



Residents' Perception of Dwelling Unit Conditions in Informal Settlements in Port Harcourt, Nigeria

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Abstract This study focused on residents' perception of dwelling unit conditions in informal settlements in Port Harcourt municipality, Nigeria. Dwelling unit conditions were studied in situ without experimental manipulation and at one period in time, i.e. the study adopted a passive-observational research design. The study utilized both secondary and primary data sources. Primary data was collected using face-to-face administration of a largely pre-coded household questionnaire, to a probability sample of 192 respondents, drawn from the 2 informal settlements. Data analysis was based on responses from 191 questionnaires retrieved and the univariate analytical method was adopted. The study found that the typical type of toilet in the study area was the pier toilet in the waterfront settlements of Marine Base and Afikpo. The study also found that in Marine base (64.3%) and Afikpo (93.5%) of the respondents said that water is not available in their dwelling unit. This implies that most residents in the settlements bought water from owners of private boreholes. Most respondents affirm that electricity, toilet, kitchen and bathroom are inadequate and shared. In the informal settlements over 35% of the houses needs major repairs and deteriorated. The study concludes that dwelling unit facilities and services are not available and inadequate. The study recommended that government should provide standard dwelling units and sanitation in the informal settlements.

Keywords Dwelling Unit, Condition, residents, Informal Settlements, Port Harcourt

1. Introduction

The UN Human Settlements Programme (UN-Habitat) estimated that a billion people, or a third of the urban population in developing countries, live in slums. Migrants, refugees and internally displaced people (IDPs) tend to be drawn to such settlements, where they become dispersed among local people who are also socially and economically marginalized, and unable to afford better housing. In West Africa, more than 50% of all urban dwellers live in poverty, with its expression of impeded access to adequate shelter, suitably located urban land, urban services and social amenities [1]. Majority of the urban poor inhabit informal settlements and slums. The urban poor live in high urban densities, with unplanned urban spatial layout and mostly deprived of access to adequate housing, residential land, municipal services and other urban benefits [1]. Most informal settlers live in flimsy and makeshift housing in at-risk areas. According to UN Habitat [1] today's key problems areas include the very rapid uncontrolled growth of urban informal settlements, prevalence of substandard and overcrowded housing, inadequate basic urban services and infrastructure provision, declining urban livelihood options, incessant civil unrest and infectious diseases and crime.

There is no single conceptual and operational definition of an informal settlement. The Organization for Economic Co-operation and Development (OECD) and the UN Economic Commission for Europe (UNECE) defined informal settlements as "areas where groups of housing units have been constructed on land that the occupants have no legal claim to, or occupy illegally" and "unplanned settlements and areas where housing is not in compliance with current planning and building regulations" UN-Habitat [2] defined slums as human



settlements with the following characteristics: lack of basic services; substandard housing and inadequate structures; high population density and overcrowding; unhealthy living conditions and hazardous locations; insecure tenure; poverty and social exclusion. In West and Central Africa two types of slum exist; (a) the traditional city centre slums of decayed and dilapidated structures built with semi – durable materials (adobe) and lacking physical planning standards; and (b) spontaneous and often illegal informal settlement developments at the urban periphery on squatted land [1]. The idea of the existence of two cities within the city: the formal and planned alongside the informal, unplanned and illegal, which “is the result of an urban, speculative and chaotic process of peripheral development, with no roads, transport and public services” [3]. According to Olutuah [4] the lack of adequate housing, which is priced out of the economic reach of the poor, is sometime so grievous that some are forced to construct shacks on pirated land with all manners of refuse materials. This has led to the growth of squatter settlements in many urban centres with no access to public utilities and services. Obinna, Owei and Mark [5] identified sprouting of 49 squatter settlements on marginal land along the water fronts in Port Harcourt. The study suggested that these settlements of the city have the potential to yield land for planned extension of the city, thereby guaranteeing security of tenure for residents and improving living conditions.

Shelter is an integral part of human existence and the development of any society. According to Ziama and Li [6] shelter is universally acknowledged as the second most essential human need after food and is considered a significant economic asset in any nation. The lack of adequate housing has forced people to live in conditions that constitute an affront to human dignity and considering housing condition as a social-economic indicator of urban poverty [6]. Aribigbola [7] stated that housing is not just a commodity but it is a bundle of goods and services that facilitate and enhance good living; a key to neighbourhood quality and preservation. Aribigbola [7] further stated that housing is conceptualised as a multi – dimensional package of goods and services extending beyond shelter. According to Adeagbo [8] housing is more than shelter. It is a bundle of services. It is the totality of the housing environment such as shelter, access roads, utilities such as water, electricity, sewerage and other qualities of the environment that planners refer to as housing.

Ebong [9] identified aesthetics, ornamentation, sanitation, drainage, age of building, access to basic housing facilities, burglary, spatial adequacy, noise level within neighbourhood, sewage and waste disposal and ease of movement among others, as relevant quality determinants in housing. Afon [10] found that the most important environmental quality indicators in core residential housing improvement are water availability, economic opportunities, good condition of roads, clean and healthy environment by the residents’ perception.

Slums are one of the challenges that governments in most developing and the least developed countries are presently faced with. Slums are on the increase, not only in terms of numbers but also in relation to the complexities involved in trying to see how best this social challenge should be addressed. In most African countries, housing has never been given significant priority compared to other social issues such as health and education [11]. In Port Harcourt there are 49 identified informal settlements housing the low income and some middle income families. Studies have investigated the existing conditions of the informal settlements but this study adds to the existing literature and focused on the resident’s perception of their dwelling unit conditions. This study investigates residents’ perception of dwelling unit conditions of informal settlements in Port Harcourt, Nigeria.

1.1. Aim and Objectives of the Study

The aim of the study is to investigate residents’ perception of dwelling unit conditions in informal settlements in Port Harcourt.

The objectives of the study are as follows:

- i. To ascertain the availability and location of dwelling unit services
- ii. To examine residents’ perception of dwelling unit attributes
- iii. To examine the physical characteristics of the dwelling units.



2. Relevant Researches on Dwelling Unit Conditions

Amao [11] examined the causes and characteristics of informal settlements in the assessment of housing quality. The study identified urbanization, poverty, growth of informal sector, non-affordability of land and housing shortage as causes of informal settlement development. The study asserted that the informal settlements have serious adverse effects on the people's health, their built environment and housing quality. Amao [11] argued that although the urban upgrading possesses great potential for improving housing quality in informal settlements, there is a need to rethink and repackage the upgrading exercise so that majority can benefit from it. It is necessary to incorporate community participation into the urban upgrading in order to assist the very poor that cannot take care of their housing consumption needs. Therefore, government is encouraged to see informal settlements as a solution to new city planning rather than problem to the urban areas.

Ziama and Li [6] evaluated the livability and convenience of social housing in Liberia from the residents' perspectives. Using residents' appraisal from several social housing projects in the suburb of Monrovia, residents' satisfaction index with regards to the aesthetic, durability and comfort of their homes were measured. It also assessed their overall living environment which includes access to road and basic service facilities such as hospitals, schools, shopping and recreational centers. How secured and comfortable do they feel within their homes. Results show that while occupants of public housing are satisfied with certain aspects of their homes, they are generally dissatisfied with their living environment.

Opoko et al [12] investigated housing quality in Ayobo, an informal settlement in Lagos, from residents' perspectives, specifically addressing two main issues: identification of criteria by which residents evaluate quality of their housing and any correlations between these criteria and residents' socio-economic characteristics. The study revealed ten factors of housing quality from residents' perspective in the study area. These are dwelling occupancy type, environmental quality and public social amenities (services); Indoor environmental quality; condition of building elements; adequacy of facilities for children and shopping; neighbourhood infrastructure; neighbourhood environmental quality; dwelling units' attributes and communal facilities; shared facilities, noise and dwelling satisfaction; indoor environmental quality; and type of repairs. Only four variables (current household size, initial household size, occupation and number of children below 18 years) correlated negatively and significantly with dwelling occupancy type and public social amenities (services). Thus these factors must be critically considered in addressing housing quality issues in informal settlements.

According to Hermanson [13] of the world's 7.4 billion population, approximately 4 billion live in urban areas. Of these, a quarter, approximately 1 billion people, live in slums. The United Nations defines a slum as a place where people live with any one of "five deprivations": clean water, improved sanitation, sufficient living area so as not to be over-crowded, durable housing, and secure tenure. Hermanson [13] asserts that hundreds of millions lack all five.

Popoola et al [14] assessed the residential quality of life in core area of Ado, Ekiti State based on residents' perception of neighborhood attributes, residents' quality of life and the most important variable to enhance the residential quality of life. The study found that, residential quality of life was low with garbage on the streets. There was no traffic congestion; because; the area was not accessible and periodic flooding occurs in the neighborhoods. Their study also indicated that 18% of the residents were unhappy with their residential quality of life and majority (45%) of the residents perceived the neighborhoods to be of medium quality.

The Vanuatu Poverty Analysis conducted by the National Statistics Office in 2000 noted that in Vanuatu, poverty was more than simply a low income, but also inadequate access to clean water and sanitation, education, housing, health care and other basic services. By these criteria, living in the informal settlements generally means living in poverty. The household survey conducted for this study asked settlement residents about their main needs and problems, which principally were: Lack of services: water supply, electricity for lighting, rubbish collection, public transport; poor living conditions: poor housing and unhealthy surroundings, particularly from poor drainage; and difficulty in meeting their basic needs for food, clothing and money because of insufficient incomes or jobs, insecure tenure underlies the poor living standards in the informal settlements [15].



Schirnding and Mathee [16] investigated living conditions and environmental health status in two informal settlements in the Cape Peninsula and found that health status of the residents is directly affected by the quality of their housing. The study also found that the most common health problems were respiratory and diarrhea and that the provision of environmental health services is of paramount importance.

Wamani [17] conducted a study on the impact of informal settlements on land markets in Nakawa Division and found that informal settlements are the major reason for the continued dominance of informal land markets in Nakawa division.

Fazli [18] investigated factors behind the growth of informal settlements in Kabul Mirwais Fazli and found that several factors have contributed to the growth of informal settlements in Kabul but, in general, insecurity and political changes are the prime factors. The other factors include the desire to get a better life, job and education. Jiboye [19] conducted a research on the use of neighborhoods' quality evaluation to determine the performance of two medium-sized private and public residential development in Bodija and Moremi, Southwestern Nigeria. Using Analysis of Variance test; eighteen variables consisting of the dwelling, environmental and neighbourhood features were identified as significant determinants of residential quality in the study areas. These variables were rated and their total weight values obtained. Residential quality index (RQI) was calculated for each of the variables and different indices - 4.12 and 3.24 were obtained for Bodija and Moremi Estates respectively. These values indicate existing variation in the quality of the two neighbourhoods; with Bodija- a private residential estate having a higher quality rating than Moremi estate. The study showed that different factors determine neighbourhood quality and these affect users' view on the performance of their dwellings. Rather than making a broad generalization in housing provision, the performance and quality of residential development could be measured and improved upon using appropriate indices based on users' ratings of their dwellings.

Emankhu and Ubangari [20] examined housing quality in the peripheral area of Lafia town. The paper asserts that the peripheral area have serious adverse effects on the people's health, their built environment and housing quality. The study revealed a gap in quality between the low- and medium-income resident. Their paper suggests the implementation of policies and planning physical infrastructural development, social-economic improvement, environment and health improvement. Government, private and communities interventions on the peripheral areas are required in order to check and prevent further decay for sustainable development. Therefore, government is encouraged to see peripheral areas as a solution to new city planning rather than problem to the urban areas.

Heshmati and Zarabadi [21] evaluated effective indicators on the formation of informal settlements of Shahr Ghods, Iran. Effective indicators of informal settlements can be divided into three general categories, socio-cultural, economic and physical – services. The study found that socio-cultural factor is the most important, the second is physical – services (infrastructure) and lastly is economic factors that influenced the formation and the expansion of informal settlements.

3. Research Methods

The study adopted a passive-observational research design. Passive-observational designs pertain to studies where there has been no prior "treatment", intervention, or manipulation of subjects. The study utilized both secondary and primary data sources. Secondary and primary sources of data were used for the study. Secondary data was obtained from books, journals, magazine, conference papers, and the Internet.

Systematic sampling technique was used to select the respondents. Primary data was collected using face-to-face administration of a largely pre-coded household questionnaire, to a probability sample of 192 adult respondents from the 2 informal settlements (98 from Marine Base and 93 from Afikpo). The sample size of 192 household was derived from a population of 5338 households in the two informal settlements (3850 households in Marine Base and 1488 in Afikpo) by applying the Yamane (1965) formula at 10% level of precision. To achieve a representative sample of households Yamane (1965) formula (given below) was applied.

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

Where n is the sample size, N is the population size, and e is the level of precision (here set at 10%).



Data analysis was based on responses from 191 questionnaires retrieved and the univariate analytical method was adopted such as frequency distribution and percentages. The high response rate of 99.4 % was achieved as a result of the assistance by five trained assistants during the primary data collection.

4. Results and Discussion

The results of the study are presented below. The section present results on availability and location of Dwelling unit services/facilities, residents perception of dwelling unit attributes and physical and economic (rent) characteristics of the dwelling units.

4.1 Availability of Dwelling Unit Services/Facilities

Majority of the respondents (more than 80%) affirm that electricity, toilet, kitchen and bathroom are available. Most residents also said that toilet, kitchen and bathroom are located outside the house. Only a few said that these services/facilities are not available. The study further shows that less than 50% of the kitchens, toilets and bathrooms were located inside in Marine Base while a few said they are located inside.

Table 4.1 showed that a large number of the respondents in Marine base (64.3%) and Afikpo (93.5%) said that water is not available in their dwelling unit. Most residents in these neighbourhoods purchase water from owners of private boreholes. The study also revealed that toilet, kitchen and bathroom are shared by most respondents in these informal settlements. This implies that sanitation and privacy are major challenges in the two informal settlements. The survey revealed that government has failed in the provision of potable water for its citizenry and appropriate policy measures should be put in place to provide adequate water supply in the neighbourhoods and upgrade the settlements by providing other basic infrastructures to improve living conditions. The results of this study are similar to the findings of Chung and Hill [15]; Opoko et al [12] and Popoola et al [14] were settlement residents were asked about their main needs and problems, which were lack of services such water supply, electricity for lighting, rubbish collection, public transport; poor living conditions: poor housing and unhealthy surroundings, particularly from poor drainage and the poor living standards in the informal settlements.

Table 4.1: Dwelling Unit Services in the Informal Settlements

Dwelling unit attributes	Marine Base		Afikpo Waterline	
	N	%	N	%
Electricity in the house				
1. Available.	91	92.9	88	94.6
2. Not Available.	4	4.1	5	5.4
3. Missing data.	3	3.1	0	0
Total	98	100	93	100
Mode				
Availability of Water Supply				
1. Available	32	32.7	4	4.3
2. Not available	63	64.3	87	93.5
3. Missing data	3	3.1	2	2.2
Total	98	100	93	100
Location of Kitchen				
1. Inside	46	46.9	6	6.5
2. Outside	46	46.9	75	80.6
3. Missing Data	6	6.2	12	12.9
Total	98	100	93	100
Location of Toilet				
1. Inside	41	41.8	3	3.2
2. Outside	52	53.1	89	95.7
3. Missing Data	5	5.1	1	1.1
Total	98	100	93	100
Location of Bathroom				



1. Inside	44	44.9	7	7.5
2. Outside	51	52.0	85	91.4
3. Missing Data	3	3.1	1	1.1
Total	98	100	93	100
Use of Bathroom				
1. Shared	72	73.5	89	95.7
2. Not Shared	24	24.5	4	4.3
3. Missing Data	2	2.0	0	0
Total	98	100	93	100
Use of Toilet				
1. Shared		57	58.2	85
2. Not Shared		26	26.5	8
3. Missing Data		15	15.3	0
Total		98	100	93
Use of Kitchen				
1. Shared		46	46.9	50
2. Not Shared		42	42.9	32
3. Missing Data		10	10.2	11
Total		98	100	93

(Source: Author's Field Survey)

4.2. Residents' Perceptions of their Dwelling Unit Attributes

Respondents were asked to state their perceptions regarding different aspects of their dwelling units. Tables 4.2 give the responses. The results reveal different patterns. The responses range between disagree strongly to agree strongly. With reference to the statement: "my dwelling unit is not crowded" over a quarter of the respondents in Marine-Base and Afikpo said they agree to the statement while over 30% of the respondents in Marine-Base and Afikpo disagree strongly to the statement. This implies that about a third of the dwelling units are crowded. Table 4.2 revealed that over 30% of the respondents in Marine Base and Afikpo disagree that the interior of their dwelling units are well laid out while over 35% agree that the interior is well laid out. Table 4.2 revealed that over 43.9% of the respondents disagree that their dwelling units have beautiful external appearance in Marine Base while 90.3% disagree in Afikpo. The study further showed that over 34% of the respondents in the two settlements disagree that their dwelling units are well constructed while over 50% in Marine Base and over 30% in Afikpo agree. Table 4.2 revealed that 69.4% of respondents in Marine Base and 85% in Afikpo disagree that their dwelling units are not too close to others (See Plate 1 and 2). Table 4.2 also revealed that most respondents were renting their dwelling units, 54.1% in Marine Base and 91.4% in Afikpo. This implies insecure tenure for the residents. Less than a quarter of them said that the rent was too expensive. It implies that the primary goal of the National Housing Policy of 1991 which is to ensure that all Nigerians own or have access to decent, safe and sanitary housing accommodation of affordable cost with secure tenure has not been achieved.

Table 4.2: Perceptions of Dwelling Unit Attributes

Dwelling Unit Attributes	Marine Base		Afikpo	
	N	%	N	%
The Interior is well laid - out				
1. Disagree Strongly	28	28.6	30	32.3
2. Disagree Somewhat	11	11.2	21	22.6
3. Neither Agree Nor Disagree	13	13.3	7	7.5
4. Agree Somewhat	17	17.3	27	29.0
5. Agree Strongly	29	29.6	8	8.6
6. Missing Data	0	0	0	0



Total	98	93		
	100	100		
Beautiful External Appearance				
1. Disagree Strongly	27	27.6	55	59.1
2. Disagree Somewhat	16	16.3	29	31.2
3. Neither Agree Nor Disagree	10	10.2	4	4.3
	22	22.4	5	5.4
4. Agree Somewhat	23	23.5	0	0.0
5. Agree Strongly	0	0.0	0	0.0
6. Missing Data				
Total	98	100	93	100
Dwelling is Well Constructed				
1. Disagree Strongly	19	19.4	37	39.8
2. Disagree Somewhat	15	15.3	8	8.6
3. Neither Agree Nor Disagree	7	7.1	14	15.1
	34	34.7	25	26.9
4. Agree Somewhat	23	23.5	9	9.7
5. Agree Strongly	0	0.0	0	0.0
6. Missing Data				
Total	98	100	93	100
Private outside space around compared to others				
1. Disagree Strongly	27	27.6	60	64.5
2. Disagree Somewhat	21	21.4	21	22.6
3. Neither Agree Nor Disagree	18	18.4	3	3.2
	20	20.4	9	9.7
4. Agree Somewhat	12	12.2	0	0.0
5. Agree Strongly	0	0.0	0	0.0
6. Missing Data				
Total	98	100	93	100
Dwelling Not Too Close to Others				
1. Disagree Strongly	40	40.8	65	69.9
2. Disagree Somewhat	28	28.6	14	15.1
3. Neither Agree Nor Disagree	14	14.3	7	7.5
	10	10.2	3	3.2
4. Agree Somewhat	6	6.1	2	2.2
5. Agree Strongly	0	0.0	2	2.2
6. Missing Data				
Total	98	100	93	100
Acquisition of Dwelling				
1. Acquired it from Government	6	6.1	0	0.0
	53	54.1	85	91.4
2. Renting it	18	18.4	2	2.2
3. Built it on Government Land	19	19.4	4	4.3
	2	2.0	2	2.2
4. Others				
5. Missing Data				
Total	98	100	93	100
Amount paid for Dwelling Compared to others				
1. Too Expensive	18	18.4	21	22.6
2. Price is about right	20	20.4	27	39.8
3. Too Cheap	5	5.1	11	11.8
4. Missing Data	55	56.1	24	25.8



Total	98	100	93	100
Considering your annual family income what would you say about the amount you are paying				
1. Very Uncomfortable	13	13.3	27	29.0
2. Rather Uncomfortable	15	15.3	13	14.0
3. Neither Comfortable Nor Uncomfortable	5	5.1	10	10.8
4. Fairly Comfortable	15	15.3	22	23.7
5. Very Comfortable	6	6.1	6	6.5
6. Missing Data	44	44.9	15	16.1
Total	98	100	93	100

(Source: Author's Field Survey)

4.3. Other Dwelling Unit Attributes

Table 4.3 revealed that most residents in two settlements live in a row house, temporary structure (Bacha) and uncompleted houses with percentage distribution of 60.2% - 98.9%. (See Plates I and 2). The study showed that most households live in one room in Marine Base and two rooms in Afikpo. This is an indication of overcrowding in these settlements.

In the informal settlements most of the houses need major repairs and deteriorated (See Plates 1 and 2). This shows that maintenance culture is still a major issue in the informal settlement and Port Harcourt. The deteriorating condition of houses in the study area could also mean that houses were built with poor quality materials and poor workmanship. This is confirmed by the survey results that most houses in the study area were roofed using corrugated iron sheets (CIS). Corrugated iron sheet is prone to rusting from a number of factors including salt from evaporation of sea water, given the proximity of settlements to the creeks. The reason why most house owners use CIS is because it is cheaper than other roofing sheets but it is, of course, not as durable. Table 4.3 further reveals that most of the houses were 11 - 20 years old.

The study also revealed that most residents in the two settlements were tenants while some were owner occupiers. Table 4.3 further showed that annual rent paid by most of the tenants is between ₦10,000 to ₦50,000. The study showed that mostly two to three persons live in one room in two settlements. This is a high occupancy ratio per room, indicating overcrowding which sets in when occupancy exceeds 1 person per room.

The study revealed that corrugated iron sheet and asbestos are the widely used roofing material. The walling material commonly used across the neighbourhoods was sandcrete cement blocks and corrugated iron sheet. The predominant foundation type used is strip foundation while the predominant flooring was sandcrete.



Plate 1: A Poorly Maintained Building at Afikpo Water Front. (Source: Author's Field Survey)





Plate 2: Deteriorated Buildings at Afikpo Water Front. (Source: Author’s Field Survey)

Table 4.3: Other Dwelling Unit Attributes in the Informal Settlements

Dwelling Unit House Type	MarineBase Waterfront		Afikpo Waterfront	
	N	%	N	%
1. A row house	28	28.6	36	38.7
2. Bacha(temporary structure)	19	19.4	34	36.6
3. Uncompleted block houses				
4. A block of flats	12	12.2	21	22.6
5. Bungalow				
6. Semi-detached Bungalow	0	0	0	0
7. Maisonette (duplex)	18	18.4	2	2.2
8. Missing Data	15	15.3	0	0
	0	0	0	0
	6	6.1	0	0
Total	98	100	93	100
Living Space				
1. One room	42	42.9	30	32.3
2. Two rooms	21	21.4	46	49.5
3. Three rooms	10	10.2	4	4.3
4. Four rooms	14	14.3	4	4.3
5. Five rooms	11	11.2	9	9.7
6. Missing Data	0	0	0	0
Total	98	100	93	100
Maintenance Condition				
1. Sound (Needs No Maintenance)	8	8.2	0	0
2. Needs minor repairs	30	30.6	2	2.2
3. Needs major repairs	20	20.4	21	22.6
4. Deteriorating	24	24.5	36	38.7
5. Dilapidated	13	13.3	34	36.6

6. Missing Data	3	3.1	0	0
Total	98	100	93	100
Age of Building				
1. < 5 years	2	2.0	0	0
2. 5 – 10 years	17	17.3	13	14.0
3. 11 – 20 years	38	38.8	47	50.5
4. 21 – 30 years	30	30.6	27	29.0
5. 31 – 40 years	3	3.1	4	4.3
6. 41 – 50 years	0	0	2	2.2
7. Over 50 years	6	6.1	0	0
8. Missing Data	2	2.0	0	0
Total	98	100	93	100

House Tenure

1. Owner – occupied	41	41.8	10	10.8
2. Privately Rented	53	54.1	83	89.2
3. Company rented	0	0	0	0
4. Company Official quarters	0	0	0	0
5. Public official quarter	0	0	0	0
6. Missing Data	4	4.1	0	0
Total	98	100	93	100

Rent Per Annum

1. Less than N10,000	0	0.0	8	8.6
2. N(10,000 – 50,000)	36	36.7	58	62.4
3. N(51,000 100,000)	2	2.0	16	17.2
4. N(101,000 150,000)	3	3.1	4	4.3
5. N(151,000 200,000)	2	2.0	2	2.2
6. N(201,000 250,000)	5	5.1	5	5.4
7. N(251,000-300,000)	5	5.1	0	0
8. N(301,000-350,000)	0	0	0	0
9. N(351,000-400,000)	0	0	0	0
10. N(401,00-450,000)	0	0	0	0
11. N(451,000 500,000)	0	0	0	0
12. N(501,00-550,000)	0	0	0	0
13. N(551,000 600,000)	0	0	0	0
14. Above N600,000.00	0	0	0	0
15. Missing Data	45	45.9	0	0
Total	98	100	93	100

Room Occupancy Ratio

1. One person /room	4	4.1	9	9.7
2. Two persons/room	31	31.6	35	37.6
3. Three persons/room	23	23.5	36	38.7
4. Four persons /room	9	9.2	7	7.5
5. Five persons/room	10	10.2	2	2.2
6. Six persons /room	8	8.2	3	3.2
7. Seven persons/room	4	4.1	0	0
8. Over seven persons /room	9	9.2	1	1.1
9. Missing Data	0	0	0	0
Total	98	100	93	100



Type of Roofing Material				
1. Corrugated Iron Sheets	78	79.6	31	33.3
2. Asbestos	6	6.1	50	53.8
3. Reinforced concrete	2	2.0	0	0
4. Aluminum	9	9.2	10	10.8
5. Slate/ Roof tiles	0	0	0	0
6. Missing Data	3	3.1	2	2.2
Total	98	100	93	100
Type of Walling Material				
1. Corrugated Iron Sheets (Zinc)	18	18.4	11	11.8
2. Wood/Plywood	3	3.1	30	32.3
3. Mud	0	0	0	0
4. Sandcrete Cement Block	75	76.5	48	51.6
5. Burnt Bricks	0	0.0	0	0
6. Concrete	0	0	2	2.2
7. Others, specify	0	0	0	0
8 Missing Data	2	2.0	2	2.2
Total	98	100	93	100
Type of Foundation				
1. Strip Foundation	83	84.7	88	94.6
2. Raft	7	7.1	3	3.2
3. Pile	0	0	0	0
4. Missing Data	8	8.2	2	2.2
Total	98	100	93	100
Type of Flooring				
1. Concrete	25	25.5	6	6.5
2. Sandcrete	48	49.0	74	79.6
3. Tiles	19	19.4	7	7.5
4. Terrazzo	0	0	0	0
5. Marble	0	0	0	0
6. Mud	0	0	2	2.2
7. Missing Data	6	6.1	4	4.3
Total	98	100	93	100

(Source: Author's Field Survey)

5. Conclusion

In this study dwelling unit conditions in informal settlements were examined. The study found that majority of the respondents said that water is not available in their dwelling units. This implies that most residents in the settlements bought water from owners of private boreholes. It also implies that sanitation is a major problem in these settlements which affects the health of the residents. A large proportion of the respondents affirm that electricity, toilet, kitchen and bathroom are inadequate and shared. In the informal settlements most of the houses needs major repairs and are deteriorated. The study concludes that dwelling unit facilities and services are not available and inadequate. Overcrowding is also a challenge in the informal settlements. Some houses need major repairs, the implication is that all the houses that fall within this category need to be renovated by the owners. Access to housing finance is required to accomplish this and housing finance can be obtained through the National Housing Fund loan scheme. Findings of this study are similar to the characteristics outlined by UN Habitat [2] and Chung and Hill [15]. The study recommended that government should provide standard dwelling units, sanitation and upgrade the informal settlements to improve their living conditions.



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