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Effects of Poverty on Urban Residents' Living and Housing Conditions in Nigeria

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ABSTRACT

The importance of housing has made it received much attention worldwide among scholars and policy makers as a potential tool for man's productivity. However, little is known about the poverty implications on the living and housing condition among Nigerian residents. This study aims at examining the effects of poverty among urban residents on their living and housing conditions in Nigeria. Questionnaires administration was made among 400 residents to assess residential attributes. Qualitatively supported with the aid of personal interview, observation and photographs. Correlation analysis was drawn between the residents' socio-economic status and housing condition. Results through descriptive analysis established that majority of the housing exhibit deterioration condition. This resulted from the socio-economic situation and high poverty level of the residents. The result also showed robust and positive relationship between residents socio-economic and urban housing condition. This positive relationship demonstrates support for the negative impacts on the welfare of the residents. Urban housing attributes are of importance for residents' safety, comfort and convenience to enhance productivity. In view of this, the authors are of opinion that, urgent attention is highly necessary if the residents are to live in an environment that is safe, convenience and comfortable in order to enhance their productivity.

Keywords: Housing, Housing Conditions, Poverty, Socio-economic Status, Urban Residents.

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1. Introduction and background of the study

The importance of housing as a potential tool for the survival, health, productivity and welfare of every individual and household has made it received much attention worldwide among scholars and policy makers (Agbola & Kassim, 2007; Aribigbola, 2011; Liu, 1999; A. K. Otubu, 2008). Housing should not be seen as ordinary shelter but should embraces economic and social needs serving as indicators of

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households' living condition and their position in the society (I. A Ademiluyi, 2010; Nubi, 2008). Thus, housing provision is expected to meet the residents' need, aspiration, safety and aesthetic satisfaction as well as contributing to their physical, mental and social wellbeing (Israel A. Ademiluyi & Raji, 2008; AErO, 2006; Agbola & Kassim, 2007; Ndubueze, 2009; Olayiwola, Adeleye, & Ogunshakin, 2005; T. Otubu, 2009; Wallace, 2004). It is a set of durable assets, which accounts for a high proportion of a country's wealth and on which households spend a substantial part of their income.

Nevertheless, most settlements in developing world, Nigeria inclusive are characterised with awful living and environmental conditions together with inadequate water supply, filthy conditions of environmental sanitation, congested and dilapidated residence, harmful locality, and insecurity of tenure, as well as economic and social deficiency (Ben C Arimah, 2010; Fotso, 2006). Arimah (2010) related the external debt burden, inequality in the distribution of income, rapid urban growth and the exclusionary nature of the regulatory framework governing the provision planned residential land as the contributors to the pervasiveness of slums and squatter settlements. The high levels of inequality within the nation make it tough for economic growth to have an influence on poverty and the predominance of slums. Many of the programs to reduce poverty in Nigeria lacked emphasis on inequality and did not allow the underprivileged to share in the increase of GDP and per capita income thereby has no effect in improving their poverty reduction (Obadan, 2001).

However, despite the importance of housing, urban poverty is becoming an increasing problem in Nigeria (Ogwumike, 2002) and has prevented majority of Nigerian populace having access to decent housing. The socio-economic status of household is the determinant factor of choice and affordable type of the housing unit. Poverty is one of the most noticeable indicators that dictates urban residents' housing condition in developing countries.

Thus, government and individuals' efforts in making qualitative housing provision at all levels are yet to be fruitful (Israel A. Ademiluyi & Raji, 2008). Various scholars examined the effects of poverty on different facets of life (Andrew Aligne, Auinger, Byrd, & Weitzman, 2000; Ben C Arimah, 2010; Fotso, 2006; Ludwig, Duncan, & Hirschfield, 2001; Obadan, 2001; Ogwumike, 2002; Shinn & Gillespie, 1994; Wood, 2003). Nonetheless, little attention has been drawn to the implications of poverty on urban living and housing condition among Nigerian residents. With intention of bridging the gap and add to the housing literature, this study aimed at investigating the implications of poverty on urban residents' living and housing condition in Nigeria with particular reference to Ogbomoso. The use of quantitative data collection with the aid of questionnaire administration supported by the qualitative method through direct observation, interview and photographs was made to achieve the aim. Descriptive and correlation analysis were made to analyse the quantitative data while content analysis was adopted for the qualitative aspect of the study.

The study discusses the relationship between the urban residents' living and housing condition as well as their quality of life, which could be confirmed by the residents' poverty level. The predominance of deteriorated housing condition in the study area is a reflection of the residents' low levels of income and urban poverty. Social inequalities within the study area make it difficult for residents to live in a decent housing condition and constitutes the major factor for the prevalence living condition. This necessitates workable housing policy especially for low income households to lessen their prevalence deteriorated housing condition and their wellbeing.

The rest of the paper is organised as follows: the literature review that focused on poverty, household income, household demographic attributes, housing condition and attributes are discussed in the section two of the paper. This is followed by the methodology in order to give brief description of the variables, sample size, sample techniques, data analysis, interpretation and presentation that are used. The data, empirical results and findings are then presented and discussed in the fourth part of the paper. Lastly, the conclusions and policy implications of the paper are thereafter summarised.

2. Literature review

2.1 Poverty

Wood (2003) described poverty as an economic situation that does not give room for the provision of basic needs like adequate food, clothing, and housing. Despite the fact that, Nigeria is immensely blessed with human, agricultural, petroleum, gas, and solid mineral resources, the poverty level in Nigeria contradicts the country's immense wealth (Obadan, 2001). Ogwumike (2002) supported this assertion and proved that the number of households recognised to be poor in Nigeria has continued to increase. Poverty is highly correlated with educational attainment (Ogwumike, 2002; Wood, 2003). When the educational level of households is low, the poverty rates of such household tended to be higher which may further dictate the living and housing condition of the residents. Urban poverty among residents also contributes to schooling in terms of schools' quality and employment status (Ludwig et al., 2001) which may have negative implications on the condition of housing units where urban residents are living. Shinn and Gillespie (1994) saw origin of homelessness to be the poverty and inadequacy of affordable housing. According to them, increase in low-income households compared with affordable housing units results to homelessness of many of the households. Wood (2003) saw family structure and other social, environmental and emotional issues that affect families as the contributing factors to poverty whereas poverty is the consequence of urban population explosion in developing countries according to Fotso (2006) and Ogwumike (2002). This resulted from interrelationship amongst downward pressure on lower income wages, economic pressures and social and emotional problems of households in the context of rapid urbanisation.

Lack of any workable effort on poverty reduction as well as feeble institutional and financial technique have rendered several programs adopted in the past to improve the living and housing condition and reduce the poverty level of urban residents ineffective (Ben C Arimah, 2010). In view of this, policies need to be designed to lessen residents' poverty for improving their living and housing condition.

2.2 Household's income

Household's income directly influences household's capability to purchase and make payment on house rents. A maximum of 30% of a household's gross income is universally established for housing affordability in US, UK and Canada (Fisher, Pollakowski, & Zabel, 2009; Kutty, 2005; Onu & Onu, 2012). When monthly housing costs surpass 30.35% of household's income, housing is considered not affordable. Ndubueze (2009) asserted that household's income positively and mostly influenced housing affordability. Ben C. Arimah (1997) supported this assertion and concluded that access to land and household size are other determinants factors of housing affordability.

Desire to have a house is consumption decision and at the same time an investment decision. Thus, the house price may prevent many households from having their personal house because of financial constraints and capability. As a result, they that plan to have their personal house must usually adjust their savings behaviour and consumption expenditures many years before they actually get their personal house (Atterhög & Song, 2009). Income is seen to be the most imperative factor influencing home ownership according to various scholars (Constant, Roberts, & Zimmermann, 2009; Gan, Hu, Gao, Kao, & A. Cohen, 2013; Y. Huang & Clark, 2002). An increase in the level of household income could positively influence the household's home purchase decision. However, there is strong correlation between housing quality and households' income. Income plays a significant role in a household's tenure choice decision (Robst, Deitz, & McGoldrick, 1999).

Various scholars used various indices in measuring housing affordability (Glaeser & Gyourko, 2003; Quigley, 2007; Turner, 2003). Each of the indicators to measure housing affordability has its benefits and restrictions. The most widely used and cited indicator of housing affordability is the rent to income ratio, due to its simplicity to calculate and ease of understanding. However, it does not fully depict a

household's ability to pay for housing and non-housing expenses altogether. There is likelihood that some low-income households may not be capable of paying between 25% and 30% of their income on housing without having financial stress with very low standard of living. Whereas, high-income households might be capable of paying up to 50% of their income on housing without having financial stress and at the same time, maintain a high standard of living (Robinson, Scobie, & Hallinan, 2006; UN-Habitat, 2011). This approach in measuring housing affordability however failed to be concerned with household's wellbeing by not taking into consideration differences in housing quality in terms of housing physical attributes, provided amenities and facilities and household size. Concentrating on definite rent payments gives no room for variances in housing quality within the housing market. This problem can be overcome by examining the households' standard of living through their socio-economic status, housing attributes, the environment where the housing is situated and households' evaluation on the housing unit.

Nigerian government to enhance housing affordability for low-income households has adopted different strategies. None of these strategies so far has been implemented successfully. The main reason for this is probably that previous housing provision strategies have not taken into consideration relevant inputs of prospective housing households' socio-economic status into the housing provision or policy. (Aribigbola, 2008; Jiboye, 2011, 2012; Ndubueze, 2009; Olatubara, 2007). The previous strategies, which could not meet the targeted households especially among the low and middle-income households, have consequently ignored the aspect of housing quality and living standard.

2.3 Household demographic attributes

Different literatures examined the role of socio-demographic variables on housing affordability. Coolen, Boelhouwer, and van Driel (2002) and Heijs, van Deursen, Leussink, and Smeets (2011) asserted that socio-demographic characteristics have significant relationship with housing affordability. Manrique and Ojah (2003) discovered males are more probable of having a house. Lauridsen and Skak (2007) who established that males often have stable incomes afford them the opportunity to acquire house than women support this. Gan et al. (2013) discovered that male respondents with higher levels of education are more likely to own a house. Lauridsen and Skak (2007) asserted that as the level of household head's educational attainment changes, it contributes to housing affordability level. The household with higher level of educational attainment is likely to have better employment with higher income (Chua & Miller, 2009; Constant et al., 2009) which is another factor that contributes to the household's housing affordability (Y. Huang & Clark, 2002; Kurz & Blossfeld, 2006).

Kryger (2009) in his own study in Australia found that the rate of homeownership increased increasingly with age. Feijten et al. (2003) who affirmed that the age groups between 25 and 34 years had the utmost likelihood to become homeowners support this. The older the household, the more likely to have higher incomes. This is because of long duration of their employment and increasing level of work experience. In view of this, the older households may likely be accessible to sufficient financial resources to owning a house (Chua & Miller, 2009; Kurz & Blossfeld, 2006; W. Wang, 2010). In contrast, the type of household's demographic in terms of marital status and household size impact on housing affordability, but the age impacts is slightly less expected negative for people under age 30s and over age 60s (Bramley, 2011). The younger households and those that are over aged were less likely to face housing affordability problem. Those in these age brackets can be considered as dependants. Various scholars asserted that married households have a greater possibility of housing affordability compared to single and divorced households (Chua & Miller, 2009; Del-Río & Young, 2005; Hendershott, Ong, Wood, & Flatau, 2009; H.-C. Huang, 2011; Y. Huang & Clark, 2002; Lauridsen & Skak, 2007). Employment status of the household affects a household's ability to partake in the labour market to earn an income and then possess the ability to maintain housing costs. Bramley (2011) discovered that unemployment rate in a community has a significant positive effect on housing affordability whereas, household employment status negatively influence housing affordability. This may be possible for households who have profoundly devoted to housing.

2.4 Housing condition and attributes

The housing condition and attributes can be assessed through housing unit in terms of size and physical appearance, the house location in terms of accessibility, social and physical characteristics of the neighbourhood environment as well as the services and facilities being provided within the environment. Atterhög and Song (2009) discovered that, older and/or poor maintained house are often within an affordable price range for low-income households. According to them, a comprehensive housing condition survey in the UK from 1996 showed that the majority of the households are living in poor housing conditions. Besides this, low-income households spend a larger percentage of their income on house maintenance compared with high-income households (Malpezzi & Green, 1996; Malpezzi & Vandell, 2002). Neighbourhood and locational indicators, such as environmental qualities of housing attributes have been shown in many studies (Tan, 2012; Yusuf & Resosudarmo, 2009; Zabel & Kiel, 2000). According to Tan (2012), households prefer and have the willingness to pay more for a house that is located in a good neighbourhood with good environmental qualities and in neighbourhoods with low crime rates and other security problems (D. Wang & Li, 2006). Consideration has to be given in housing policy for neighbourhood that is safe to ensure that safety, security and wellbeing of households are guaranteed.

3. Methodology

The study area was divided into three main residential densities namely high, medium and low residential density areas. This division corresponded to the pre-colonial, colonial and post-independent residential densities (Atolagbe, 2013). The study employed quantitative and qualitative techniques of data collection and analysis.

3.1 Variables

The definition of housing condition employed in this study was housing deterioration status. The researchers qualitatively judged this by assessing the physical attributes of the housing, provision of infrastructural facilities, amenities and utilities. The respondents were asked if there is provision of different infrastructural facilities, amenities and utilities such as toilet, kitchen and electricity. The main independent variables explored was poverty level. Poverty level was determined by household's income and other socio-economic status. Household was identified as being poor if such household cannot afford decent housing environment. In addition to poverty level as the main independent variables, several other factors were also considered to assess the urban housing condition. These included household head's demographics like respondent's age, sex, marital status, employment status, educational attainment level and family size and housing environment features.

3.2 Sample size

Sample size was determined through the formula $S = X^2NP(1-P) / d^2(N-1) + X^2P(1-P)$ (Akinyode & Khan, 2013; Ankrah, 2007; Baba, 2013; Eichenberger, Hulliger, & Potterat, 2011; Ikpe, 2009; Krejcie & Morgan, 1970). S indicates required sampled size, X^2 indicates table value of the Chi-square for 1 degree of freedom at the desired 0.95 confidence level which is 3.841 (1.96 x 1.96) and N designates population size. In addition, P designates population proportion (assumed to be 50% that is 0.50 since this would provide the maximum sample size), d is the degree of accuracy expressed as a proportion which is 5% that is 0.05. Alternatively, the use of table for population 250,000 and above suggested the sample size of 384 (Creswell, 2012; Israel, 2013; Mohammad, 2010). Bartlett, Kotrlik, and Higgins (2001) supported the use of table. For the purpose of reliability and acceptability, the population figure of 2006 population census formed the basis of the population projection for this study. The population of Ogbomoso as at 2006 was 299,238. This was projected to 487,427 in 2016 with annual growth rate of 5.0% using the formula $P_n = P_o (1 + r/100)^n$ where "P_n" is the projected population, "P_o" is the based population, "r" is the annual growth rate and "n" is the year interval between the based year and

projected year. Based on this projected population, the calculated sample size was 383.86 approximately 384 households sample size. This supported the use of table to determine the sample size. However, 384 households were rounded off to 400 households in order to cover appreciable households sample and to make provision for any lose and incomplete questionnaires.

3.3 Sampling techniques

Application of quantitative research technique with the aid of questionnaires administration among four hundred (400) respondents entails the collection of data in the form of numbers (Mahmud, 2008). This was achieved through stratified random sampling. The choice of 400 sample size is to cover appreciable households sample, to make provision for any lose and incomplete questionnaires (Bartlett et al., 2001; Creswell, 2012; Israel, 2013; Mohammad, 2010). Simple random sampling technique was adopted to administer questionnaires on ratio 2:3:5 in low, medium and high residential density areas respectively. Based on the area coverage and population of each of the residential density area.

The use of qualitative techniques through researchers' personal observation, interview and photography was to support and compliment the quantitative technique. The research problem was investigated in its natural phenomenon (Akinyode, 2016; Creswell, 2007). The purposeful sampling techniques was adopted to gives in-depth and detail information as well as deeper understanding of the subject matters as they exist in their own unique environment (Akinyode & Khan, 2016; Miles, Huberman, & Saldana, 2014) aimed at revealing the actual effects of poverty on residents' living and housing condition. This was to prove the findings and assumed the position of evidence. It contributed to more precise and exhaustive written analysis of the phenomenon (Akinyode, 2016) and data validation. Out of 400 questionnaires that were administered, a total number of 326 questionnaires were fully completed. This represents a response rate of 81.50% of the total number of administered questionnaires and considered to be good response rate Jack (2008).

3.4 Data analysis, interpretation and presentation

Statistical data collation and analysis was through Statistical Package for the Social Science (SPSS) software version 22 to achieve the objective of the study. Cronbach's Alpha was used to evaluate the internal consistent reliability of the survey instrument. The Alpha value result was 0.841 considered sufficiently reliable indicating strong reliability of the measurement. The study also recorded higher respondents of 326 administered questionnaires with KMO value of 0.864. This signifies reliable, adequate and valid survey sampling (Field, 2009).

The use of descriptive and correlation statistical methods were made to analyse the quantitative technique. The results were used to generalise or make claims about a population (Creswell, 2003). Descriptive analysis method was used to establish the frequency of the housing attributes and the provided facilities within the study area. The correlation analysis was drawn between the socio-economic variables and housing condition to establish the effects of poverty on residents' living and housing condition. The content analysis method was adopted to analyse the qualitative data in order to support and compliment the quantitative technique.

4. Data presentation, discussion and findings

4.1 Respondents' profile: Socio-economics attributes

For the purpose of determining the effects of poverty on urban residents' living and housing conditions, the understanding of respondents' profile as it relates to their socio-economic status is highly important. Consideration was given to sex, age, marital status, religious affiliation, educational attainment, employment status and estimated monthly income. 67.48% of the respondents are male and 32.52% are females. 06.75% of the respondents are less than 21 years of age while 07.98% fall within

the age group 21 – 30 years. The respondents within the age group 41 – 50 years amount to 46.62% and takes the larger percentage of the entire respondents followed by age group 31 -40 years with 23.62% while those above 50 years is 15.03% of the total respondents. As a result of this, it can be inferred that majority of the respondents are matured to own or rent a house. At the same time, they can be termed as being a working class whereas very few that are young or aged can be termed as dependant class.

The married respondents take the lion share of the entire population contributing 45.40% followed by the single parent with total percentage of 23.93% while those that are widow or widower and singleconstitutes18.10% and 12.57% respectively. Single parents in this context are those that their spouse are not living in Ogbomosho based on the fact that, their spouse are working in another town or they are single parents. No respondent is identified as divorcee among the total respondents. Majority of the respondents with total number of 58.59% belongs to Christianity religion, 38.65% are Muslim while the remaining 02.76% of the entire sampled respondents claimed to be traditional worshippers. The respondents that obtained primary, secondary, modern and Grade II educations are categorised as those with elementary education and they take the larger percentage of the sampled respondents. This accounts for 29.76% followed by those with no formal education that amount to 26.07%. The respondents that obtained HND/BSc, NCE/OND and postgraduate certificates, which can either be MSc or PhD level accounts for 24.23%, 12.88% and 07.06% respectively. The study went further to find the employment status of the respondents and discovered that the majority of the respondents are government employee with total number of 34.66% among the sampled respondents. The unemployed respondents that constitutes 29.45% while only 21.78%, 11.96% and 02.15% are self-employed, tertiary institution employees and company employees respectively.

In view of this, about 48.77% of the total respondents are government workers while the remaining 51.23% are non-government workers. Thus, the employment status of the respondents reflects in their estimated monthly income. Greatest number of the respondents earn less than N30,000.00 monthly and this amount to 67.79% of the entire sampled respondents. This is followed by those that earn between N30,000.00 and N50,000.00 that constitutes about 19.94%. About 06.75% and 03.38% are the respondents that are earn between N51,000.00 and N90,000.00 and between N91,000.00 and N120,000.00 respectively while the remaining 02.14% earn above N120,000.00.

4.2 Housing attributes

It is also necessary to examine their housing attributes. This is because; the evidence provided will be of assistance to understand the effects of poverty on residents' living and housing condition. This aims at relating the residents' living and housing condition with the socio-economics attributes of the residents and determine to what extent their poverty level influence the type of housing units they can afford and occupied. Utmost number of the respondents are living in traditional house designed in form of roomy type. This constitutes 60.43% of the entire sampled respondents. This indicates that the larger percentage of the respondents within the study area could not afford to reside within modern designed houses like flat and duplex. Very few respondents are residing in duplex. This amount to 7.36% of the sampled respondents while 23.01% reside in single flat.

It can be inferred that few respondents that are working with government especially in tertiary institution could afford to reside in single flat and duplex house. The remaining respondents that live in block of flats and semi-detached house amount to 6.44% and 2.76% respectively. The educational attainment of the respondents reflects on the type of housing unit they reside. The majority of the respondents are either illiterate with no formal education or obtained just elementary education reflects on their employment status. This supports the view of other scholars that are of opinion that household's education influence employment status (Chua & Miller, 2009; Constant et al., 2009) and also contributes to the kind of affordable house (Y. Huang & Clark, 2002; Kurz & Blossfeld, 2006). However, this also linked with income. The income of the residents therefore could be said to be the factor that dictate the type of the housing unit they reside.

Most of the houses being occupied by the residents are already deteriorated as shown in Figure 1. Investigations were made on the age of the house and the material used for the construction. The investigation reveals that most of the housing units has been constructed for over 60 years and this amount to 35.58% of the totalled sampled houses. However, 45.70% of the sampled housing units are constructed with blocks but the income status of the respondents who occupied these houses could not enable them afford to maintain the house properly. Majority of the houses being deteriorated resulted from non-proper maintenance and these housing units cannot be said to be safe, conducive and comfortable for the residents within the city.

The study reveals that houses constructed with mud ranks next to the houses constructed with blocks. The mud houses amount to 38.96%. These kind of housing units are mostly found in the high residential density area, which is the indigenous core area of the city. It is also discovered during the survey that aged and few young residents are mostly found in mud-constructed houses. A larger percentage of the respondents that reside in the mud-constructed houses located within the indigenous core area of the city are likely to be a native of Ogbomoso. According to the survey conducted, 78.53% of the totalled sampled respondents are native of Ogbomoso while the remaining 21.47% are non-native. 48.46% of the respondents have been living in Ogbomoso for over 40 year ago. The little percentage of the residents that are non-native might have migrated from other part of the nation with the aim of coming to work in the tertiary institution and other companies situated in the city.



Figure 1: Deteriorated houses within the study area

4.3 Utilities and amenities provided within the house

The provision of housing with basic utilities and amenities is very imperative if housing unit is to enhance residents' productivity. These include toilet, kitchen, water supply, lighting facilities and so on. The provision of these basic utilities and amenities often determine the residents' status. The investigation conducted reveals inadequate provision of utilities and facilities within the housing units being occupied among the residents. The provision of toilet facilities indicates that majority of the houses are provided with pit latrine and accounts for 56.14% of the total sampled survey. This is followed by the houses that are provided with water closet (WC) with 34.66%. 04.60% of the sampled survey do not have any toilet facility. It can be inferred that majority of the houses that are provided with none or any other toilet facilities rather than water closet are mostly situated within the indigenous or traditional core area of Ogbomoso where majority of the low income households live. This is in line with the discovery of [Atterhög and Song \(2009\)](#) who discovered that the older and/or not so well maintained housing units are often within an affordable price range for low-income households. Few households are using open space and pail latrine for their toiletry.

Cooking facility is another facility that was investigated in this study. This is to establish the location respondents and members of the household are using for their daily cooking. Majority of the respondents are cooking in the kitchen with 47.24% followed by those cooking in the passage that accounts for 26.38% whereas 06.75%, 15.95% and 03.68% of the sampled respondents are cooking in the veranda, outside and inside the room respectively. The investigation reveals that 69.33% of the sampled respondents depend solely on deep well as the source of their water supply. 25.46% are using borehole whereas only 03.68% and 01.53% depend on vendors and pipe-borne water supply respectively. The use of borehole as the source of water was found among high-income households while those that depend on vendors buy their water from those that have borehole at home and from water tankers. Five options were given on the frequent sources of light in the house. Electricity as the frequent source of light takes the lion share and accounts for 59.70% followed by those using kerosene, which amounts to

18.41%, 14.11% and 00.61% are using generator and candle respectively as the source of light. The remaining 01.84% of the sampled respondents using local lamp are the aged house holds residing within the traditional core areas of Ogbomosho.

Housing accessibility and proximity to different land uses is likewise very essential to take into consideration. Households above the poverty level would prefer to live in a house that exhibits accessibility and proximity to other land uses. This assists in relating the urban residents' housing accessibility and proximity to different land uses in the context of their socio-economic status as relate to their poverty level. This will inform the value of the house urban residents reside. This study reflects that 48.47% of the sampled houses are accessible by tarred road, 26.99% are accessible by untarred road while the remaining 24.54% houses are not accessible at all. This implies that, the majority of the housing developers are being conscious of efficient physical planning development in the provision of road network for making their housing unit to be more accessible and gain proximity to other different land uses.

4.4 Relationship between the variables

To establish further the relationship between the urban residents' poverty level and the urban residents' living and housing conditions within the study area, correlation analysis was drawn. Urban residents' poverty level was measured by education, employment and income while the urban residents' living and housing conditions were measured by different variables such as house type, age, construction material, toilet facility, cooking facility, sources of water supply and sources of lighting within the house. Different results were derived in the relationship among these variables. The education and the income reveal a significant positive relationship with correlation co-efficient of 0.51, and R^2 adj value of 0.26 at a significance level of 5%. This suggests that there is a significant relationship between education and households' income. This implies that as the household increase in their education status, their income becomes increased. However, education and age of the house reveals a significant negative relationship with correlation co-efficient of 0.86, and R^2 adj value of 0.74 at a significance level of 5%. This implies that there is a significant negative relationship between the education and the age of the house. This suggests that, as the education of the household is improves, they tend to move out from the old houses to the newly constructed houses. This is also supported by the positive relationship between education and the house type with correlation co-efficient of 0.29, and R^2 adj value of 0.084 at a significance level of 5%. This implies that education of the household reflects on the type of house they are residing.

Besides the relationship between education and variables that measured the residents' living and housing conditions, the relationship between income and the variables was also drawn. The results indicate a significant relationship between the variables with different correlation co-efficient and R^2 adj values. Majority of the variables indicate moderate and strong relationship with income. This implies that household income has a great influence on the residents' living and housing condition. As the urban residents' income improves, it reflects upon the type of house they reside, the age of the house they occupy, material used for the construction of the house and toilet facility provided within the house as well as the cooking facility, sources of water and lighting supply. The explanatory variables result suggests that there is significant relationship between poverty and urban residents' living and housing condition. Various scholars suggested R^2 adj value that is not less than 15% of the variance to be significant (Kotchen & Reiling, 2000; Mitchell & Carson, 1989; Wattage, Smith, Pitts, McDonald, & Kay, 2000). In view of this, R square value of 0.15 and above indicating 15% and above of the variance in living and housing condition as explained in the relationship amongst the variables is accepted in this study to be reliable value (Mitchell & Carson, 1989) and acceptable in social sciences when cross-sectional data were used (Kotchen & Reiling, 2000; Wattage et al., 2000).

This study has revealed that urban residents' living and housing condition significantly relate to poverty level. Several studies have related the effects of poverty to different issues (Andrew Aligne et al., 2000; Ludwig et al., 2001; Obadan, 2001; Ogwumike, 2002; Shinn & Gillespie, 1994; Wood, 2003). However, this

study has discussed the relationship between the urban residents' living and housing condition as well as their quality of life, which could be confirmed by the residents' poverty level. In addition, households' employment and educational attainment may also be of assistance to explain the relationship between poverty and urban residents' living and housing condition. The predominance of deteriorated housing condition in the study area is a reflection of the residents' low levels of income and urban poverty. The interview conducted in addition buttresses that the disparity in the payment of salary of government workers and social inequalities within the study area make it difficult for residents to live in a decent housing condition and constitutes the major factor for the prevalence living condition.

The direct observation made revealed that the high residential density areas which are the indigenous core areas are characterized by traditional house which can be described as roomy (face to face) type of house, constructed with indigenous materials such as mud and few small sized windows as shown in Figure 2. It is also observed that there are no enough airspaces in between the houses. However, the low residential density areas primarily at the outer part of the city that can be seen as the new developing area are characterized by single flat, duplex semi-detached house. The houses within this area are provided with toilets, baths and kitchen facilities inclusive within the house with varieties of window, doors and burglary proof.

5. Conclusion and policy implications

This study submits that, deteriorated houses are highly prevalent in indigenous core areas within Nigeria with particular reference to Ogbomoso. Majority of the residents living within the indigenous core area of the city obtain no formal or elementary education, are poor and live in deteriorated houses with poor quality of life. These results are consistent with other findings which indicate that housing condition is a result of urban residents' poverty level (Ogwumike, 2002; Wood, 2003). This also indicates that majority of the residents within urban centres remain poor because of their employment status and educational attainment. However, probing into urban residents' poverty that influence the urban residents' living and housing condition should lead to intuitions that will assist to make workable housing policy especially for low income households and lessen the prevalence of deteriorated housing condition and urban residents' wellbeing.



Figure 2: Traditional houses constructed with mud and provided with small sized windows without enough airspaces

For the purpose of ameliorating the negative implications of poverty on the urban residents' living and housing condition as well as improving the living and housing condition of urban residents in Nigeria with particular reference to Ogbomoso, Nigerian housing policy will need to respond to the ever-increasing poverty level of urban residents. The ineffective policy on urban poverty reduction has resulted to poor living and housing condition, unorganised housing settlements, inadequate and lack of provision of infrastructural facilities. The economic wellbeing of the low-income households needs to be taken into consideration through housing subsidies programs. The authors are of opinion that providing low-income households of high poverty level with financial assistance opportunity through housing subsidies to reconstruct their family houses and government embarking on urban renewal exercise will improve urban housing condition within Nigerian urban centres. It is believed that these suggestions to design policies on housing subsidies to reduce the poverty level of urban residents in Nigeria may influence the overall urban housing condition. However, this program needs to be extended to the generality of the public and not to be limited to only government workers. Policies that

encourage and support livelihood approaches should be explicitly designed to cater for low-income households and non-government workers.

The introduction of proper implementation and monitoring strategies specifically for these sets of people also has a significant role to play. The political will on the part of policymakers and those in the position of authority in making sure that the targeted households are the main beneficiaries of the program and not to be hijacked by the highly influential and politicians is also very imperative. This is highly important, bearing in mind that, low income households and non-government workers are not influential, disadvantaged in terms of political power and not capable to effect government decision on policy making, policy execution and how to execute them. It is certain that, improvement in the financial capability of urban residents will reduce their poverty level, which will invariably improve their living and housing condition.

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