#### International Journal of Civil Engineering and Technology (IJCIET)

Volume 9, Issue 1, January 2018, pp. 562–577, Article ID: IJCIET\_09\_01\_056 Available online at http://http://www.iaeme.com/ijciet/issues.asp?JType=IJCIET&VType=9&IType=1 ISSN Print: 0976-6308 and ISSN Online: 0976-6316

© IAEME Publication



**Scopus** Indexed

## RESIDENTS' FACILITIES SATISFACTION IN HOUSING PROJECT DELIVERED BY PUBLIC PRIVATE PARTNERSHIP (PPP) IN OGUN STATE, NIGERIA

#### **Babatunde F. OGUNBAYO\***

Department of Building Technology, Covenant University, Ota, Nigeria. P.M.B. 1023, Ota, Ogun State, Nigeria

#### Adekunle M. AJAO

Department of Building Technology, Covenant University, Ota, Nigeria. P.M.B. 1023, Ota, Ogun State, Nigeria

## Oluwole T. ALAGBE

Department of Architecture, Covenant University, Ota, Nigeria. P.M.B. 1023, Ota, Ogun State, Nigeria.

#### **Kunle E. OGUNDIPE**

Department of Building Technology, Covenant University, Ota, Nigeria. P.M.B. 1023, Ota, Ogun State, Nigeria

#### Patience F. TUNJI-OLAYENI

Department of Building Technology, Covenant University, Ota, Nigeria. P.M.B. 1023, Ota, Ogun State, Nigeria

## Ayodeji O. OGUNDE

Department of Building Technology, Covenant University, Ota, Nigeria. P.M.B. 1023, Ota, Ogun State, Nigeria \*Corresponding Author's Email: babatunde.ogunbayo@covenantuniversity.edu.ng

#### **ABSTRACT**

Public-private partnership in housing development provide conducive housing environment through provision of services, good and quality facilities, easy access to social amenities, good security arrangement among others. It is on this basis that this study examined residents' satisfaction of facilities in housing projects delivered by public private partnership. A field survey was conducted in three existing housing estates delivered through PPP within the study area. The information gathered from both the secondary and primary data were used to analyze occupant's satisfaction of facilities available in housing project delivered by PPP. Questionnaires were

distributed through systematic sampling method to 224 respondents in the three existing housing estates in the study area. Result showed that Year of tenure, size of house hold, provision of facilities, security of life and properties, location of resident, space allocation, proximity to work place were some of the factors significantly contributed to occupier satisfaction of facilities available in a PPP driven housing estate. The study recommended that for successful implementation of the PPP housing project to meet the desired satisfaction of any occupier, the government should ensure that all the necessary infrastructural facilities and services like good road, electricity, school, health centre etc. be provided first before building production commence on the estate. Moreover, recreational facilities lacking in most of the estates should be provided so that residents of the estate would not need to travel miles to access these facilities.

**Key words:** Facility, Housing Delivery, Low income earners, Public-private-partnership, Resident.

Cite this Article: Babatunde F. OGUNBAYO, Adekunle M. AJAO, Oluwole T. ALAGBE, Kunle E. OGUNDIPE, Patience F. TUNJI-OLAYENI, Ayodeji O. OGUNDE, Residents' Facilities Satisfaction in Housing Project Delivered by Public Private Partnership (PPP) in Ogun State, Nigeria. *International Journal of Civil Engineering and Technology*, 9(1), 2018, pp. 562-577.

http://www.iaeme.com/IJCIET/issues.asp?JType=IJCIET&VType=9&IType=1

## 1. INTRODUCTION

One of the effective approach to enhancing housing project productivity with quality facilities is by bringing in good management efficiency and creative skill from business practices organisation thereby reducing government involvement by using private sector driven in the provision of public services through well natured public-private partnership arrangement. In other to carry out different kinds of activities ranging from work, study, leisure and family life to social interactions, it is of important for any building developed to provide occupants with comfortable, conducive, safe, healthy and secured indoor environment. To achieve this purpose, A good housing project need a standard designed, good planning, which would be constructed and managed based on standards and specifications established by governments, professionals and experts who have adequate knowledge of users' needs and expectations.

In other word the residential environment quality is one of the basic conditions for quality of life, it support the economy, culture and society at large. Policy maker and urban planning, target residential environment quality to plan periodic maintenance and improvement of quality of facilities within residential building. Fulfilling users need is a key factor majorly in the housing sector. In housing design and in provision of services, the absent of providing these needs, satisfactions of users become lower especially in the area of available facilities and thereby change in accommodation became inevitable.

Since residential environments occupied spaces for users to live in and to be happy with it, it is of importance that expectations of users should be considered both at the design stage and in provision of relevant services. Tech-Hong (2011), suggested that one possible way to meet resident's facilities needs is to examine factors which account for residents' satisfaction or dissatisfaction with their housing condition. In similar view Fatoye and Odunsami (2009) suggested that for housing sector to improve the quality of housing produces, it must explore and understand users' needs and expectation.

## Babatunde F. OGUNBAYO, Adekunle M. AJAO, Oluwole T. ALAGBE, Kunle E. OGUNDIPE, Patience F. TUNJI-OLAYENI, Ayodeji O. OGUNDE

Amazingly, Garling and Friman (2002) share similar view by noting that, residential satisfaction is a natural criterion to judge the success of residential choice which reflects a preferred lifestyle of people. Despite the volumes of literature on the plausible assessment of satisfactory level of occupant's on housing delivered through PPPs, there is dearth of literature on satisfactory level on available facilities specifically in housing delivered through PPPs. Therefore, the main aim of this study is to assess occupant satisfaction on facilities provision in housing project delivered through PPPs in Nigeria.

## 2. REVIEW OF RELATED LITERATURE

Residential satisfaction been defined as a measure of residents' satisfaction with both their housing units and the neighbourhood environment (Ogu 2002.). The study of Mohit and Azim (2012) in Maldives showed that majority of the residents in public housing in Hulhumale, Maldavies, were not that satisfied with their present housing situation, but for services and public facilities the satisfaction levels were higher than social environment of the housing estates and the physical space within the dwelling units. In Malaysia, Mohit, Ibrahim and Rashid (2010) in their study found out that majority of the house hold in newly constructed public low-cost housing in Kuala Lumpur were most satisfied with housing unit support services and social environment of the estates but were moderately satisfied with their housing conditions and its environ.

In Hong Kong, the study of Liu (1999) shows high level of dissatisfaction, especially in the area of maintenance and cleanliness of the estates, integrity of the building envelope and access to public transport from resident's residences. In similar view, Ukoha and Beamish (1997) found out that amongst the residents of public housing in the Federal Capital Territory-Abuja majority were satisfied with the neighbourhood facilities but dissatisfied with the physical and spatial characteristics of buildings and the general management of the housing estates. In the same vein, the study conducted by Ha (2008) in South Korea revealed that about 51 percent of the occupiers of social housing in South Korea were generally satisfied with their housing conditions, it further revealed that residents were satisfied with the availability of some neighbourhood facilities such as banking facilities, healthcare, shopping, and post office, however residents were mostly dissatisfied with landscaping and parking facilities within the estate.

In a similar dimension, a recent survey by Clement and Kayode (2012) showed that there was a high rate of satisfaction with the adequacy of size of living room and proximity to worship centres than satisfaction with proximity to recreation areas and healthcare facilities amongst the residents of public housing in Ondo State. Ibem and Aduwo (2013) maintained that resident of public housing in Ogun State were generally dissatisfied with their housing conditions, but enjoy higher satisfaction levels with dwelling unit features than neighbourhood facilities and services. Ukoha and Beamish (1997) and Jiboye (2009) findings opined that the residents of public housing in Lagos State were also dissatisfied with management of the housing estates. However, residents in public housing in Lagos were most satisfied with housing unit characteristics and least satisfied with the layout of the estates, access to public facilities and services (Olatubara and, Fatoye, 2007; Jiboye, 2009; Ilesanmi, 2010).

Indeed, different studies have shown that residential satisfaction is a highly contextual construct, which partly depends on the manner in which the objective characteristics of the residential environment are perceived by the residents who are the evaluators. That means, satisfaction is based on standard and the extent to which the standard can be met by the

constructor. The study of Oliveira and Heineck, (1999); Olatubara and Fatoye, (2006) described housing satisfaction has as an evaluating criterion used by numerous researchers and analysts to determine occupants"/ tenants"/ residents" perception of their housing environment. Prior to these previous studies, Onibokun (1974) had revealed that the level of tenant satisfaction is synonymous to the state of habitability of the housing units. This suggests that a dwelling that is adequate from the design point of view may not necessarily be satisfactory from the tenant's view points. The building fabrics thus become one link in a chain of elements that determine residents" relative satisfaction. However, Ebong (2007) opined that over the years the mode of provision and deliveries of this infrastructure by the public sectors have been characterized with many shortcomings. The aftermaths of these problems include dilapidated state of most of the available infrastructure such as poor road, erratic supply of electricity and lack of political will to embark upon total deregulation and privatization of all infrastructures including road and electricity supply. The housing facilities therefore include all facilities attached to building fabrics in order for it to function efficiently while urban infrastructure is provided to service the larger society.

Babarinde (1998) buttressed that the efficiency of any form of human activity largely depends on the provision of efficient infrastructural facilities and services. As opined by Akinloye (2009) housing facilities roles were revealed as those conveniences that allow the unit to perform its function of creating an efficient platform for the occupants to organise themselves. The Kernerman Webster's college dictionary (2010) defined facilities as something designed, built or installed to afford a specific convenience or services. Thus, because of importance of facilities as a component of a building there is need to often carried out periodic maintenance or checks to ascertain it level of soundness this is necessary to avoid failure in use. The kind of facility provision in a property most time determines the status of people that reside or occupied a property, and their level of satisfaction. The study by Liu (1999) which is buttressed by Vera-Toscanoand, Aceta-Amestoy (2008) indicated that people of high income earner are more likely to be satisfied with their housing situation than those of lower income earner because the high income earners has the financial strength to acquire better houses and housing environment. More so in Malaysia, the influence of length of stay and household size on residential satisfaction had positive impact on residential satisfaction, there was a negative correlation between household size and residential satisfaction in newly constructed public housing (Mohit, Ibrahim and Rashid 2010). In many European countries, Elsinga and Hoekstra (2005) found that housing satisfaction levels were higher among owner occupiers compare to renters, while the ability to pay rents regularly is one of the factors which as positive influence on the levels of satisfaction among renters in public housing in Malaysia (Salleh., Yosuf, Salleh, and Johari, 2012).

The influence of facilities within housing environment cannot be over emphasized because it represents one of the backbones of housing development. Furthermore, access to other local amenities and different housing buying system together with the level of social integration among the residents have an important effect on residential satisfaction. In the light of the above, provision of facilities in housing provided through public-private-partnership should not only satisfied occupant's in term of static facilities alone, occupant should also be satisfied with movable, removable and replaceable facilities' within the confine of the property. Level of users of houses delivered through PPP has become more astute and their expectations are rising. It is based on this that there is need to first understand and establish what the residents' want, need and perceived meet. Despite the volumes of literature on the plausible impact of facilities on residential satisfaction on housing provided through PPPs, there is dearth of literature on residents' satisfaction of facilities provision in housing

project delivered through PPPs. Therefore, the main aim of this study is to evaluate residents' satisfaction of available facilities within housing provided through PPPs' housing projects in Ogun State, Nigeria.

### 3. METHODOLOGY

The study was carried out in three PPP driven housing estate within Ogun State .The breakdown of existing housing stock as presented in Table 1, a total of 560 housing units existed in the study area, ranging from 100 housing units in Havillah Villa estate, Isheri, 120 housing units in Ibaara Housing units, Abeokuta and to as high as 340 Housing units in OGD Spark-light, Ibafo. 40% of the buildings were taken across board from each estate because of similarity in response and to avoid saturation of response from the sample area. Questionnaires were administered per building in a systematic sampling. Therefore, 136 copies of questionnaire were administered in OGD Spark-Light, Ibafo, 40copies at Havillah Villa Estate, Isheri, and 49 copies was administered at Ibarra Housing Estate, Abeokuta. In all, a total of 224 copies of the questionnaire were administered and the questionnaire that were sent out were all retrieved, this helped this research work to know the level of satisfaction that existed between the occupier and the administrator of the PPPs estate. Secondary data were also collected from the library on previous relevant works on the research theme. Sources of data included research reports, journal articles, newspaper cuttings, theses and dissertations among others.

S/N	PPP HOUSING SCHEME IN OGUN STATE	LOCATION	NO OF HOUSING UNITS	NO OCCUPIED	SAMPLE SIZE40%
1	OGD Sparklight.	Ibafo	340	340	136
2	Havilah villa Estate.	Isheri	100	100	40
3	Ibaara Housing Estate.	Abeokuta	120	120	48
	Total			560	224

**Table 1** Sample frame for the selected Public-Private Housing Estate

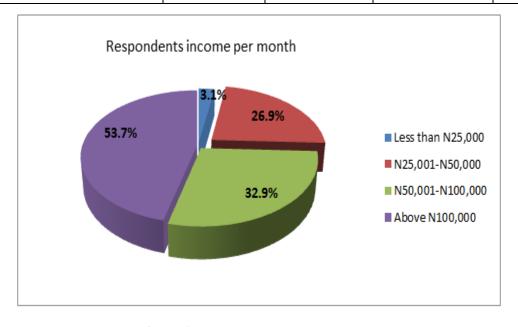


Figure 1 Respondents income per month

Figure 1 appraised the personal income of the resident of the study area .Out of 224 respondents sampled the result indicated that most of the respondents were high income earners. The survey revealed that 53.7% (124) of the respondents earned above  $\maltese$  100,000 while 32.9% (76) earned between  $\maltese$ 50,001 and  $\maltese$ 100,00 only 26.9%(28)earned between  $\maltese$ 25,001 and  $\maltese$ 50,000 while 3.1%(3) earned less than  $\maltese$ 25,000 per month. In all about 88% of the respondents earned between  $\maltese$ 50,000 -  $\maltese$ 100,000 per month.

## Respondent's years of residence

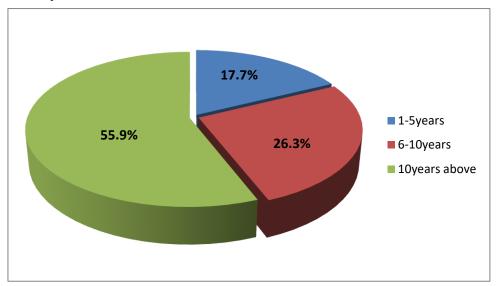


Figure 2 Respondents years of residence

Figure 2 revealed tenancy record of resident and it sought to know the number of years respondents had been in the estates that were sampled, it revealed that over half of the respondents had been resident for between 1-5 years, 17.7%(40), 26.3%(59) had been resident for 6 to 10 years, and those above 10 years recorded 55.9% (125).

## Respondent's Nature of tenure

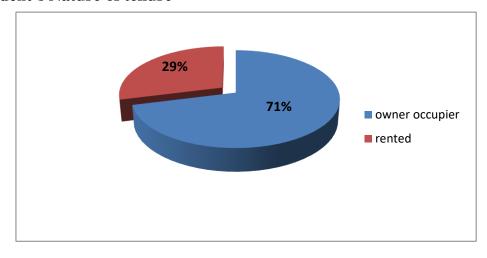


Figure 3 Respondents on Nature of Tenure

Figure 3 revealed the nature of tenure of respondents, the result of the survey revealed that 71% (159) of respondents were owner's occupiers while 29 % (65) rented their apartment.

Table 2 Type of houses in the Study Area

Type of house	Frequency	Percentage
Duplex	24	10.7
Bungalow/flats	177	79
Mini-flat	13	5.8
Others	10	4.7
Total	224	100

Table 2 showed that **79%** (**177**) of the respondents occupied Bungalows/flat while **10.7%** (**24**) occupied duplexes compare to **5.8%** (**13**) that occupied mini-flat from the entire housing stock.

Table 3 Satisfactory level on Cost of Housing

Satisfactory level	Frequency	Percent
Very low	29	12.9
High	195	87.1
Total	224	100.0

Table 3 investigated the cost of housing in the sampled estates, 12.9% (29) of respondents agreed that the cost of housing in the sampled estates was very low while 87.1% (187) said the cost of housing was high.

## Satisfactory level on Location of Residence

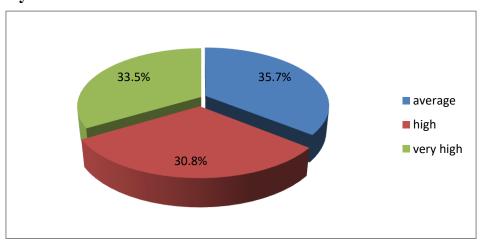


Figure 4 Respondents on Location of Residence

Figure 4 showed respondent's opinion on level of satisfaction regarding the location of residence, the result show that 35.7% (80) were averagely satisfied, 30.8%(69) were highly satisfied, while 33.5% (75)said they were very highly satisfied.

## Satisfactory level on Proximity to Work Place

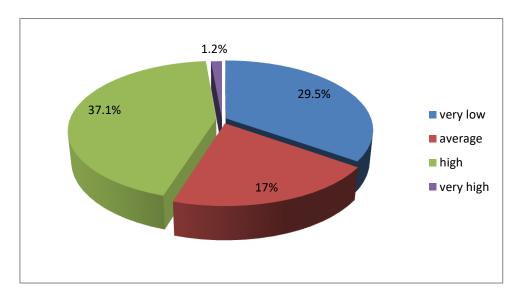


Figure 5 Respondent's satisfactory level on Proximity to Work Place

Figure 5 showed the views of respondents on the proximity of location of the estate to their work place, 29.5% (66) said the proximity was very low, 17% (38) said the proximity was on the average, 37.1% (83) signified high proximity while 16.5% (37) of respondents signified a very high degree of satisfaction.

## Satisfactory level on Security of Life and Property

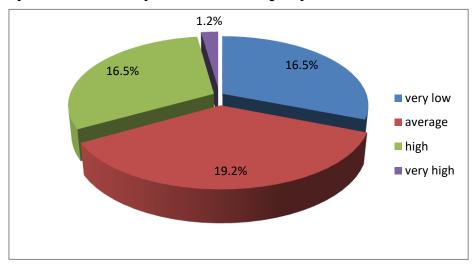


Figure 6 Satisfactory levels on Security of Life and Property

Figure 6 appraised the level of satisfaction on security of life and property. From the study 16.5% (37) of respondents said the security of life and properties were very low, 19.2% (43) said it was average, 16.5% (37) said the security of life and property was high and 47.8% (107) said the security of life and property was very high. In all Security of life and property can be said to be satisfactory to over 70% of respondents in the study area.

## **Satisfactory level on Space Allocation**

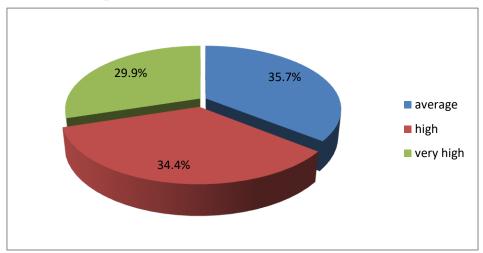


Figure 7 Respondent's satisfactory level on Space Allocation

Figure 7 appraised the satisfactory level on adequacy of space allocation within the estates that were sampled. Respondents that accounted for 35.7% (80) said the satisfactory level was average, 34.4% (77) said the satisfactory level was high while 29.9% (67) said the satisfactory level was very high.

## Satisfactory level on Adequacy of spaces and facilities

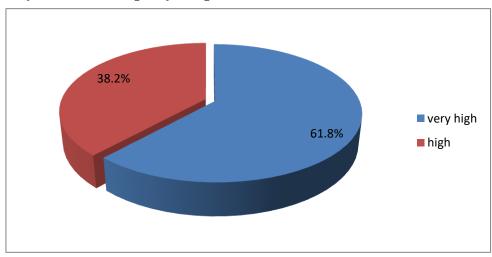


Figure 8 Respondent's satisfactory level on Adequacy of spaces and facilities

Figure 8looked into the adequacy of available facilities and the result according to the responses from respondents that covered 61.8 % (138) revealed that facilities were adequate while 38.2 % (86) affirmed the inadequacy of the facilities.

## Satisfactory level on standard of Building Material used

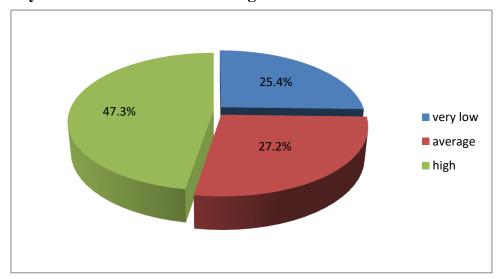


Figure 9 Respondent's satisfactory level on standard of Building Material used

Figure 9 examined the degree of satisfaction level on the standard of building material used, 25.4% (57)said the degree of satisfaction was very low, 27.2% (27.2) said the satisfaction was average, 47.3%(106)said the degree of satisfaction was high.

## Satisfactory level on External Appearance

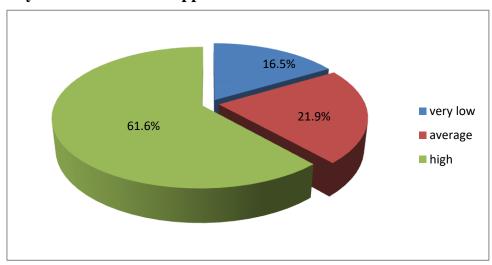


Figure 10 Respondent's satisfactory level on External Appearance

Figure 10 examined the degree of satisfaction on external appearance of housing by residents, 16.5% (37) said the external appearance was very low, 21.9% (49) said is average, 61.6% (138) opined that the external appearance was high.

#### **Maintenance Practice on available facilities**

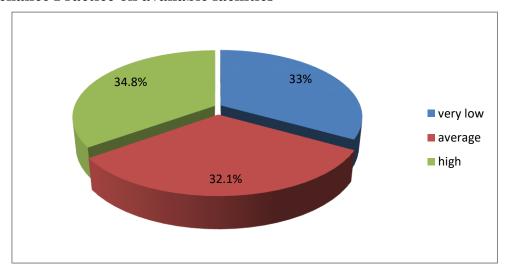


Figure 11 Maintenance Practice on available facilities

Figure 11 appraised the adequacy of maintenance practice in the area cover in the study. Respondents that accounted for 33% (74) said the maintenance practice was very low, 32.1% (72) said it was on the average, 34.8% (78) said the maintenance practice was high.

## 4. DISCUSSION OF FINDINGS

This study examined residents' satisfaction of facilities in housing projects delivered by public private partnership, it attempt to bridge the gap of the differences in facility satisfaction among the occupants of housing constructed through public private partnership. The study indicates that most of the respondent work with the private sector and are either high or medium income earner. The dominance of respondents that earned above \$\frac{100,000}{2}\$ per month in the study area had made it possible for the affordability of the housing unit that are provided by the private sector because of high cost of those unit (with little or no subsidy). The findings buttressed the study of Lu (1999) and Vera-Toscano and Aceta-Amestoy (2008) that people of high income group are more likely to be satisfied with their housing situation than those of lower income group because the former has the financial muscle to acquire better houses and housing environment. But this negates the policy objective of public private partnership that is pro-poor from its inception but in operation it is pro-affluence. From the result of this study, it can be deduced that most of the respondents interviewed would be considered to have taken good advantage of PPP in the area, and that there length of stay within the property influence their level of satisfaction on facilities within the property. The result is in agreement with Mohitet al., (2010) that revealed that the length of stay in the residence had positive impact on residential satisfaction.

There is an indication according to this study that more people had taken advantage of government initiative of PPP in housing delivery, which had hitherto yielded by making more people become home owners. Furthermore because majority of the occupiers of this property were owner occupier, the satisfactory level of the facilities within the property was also exposed. This is in line with Elsinga and Hoekstra (2005) finding that in many European countries housing satisfaction levels were higher among owner occupiers compare to renters. The study further reflects itself in the nature of preponderance of the estate with household of 3-5. it is important to note that house type play a very important role in determine the satisfaction level of facilities within a property, this is because there are different house type

within the study area which help in getting different satisfactory level from different house hold with different perspective of their property, this is in line with Mohit, Ibrahim and Rashid (2010) finding that residents in newly constructed public low-cost housing in Kuala Lumpur were moderately satisfied with their housing conditions, but were most satisfied with housing unit support services and social environment of the estates. In similar view, it negate Liu (1999) investigation of residential satisfaction among residents of public housing in Hong Kong, which shows high level of dissatisfaction, especially in the area of maintenance and cleanliness of the estates, integrity of the building envelope and access to public transport from their residences.

The study further confirmed the fact that most housing under PPP arrangement was not easily accessible to low income earners due to high cost of housing in the area. Ability to pay rent, play a major role in ability to staying in a housing delivered through PPP. These indicate that some of housing being produced by PPP is not meant for low class people which are against the purpose of public-private partnership. Some of these houses are occupied by high income earners because of sky-rocketed price placed on them. This finding agrees with the findings of Fatoye and Odunsami (2009) that income level and social status dictates quality in housing provision with the assertion that there is corresponding increase in housing quality from low income to the high income estates. It further compliment the studies by Lu (1999) and Vera-Toscano and Aceta-Amestoy (2008) that shows that people of high income group are more likely to be satisfied with their housing situation than those of lower income group because the former has the financial muscle to acquire better houses and housing environment.

Location of housing developed through PPP, has a very unique important, this study further found that, the study area locations were located in a very good area which had been upgraded by both the government and the private developers and it have improved the serenity of the area, the location of this PPP within the study area as open up the area and increase the social economy value of the area, but finding of this study is not in variance with findings of Ebiaride and Umeh (2015), which indicates that the residents are fairly satisfied with the aesthetics of the estate ;while they doubtful of location characteristic. The finding of this study further established by the fact that, majority of the residents within the study area reside in Ogun State but work in Lagos State and proximity to their work is satisfactory.

Apart from good location with good proximity to working place, within the study area, social activity area like market, religion centre etc., are also located within it, which is an important factor in reducing the cost of transportation of the resident,this corroborated the finding of, Ha (2008) which revealed that about 51 percent of the occupiers of social housing in South Korea were generally satisfied with their housing conditions, the residents were satisfied with the availability of some neighborhood facilities such as healthcare, shopping, banking facilities and post office, but were dissatisfied with parking facilities and landscaping in the estates. But it negate the result of Nwagbara and Irouke (2015), that the dominant elements in the highest levels of dissatisfaction list are those relating to estate layout and site location as well as those relating to accessibility to facility, furthermore they find out that poor access to recreational facilities and inadequate medical / health care facilities as well as proximity to market found to be the main sources of dissatisfaction among the residents , it also disagree with the finding of Ibem and Aduwo (2013) which state that poor access to neighborhood facilities and inadequate supply of electricity and good drinking water were the main sources of dissatisfaction among the residents of their study area.

# Babatunde F. OGUNBAYO, Adekunle M. AJAO, Oluwole T. ALAGBE, Kunle E. OGUNDIPE, Patience F. TUNJI-OLAYENI, Ayodeji O. OGUNDE

From the study it can be deduced that the security within study area are of satisfactory level, this shows that security especially in the beginning of arrangement of any PPP housing production arrangement needs to be of important. This is because Security around any property will determine the type of individual that will reside in it and its value. Space is of very important in any living area, from the result of the study, space allocation within the perimeter of the houses of the study area is not that enough, especially in the area of children play ground, car parks, and other needed essential physical property this finding support the finding of Mohit and Azim (2012) which shows that majority of the residents in public housing in Hulhumale, Maldavies, were slightly satisfied with their present housing situation, but the satisfaction levels were higher for services and public facilities than physical space within the dwelling units and social environment of the housing estates.

It of important that enough space is considered when designing or in the process of constructing any PPPs housing estate. The finding of this study base on the result of the respondent also shows that most houses delivered through PPP within the study area averagely make use of materials that were of low quality, though the external appearance of the property was of good quality within the estate, and it shows in the total outlook of the estate. The study affirm the work of Kowaltowski, Da silva and Pina (2006); Salleh (2008); Ha (2008) which indicated that certain performance criteria or housing attributes determine the level of quality in residential development. Base on this, it is of important to make use of standard material in the production stage of PPP housing estate especially in the area of finishes, this is essential in reducing cost of maintenance and improving health and safety of the resident, more so using of substandard material those not add value to the standard of living of the resident, The higher percentage of provision by the government was due to the fact that the study area was developed under PPP arrangement. This result further affirm with the PPP arrangement that 60%-70% of finance and some other necessary provision should be made available by private sector while the remaining 30%-40% of the remaining arrangement will be provide by the public sector. This buttressed the study of Mabogunje (2002) Ogunbayo, Alagbe, Ajao and Ogundipe (2016) which identified governments' (public sector) significant contribution to PPP project as provision of land, provision of drawing, and services.

One of the satisfaction level of the study area is the maintenance attitude or maintenance culture within the estate which is enhance by individual contribution through there maintenance effort. The high level of maintenance culture within the research area is due to type of people living within the research area and more so, majority of the resident leave a good and cultured life. This conjecture the findings of Ebiaride and Umeh (2015) that attitude to maintenance of facilities which includes such activities as the type of maintenance measures, frequency of maintenance of facilities, class of maintenance, waste disposal management and general painting of estate are all classed as not been considered by residents in expressing their level of satisfaction.

## 5. CONCLUSIONS

This study investigated the residents' satisfaction of facilities provision in housing project delivered by Public- Private Partnership (PPP) in Ogun State, Nigeria. In this regard the study identified nature of tenure, type of housing, location of residence, proximity to work, security of life and property, space allocation, adequacy of space and facilities, type of building material, external appearance, quality of available facilities, and maintenance practice on available facilities as some of the factors that determine the satisfaction level of occupant of housing provided through public and private partnership housing delivery project.

For the occupier to annex the satisfactory level of facilities provided in PPPs housing, the study maintained that, any housing estate developed through PPP should be built with facilities that is easily maintained and satisfied the occupants' housing condition or needs. Space allocation within the perimeter of the houses should be adequate and enough, especially in the area of children play ground, car parks, and other essential needed physical property. The estate should be assisted with the provision of facility maintenance unit stationed within the estate. Security of life and property is one important aspect of locating or renting of any apartment in respect of method or process of it production or nature of it tenure, adequate security should be provided within the estate, security post should be provide around strategic location within the estate to checkmate movement of people moving in and out of the estate.

Any future PPP housing estate should be located in good location with easy access to place of work, and that there should be availability of social facilities like market, religion centre, recreational centre, access road, health care centre, banking facility and other facilities that can improve the life of the occupants', this is necessary in other to improve the life of the resident, and to reduce their cost of transportation. There should be periodic maintenance of both movable and static facilities and repairs should be carried out as at when do or necessary, which should be centred on the end user need.

The paper concluded that for successful facility satisfaction among resident of housing developed through PPPs, it will require the redefinition of facilities required for both movable and static facilities. Design and construction must also align with best practices and ensure that experience tradesmen is employed in fixing required facilities and using best methods and materials for needed facilities within the estate.

## **ACKNOWLEDGEMENT**

We acknowledge Covenant University, Ota, Nigeria for creating research enabling environment.

## REFERENCES

- [1] Akinloye, O. A. (2009). Problems of Public Housing Estate in Nigeria. *Research Report, Development Policy Centre*, Ibadan.
- [2] Babarinde, O. A. (2009). Africa is open for business: A continent on the move. *Thunderbird International Business Review*, 51(4), 319-328.
- [3] Clement, O. I., & Kayode, O. (2012). Public housing provision and user satisfaction in Ondo State, Nigeria. *British Journal of Arts and Social Sciences*, 8(1), 103-111.
- [4] Ebong, B. B.(2012). "Infrastructure Financing: The Public-Private Partnership Option." *Infrastructure Financing: The Public-Private Partnership Option*, 8.
- [5] Elsinga, M., & Hoekstra, J. (2005). Homeownership and housing satisfaction. *Journal of Housing and the Built Environment*, 20(4), 401-424.
- [6] Fatoye, E. O. & Odusami, K. T. (2009). Occupants' satisfaction approach to housing performance evaluation: The case of Nigeria. In *RICS COBRA research conference held at the University of Cape Town* vol. 10.
- [7] Galster, G. C. (1987). *Homeowners and neighborhood reinvestment*. Duke University Press.
- [8] Garling, T., Friman, M., (2002). A psychological approach to the study of residential choice and satisfaction. In: *Residential Environments: Choice, Satisfaction, and Behavior. Bergin and Garvey, Westport, Connecticut, London*, pp. 55–80.

## Babatunde F. OGUNBAYO, Adekunle M. AJAO, Oluwole T. ALAGBE, Kunle E. OGUNDIPE, Patience F. TUNJI-OLAYENI, Ayodeji O. OGUNDE

- [9] Ha S.K. (2008). Social housing estates and sustainable community development in South Korea *Habitat International*, 32 (2008), pp. 349–363
- [10] Hashim, A. H. (2003). Residential satisfaction and social integration in public low cost housing in Malaysia. *Pertanika Journal of Social Sciences & Humanities*, 11(1), 1-10.
- [11] Ibem, E. O. (2013). Accessibility of services and facilities for residents in public housing in urban areas of Ogun State, Nigeria. In *Urban Forum* (Vol. 24, No. 3, pp. 407-423). Springer Netherlands.
- [12] Ibem, E. O., & Aduwo, E. B. (2013). Assessment of residential satisfaction in public housing in Ogun State, Nigeria. *Habitat International*, 40, 163-175.
- [13] Ibem, E. O., & Amole, D. (2013). Residential satisfaction in public core housing in Abeokuta, Ogun State, Nigeria. *Social indicators research*, 113(1), 563-581.
- [14] Ilesanmi, A. O. (2010). Post-occupancy evaluation and residents' satisfaction with public housing in Lagos, Nigeria. *Journal of building appraisal*, 6(2), 153-169.
- [15] Jiboye, A. D. (2009). Evaluating tenants' satisfaction with public housing in Lagos, Nigeria. *Town Planning and Architecture*, *33*(4), 239-247.
- [16] Jiboye, A. D. (2010). The correlates of public housing satisfaction in Lagos, Nigeria. *Journal of Geography and Regional Planning*, 3(2), 17.
- [17] Kaitilla, S. (1993). Satisfaction with public housing in Papua New Guinea the case of west Taraka housing scheme. *Environment and Behavior*, 25(3), 514-545.
- [18] Liu, A. M. M. (1999). Residential satisfaction in housing estates: a Hong Kong perspective. *Automation in construction*, 8(4), 511-524.
- [19] Lu, M (1999) Determinants of residential satisfaction: *ordered logit vs regression models Growth and Change*, 30 (1999), pp. 264–287
- [20] Mohit, M. A., & Azim, M. (2012). Assessment of residential satisfaction with public housing in Hulhumale', Maldives. *Procedia-Social and Behavioral Sciences*, 50, 756-770.
- [21] Mohit, M. A., Ibrahim, M., & Rashid, Y. R. (2010). Assessment of residential satisfaction in newly designed public low-cost housing in Kuala Lumpur, Malaysia. *Habitat international*, 34(1), 18-27.
- [22] Montgomery, H., & Johansson, U. S. (1988). Life values: their structure and relation to life situation. *Applied behavioral economics*, 1, 420-437.
- [23] Nubi, O. T. (2008, October). Affordable housing delivery in Nigeria. In *Proceedings of the South African Foundation International Conference and Exhibition* (pp. 1-18).
- [24] Ogu, V. I. (2002). Urban residential satisfaction and the planning implications in a developing world context: The example of Benin City, Nigeria. *International Planning Studies*, 7(1), 37-53.
- [25] Ogunbayo, B. F., Alagbe, O. A., Ajao, A. M., & Ogundipe, E. K. (2016). Determining The Individual Significant Contribution of Public And Private Sector in Housing Delivery in Nigeria. *British Journal of Earth Sciences Research*, 4(3), 16-26.
- [26] Olatubara, C. O., & Fatoye, E. O. (2007). Evaluation of the satisfaction of occupants of the Abesan public low-cost housing estate in Lagos State, Nigeria. *The Nigerian journal of Economic and Social Studies*, 49(1), 5-9.
- [27] Olatubara, C. O., & Fatoye, E. O. (2006). Residential Satisfaction in Public Housing Estates in Lagos State, Nigeria. *Journal of the Nigerian Institute of Town Planners*, 19(1), 103-114.

- [28] Oliveira, M. C. G., & Heineck, L. F. M. (1999). An investigation into the determinants of built environmental customer satisfaction. In *Paper delivered at CIB W55 and W65 Joint triennial symposium on customer satisfaction: A focus for researchand practice. Cape Town South Africa* 510.
- [29] Onibokun, A.G. (1974). Evaluating consumers' satisfaction with housing: an application of a system approach *Journal of the American Institute of Planners Journal*, 40 (3) pp. 189–200
- [30] Salleh, A. G. (2008). Neighborhood factors in private low-cost housing in Malaysia. *Habitat International*, 32(4), 485-493.
- [31] Salleh, A. N. A., Yosuf, B. N. A., Salleh, C. A. G., & Johari, D. N. (2012). Tenant satisfaction in public housing and its relationship with rent arrears: Majlis Bandaraya, Perak, Malaysia. *International Journal of Trade, Economics and Finance*, 2(1), 10-18.
- [32] Teck-Hong, T. (2011). Housing satisfaction in medium-and high-cost housing: the case of greater Kuala Lumpur, Malaysia. *Habitat International*, 35(3), 1-9.
- [33] Ukoha, O. M., & Beamish, J. O. (1997). Assessment of residents' satisfaction with public housing in Abuja, Nigeria. *Habitat international*, 21(4), 445-460.
- [34] Vera-Toscano & Ateca-Amestoy, (2008). The relevance of social interactions on housing satisfaction, *Social Indicators Research*, 86 (2008), pp. 257–274
- [35] Varady, D. P., & Carrozza, M. A. (2000). Toward a better way to measure customer satisfaction levels in public housing: *A report from Cincinnati*.
- [36] Dr. M. Bina Celine Dorathy, Differentiation Strat egy For An Emerging Port A Case of Kattupalli Port Under PPP Model In India. International Journal of Civil Engineering and Technology, 8(4), 2017, pp. 1831-1839
- [37] Dr. S Kasturi Rangan, Is It End Of Road For PPP in Road Infrastructure In India?. International Journal of Management, 5(4), 2014, pp. 100-105
- [38] Wendrila Biswas, Public Private Partnership and Economic Growth with special reference to India An overview . International Journal of Management , 7 ( 3 ), 201 6 , pp. 18 26