

Housing and Neighbourhood Quality Deprivation in Fagoji Area of Dutse, Jigawa State, Nigeria

*Murtala Uba Mohammed¹, Nafiu Zakari²

¹ Department of Geography,
Bayero University, Kano.

²Department of Environmental Management and Toxicology,
Federal University, Dutse

Email: murtalamuhammadu@gmail.com

Abstract

Although urban areas are places of opportunity and joy, they are also home of poverty and inequality. Urban poverty manifests in many forms, lack of decent housing and poor neighborhood are some of key pointers to urban poverty, especially in developing countries where urbanization is generally rapid and unplanned. This study analyses housing and neighborhood qualities in Fagoji, a locality in the heart of Dutse the Capital City of Jigawa State. Data for the study were obtained using checklist and interview schedule. The interview schedule was used to obtain the housing information while checklist was used to map the condition and infrastructure in the neighborhood. Two hundred respondents were selected in the area using convenient sampling technique. Housing deprivation index was generated based on various quality attributes. The study findings reveals that most of the residents are deprived with respect to drainage, water, toilets and poor sanitary conditions. Although respondents are generally satisfied with neighborhood quality, the observation revealed that the neighborhood generally lacks some basic facilities and infrastructure are highly over stretched. Also nearly one-third of the respondent are deprived with respect to housing quality. The study recommends the need for the state government to create enabling environmental condition for urban poor decent to access decent housing and provide more infrastructure in the already existing settlement with a view to improving the living condition of the residents.

Keywords: Housing, Poverty, Sanitary Condition, Deprivation, Urban Centre

Introduction

The second millennium is described as the millennium of urbanization and urban growth. For the first time the number of people living in urban areas constitute the majority of the world population. At the immediate dawn of 21st century the report by the UN-Habitat postulates that the world population will continue to increase and the increase is virtually an urban phenomenon (UN-Habitat, 2003). Currently 55% of the world population is urban

*Author for Correspondence

(Urbanization Prospects, 2018), residing in 2.8% of the global earth surface (Centre for International Earth Information Science, CIESIN, 2007), and by 2060 two-third of global population will be living in urban areas. Although the urbanization level is higher in developed countries the rate of increase is highest in developing countries. Indeed the report by UNDESA/PD (2012) projected the world urbanization to reach 65% by 2050 of which 90% of the urbanization will be contributed by developing countries. African cities will constitute 1.5 billion people by 2050. This uninterrupted urbanization and urban expansion is not only having the potentials to stimulate, but can also retard the development in an area, region or country (Cobbinah et al., 2015).

With average growth rate of 3.29% Africa has the fastest growth rate, higher than the world's average (2.69%). Nigeria has one of the highest growth in Africa (3.93) according to some statistics (UNDESA/PD, 2012). Although Africa had the highest urbanization in recent decades (Guneralp, 2017), the continent had been lagging behind in addressing development and life improvement (Boadi et al., 2005). African cities continue to be plagued with problems of unemployment, poverty, insecurity and water and sanitation challenges (Cobbinah et al., 2015). This unprecedented urbanization, particularly in Africa is accounted by natural growth, rural urban drift and reclassification of rural settlements (McGranahan et al., 2009). The three factors are not, however mutually exclusive. For instance the reclassification of rural settlement is being achieved through annexation of neighboring rural areas into the adjacent city which is largely accounted by population increase through either natural growth or urban influx (McGranahan et al., 2009; Cobinnah et al., 2015). The high rate of urbanization in Nigeria had been attributed to post civil war states creation (Barau, 2017). States capital in particular attracts and provides avenue for migrants from rural areas. While GDP is the main driver of urban expansion in developed part of the world, in Africa it is largely attributed to natural increase in birth rates and rural-urban drift. Indeed considering their GDP, Nigeria's cities are poor by global standard (Barau, 2017).

Income is one way of measuring poverty. It is however important to note that poverty has multiple dimension as such it is appropriate when quantifying it to supplement variables such as housing, literacy, life expectancy, provision of public goods and so on (Bourguignon and Chakravarty 2003; Chakravarty, Deutsch and Silver, 2008). One of the major challenges in urban centres particularly in developing world is that of housing quality. Although the quality of housing and services varies greatly in different part of the world, almost every city in the world has slums. In addition to the slums, cities are also characterize by informal areas, where the residents are poor and life quality is generally low. Housing and neighbourhood characteristics are very fundamental when measuring the quality of life (Ilesanmi, 2012; Mole et al., 2017). In fact descent dwelling is first and the most fundamental need of human based without appropriate dwelling, people can hardly meet their other basic needs and participate adequately in society. Due to lack of housing development planning, Nigeria suffers from poor housing condition. For many years, the country has not made serious attempt to address the ever increasing housing needs (allAfrica, 2016).

Housing deprivation describes a situation where a house lacks some basic requirements. What one considers as basic requirements is however relative and changes with time and location. Measuring housing deprivation take place in two stage: the first stage is identifying the dwellings basic conditions and the second is aggregating the conditions into synthetic

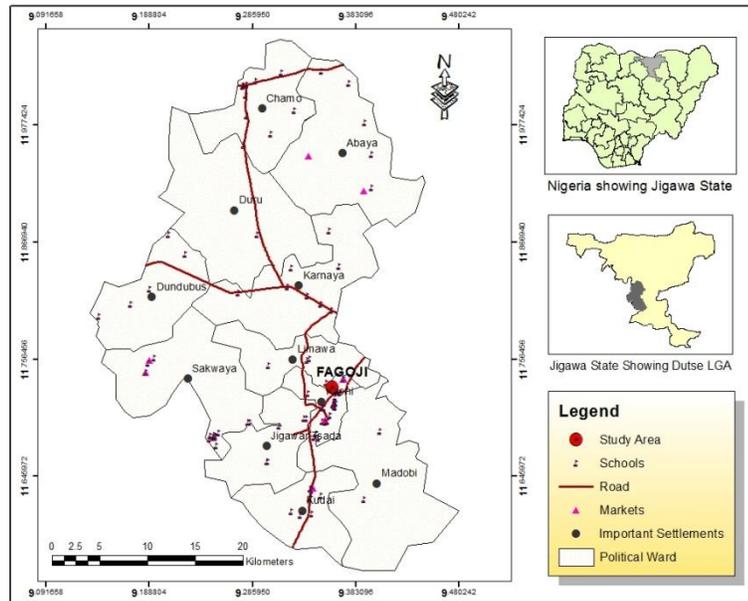
indicators. The choice of indicators is guided by what the society considers as necessity, common possessed or essential feature of individual well-being. There are several methods of aggregating to the indicators to develop an index value to describe the deprivation levels (Ayala and Navaro, 2007).

Fagg et al. (2013) sees neighborhood deprivation as form of deficiency measure for a small geographical area. It is obtained by finding average, percentage or standardize scores of area condition such as population, crowding, unemployment and so on.

In Nigeria, several studies were conducted to ascertain the housing quality in urban centres. The focus of the studies include nature of housing, neighborhood and life quality in public housing (Ilessanmi, 2012); housing and environmental quality (Owoeye, and Ogundiran, 2015); housing quality of informal settlement (Amao, 2012); and spatial characteristics of housing characteristics (Wole et al., 2017). Most of these studies were conducted in larger cities such Lagos, Kano and Ibadan. Studies on emerging cities like Dutse are very few, hence need to conduct studies such as this. Dutse became a state capital recently, it has started to assume an urban form. Prior to 1991 when Jigawa state was created, Dutse was just a small and insignificant town. With its declaration as state capital however, new layouts were created and many villages became town. Therefore this study aims at analysing housing and neighbourhood quality in ancient part of the newly created capital of Jigawa State.

Study Area

The study area is Fagoji, a quarter in Dutse, the capital of Jigawa State, Nigeria. It is seating on latitude 11° 43' north of the Equator and longitude 9° 21' east of Prime meridian. It is located at the heart of the city along Emir's Palace Road. It is the second most historic area after Garu, the seat of Duste Emirate and is the most centralize quarter in the town. It is situated in Kachi ward, the most populated ward in Dutse local government. The climate of the area like that of the state is tropical wet and dry and the vegetation type is Sudan Savannah even though influenced by the rocky topography of Dutse. The dominant trees in the area are neem and date palm. The geology is basement complex which is made up of metamorphosed crystalline rock of older granitic rocks and the family. Familiar language in the area is Hausa, though some of the habitants claim Fulani decent. The most important source of livelihood for the settlers is trade, commerce and craft. However, there are many of them that civil servants and farmers. Like other old settlement in Hausaland, Fagoji is poorly planned in the modern sense. The housing areas are densely populated and the settlement pattern is relatively nucleated. Houses are very small and the streets are narrow and non-motorable. The map of the area is shown in Figure 1.



Source: Author's Compilation
Figure 1: The Study Area in Dutse Local Government

Materials and Methods

Data for the study were collected through direct observation and interview schedule. For direct observation, notes were taken on the general environmental condition and the result was used to describe the geography, and to help in data interpretation. The interview schedule was used to obtain data on housing and neighborhood characteristics. Two hundred respondents were sampled for the study using convenient sampling method. This was dictated by the lack of complete sampling frame. A sample of one hundred was selected because researchers felt that it is sufficient looking at the size of the area and near homogenous characteristics of the settlers. However, the study make sure that the entire area was covered to capture micro variability that may be found within. The survey results were coded and entered into Microsoft Excel for the analysis. The questions asked focuses on housing and neighborhood qualities. The conditions were ranked as suggested by Wole et al., (2017).Fifteen environmental parameters were examined based on the consideration of the culture of the area. These parameters focused on three domains: housing conditions, sanitary issue and neighborhood attributes. Each of the fifteen parameter was ranked in ascending order with lowest value given to worst condition and highest values for best condition. The total score for each domain were obtained and based on these the area was ranked as either deprived, partially or not deprived using equal interval class. The deprivation indices were correlated with socio-demographics using Spearman's Rank correlation to ascertain the level of association. The outcome of the analysis were presented as tables and charts and the result were discussed accordingly.

Results and Discussion

Demographics

More than three-quarter of the respondents were age 40 and below indicating that majority of the residents are youths and within their active age. Nearly half of the respondents are male. The overwhelming majority are married, typical rural and newly developed urban area. This findings agreed to some extent with finding of National Health and Demographic Survey (NDHS, 2018). The western education level of the resident is generally low, only a quarter of the respondents have tertiary education and majority attends Qur'anic schools only. The number of secondary school and tertiary school leavers in the area is slightly below the state average of 18% and 7% respectively (NPC, 2010). Being an urban area, the level of education in the area is likely to be higher than most part of the state which is predominantly rural. As expected, few (less than one-fifth) were civil servants. Trading and self-employment are the main employee of people in the area (Table 1). This finding agrees with Owoeye and Ogundira (2015) which discovered that major residents in Maniya in Ibadan are traders and self-employed.

Table 1: Demographics

Characteristics	Response	Percent	Cumulative Percent
Age (Year)	20 and Below	8	8
	21-30	45	53
	31-40	24	77
	41-50	15	92
	51-60	4	96
	Above 60	4	100
Gender	Male	49	49
	Female	51	100
Marital status	Single	14	14
	Married	86	100
Level of Education	Qur'anic	38	38
	Primary	7	45
	Secondary	31	76
	Tertiary	24	100
Occupation	Civil Servant	18	18
	Self Employed	27	45
	Trader	23	68
	None	32	100

Source: Field Survey (2017)

Large family is a general feature of the area. From Table 2, half of the people interviewed during the survey have family of eight and above. Indeed the average family size is nine which is quite above the national average of 4.9 for the country and that of 5.3 for Jigawa state (NPC priority table, 2010).

Table 2: Family Size and Number of Rooms

Characteristics		No. of Rooms				Total
		2-4	5-7	8-10	>10	
Family Size	2-4	23	2	1	3	29
	5-7	18	2	1	0	21
	8-10	6	10	2	0	18
	>10	16	5	6	5	32
Total		63	19	10	8	100

Source: Field Survey (2017)

A large family size is a general feature of poor and less development (Orbeta, 2015). Majority of households in the area have live in houses of 2-4 rooms, few had more than four rooms, and these were usually large families.

Housing Characteristics

The characteristics examined include the housing tenure and the physical features. Figure 2 shows the housing tenure in the area.

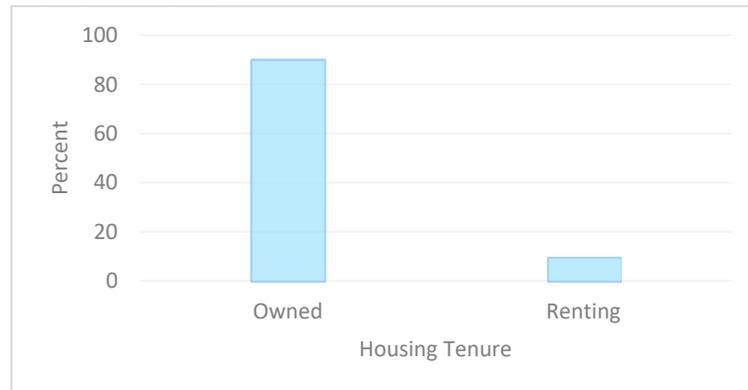


Figure 2: Housing Tenure

Housing ownership is major feature of the area. In fact in every ten respondents in the area, only one is a tenant. This is typical of informal and old settlements. Only in areas with high economic potentials or employment opportunities one find large number of tenants. However, the findings of this study contradicts that of Lagos, where 60% of the residents live in rentedapartmentpaying as high as 50 to 60% of their income (Population, Development and Housing in Lagos, 2015).

Table 3 indicates the physical characteristics of housing in the study area.

Table 3: General Housing Characteristics

	Response	Frequency	Cumulative Percent
Building Material	Mud	25	25
	Cement Block	66	91
	Brick	9	100
Type of Floor	Earth	28	28
	Cement	60	88
	Tiles	12	100
Type of Roofing	Thatch	2	2
	Zinc	92	94
	Asbestos	4	98
	Others	2	100
Number per Room	0-4	93	93
	5 and Above	7	100

Source: Field Survey (2017)

From Table 3 most of the houses in the area are built from cements blocks, typical of most urban centres in Nigeria. However, the number of mud houses is relatively large, constituting a quarter. This is a pointer to poor housing condition because in case of flooding or heavy rainstorm, mud houses are most vulnerable. Cement is the dominant floor material in the area, typical of most urban centres in Nigeria. Of every ten houses in the area, nine are having Zinc roofing. There are few asbestos and thatch roofing in the area. However the housing density in the area is largely within the permissible limit of WHO of five person per room. The housing characteristic corroborates with Haruna (2018) in Kano Metropolis.

Sanitary condition of the areas was also examined using six indicators as presented in Table 3.

Table 3: Sanitary Conditions

Variable	Response	Frequency	Cumulative Percent
Source of Water	Well	17	17
	Borehole	36	53
	Water Vendors	9	62
	Tap	38	100
Type of Drainage	Opened	81	81
	Closed	19	100
Type of Toilet	Pit latrine	52	52
	Water closing	47	99
	Other	1	100
Location of Suck Away	Inside the house	30	30
	Outside the house	70	100
Rubbish/litter lying around	Very Common	29	29
	Fairly Common	20	49
	Common	15	64
	Not Common	36	100
Bad Odour	Very Common	3	3
	Fairly Common	9	12
	Common	10	22
	Not Common	78	100

Source: Field survey, 2017

Although the study area is situated in the heart of the state capital, majority of the residents (53%) source of water is groundwater from wells and boreholes. This water is rarely treated before consumption and has a potential cause of water use related ailments like cholera and typhoid fever (Taylor et al., 2015). More so, the potential of contamination is higher with common usage of pit latrine toilet type in the area that are not lining. Even the use of unlined suck ways, the contamination threat is still higher. There is no centralized sewage in the area. The drainage in the area were overwhelmingly open and is likely to be good breeding sites for mosquitoes and other disease vectors. Rubbish littering is common in the area in the area a sign of poor sanitary condition. With open drainage, the rubbish is likely to end in the open drainage and that may aggravate the urban induced flood in the area. Bad odour is very rare in the area according the respondents (Table 3).

Neighbourhood in the area was assessed using five important indicator. Respondents were asked to rank in a relative term, the distance of the five facility from the residence. The result is presented in a radar chart in Figure 3.

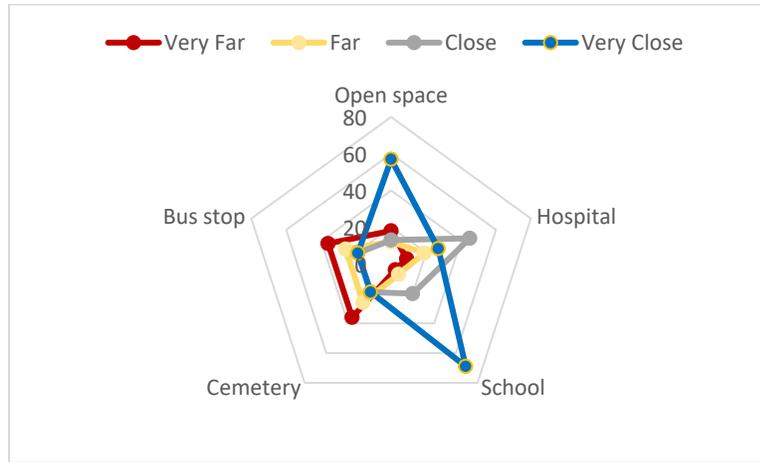


Figure 3: Neighborhood Quality

Figure 3 shows that school is the closest facility in the neighborhood followed by open space. This was attributed to importance and high demand for the schools compared to other facilities. Hospital is relatively close, nearly 45 and 35 percent have hospital close to their residence indicating that the area is less deprived with respect to hospital. The area is most disadvantage with respect to bus stop and cemetery. Cemetery is less needed compared to school or hospital and taking a decease to the cemetery is purely adult responsibility. Only twenty percent of the household are very close to the bus stop, hence area is most deprived with respect to transport sector.

Deprivation

The result for the deprivation is shown in Figure 4.

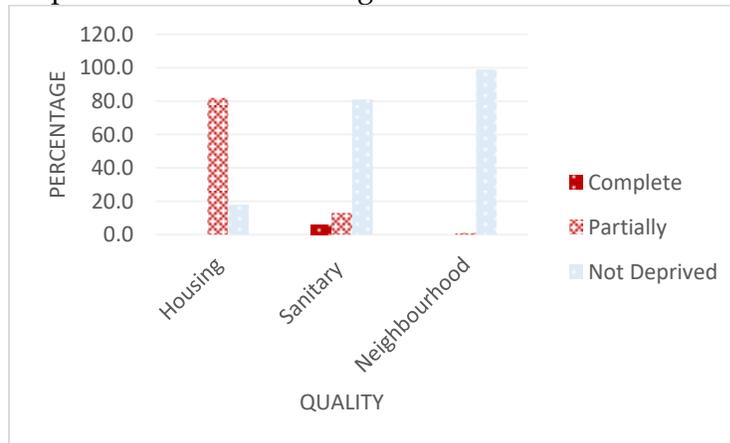


Figure 4: Deprivation by Domains

Figure 4 shows that the residents were most deprived with respect to housing qualities, with 80% partially deprived. Next is in term of deprivation was sanitary condition where 6 and 7 percent are deprived and partially deprived respectively. The respondents were less deprived with respect to neighborhood quality. The low deprivation in the area is linked to the fact that neighborhood quality is determined by the presence and access to infrastructure that are largely provided by the government for the public. It is however important to note even though the infrastructure are present and accessed, they are highly overstretched. The housing deprivation

found in the area agreed with the findings in other part of Nigeria like that of Ilessanmi (2012) in western Nigeria and Haruna (2018) in Kano Metropolis Nigeria.

The relationship between deprivations and socio-demographics is presented in Table 4.

Table 4: Relationship Deprivation Indicators and Socio-demographic Characteristics

Quality	Age	Gender	Marital Status	Educ.	Occupation	No. of Rooms	Family Size
Housing Cond.	-.226*	-0.056	0.035	.367**	-0.162	0.164	-.377**
Sanitary Condi.	-.208*	-0.067	0.006	0.14	0.068	0.027	0.123
Neighborhood Cond.	0.1	0.164	0.027	-0.19	0.147	-0.089	0.023

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 4 reveals that only age, education and family size had significant relations with the deprivation. All the three socio-demographics are significantly related with housing condition. Only age is significantly related with sanitation. None of the variables shows significant association with neighborhood. Education is one of the key determinant of income which significantly determine the type and nature of dwelling, hence had the very significant association with housing condition. Also family size is also another determinant of housing condition and from the table the association is inverse indicating that as the family get larger housing condition tends to be poor, hence deprived.

Conclusion

In general Fagoji suffers some form of deprivation with respect to housing and sanitary conditions and less with respect to neighborhood quality. This study concludes that houses in the area are generally deprived of some qualities considered for descent housing. Based on the findings, the study recommends the need for government to pay attention to housing upgrading and development. There is also need for government through societal orientation and engagement to improve on sanitary condition and thrive in people sensitization and environmental campaigning. People should be enlighten on the importance of education especially among youths. Education is seen as the forefront means of getting out of poverty, poverty is synonymous with poor housing and quality deprivation.

Acknowledgement

The data for the study were obtained during the departmental fieldwork of 2016/2017 session. Hence the researcher acknowledged the geography department of Bayero University and group 10 students of 2016/2017 session that help in data collection.

References

- allAfrica (2016). Housing problems and solutions in Nigeria. Available on schoolofestate.com/housing-problems-and-solutions-in-nigeria/
- Amao, F.L. (2012). Housing quality in informal settlements and urban upgrading in Ibadan, Nigeria. *Developing Country Studies* 12 (10): 68-80.
- Ayola, L. & Navarro, C. (2008). The dynamics of housing deprivation. *Journal of housing economics*, 16:72-97.
- Barau, A. (2017). Land degradation and environmental quality decline in urban Kano In Isa, M.A. et al., (edi) Kano: the state, society and economy 1967-2017. Kano State Government.
- Boadi, K., Kuitunen, M., Raheem, K., & Hanninen, K. (2005). Urbanisation without development: Environmental and health implications in African cities. *Environment, Development and Sustainability*, 7, 465–500.
- Bourguignon, F. & Chakravarty, S.R. (2003). The measurement of multidimensional poverty. *Journal of Economic Inequality* 1:25–49.
- CIESIN (2007). Gridded Population of the World (GPW), v3. Retrieved on 26th August, 2018 from <http://sedac.ciesin.columbia.edu/data/collection/gpw-v4>
- Cobbinah, P.B., Erdiaw-Kwasie, M.O. & Amoateng, P (2015). Africa’s urbanisation: implications for sustainable development. *Cities* 47: 62-72.
- Fagg, J.H., Curtis, S.E., Cummins, S., Stansfed, S.A. & Quesnel-Vallée, A. (2013). Neighbourhood deprivation and adolescent self-esteem: Exploration of the ‘socio-economic equalisation in youth’ hypothesis in Britain and Canada. *Social Science & Medicine*, 91:168-177.
- Haruna, M. (2018). Geographical analysis of social exclusion of children in Kano Metropolis. A PhD thesis submitted to the department of geography, Bayero University, Kano
- Population, Development and Housing in Lagos, (201). Retrieved on 27/08/2018 from oshlookman.wordpress.com/2010/11/24/housing-situation-in-lagos-nigeria/.
- Ilesanmi, O. (2012). Housing, neighbourhood quality and quality of life in public housing in Lagos, Nigeria. Retrieved from housingscience.org/html/publications/pdf/36-4-6.pdf on 27/08/2018.
- NDHS (2018). Nigeria Demographic and Health Survey. National Population Commission, Abuja Nigeria.
- NPC (2010). 2006 Population census priority tables vol 1-15. National Population Commission.
- Orbeta, A.C. (2005). Poverty, Vulnerability and Family Size: Evidence from the Philippines. ADB Institute Research Paper Series No. 68. Retrieved from www.adb.org/sites/default/files/publication/157217/adbi-rp68.pdf.
- Owoeye, J.O. & Ogundiran, A.O. (2015). A study on housing and environmental quality of moniya community in Ibadan, Nigeria. *International journal of physical and human geography*, 3:31-45.
- Taylor, D. L., Kahawita, T. M., Cairncross, S. & Ensink, J. H. J. (2015). The impact of water, sanitation and hygiene interventions to control cholera: A systematic review. *PLOS ONE*, 10(8), 1-19. <https://doi.org/10.1371/journal.pone.0135676>.
- UNDESA/PD (2012). World urbanisation prospects: The 2011 revision. New York: United Nations.
- UN-Habitat (2003). *The Challenge of Slums: Global Report on Human Settlements 2003*. London: Earthscan Publications.
- Wole, M., Umaru, E., Pai, H., Jiya, S. & Idawu, O. (2017). Spatial analysis of housing quality in Nigeria. *International journal of sustainable built environment*, 6(2): 309-316.