0.0         | 119   | 12.5        |
| 31 - 40 years    | 88    | 18.7       | 91    | 26.6       | 0     | 0.0         | 180   | 18.8        |
| 41 years and above | 237   | 50.2       | 21    | 6.2        | 0     | 0.0         | 265   | 27.7        |
| Total            | 472   | 100.0      | 340   | 100.0      | 143   | 100.0       | 955   | 100.0       |

Table 10: Age of Building

Type of toilet facility
In terms of the type of toilet facility available in the study area, 75.3 percent of the respondents used W.C., 23.2 percent used pit latrine (cesspool), and 1.4 percent accounted for open defecation. According to the findings of this study, there were buildings without toilet facilities from the core to the periphery. A large percentage of the houses are of the tenement type, built for rental purposes, and some were built without plan approvals because the provision of toilets was deemed less important. Exposed human excreta are common sight at the periphery with open defecation at 2.5 percent and pit latrine toilet facilities at 8.3 percent. Both the pit-latrine system and open-space defecation, however, are unsanitary.

More notably, open excretion in any portion of the city may cause environmental issues. It was also discovered that in some of the monitored residences the pit latrine system renders the shelters stuffy, and rain possibly washes faecal matter (excreta) on waterways back into the artisan wells, making the water unsafe for consumption. This finding is in agreement with the predictions of Olotuah (2006), Aribigbola (2010), and Rotowa (2014), who separately found that 45.0 percent, 41.3 percent, and 45.3 percent of Akure's toilet facilities were pit latrines. However, the results of this study suggest that the number of residential buildings using water closets is increasing.

The issue extends beyond the residents to the government and decision-makers. The findings indicate that there is a significant gap between planning and the reality on the ground, in other
words, no satisfactory policing and adherence to building regulations. However, a significant proportion of the residents’ living conditions was indeed deplorable.

Following the findings of this study, some measures were proposed as a means of addressing the deplorable housing conditions in the study area: The government of Ondo State should make a concerted effort to reinvigorate the study area to enhance the residents’ quality of life. Furthermore, development control modalities such as setbacks and building land coverage should be strictly enforced. To reduce cases of water insecurity and paucity, adequate and high-quality potable water should be made available through the construction of boreholes and public taps. In addition, the monthly environmental sanitation program should be intensified by introducing environmental inspectors and mobile courts as viable implementation strategies to ensure a clean environment and better housing conditions. The government of Ondo State should make investments in urban infrastructure.

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