

PUBLIC PERCEPTION OF MINIMUM HOUSING STANDARDS IN BENIN CITY, NIGERIA

Uyi Ezeanah, Sylvanus Songden, Moga Monday Simon and Christopher Musa Choji

Department of Urban and Regional Planning, University of Jos, Nigeria

Corresponding author: ezeanahu@gmail.com

Abstract

Housing is vital for the sustenance of humankind. Despite the significance of housing and formal conventional interventions, adequate supply has remained a mirage to all cadres of the society in Nigeria. Consequently, the discrepancy in housing need and supply is high. The Nigerian housing question has reached a crisis, manifesting and expressing itself in quantitative and qualitative dimensions. While several studies have examined the level of compliance with minimum housing standards and development controls, little or no effort has been made to explore the public perception of minimum housing standards. This study, therefore, aimed at filling this gap by documenting the public perception of minimum housing standards in Benin City. A cross-sectional survey research design was adopted. A total of 365 respondents were used as subjects for the study. The study made use of frequency count, percentages and analysis of variance to analyse the research objective and hypothesis raised for the study. The study revealed that the respondent's perception of minimum housing standards was greatly influenced by their spatial locations in Benin City.

Keywords: Housing, Standards, Perception

INTRODUCTION

Before the colonial administration in 1854, land-use administration in Nigeria was vested in traditional rulers or community heads, in different parts of the country. They are the Obis, Obas, and Emirs in the east, west, and northern part of the country, respectively (Oduwaye, 2006). Formal planning activity in Nigeria began with an Ordinance in 1902, which empowered the Governors of the Colony and Protectorate of Southern Nigeria to set up European Reservations. Through a series of ordinances, culminating in the Town and Country Planning Ordinance, No. 4 of 1946, planning became legitimised as a state function throughout the country.

Since then, large amount of resources (effort, time, materials and money) have been devoted to planning the Nigerian environment at the national and sub-national levels. The problems of housing shortages, like those of unemployment, physical deterioration, poverty, and inequality in service delivery systems have escalated. The incidence and growth of these problems seem to outpace the capacity of government to address them. Nigerians are faced with the fact that their cities are in trouble and that there is an urgent need to take active measures to tackle the emerging problems.

Public dissatisfaction in Nigeria with the process and output of planning and other

regulatory standards is becoming increasingly articulate and vocal. Symptoms of mass rejection of planning include non-identification with the planning process and non-compliance with the planning regulations. According to Omuta (2004), the planning codes being enforced do not reflect the local economic realities and this may probably account for the woeful performance of the housing sector. Ezeanah (2018) has also argued that the western housing codes applied to Third World cities do not reflect the economic realities of the peoples' situation and hence they are not only discriminatory against the poor but prevent them from owning homes as prescribed by the existing standards. In the same vein, Lufadeju (1984) correctly predicted the failure of the policy of 'Housing for All' by the Year 2000, unless the requirements of housing codes were modified, liberalized and simplified, to not only recognize, but also accommodate the economic disability and handicap of the poor.

However, on the practical side, there has been an unresolved issue regarding people's perception of minimum housing standards. For

instance, the fundamental question as to who should decide housing standards is yet to be fully resolved. Consequently, several stakeholders have always been left out in the process of formulation and implementation of housing standards.

It is now considered that enduring solutions to poor housing standards and its environment which are fundamentally human problems should be sought from the users' themselves. This implies active public participation in the design of housing policies and regulations in Nigeria. An important way of evolving public participation in the development of housing regulatory standards is to seek their perception of minimum housing standards. Such information could then be used as a tool in the development of minimum housing standards. While several studies (Sada, 1984; Omuta, 1986; 1987; Moughalu, 1991; Arimah and Adeagbo, 2000) have examined the level of compliance with minimum housing standards and development control little or no effort has been made to seek the public perception of minimum housing standards. The objective of this study is to assess the public perception of minimum housing standards in Benin City. According to this goal, the specific objective is to assess the perception of minimum housing standards by people and to examine if there are any significant spatial variations in this perception (of minimum housing standards) in Benin City.

LITERATURE REVIEW

Housing Standards

Housing and building standards are standards that govern how a given housing provision within a locality or environment is planned/regulated (Thompson, 1976). The official standards refer to the laws which are in use and have been coded as a means of regulating the type and nature of housing provided in Nigeria. Official standards have been categorized into three distinct types of space standards; technological or performance standards and threshold and range standards based on the function performed by the individual standard. The Town and Country Planning Laws (Cap 123) of 1946 (Omuta, 1986) was the first-ever comprehensive planning law in Nigeria. Different states of the federation have adopted their building laws or codes from it. The Town and Country Planning

Laws (Cap 123) of 1946 were amended under the Bendel State Town and Country Planning Law (Cap 165) of 1968 and these rules have over time been changed to accommodate the building norms that are endorsed in Edo state. The Edo state of Nigeria *Gazette* identifies these forms of standards for providing or constructing residential buildings in Nigeria.

Few studies have examined the level of compliance with development control standards in Nigeria. Arimah and Adeagbo (2000) and Omuta, (1986) in their studies contended that although there is an awareness of urban planning and building regulations by some households in Ibadan city and Benin City, problems of compliance persist. They further argued that the building norms that are mostly contravened are the size of rooms, provision of infrastructural amenities, stipulations relating to setbacks, and the use of a residential building for multiple uses- as a home and as a business enterprise. Reasons given for contravening these guidelines include the nature of urban planning laws, the contempt and lethargy of the community towards official development laws in the town, the lack of monitoring and supervision, and poor income levels of most people. Non-compliance to the codes and building standards has resulted in the production of poor quality housing in Ibadan and Benin City.

Attempts have been made at the national and sub-national levels towards planning housing standards of the Nigerian society through the provision of resources such as money, effort, materials, and time. Although these planning and building regulations have been reviewed over time, they are unaffordable for poor and low-income, and middle-income earners in Nigeria and Benin City specifically. As a result, the various challenges such as inadequate housing policies, the excessive cost of housing construction, poor access to land etc. that have been, and are being considered, have hardly diminished and barely lessened (Ikejiofor, 1999; Makinde, 2013 and Udechukwu, 2008).

Since planning regulations are often too official, unachievable and escalate the cost of housing delivery especially for the low-income earners, it tends to foster an environment for corrupt practices to take place. The problems of housing deficit, like unemployment, poverty, structural

deterioration, insufficiencies and variation in the provision of service schemes have increased. These aforementioned problems seem to surpass the Nigerian government's capacity to confront these problems in addition to the corrupt practices that are embedded within the formal system (Fokolade and Colenbtz, 1981). Consequently, there is a need for a better understanding of the problems and also to articulate how to improve the existing minimum housing standard regulations and control methods.

Perception Studies

There are few studies on housing perceptions in Nigeria. Awotona (2002) examined the perception of housing conditions by the urban poor in the city of Jos. The study provided a critical analysis of the urban poor's perception of housing conditions in Nigeria. The study posited that the problems of housing in Nigeria today cannot be restrictedly defined in terms of housing costs, building materials, manpower availability, land tenure systems and other factors. To understand them adequately, the problems must be seen as an unavoidable and persisting aspect of structural inequality in our society. The study further noted that clarification of users' disposition of minds towards government housing policies is essential to begin to formulate the elements of various reforms that are necessary to reduce inequality in housing.

Domanski, et al., (2006) defined Perception a state of fundamentally being aware or knowledgeable of something through the senses of sight, hear, touch, taste and smell. The sense of taste is rarely used in housing assessment. Perception starts from an evaluation of one's situations with those of other people. For this study, perception is defined as the level of awareness or knowledge of the (prescribed minimum housing standard) through the senses of hearing. This is fundamental to understanding the people level of awareness of the given standards in their spatial locations. This will be assessed using the four-point scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SA).

Jiboye (2009) examined the perception of tenants' satisfaction with public housing in Lagos, Nigeria. This was accomplished by

assessing the levels of housing satisfaction of the general population and the degrees of satisfaction of tenants living in selected public housing estates within Lagos metropolis. Three (3) major housing components – environment (E), dwelling (D), and management (M), were identified and employed for the study. Six (6), representing 10% of estates, were randomly selected from forty (40) public housing estates in Lagos. The results of the analysis indicate that the perception of tenants' housing satisfaction varies and is dependent on the environment, dwelling and management interaction systems. It demonstrated that the perception of tenants' satisfaction with the housing environment and dwellings was above average (adequately satisfactory), but their level of satisfaction with the housing management was below average (unsatisfactory). The study showed that users' inputs and preferences should be strongly considered by planners and public housing agencies when planning and designing public housing projects.

Aliu and Adebayo (2010) examined the potential influence of housing conditions on the health and wellbeing of dwellers in the Lagos metropolitan area. A total of 1240 houses and households were surveyed using structured questionnaires in four communities in Lagos. Analysis of the data revealed that a large portion of houses in these areas was in deplorable conditions. The result further showed that the conditions of the houses impacted negatively on the health and satisfaction levels of the residents. The implication is that some of the health problems and psychological trauma associated with urban life in developing countries like Nigeria are traceable to poor dwellings that characterise the cities. Therefore, perception studies as evidenced by various authors have focussed on diverse geographical locations and diverse issues as reviewed. It is against this backdrop, that the study of public perception of minimum housing standards in Benin City finds relevance. In the ensuing sections, the result of the public's perception of minimum housing standards will be provided through the analysis of the data collected in addition to factors responsible for the non-compliance to minimum housing standards by the public.

MATERIALS AND METHODS

Study Area

Benin City is the biggest urban centre in Edo state. The area lies between longitudes 6°13'E and 6°19'E, and latitudes 5°36'N and 5°60'N (Asikhia and Eghagha, n.d) (Figure 1). It has an extensive history dating back to before the 12th century AD. Within the modern contemporary era, Benin City became the headquarters of the Midwestern region in 1963, after which it experienced a marked increase in urban development (Omuta, 1986). Currently, there are 4 LGAs that makeup Benin City. These are Ovia NE and Ovia SE, Orhionmwon and Uhunmwonde LGAs. The current size of the planning zone in Benin City is 804 sq. Km (Edo State Government, 1996).

The growth of Benin is related to population increases. In 1952, the number of residents in Edo State was put at 53,753 (Nigeria Census, 1963). In 1963, the population had increased to 100,094 while in 1991, the population of residents living in the city grew to 780,976 and in 2006 to 3,233,366 (NPC, 2006).

Residential land use dominates all land use activities in Benin City (Onokerheraye and Omuta, 1986; Ogu, 2009). Studies have shown that Benin City exhibits four main residential patterns (Ikhuoria 1984 and Ogu, 2009). These are a Traditional core surrounded by a migrant ring, Intermediate area, settlements/ Government reservation area, and developments/ urban fringe. From the four distinct residential zones in Benin City, four neighbourhoods were selected, one from each zone. In the Traditional core zone, which has the Oba's Palace, the Ogbe neighbourhood was selected. From the medium neighbourhoods' areas around Owina, Uselu, Ugbowo, Okhoro, Upper Lawani, First and Second East Circular and Dumex Road were selected to represent the intermediate area. In the Planned settlements, the Government Reservation Area (GRA) was selected and this includes Boundary Road, Adesuwa, Ihama and other areas in GRA, while the fringe neighbourhoods covered Oluku, Aduwawa, Ikpoba Hill, Oka I and II, Ugbiyoko and other fringe areas in Benin City.

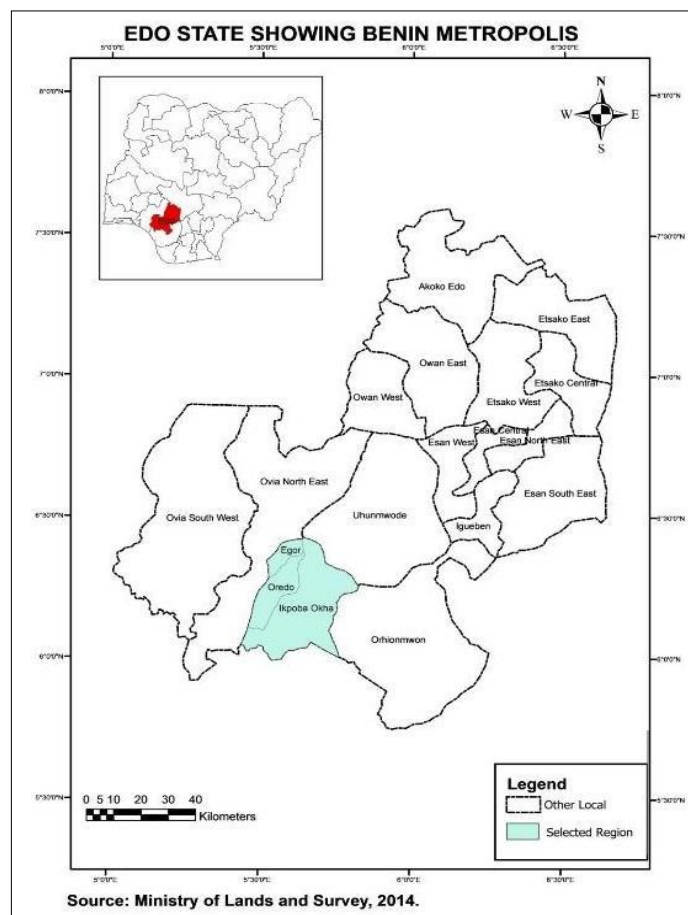


Figure 1 Edo State showing the Study Area.

A cross-sectional survey research design was adopted and four neighbourhoods were selected and used for this study as discussed above. A list of streets was compiled from each of the four selected neighbourhoods. This served as the sampling frame. From the list, two streets were randomly selected using a table of random numbers while the respondents were selected from the streets using systematic sampling with a random start and a sampling interval of five. The population of the study consists of selected household head members in Benin City.

A household in this study is taken as all members of the family that eat from the same pot as at the time of this study. From the neighbourhoods selected, a total of 400 households were selected and only a total of 365 questionnaires out of the 400 were returned by the respondents. The data collected are analysed using a quantitative approach. A questionnaire with a four-point scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), was used to collect

data. This means that for SA they had a better level of perception/awareness, for A (good) level of perception, for D (low) level of perception/awareness and for (SD) they had no knowledge/awareness of the prescribed standards. Data from questionnaires were analysed using Statistical Packages for the Social Sciences (SPSS). Both descriptive and inferential statistics were employed in the analysis of the data collected. These include tables, frequencies, mean, percentages, and Analysis of Variance (ANOVA) was used to test the hypothesis of the study.

RESULTS AND DISCUSSION Demographic and Socioeconomic Characteristics of the Respondents

The demographic characteristics of the respondents examined include income, sex, age, marital status and educational qualification of the respondents as shown in tables 1 and 2.

Table 1 indicates that (35.6%) of the total respondents earned between 10,000 - 30,000 Naira per month.

Table 1 Spatial distribution of income across the neighbourhoods

Income range (Naira)	Name of Neighbourhoods				Total
	GRA	Ogbe	1 st and 2 nd East circular/ Okhoro	Ikpoba hill/ Aduwawa	
Below 10,000	8 (8.8%)	10 (11.0%)	14 (14.0%)	10 (10.6%)	42(11.5%)
10,000-30,000	10 (11.0%)	52 (57.1%)	42 (42.0%)	26 (27.7%)	10(11.0%)
31,000-60,000	18 (19.8%)	15 (16.5%)	34 (34.0%)	20 (21.3%)	130 (35.6%)
61,000-90,000	17 (18.7%)	3 (3.3%)	6 (6.0%)	31 (33.0%)	87 (33.8%)
90,000 and above	38 (41.8%)	0 (0%)	4 (4.0%)	7 (7.4%)	57 (15.7%)
Total	91 (100.0%)	80 (100.0%)	100 (100.0%)	94 (100.0%)	365 (100.0%)

Source: Authors' Fieldwork, 2018

However, the majority of these respondents are found in ogbe (57.1%) and 1st and 2nd East Circular/Okhoro (42.0%) neighbourhoods. The lowest percentage is found in GRA (11%) neighbourhood. Similarly, 41.8 % of respondents that earned above 90,000 Naira per month are found in GRA neighbourhoods. This scenario may be explained by the fact that the GRA is occupied by the high income professionals as against the low and middle income earners found in the other neighbourhoods.

Table 2 revealed that the majority (57.8%) of the respondents were males. One apparent inference that can be drawn from the above analysis is the fact that the majority, 71.7% of the respondents belong to the active or productive age brackets of the population (less than 55 years of age), who are engaged in different livelihood activities for the sustenance of their respective families, while only 28.2% are located on the dependent category (55 years and above). The above age structure shows that there are more married people that make up the

respondents of the study. One reason for this is due to the study's emphasis on the household head who are engaged in different livelihood activities and to the exclusion of their wards that are mainly dependants on their respective household heads.

Again, the majority (82.7%) of the respondents were married, while 12.3% were single. The study also revealed that most

household heads (86%) had between 1 and 6 children. Expectedly, Table 2 shows that 52.9% of the respondents had tertiary educational qualification while only 1.9% of the respondents had no formal education. This is expected since the study is carried out in an urban environment where there is high access to educational facilities. The study area can be described as having a highly literate population.

Table 2 Sex, age, marital status, household size and educational qualification

Variables	No. of Respondents	Percentages (%) of Respondents
Sex:		
Male	211	57.8
Female	154	42.2
Age:		
Under 25 Years	38	10.4
25-34 Years	79	21.7
35-44 Years	84	23
45-54 Years	61	16.7
55-64 Years	49	13.4
Above 65 Years	54	14.8
Marital Status:		
Married	302	82.7
Single	45	12.3
Divorced	5	1.4
Widowed	12	3.3
Separated	1	0.3
Household Size:		
1-3 Children	239	41.7
4-6 children	254	44.3
7-9 children	71	12.4
Above 9 children	6	1
None	2	0.4
Educational Qualification:		
No Formal Education	7	1.9
Primary Education	25	6.8
Secondary Education	140	38.4
Tertiary Education	193	52.9

Source: Authors' Fieldwork, 2018

Perception of Minimum Housing Standards

The perception of respondents was sought on different minimum housing standards across the neighbourhoods. These standards include

the prescribed Minimum Water Closet Standard (WC), Prescribed Minimum Persons per Room Standard, Prescribed Minimum Plot Size and Site Coverage Standard, Prescribed Minimum

Plot per Room Dwelling Houses and Block of Flats Standards, Prescribed Minimum Allowable Number of Dwelling Units per Acre Standards, Prescribed Standards for Allowable Setbacks on all Four Sides of the Building and Prescribed Minimum Standards for Number of

Rooms Allowable per Plot. The responses from the respondents were collated and analysed using frequency counts and percentages since the four-point scale was used in the questionnaire.

Minimum Water Closet (WC) Standards

Table 3 Prescribed minimum W.C standard

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	48 (52.7%)	25(27.5%)	7(7.7%)	11(12.1%)	91
Ogbe	17(21.3%)	51(63.8%)	11(13.8%)	1(1.3%)	80
1 st and 2 nd East circular/Okhoro	43(43.0%)	7(7.0%)	10(10.0%)	40(40.0%)	100
Ikpoba Hill/Aduwawa	14(14.9%)	12(12.8%)	6(6.4%)	62(65.6%)	94
Total	122(33.4%)	178(48.7%)	24(6.7%)	41(11.2%)	365

Source: Authors' Fieldwork, 2018

Table 3 indicates that about 48.7% of the sampled households have a good view/perception of the prescribed minimum standard for toilet facilities by the government of one water closet to three habitable rooms as they agreed to this perception. The table also indicates that about 6.7% of the sampled households strongly disagreed with the prescribed minimum standard for toilet facilities. Spatially, the level of very strong perception was higher in the GRA

neighbourhood, followed by 1st and Second East circular/Okhoro respectively. The lowest level of perception of the prescribed minimum standard for toilet facilities was observed in Ogbe and Ikpoba Hill/Aduwawa neighbourhoods with the percentage of 21.3 % and 14.9 %respectively. This is borne out of the fact most residents domiciled in the neighbourhoods were poorly literate and had very limited knowledge of this standard.

Minimum Persons per Room Standard

Table 4 Prescribed minimum persons per room standard

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	30 (32.9%)	35 (38.5%)	11 (12.1%)	15 (6.5%)	91
Ogbe	40 (50.0%)	15 (18.8%)	12 (15.0%)	13 (16.2%)	80
1 st and 2 nd East circular/Okhoro	43 (43.0%)	37 (37.0%)	12 (12.0%)	8 (8.0%)	100
Ikpoba Hill/Aduwawa	46 (48.9%)	26 (27.7%)	2(2.1%)	20 (21.3%)	94
Total	159(43.6%)	113 (31.0%)	37(10.1%)	56(15.3%)	365

Source: Authors' Fieldwork, 2018

Also, in GRA, the respondents had strong perception because they were highly literate and had built their houses themselves, which meant they had taken their plans for

approval and had been notified of some of these standards by the planning officials.

Table 4 indicates that about 43.6% of the sampled households have a very strong

perception of the prescribed minimum standard of two persons per one habitable room by the government while 15.3% of the respondents had a poor perception of the prescribed minimum standards per number of persons per one habitable room. Table 4 also shows the spatial differences in the level of perception of the prescribed minimum standards. In GRA, about 35% of the sampled household's agreed to having a perception of the standards

implying that they had a good perception of these standards. Similarly, the scenario is not different in Ogbe, 1st and 2nd East circular/Okhoro and Ikpoba Hill/ Aduwawa neighbourhoods where 50%, 43% and 48.9% of the sampled households have strongly agreed they had a perception of the prescribed minimum of two persons per one habitable room.

Minimum Plot Size and Site Coverage Standard

Table 5 Prescribed minimum plot size and site coverage standard

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	70 (76.9%)	7 (7.7%)	3(3.3%)	11 (12.1%)	91
Ogbe	45 (56.2%)	13 (16.3%)	16 (20.0%)	6 (7.51%)	80
1 st and 2 nd East circular/Okhoro	19 (19.0%)	49 (49.0%)	22 (22.0%)	10 (10.0%)	100
Ikpoba Hill/ Aduwawa	20 (21.3%)	53 (56.4%)	9 (9.6%)	12 (12.8%)	94
Total	154 (42.2%)	122(33.4%)	50 (13.7%)	39(10.7%)	365

Source: Authors' Fieldwork, 2018

The maximum site coverage for a plot according to government standard is 45% of the plot for dwelling houses and 50 % for blocks of flats. Table 5 shows that about 42.2 % of the total respondents have strongly agreed with the perception of the prescribed minimum

standards for plot and site coverage while only 13.7% and 10.7% of the total respondents in the various neighbourhoods disagreed which implies that their views of the prescribed minimum standard for site and plot coverage were poor.

Minimum Plot per Dwelling Houses and Block of Flats Standards

Table 6 Prescribed minimum plot per dwelling houses and block of flats standards

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	23 (25.3%)	44 (48.4%)	20 (21.9%)	4 (4.4%)	91
Ogbe	3 (3.8%)	1 (1.2%)	38 (47.5%)	38 (47.5%)	80
1 st and 2 nd East circular/Okhoro	12 (12.0%)	17 (37.0%)	8 (8.0%)	43 (43.0%)	100
Ikpoba Hill/ Aduwawa	14 (14.9%)	21 (22.3%)	23 (24.5%)	36(38.3%)	94
Total	52(14.3%)	83(22.7%)	89(24.4%)	141(38.6%)	365

Source: Authors' Fieldwork, 2018

This again is subject to the economic realities and education of the sampled population which greatly influenced their level of perceptions in these neighbourhoods.

Spatially, GRA neighbourhood recorded the highest level of perception with an average percentage of 70.0, followed by Ikpoba Hill/Aduwawa Neighbourhood and 1st and 2nd

East circular/Okhoro with a good perception of the prescribed minimum standards of 56.4% and 49.0% respectively.

The lowest level of perception (strongly disagree) of the prescribed minimum standard for plot and site coverage was observed in Ikpoba Hill/Aduwawa Neighbourhood with a percentage of 12.8. This is because in GRA the population are more literate as against the other neighbourhoods as discussed earlier.

The prescribed minimum standard of plots per dwelling houses and block of flats by the government by law is 450m². Table 6 shows that about 22.7 % of the sampled households have a good perception (Agree) of the prescribed minimum standard of plots per dwelling houses and block of flats while 38.6 % have a fair perception of the prescribed

minimum standards. Table 6 further evidenced the spatial differences in the level of perception of the prescribed minimum standards. In GRA, about 48.4% of the sampled households have had a better view (Agreed) of the minimum standards of plots per dwelling houses and block of flats while the following neighbourhoods; Ogbe, 1st and 2nd circular/Okhoro and Ikpoba Hill/ Aduwawa neighbourhoods were 47.5%, 43% and 38.3% of the sampled households have a lower perception of the prescribed minimum standard of plots per dwelling houses and block of flats. Consequently, many residents, especially in Ogbe, 1st and 2nd East circular, had lower awareness of this standard and this impacted on their level of compliance with the housing standards in Benin City.

Minimum Allowable Number of Dwelling Units per Acre Standard

Table 7 Prescribed minimum allowable number of dwelling units per acre standard

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	44 (48.4%)	12 (13.2%)	2 (2.2%)	33 (36.2%)	91
Ogbe	0 (0.0%)	4 (5.0%)	20 (25.0%)	56 (70.0%)	80
1 st and 2 nd East circular/Okhoro	17 (17.0%)	10 (10.0%)	41 (41.0%)	32 (32.0%)	100
Ikpoba Hill/ Aduwawa	9 (9.6%)	12 (12.0%)	9 (9.6%)	64 (68.1%)	94
Total	70(19.1%)	38(10.4%)	72(19.2%)	185(50.7%)	365

Source: Authors' Fieldwork, 2018

Table 7 shows that about 50.7% of the sampled households have a lower perception of the prescribed minimum standard of 2 allowable number of dwelling units per acre as their responses were (strongly disagree) while 19.1% have a very good perception of the prescribed minimum standards. It further shows the spatial differences in the level of perception of the prescribed minimum standards and how their level of education impacts on their level of awareness. In GRA, about 48.4% of the

sampled households have a good perception of the standards, the scenario is different in Ogbe, 1st and 2nd East circular/Okhoro and Ikpoba Hill/ Aduwawa neighbourhoods where 70%, 32% and 68.1% of the sampled households have a lower perception of the prescribed minimum of the allowable number of dwelling units per acre. This shows that many of the residents had were not aware of these standards and as such did not consider it in the production of housing in Benin City.

*Minimum Standard for Allowable Setbacks on all Four Sides of the Building***Table 8** Prescribed minimum standard for allowable setbacks on all four sides of the building

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	52 (57.1%)	29 (31.9%)	8 (8.8%)	2 (2.2%)	91
Ogbe	7 (8.9%)	14 (17.5%)	32 (40.0%)	27 (33.6%)	80
1 st and 2 nd East circular/Okhoro	9 (9.0%)	18 (18.0%)	67 (67.0%)	6 (6.0%)	100
Ikpoba Hill/Aduwawa	18 (19.1%)	26 (27.7%)	17 (18.1%)	33 (35.1%)	94
Total	86(23.6%)	87(23.8%)	124(34.0%)	68(18.6%)	365

Source: Authors' Fieldwork, 2018

The minimum housing standard for allowable setback on all sides of the building by the government is 1.5m by 5m. Table 8 also indicates that about 34% of the total number of respondents in the neighbourhood had a poor

The table further shows that there are variations in the level of perception of minimum housing standards across neighbourhoods. While more than half (57.1%) of the respondents in GRA had a very good perception of the minimum standard as prescribed by the government those in Ikpoba

level perception of the minimum housing standard for allowable setback on all sides of the building while 23.8% of the total households have a good perception (Agreed) of this standard.

Hill/Aduwawa neighbourhoods have a bad perception of the minimum housing standard.

Among the sampled households in 1st and 2nd East circular/Okhoro and Ogbe neighbourhoods, the level of perception of minimum standards was fair with percentages of 67.0% and 40% respectively.

*Minimum Standards for Number of Rooms Allowable per Plot***Table 9** Prescribed minimum standards for number of rooms allowable per plot

Names of Neighbourhood	SA	A	D	SD	Total
G.R.A	41 (45.1%)	19 (20.9%)	7 (7.7%)	24 (26.3%)	91
Ogbe	8 (10.0%)	12 (15.0%)	38 (47.5%)	22 (27.5%)	80
1 st and 2 nd East circular/Okhoro	10 (10.0%)	0 (0.0%)	51 (51.0%)	39 (39.0%)	100
Ikpoba Hill/Aduwawa	2 (2.1%)	20 (21.3%)	67 (71.3%)	5 (5.3%)	94
Total	61(16.7%)	53 (14.5%)	163(44.7%)	88 (24.1%)	365

Source: Authors' Fieldwork, 2018

The Table 9 above indicates that about 44.7% of the total number of respondents in the neighbourhood had a fair perception of the minimum housing standard for the number of rooms allowable per plot by the government is six rooms while 16.7% of the total households have a very good perception of this standard. The table further shows that there are variations

in the level of perception of minimum housing standards across neighbourhoods. While about (45.1%) of the respondents in GRA had a better perception of the minimum standard as prescribed by the government those in Ikpoba Hill/Aduwawa neighbourhoods have a fair perception of the minimum housing standard with 73.1%. Among the sampled households in

Ogbe neighbourhoods, the level of perception of minimum standards was also fair with percentages of 47.5%. The highest level of poor perception of the minimum housing standard for the number of rooms allowable per

plot was observed in 1st and 2nd East East circular/Okhoro with 39%.

As discussed in the previous section again the issue of a low level of literacy, and income level may be responsible for this.

Spatial Variation in Perception of Minimum Housing Standards

Table 10 Analysis of variance table

Minimum Housing Standards		Sum of Squares	df	Mean Square	F	Sig.
The prescribed minimum standard for toilet facility by the government is one water closet to three habitable rooms, what do you think?	Between Groups	115.554	3	38.518	50.021	.000
	Within Groups	274.900	357	.770		
	Total	390.454	360			
According to government law, two persons should occupy one habitable room. What do you think?	Between Groups	20.762	3	6.921	11.284	.000
	Within Groups	221.413	361	.613		
	Total	242.175	364			
The prescribed minimum plot size by law is 450m ² , what do you think?	Between Groups	119.051	3	39.684	48.300	.000
	Within Groups	293.314	357	.822		
	Total	412.366	360			
The minimum site coverage for a plot according to government standard is 45 per cent of the plot for dwelling houses and 50 per cent for blocks of flats. What do you think?	Between Groups	84.294	3	28.098	44.046	.000
	Within Groups	225.185	353	.638		
	Total	309.479	356			
The prescribed minimum standard for the allowable number of dwelling units per acre by the government is two. What do you think?	Between Groups	110.425	3	36.808	65.202	.000
	Within Groups	199.278	353	.565		
	Total	309.703	356			
The prescribed minimum standard for the number of rooms allowable per plot by the government is six rooms. What do you think?	Between Groups	102.334	3	34.111	94.701	.000
	Within Groups	130.033	361	.360		
	Total	232.367	364			
According to government law, the minimum allowable setbacks on all four sides of the building is 1.5m by 5m. What do you think?	Between Groups	225.640	3	75.213	123.972	.000
	Within Groups	214.164	353	.607		
	Total	439.804	356			

Source: Authors' fieldwork 2018

The Analysis of Variance (ANOVA) (Table 10) was used to determine if any spatial variations exist in public perception of minimum housing standards in Benin City. The ANOVA table shows that for all seven minimum standard variables tested in the study, there are significant spatial variations in public perception of them. Measured against the 0.05 level of significance all variables returned significance levels of 0.00, which is less than the level of significance (0.05). This implies that there are significant differences in the spatial variations in the perception of minimum housing standards in Benin City.

DISCUSSION

In line with the above result, there appears to be a general trend, which shows that residents of GRA, in most cases, have better views of these minimum standards than other areas. This may be because they are more educated and earn more income than others, according to their socioeconomic profiles. The implication is that they are better aware of the need for minimum housing standards and compliance with such prescriptions because of their education and have the income to meet these standards so they may not have much cause for complaints against them. In the old core area (Ogbe), some of the housing is old and precede these minimum standards era and due to their low socioeconomic status, there is little income to effect compliance. Less education also means less understanding of the need for these minimum standards by the residents in the first place. Also in some other locations explored such as the 1st and 2nd East circular/Okhoro some of the minimum standards appear to be acceptable or viewed favourably while others are not. This again stems from their level of awareness in addition to their socio-economic status which makes it difficult to comply with such standards.

CONCLUSION

This paper has explored the public perception of minimum housing standards in Benin City, Nigeria from the resident's perspective. It has shown that residents level of awareness or perception is substantially influenced by their level of education, socio-economic status and spatial locations respectively. Given the persistent increase in the urban areas in Nigeria

and the developing world at large, housing provisions in terms of compliance to housing standards will remain a mirage if necessary steps are not taken by the government and the planning agencies to educate the people on the prescribed minimum housing standards in Benin City. Finding from this study is estimated to be of wider nationwide and worldwide applications, given that housing is of vital importance to mankind.

In the light of the above findings, this study makes the following recommendations: The government should develop programmes that will enlighten the people on the minimum housing standards taking into cognisance the public level of awareness of the prescribed minimum housing standards. Similarly, the government should develop new strategies that are people-centred to ensure the effective enforcement of the prescribed minimum housing standards in Benin City. Finally, the Government should streamline the minimum housing standards to reduce some of the ambiguities in the housing standards.

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