

Peri-Urban Housing and Environmental Quality Problems in Choba Town, Rivers State, Nigeria

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ABSTRACT

This study seeks to examine peri-urban housing and environmental quality problems in Choba town, Rivers State, Nigeria. The objectives among others were to examine the condition of houses in the study area, investigate residents' satisfaction to housing quality, highlight the factors that influence choice of housing in the study area and appraise the affordability or otherwise of housing in the study area. To achieve this, the study generated data from field survey questionnaire using interviews and direct observation. The data generated were analyzed using a combination of descriptive and inferential statistics. From the findings, it was observed that many buildings in the study area are inadequate qualitatively and are located in unsanitary environment. The result of the survey further showed that most residents are dissatisfied with the condition of their present accommodation owing to the quality of the house and neighborhood environmental condition. Further evidence from the study revealed that majority of respondents spend large share of their income on housing thereby diverting funds for other necessities of life. Based on these findings, the study recommends that government should provide safe, adequate and affordable housing for her citizens in line with the provisions of 2012 National Housing Policy, the Nigerian government at all levels should incorporate social housing into government housing development policy to address the problem of housing affordability particularly for the low-income earners and entrepreneurs wishing to go in to the production of building material should be encouraged through tax relief and incentives

KEYWORDS: *Housing, Environment, Quality, Residents, Urban Fringes, Occupancy, Nigeria*

INTRODUCTION.

Housing stand as something that shelters, protects, or supports another thing. It could also be buildings or structures that individuals and their family may live in that meet certain federal regulations. Different housing situations vary for individuals and may depend on age, family, or geographical location (Oche *et al.*, 2015). Housing quality refers to structural attributes and facilities provided for the inhabitants of a building to live a decent life. The structural attributes of housing refer to materials used to build houses such as mud, thatch, sharp sand, corrugated iron sheets, wood, while the internal facilities include pipe water, access to toilets and electrical appliances (Adetunji and Isah, 2015; Bradley and Putnick, 2012). Housing therefore, is the process of providing a large number of residential buildings with adequate physical infrastructure and social amenities (services) in planned, decent, safe and hygienic neighborhoods to meet the basic and special needs of the population (FMNWH, 2002; Kuroshi and Bala, 2005). Housing conditions play a major role in the health status of the individual and

a wide variety of housing features have been reported to influence the physical, social, economic and the mental well-being of peri-urban occupants (Turunem *et al.*, 2010).

Internationally, housing units predominantly in peri-urban areas are known to be insufficient, lacking in basic facilities and mostly found to be sited in unsuitable locations (Mbazor, 2018; Bramley *et al.*, 2010). The areas are congested and categorized by poor infrastructural amenities, poor building quality and inadequate environmental facilities (Addo, 2013). In spite of this unbearable situation, housing remains an essential rudimentary want in every society and serves as the basis of household resources for low-income households. Peri-urban housing is becoming very essential in contemporary times largely due to the rush in demand for ownership, hence serving as a means of protection against inflation and also as a form of savings (Wizor, 2014; Di, 2001).

Peri-urban housing encompasses not only the main building, but also environmental amenities such as water supply, waste disposal, sub-urban neighborhood roads and housing facilities like nature of bathroom, kitchen and toilet. Housing can therefore, be seen as a complex multi-dimensional unit comprising package of goods and services to provide satisfaction for human beings (Olatubara, 2008). Besides the above stated attributes of peri-urban housing, its other features include the fact that it is fixed in geographical space, a form of wealth and from the geographic point of view, it is a point of interaction between the user and every other aspect of the peri-urban landscape and its role in urban economics as a source of revenue generation. This multi-faceted nature of housing confers a multi-disciplinary approach to its study (Olutoyin, 2018).

Olotua (2016) postulate that housing is the totality of residential neighborhood/environment or micro district including the physical structure, all necessary services, facilities, utilities and apparatus for the total health and social well-being of the individual and family within the neighborhood. It is seen as the physical environment in which the family and society's basic units must develop. Housing structures are enclosures in which people are housed for lodging, living accommodation or even work places (Mbazor, 2018). The manifestations or indicators of environmental poverty includes but not limited to housing congestion, traffic congestion, poor drainage and sewage system, indiscriminate discharge of liquid and solid waste, environmental pollution, inadequate social facilities and over-utilization of existing infrastructural facilities (Femi, 2019).

Cheserek and Opata (2011) studied environmental and housing problems of low-income households in Eldoret Municipality, Kenya and opined that rapid growth in cities has been accompanied by a rapid growth in the number of urban inhabitants who live in sub-standard and overcrowded conditions. They concluded that demand for residential housing has grown faster than the supply leading to increased prices of land and house-rent and to over-crowded housing. Housing quality according to Dorcas (2016) is a mental or moral attribute of things which can be used when describing the nature, condition or property of that particular thing. Quality is a product of subjective judgment which arises from the overall perception which individual holds towards what is seen as the significant elements at a particular point in time as observed by (Dorcas, 2016; Olayiwola *et al.*, 2006).

In spite of all these studies, there is still a gap in certain aspects of peri-urban housing studies particularly in the aspect of how individuals assess peri-urban housing and environmental quality problems. It is in view of this that this study seeks to examine peri-urban housing and environmental quality problems in Choba town, Nigeria.

MATERIALS AND METHODS

This study population consists of all residents in Choba town. It consists of both indigenes and non-indigenes that live in Choba town. In terms of population strength, Choba population was estimated to be about 24105 using 3.5% annual growth rate. The study area was divided into four homogenous zones based on the existing kindreds. The zones are: Rumuchakara, Rumuokocha, Owhipa and Ndudor. A total of 400 respondents were sampled. This constitutes the sample size. This number (sample size) was arrived at using Taro Yamane (1967) formula. The calculation was as follow:

$$n = \frac{N}{1+N(e)^2}$$

Where n = sample size

N = population size

e = level of precision

1= theoretical constant

$$\text{Therefore} = \frac{24105 \text{ (population estimates for 2019)}}{1 + 24105 (0.05)^2}$$

$$= 24105$$

$$1+24105 (0.0025)$$

$$= \frac{24105}{60.265}$$

$$= 399.93$$

$$n= 400$$

To ensure that each of the zone contribute to the sample in proportion to her population strength, stratified random sampling technique was adopted. Both primary and secondary data were utilized in this study. Reconnaissance survey of Choba town was undertaken by the researchers before the commencement of data collection. This became necessary to allow the researchers get acquainted with the study area particularly peri-urban housing and environmental quality problems. The research instrument used in this study is a semi-structured questionnaire administered to sampled respondents in the study area. Out of 400 questionnaires administered, only 362 questionnaires were retrieved from the respondents.

A combination of descriptive and inferential statistics was employed to analyze the assembled data. For the descriptive aspect of the analysis, frequency distributions were generated. Mean and sample percentages were also employed.

Study Area

From geographical position, Choba town is located between longitude 60°54'20'' east and latitude 40°53'15'' north of the equator. This peri-urban town is one of the host communities of the unique University of Port Harcourt. The oldest campus of the University; Choba Park derives its name from the town. Choba town is situated in Obio/Akpor Local Government Area

of Rivers State. It is located at the peri-urban area of Port Harcourt, 20kms northwest of the garden city of Nigeria. It is about half an hour's drive from the metropolitan city of Port Harcourt. It lies strategically along the popular east- west road at the intersection with NTA Mgbuoba road. It shares land border with Alakahia in the east; Rumualogu in the south; all in Obio/Akpor Local Government Area. In the north, it shares land border with Aluu, a peri-urban town in Ikwerre Local Government Area of Rivers state. It shares river border with Emohua, in Emohua Local Government Area of Rivers state.

Choba town is drained by a river known as "New Calaber River". The town enjoy tropical hot monsoon climate as a result of her latitudinal position. The daily tropical monsoon climate is characterized by heavy rainfall and high temperature all year round (Mmom, 2003). The town experiences lengthy and heavy rainfall season and very short dry season. Rainfall in Choba town is heavy and more persistent as a result of the strong influence of the southwest trade wind. Rainfall is almost predictable and follows sequence of increase towards the month of July-August before decreasing in the month of November - February (Mmom, 2003).

Rainfall is at its peak in July and September with a little dry season occurring in August, although the period of the break has been fluctuating in recent times. Choba town experience a double maximum rainfall which occurs between July and August. Although there might be rain during the months of December, January and February, most of the rains received are unreliable and spotty (Osuiwu and Ologunorisa, 1999). Rainfall in Choba town occurs over a long duration of usually between 2-4 hours and it is high intensity (Osuiwu and Ologunorisa, 1999).

Temperature on the other hand is high and fairly constant throughout the year. February is the warmest of all the months of the year with an average temperature of 32°C at noon, the month of July is the coldest. Like Port Harcourt, mean annual temperature in Choba town is 28°C while the mean daily maximum temperature is about 30°C. The months of February, March and April records the highest mean maximum temperature. The maximum temperature also exhibits the same sequence (Osuiwu and Ologunorisa, 1999). In addition to these, the study area experiences a seasonal variation in relative humidity. This is mainly due to the seasonal variation in the amount of isolation received. Relative humidity is high in Choba town with mean annual figure of about 80%. The rainy season month records the highest value. These months are very cloudy due to the strong presence of the south westerly wind (Osuiwu and Ologunorisa 1999).

This peri-urban town has a humble beginning. Her population according to the 1991 national population census was 10,968 of which 5,869 are male while 5,099 are female (NPC, 1991). In 1996, Choba population was projected to be 12,980. Using an annual growth rate of 3.5% the population of Choba is estimated to be 24105 in 2019.

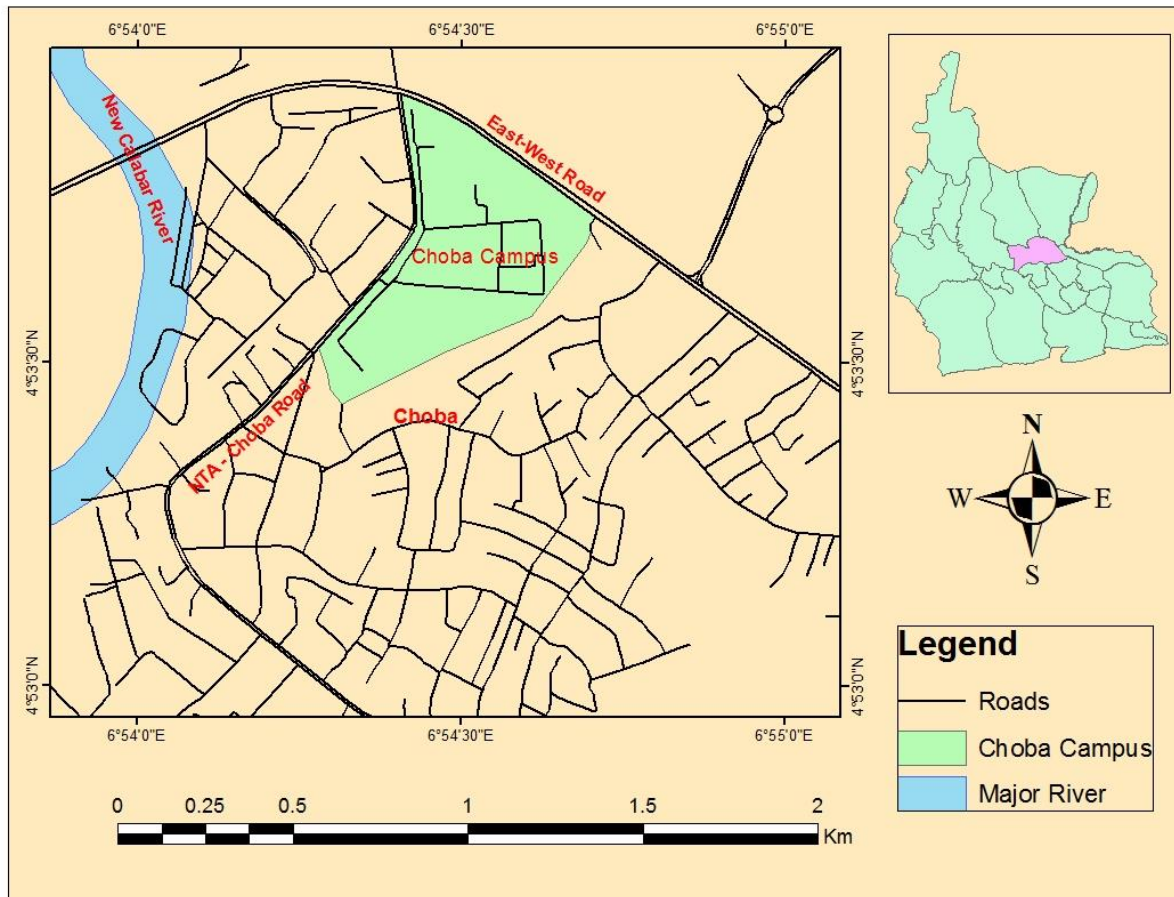


Figure 1 Choba Town

Source: GIS Laboratory Geography and Environmental Management, University of Port Harcourt

RESULTS/DISCUSSIONS

Analysis of Socio-Economic Characteristics of Respondents

Socio-economic characteristics such as sex, age, marital status, education level, occupation, income and household size were sought from respondents. The result is depicted as follows:

Table 1: Sex Distribution of Respondents

Sex	Frequency	Percentage %
Male	241	66.57
Female	121	33.43
Total	362	100

Source: Authors Analysis, 2019

On the sex distribution of respondents, table 1 shows that majority (66.57%) of respondents are male while 33.43% are female.

Table 2: Age Distribution of Respondents

Age bracket	Frequency	Percentage %
16-25 years	57	15.75
26-35 years	81	22.38
36-45 years	114	31.49
46-55 years	73	20.17
56 years and above	37	10.21
Total	362	100

Source: Authors Analysis, 2019

From Table 2 above, those within the age bracket of 46-55 years account for 20.17% while those between 56 years and above account for 10.21%. The implication of this result is that respondents are knowledgeable enough on the subject of investigation, judging by their age and thus will be objective in responding to the question. In other words, the age distribution of respondents show that majority of respondents are adults and thus have adequate knowledge of the problem.

Table 3: Distribution of Respondents According to Marital Status

Marital status	Frequency	Percentage %
Single	112	30.94
Married	227	62.71
Divorced/separated	4	1.10
Widow/widower	19	5.25
Total	362	100

Source: Authors Analysis, 2019

Table 3 shows that majority (62.71%) of respondents are married. This is closely followed by singles (30.94%). The table also shows that 5.25% of respondents are either widows or widower while an insignificant percentage are divorcees.

Education level of sampled respondents as captured by the research instrument is presented in the table below.

Table 4: Distribution of Respondents by Education Level

Educational Level	Frequency	Percentage %
No formal education	6	1.66
Primary school attempted and completed	21	5.80
Secondary school completed	232	64.09
Tertiary school in progress	75	20.72
Tertiary school completed	28	7.73
Total	362	100

Source: Authors Analysis, 2019

Table 4 above clearly reveals that respondents who have completed secondary school accounts for 64.09%. On the other hand, 5.80% of respondents attempted and completed primary school while 1.66% have no formal education. In addition to these, 20.72% of respondents are pursuing their tertiary education while 7.73% of respondents have completed their tertiary education. This indicates that the respondents are well educated and this will translate to their response to the research question.

Table 5: Distribution of Respondents According to Occupation

Occupation	Frequency	Percentage %
Student	88	24.31
Farming/fishing	10	2.76
Civil/public service	61	16.85
Trading/Business	112	30.94
Artisan/self employed	54	14.92
Unemployed	37	10.22
Total	362	100.00

Source: Authors Analysis, 2019

Table 5 shows that 24.31% of respondents are students, 2.76% are farmers or fishermen while 16.85% are civil or public servants. On the other hand, 30.94% of respondents are involved in trading (business), 14.92% are artisans while 10.22% are unemployed. The proportion of students and unemployed gives an insight to the housing problem especially the ability to pay the rent.

Table 6: Monthly Income Profile of Household Heads.

Income (Naira, ₦)	Frequency	Percentage %
Less than 10000	3	0.83
10001-30000	25	6.91
30001-50000	179	49.45
50001-70000	61	16.85
70001-90000	57	15.74
Above 90000	37	10.22
Total	362	100.00

Source: Authors Analysis, 2019

Table 6 shows that 0.83% of respondent's household head earn less than ₦10000 monthly while 6.91% of respondents' household head earn between ₦10001 - ₦30000 monthly. About half (49.45%) of respondents informed that the household head of their household earn between ₦30001-₦50,000 monthly. Those whose household head earn between ₦50001-₦70,000 monthly accounted for 16.85% while those whose head of household earn between ₦70001-90000 accounted for 15.75%. Those that their household head earn above ₦90000 accounted for 10.22%.

This result has an implication on the affordability of monthly rent of housing units occupied and equally the ability to meet other necessities of life.

Table 7: Distribution of Respondents according to Household Size

Household	Frequency	Percentage %
1-3 persons	75	20.72
4-6 persons	148	40.88
7-9 persons	97	26.80
Above 10 persons	42	11.60
Total	362	100.00

Source: Authors Analysis, 2019

Table 7 shows that majority (40.88%) of respondents have between 4-6 persons in their household while 26.80% of respondents have between 7-9 persons in their household. Those whose household size was between 1-3 persons were 20.72% while those whose household is above 10 persons account for 11.60%. The result is consistent when compared with the findings of Chukwu (2018) which revealed household size in Nigeria to be about six persons per household.

Evaluation, Perception and Opinion of Respondents on Peri-Urban Housing Problems

This section analyzes the perception and opinion of respondents on peri-urban housing problems in the study area. Among the attributes for which their perception and opinion were assessed are: tenure of residence, type of apartment occupied, number of rooms occupied and housing cost (rent).

Table 8: Distribution of Respondents According to Number of Years lived in their Present Residence.

Tenure of residence	Frequency	Percentage %
Less than 1 year	33	9.12
1-3 years	141	38.95
4-6 years	157	43.37
7 years and above	31	8.56
Total	362	100

Source: Authors Analysis, 2019

Analysis on table 8 shows that 9.12% of respondents have lived in the study area for less than one year while 38.95% of respondents have lived in the area for a period of 1—3 years. Those who have lived in the area for a period of between 4-6 years are however, greater as they accounted for 43.37% while those who have lived there for 7 years and above accounted for 8.56%. This goes to show that majority of respondents have lived in their present residents for on-ward of 1-6 years.

Table 9: Distribution of Respondents According to House Ownership Status.

Ownership Status	Frequency	Percentage %
Owner occupied	61	16.85
Rent	245	67.68
Co-rented	44	12.15
Squatting	12	3.32
Total	362	100

Source: Authors Analysis, 2019

On the ownership status of residence, table 9 shows that 16.85% of respondents own the house which they occupied (owner occupied); 67.68% of respondents rented the accommodation; 12.15% of respondents co-rented the accommodation while 3.32% are squatting with friends or relatives. The result implies that majority are living in rented accommodation.

Table 10: Distribution of Respondents According to Housing (Apartment) Type.

Ownership status	Frequency	Percentage %
Batcher/ shanty	4	1.11
Tenement	126	34.81
Self-contained	185	51.10
Bungalow flat	32	8.84
Duplex	15	4.14

Total	362	100.00
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Source: Authors Analysis, 2019

Table 10 above shows that more than half (51.10%) of respondents lived in self-contained apartment, while 34.81% lived in tenement (rooming) accommodation.

About 8.84% are living in bungalow flat while 4.14% are living in duplex. An insignificant percentage (1.11%) of respondents however are living in shanties. The implication of this result is that majority of residents of the study area are actually living in self-contained and tenement apartments. This could be as a result of their inability to afford the rent for bungalows or duplex; thus they make do with the apartments they can afford.

The number of rooms occupied was used to measure the size of housing unit occupied by respondents in the study area. The result is as depicted in table 11 below.

Table 11: Number of Rooms Occupied by Respondents and Household

Number of rooms	Frequency	Percentage %
One room	245	67.68
Two rooms	56	15.47
Three rooms	27	7.46
Four rooms	19	5.25
Five rooms and above	15	4.14
Total	362	100.00

Source: Authors Analysis, 2019

Table 11 shows that majority of respondents (67.68%) live in one room apartment which varies from tenement to self-contained while 15.47% live in two rooms apartment. Those who live in three rooms apartment account for 7.46% while those living in four rooms account for 5.25%.

Building and Dwelling Units' Condition

The internal facilities of the dwelling units and source of water supply are discussed in this section of the survey. The internal facilities include bathing facilities, toilet facilities and kitchen facilities.

Table 12 shows the result of bathing facilities in the study area.

Table 12: Distribution of Bathing Facilities

Bathroom Facilities	Location		Frequency	Percentage
	Inside	Outside		
Public (shared)	61	121	182	50.28
Private	151	3	154	42.54
None	-	-	26	7.18
Total			362	100.00

Source: Authors Analysis, 2019

A closer observation of table 12 above shows that half (50.28%) of the bathrooms are public and shared. Out of this, 61 bathrooms (33.52%) are located inside the building while

121bathrooms (66.48%) are located outside the building. On the other hand, 42.54% of respondents have bathing facilities which are exclusively used by them. Virtually all in this category are located inside the building (98.1%).

Table 13: Distribution of Toilet Facilities

Toilet Facilities	Location		Frequency	Percentage
	Inside	Outside		
Public (shared)	65	167	232	64.09
Private	77	12	89	24.59
None	-	-	41	11.33
Total			362	100.00

Source: Authors Analysis, 2019

Table 13 above shows that 64.09% of respondents have toilet facilities which they share with other occupants of the houses they live in the study area. Out of this, 28.02 % are located inside the building while 71.98% are located outside the building. Those who have exclusive toilet facilities account for 24.59% of which 36.52% are located inside the building while 13.48% are located outside building. The survey further revealed that 11 33% of respondents do not have toilet facilities. The implications of this result are enormous.

Table 14 Distribution of kitchen Facilities

Kitchen Facilities	Location		Frequency	Percentage
	Inside	Outside		
Public (Shared)	27	85	112	30.94
Private	172	19	191	52.76
None	-	-	59	16.30
Total			362	100.00

Source: Authors Analysis, 2019

From table 14 above, it is observed that 30.94% of the sampled households have kitchen shared inside and outside the building while 52.76% have private kitchen mostly inside the house. A lessen percentage (16.30%) however have no kitchen at all. Of the number of households that have kitchen, 65.68% are located inside the building while 34.32% are located outside the main building. The implication of shared kitchen is that of inadequate space for cooking which could lead to cooking in open spaces, along the corridor or inside room.

Table 15 below shows the major sources of water supply for sampled residents of Choba town.

Table 15 Source of Water Supply

Source of Water Supply	Frequency	Percentage %
Public Borehole	71	19.61
Purchased from Private Borehole	124	34.36
Private Borehole	156	43.09
Wells	11	3.04
Total	362	100.00

Source: Authors Analysis, 2019

Table 15 above shows that 19.61% of sampled respondents depend on public boreholes for their water supply, 34.26% purchase water from nearby private boreholes while 43.09% get their water from private boreholes. Those who depend on wells for their water supply accounts for 3.04%. The closeness of the water bearing rock (aquifer) in the study area perhaps explain the reason why most owners can afford to drill a private borehole.

Physical Condition of the Peri-urban Housing Units

The overall physical soundness of the sampled peri-urban housing units was assessed. The physical condition of the buildings was assessed using indicators such as state of roofing sheet, walls, ceiling, facial board, windows and doors. The result is as depicted in Table 16 below:

Table 16: Physical Condition of Housing Units

Variables	State					
	Good		Fair		Poor	
	No	%	No	%	No	%
Roofing Sheet	186	51.38	156	43.09	20	5.53
Wall	73	20.17	164	45.30	125	34.53
Ceiling	89	24.59	175	48.34	98	27.07
Facial Board	86	23.76	144	39.78	132	36.46
Windows	217	59.94	136	37.57	9	2.49
Doors	244	67.40	93	25.69	25	6.91

Source: Authors Analysis, 2019

Table 16 shows that 51.38% of sampled buildings' roofing sheets are in good condition; 43.09% are judged to be in a fair condition while 5.53% are in poor condition. Those in poor condition leak water profusely as against those in fair condition.

As regards the wall of the sampled buildings, only 20.17% of buildings walls are in good condition as such need no maintenance while 45.30% are in fair condition such that they need minor maintenance like painting. Those that need major maintenance and repair accounted for 34.53%. Majority (48.34%) of the ceiling in sampled buildings are in fair condition. They require minor repair works like fixing of batten. However, 27.07% of sampled buildings' ceilings are in poor condition. These categories need major repair works as most are damaged, thus need replacement. However, 24.59% of sampled buildings' ceiling are in good state and thus need no maintenance or repair work. 3

9.78% of the facial boards are in fair condition while 36.46% are in poor condition. They require minor to major repair works as some of the facial boards have fallen out. On the part of windows, a greater percentage (59.94%) are in good condition and thus require no repair works while 37.57% and 2.49% are in fair and poor condition respectively. Observation of the state of doors in sampled buildings reveal a much similar trend with those of windows. Thus majority (67.40%) of doors are observed to be in good condition while 25.69% and 6.91% are in fair and poor condition respectively, thereby requiring minor or major repair.

Environmental Conditions of the Peri-urban Neighbourhood

Apart from the physical and structural attribute of the peri-urban housing, other parameters such as household solid waste disposal method, condition of street surface and drainage were also examined.

Table 17: Methods of Refuse Disposal

Method of Disposal	Frequency	Percentage %
Put in Refuse Bin and Removed by Agents	52	14.36
Put in Refuse Bin and Removed by Government	16	4.42
Tipped on Roadside (Open Space)	214	59.12
Tipped into Government Container	14	3.87
Burning	66	18.23
Total	362	100

Source: Authors Analysis, 2019

Table 17 above shows that majority (59.12%) of respondents dispose their waste by tipping it on roadside. Better still majority of respondents informed that they dispose their waste by tipping it in open space. This is followed by those who burn their waste and those who put it in refuse bin which is removed by agents. This two-disposal methods account for 18.23% and 14.36% respectively. A lesser percentage (4.42%) of respondents however put their refuse in bin that is placed and removed by government contractors while 3.87% tip their waste directly into government container or waiting vehicle.

Street surface condition as a factor was used to measure the environmental quality of this peri-urban settlement. Table 18 below shows the condition of street surface in the study area.

Table 18: Condition of street surface

Condition	Frequency	Percentage %
Tarred	30	8.29
Not tarred	300	82.87
Tarred with potholes	32	8.84
Total	362	100.00

Sources: Authors Analysis, 2019

82.87% of all street surfaces in the sampled buildings are not tarred, 8.29% are tarred while 8.84% are tarred with potholes. The implication of this is that majority of residents of Choba town live in neighborhood where the street is not tarred. Some of the streets are flooded with water whenever it rains.

Table 19: Condition of drainage

Condition	Frequency	Percentage %
Absence of drain	204	56.35
Under construction	-	-
Blocked	125	34.53
Flowing	33	9.12
Total	362	100.00

Source: Authors Analysis, 2019

56.35% of respondents revealed that their neighborhood environment lack drainage facility while 34.53% attest to the presence of drainage but that it is blocked with solid waste which impede the flow of runoff whenever it rains. On the other hand, 9.12% of the respondents noted that the drain in their neighborhood is flowing. The implication of this, is that most areas in this peri-urban town are flooded whenever it rains.

Analysis of Satisfaction of Residents on Quality of Housing

Respondents' satisfaction on housing quality are shown on table 20 below.

Table 20: Level of Satisfaction of Respondents on Quality of housing.

Level of Satisfaction	Frequency	Percentage %
Extremely Satisfied	-	-
Very Satisfied	18	4.97
Somewhat Satisfied	31	8.56
Somewhat Dissatisfied	49	13.54
Very Dissatisfied	124	34.26
Extremely Dissatisfied	140	38.67
Total	362	100.00

Source: Authors Analysis, 2019

Table 20 above shows that majority (86.47%) of the respondents are dissatisfied with housing quality in the study area. This includes 13.54% who are somewhat dissatisfied, 34.26% who are very dissatisfied and 38.67% who are extremely dissatisfied. Similarly, 13.53% of respondents are satisfied with housing quality in the study are. This includes 4.97% of respondents who are very satisfied and 8.56% who are somewhat satisfied.

The implication of the result is that many residents of this peri-urban town are not satisfied with the quality of housing in the area.

Factors that Influence Choice of Housing in the Study Area (Residents Perspective)

Factor which influence choice of dwelling units in this peri-urban town were obtained from respondents' perspective. This was scaled and ranked in order of influence. Table 21 below shows the result.

Table 21: Factors Influencing Choice of Housing

Factors	Order of Influence							
	1 st		2 nd		3 rd		4 th	
	No	%	No	%	No	%	No	%
Proximity	39	10.77	91	25.14	105	29.01	127	35.08
Internal facilities	74	20.44	149	41.16	91	25.14	48	13.26
Environmental condition	53	14.64	62	17.13	117	32.32	130	35.91
Income	196	54.14	60	16.57	49	13.54	57	15.75

Source: Authors Analysis, 2019

Table 21 above shows that 54.14% of respondents indicate that income is the most influencing factor that account for their choice of dwelling unit. On the other hand, 41.16% of respondents are of the view that internal housing facility determine their choice of dwelling while 32.32% indicate environmental factor (condition) as the third most critical factor that influence their choice of housing.

Assessment of Housing Affordability

Beside the examination of monthly income of respondents (head of households), monthly rents paid by respondents were examined and is cross-tabulated with monthly income.

The rent paid by respondents on housing units occupied by them as sought and the results are presented as follow.

Table 22: Monthly Rent on Housing Units by Respondents

Monthly Rent (₦)	Frequency	Percentage %
Below 2000	5	1.38
2001-4000	31	8.56
4001-6000	57	15.75
6001-8000	89	24.59
8001-10000	129	35.64
Above 10000	51	14.08
Total	362	100.00

Source: Authors Analysis, 2019

Table 22 above shows that majority (35.64%) of respondents pay between ₦8001 and ₦10000 on rent monthly. This is closely followed by those who pay between ₦6001 and ₦8000 on rent monthly. This group accounted for 24.59% of the sampled population. Others are those who pay between ₦4001 and ₦6000 rent monthly. This group account for 15.75% of the sampled population. Next to this, are those who pay rent of ₦10000 and above monthly (14.08%) while those who pay between 2001 and 4000 account for 8.56%. An insignificant percentage (1.38%) pay below ₦2000. This group mainly live in shanties or their rent is subsidized by relatives or employees.

From this result, it is evident that the average monthly rent in this peri-urban area lies between ₦5000 to ₦9000.

In order to examine the affordability or otherwise of housing units in the study area, monthly income and monthly rent paid by respondents on housing unit occupied by them was cross-tabulated.

Table 23: Respondents' Monthly Rent by Monthly Income

Level of Monthly Income (₦)	Order of Influence						Total
	Below 2000	2001-4000	4001-6000	6001-8000	8001-10000	Above 10000	
Less than 1000	1	4	-	-	-	-	5(1.38)
10001-30000	-	19	12	-	-	-	31(8.56)
30001-50000	-	5	45	7	-	-	57(15.75)
50001-70000	-	-	16	54	19	-	89(24.59)
70001-90000	-	-	12	63	21	32	129(35.64)
Above 90000	-	-	-	3	8	40	51(14.09)
Total	1	28	85	128	48	72	362
Percentage	0.28	7.73	23.48	35.36	13.26	19.89	100.00

Source: Authors Analysis, 2019

Entries in Table 23 shows that 1.38% of respondents earn less than ₦1000 monthly. Out of this 1(0.28%) pay below ₦2000 on rent monthly while 4(1.10%) pay between ₦2001 and ₦4000 on rent monthly. Those who earn between ₦10001 and ₦30000 account for 8.56%, out of which 19(5.25%) pay between ₦2001 and ₦4000 on monthly rent while 12(3.31%) pay between ₦4001 and ₦6000 monthly on rent. Similarly, those who earn between ₦30001 and ₦50000 account for 15.75% out of which 5(1.38%), 45 (12.43%) and 7(1.93%) pay between ₦2001-₦4000, ₦4001- ₦6000 and ₦600- ₦8000 monthly rent respectively.

Interestingly, 24.59% of respondents earn between ₦50001 and ₦70000 monthly income. Out of this figure 16(4.42%) pay between ₦4001 and ₦6000 monthly rent while 54(14.92%) pay between ₦6001 and ₦8000while 19 (15.25%) pay between ₦8001 and ₦10000.

Those who earn between ₦70001 and ₦90000 account for 35.04%, out of which 12(3.31%), 64(17.68%), 12(5.80%), 32(8.84%) pay between ₦4001- ₦6000, ₦6001- ₦8000, ₦8001- ₦10000 and above ₦10000 monthly rent respectively. Out of the respondents (14.09%) who earn above ₦90000, 3(0.83%) pay between ₦6001 and ₦8000; 8(2.21%) pay between ₦8000 and ₦10000 while 40 (11.05%) pay above ₦10000 per month.

Respondents Perception of Amount Paid as Rent

The opinions of respondents on the amount paid as rent per month were enquired. The result is depicted in Table 24 below.

Table 24: Opinion of Respondents on Amount Paid as Rent

Opinion	Frequency	Percentage %
Very high	188	51.93
High	121	33.43
Moderate	53	14.64
Low	-	-
Very low	-	-
Total	362	100.00

Source: Authors Analysis, 2019

Table 24 shows that half (51.93%) of respondents view amount they pay as rent as very high, 33.43% of respondents are of the opinion that the amount they pay as rent is high while 14.64% of respondents are of the opinion that the amount they pay as rent is moderate. The implication of this is that many residents particularly those who pay rent are not comfortable with the amount of money they pay as rent.

CONCLUSION AND RECOMMENDATIONS

The findings of this survey show that majority of the respondents pay rent for their dwelling units. This implies that majority of residents in this peri-urban town do not own their dwelling units which indeed shows the housing situation in most Nigerian urban and peri-urban areas. This is worsening by the incidence of increased population in urban and peri-urban centres which have resulted in overcrowding and inadequate dwellings. The findings thus corroborate the study of Kalu et al. (2013) which highlighted that housing provision was left to the private investors with government limiting their role to the provision of credit facilities through loans to building societies, housing corporation and staff housing schemes.

On the type of apartment, majority of respondents live in tenement and self-contained. This is in consonance with the findings of Olotuah (2010) which maintain that the dominant house type in Akure metropolis, southwest Nigeria, is the rooming house built on one or two stories. The houses have two rows of rooms facing each other. The number of rooms occupied shows that majority of respondents occupied one room (07.68%) which is either tenement or self-contained. This again throws up the housing need of the people. The implication is that of high occupancy which has led to reduced space available to individual dweller's comfort. This is also in agreement with Olotuah (2010) which revealed that in large urban centres, poor housing conditions often manifest in the high number of people living in one room and paying exorbitant rents. He added that this is physical overcrowding, which is a determinant of two major types of problems namely, health hazard and harmful social behaviour.

On internal housing facilities, the authors findings show that majority of respondents and indeed residents of the study area share bathroom and toilet facilities which are located outside. In few instances, toilets and bathrooms are located in the buildings at the extreme end of the row of rooms. Worse still is the situation of no kitchen facilities as households without kitchen facilities either cook in the open, along the corridor (Passage) or inside the room. Smoke which emanates from such cooking is a source of air pollution which is detrimental to health.

Further evidence from the survey shows that a reasonable percentage of respondents do not have private borehole as they depend on public borehole or purchase water from private borehole. This factor which is a measure of housing quality speaks loud of housing in the study area. The research findings also show that majority of buildings in the study area are in fair and poor state. A greater proportion of the buildings require major or minor repairs to bring them to normative or structural quality especially the walls, ceiling and facial board. Most of the walls have cracks, surface wear, tearing or peeling off of surface plaster and paints. This give credence to the work of Olotuah (2002) which maintained that an estimated 2.3 million urban dwelling units in Nigeria are substandard; only 33% of urban houses can be considered to be physically sound, and 44% and 19% require minor and major repairs respectively to bring them to structural quality.

On environmental conditions, the survey findings show that majority of residents tip their refuse on road side (open space). This is consistent with the findings of Mac Ogonor (2002) which concluded that in the city of Port Harcourt, garbage is dumped on streets or in gutters and other open space. It also agrees with the findings of Kalu et al. (2013) and Agunwamba (1998) which asserts that solid waste is heaped at open places along the road in most cities and towns in Nigeria. This open deposit thus provide habitat for disease-causing organisms such as house flies, bacteria, insects and rodents.

Interestingly, respondents' satisfactions of the present quality of housing in this peri-urban town shows that majority (86.47%) are dissatisfied with housing quality obtainable in the study area. The result further revealed that majority of the respondents pay over 30 percent of their monthly income on rents. This is also consistent with the study of Aribigbola (2011) which affirmed that the salary and income profile of residents of Akure is inadequate to rent and furnish standard housing accommodation.

The study therefore recommends amongst others that in line with the provisions of 2012 National Housing Policy, government should provide safe, adequate and affordable housing for her citizens, Commercial and Merchant banks should be encouraged to invest in housing development. On its own part, the Federal Mortgage Bank of Nigeria (FMBN) should be restructured, reorganized and re-capitalized to enable them perform their duty of financing housing development. Also, social housing should be incorporated into government housing development policy as it will help address the problem of housing affordability particularly for the low-income earners, government should encourage the use of local building material for construction of houses so as to reduce building cost. This practice which has been successful in countries like Tanzania and Sweden should be encouraged. Finally, to check arbitrary cost of rent, the government should enforce rent control and also get more developers to invest on low cost housing.

REFERENCES

- Addo, A.I. (2013): Assessing Residential Satisfaction Among Low Income Households in Multi Habited Dwellings in Selected Low-Income Communities in Accra: Policy Review, *Urban Standard Journal*, 5 (4)
- Adetunji, M.A and Isah,I.O. (2015): Urban Housing Quality and Its Health Implications in Nigeria: An Example of Lokoja, Kogi State, Nigeria. *Ethiopian Journal of Environmental Studies & Management*, 8(5)
- Agunwamba, J. C. (1998): Solid Waste Management in Nigeria: Problems and Issues. *Environmental Management*, 22(6)

- Aribigbola, A. (2011): Housing Affordability as a Factor in the Creation of Sustainable Environment in Developing World: The Example of Akure, Nigeria. *Journal of Human Ecology*, 35 (2)
- Bradley, R.H. and Putnick, D.L. (2012): Housing Quality and Access to Material and Learning Resources within the Home Environment in Developing Countries. *Society for Research in Child Development*, 83(1)
- Bramley, G., Pawson, H., White, M., Watkins, D. and Pleace, N. (2010): Estimating Housing Need. *DCLG, London*.
- Cheserek, G.J. and Opata, G.P. (2011): Environmental and Housing Problems of Low-Income Household in Eldoret Municipality, Kenya. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 2 (4)
- Chukwu, B. O. (2018): Housing Affordability by Low-Income Earners in Nigeria: The Case of Abakaliki Town. *Top Africa Journal of Interdisciplinary Studies 2 (1)*
- Di, Z.X. (2001): The Role of Housing as a Component of Household Wealth, Joint Centre for Housing Studies. *Working Paper WO16, Harvard University, Harvard*
- Dorcas, O.A (2016): Challenges of Urban Housing Quality: Insights and Experiences of Akure, Nigeria. Urban Planning and Architecture Design for Sustainable Development, UPADSD. 14-16 October 2015. *rocedia - Social and Behavioral Sciences 216 (2016) 260 – 268*. Published by Elsevier Ltd
- Federal Ministry of works and Housing (FMNWH) (2002): Report on the launching of Global Campaign for Good Urban Governance in Nigeria, Abuja. Nigeria: Urban and Regional Planning Department, Federal Ministry of Works and Housing
- Femi, A. B. (2019): Rapid Urbanization and Environmental Poverty in Residential Areas of Agbowo, Ibadan, Nigeria. *Journal of Humanities and Social Science (IOSR-JHSS)*. 24(4)
- Kalu, E.U., Ikechukwu, D.N., George, E. (2013): Restructuring Urban Solid Waste Management and Housing Problems for Economic Development: A Case of Nigeria. *Business System Review*, 2 (3)
- Kuroshi, P.A, Bala, K.(2005): Development of Housing Finance in Nigeria. *Nigerian Journal of Construction Technology and Management*, 6(1)
- MacOgonor, C.U. (2002): Urban Housing Problems and Planning Implementation in the City of Port Harcourt, in S.B. Arokoyu and A.M. Adeyemo (eds), Urban Development Planning and Management, *Amethyst: and Colleagues Publishers, Lagos*
- Mbazor, D.N. (2018): Assessment of Housing Quality and Environmental Conditions in Selected Areas of Akure, Nigeria. *International Journal of Development and Sustainability*, 7 (3)
- Mmom, P.C. (2003): The Niger Delta; A Spatial Perspective to its Development. *Zelon Enterprises, Port Harcourt*.
- NPC (1991): National Population Commission; Population Distribution by Sex, State, LGA's, Senatorial Districts. 1991 Priority Table
- Oche, J.O., Ogbale, J.O., Okeke, H.U and Alaga, A.T. (2015): Geospatial Assessment of Housing Quality in Moro, Ife North Central Local Government, Osun State, Nigeria. *Greener Journal of Environmental Management and Public Safety*, 4(3)
- Olatubara, C.O. (2008): The Dynamics of Households' Residential Choice in Nigeria. *The 15th Faculty Lecture, Department of Urban and Regional Planning, University of Ibadan Nigeria*.

- Olayiwola, L.M, Adeleye, A. and Jiboye, A.D (2006): Effect of Socio-cultural factors on Housingquality in Osogbo, Nigeria. *International Symposium on Construction in Developing Economies: New issues and challenges. Santiago, Chile. January, 18-29*
- Olotuah, A.O. (2016): An Appraisal of Housing and Neighbourhood Quality in Residential Estates in Akure, Nigeria, *Mediterranean Journal of Social Sciences*, 7 (3)
- Olotuah, A. O. (2010): Housing development and Environmental degeneration in Nigeria. *The Built and Human Environment Review*, 3
- Olotuah, A. O. (2002): Recourse to Earth for Low-Cost Housing in Nigeria. *Building and Environment* 37(1)
- Olutoyin, M.A. and Francis, T.(2018): An Analysis of Housing Quality and Residential Environment in a Traditional African City: A Case Study of Ilesa, Osun State Nigeria. *International Journal of Social Sciences and Humanities Reviews*, 8 (1)
- Osuiwu, B.O., and Ologunorisa, T.E (1999): Weather and climate, in C.U Oyegun and A. Adeyemo (eds.), *Port Harcourt Region. Paragraphics, Port Harcourt.*
- Turunen, M., Panala, A., Villmen, J., Nevalainen, A., Haverinen-Shaughnessy, I (2010): Evaluating Housing Quality, Health and Safety Using an Internet Based Data Collection Response: A Cross-Sectional Study. *Environmental Health.*
- Yamane, T. (1967): *Statistics: An Introductory Analysis. Harper and Row, New York (2nd Edition)*