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Strategic framework for resident's participation in housing provision in Akure, Southwest Nigeria

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Abstract

Purpose This paper furthered the work done by Choguill (1996) in developing a framework for community participation in housing provision for Akure, Southwest Nigeria. The study tests the ladder for suitability in the City, and accounted for residential satisfaction as an important result of resident's participation, which was not considered in Choguill's ladder.

Design/methodology/approach The paper reports a cross-sectional doctoral research on residents' participation in housing in Akure. The data for this study were obtained through questionnaire and focus group discussions. Data was analysed using Spearman's Rank Correlation and Content Analysis.

Findings The findings show a significant positive relationship between the levels of participation and satisfaction. Though similar to the levels of participation, Choguill's Ladder does not totally explain the phenomenon of participation in the study area. Thus, it was modified to be more appropriate and suitable for the study area, also accounting for residential satisfaction.

Practical implications The findings imply that adoption of the new ladder by policy makers and professionals in the building sector would enhance residential satisfaction in the study area and in similar areas. It concludes that the knowledge gained from this modified framework will enable policy makers and developers plan appropriately for resident's participation in housing to achieve better residential environments for users.

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Originality/value The study developed a ladder of residents' participation in housing provision from Choguill's Framework that is more suited to Akure City and similar cities in Nigeria.

Keywords Akure · Housing provision · Ladder of participation · Residents' participation · Residential satisfaction · Strategic framework

1 Introduction

Residents' participation has become a topical discourse in housing research, it has become necessary in order to enhance the level of users' satisfaction (Broome 2005; Liu et al. 2015; Nuttavuthisit et al. 2015; O'Faircheallaigh 2010; Sanoff 2000). As vigorously propounded by the Manila Declaration of 1989, government authorities should realize that sovereignty resides with the people, and they should allow the people to set and pursue their own agenda with the support of government authorities (Theron 2005). Governments all over the world are embracing residents' participation in housing development to solve housing problems and to provide acceptable and affordable housing to its citizens. Their successes in using this approach shows that residents' participation has become necessary for the Nigerian housing sector where it is yet to gain ground.

The United Nations Rio Summit of 1992 (Principle 10) stressed the need for people to participate in housing developments (Broome 2005). This is because of its potential to enhance residents' quality of life since such developments are more likely to meet their needs when they are involved in the process. Housing developments affect residents directly, and they should therefore be considered as important to such processes in order to achieve satisfactory housing. It is however undesirable that housing in Akure in particular, and Nigeria in general has not been satisfactory to residents. Ukoha and Beamish (1997), Jiboye (2004), Omole (2010), Ibem (2010), and Ojo and Oloruntoba (2012) observed that the bulk of existing housing stock provided in Akure and Nigeria has not been satisfactory to residents' household needs. Perhaps, this is because residents are usually not involved in the housing development processes in Nigeria (Adedayo 2012; Fakere 2017; Jiboye 2012) and residents' involvement has the potential to mitigate this problem.

O'Faircheallaigh (2010), Farmer et al. (2015), Liu et al. (2015) and Nuttavuthisit et al. (2015) argued that the overwhelming view about residents' participation is that it is highly desirable and that the key issue for researchers is to discover the most suitable ways of making it effective. Jiboye (2010) also claimed that since housing is without doubt an important national investment and a right of every individual, the ultimate aim of any housing programme is to improve its adequacy in order to satisfy the needs of its occupants. Thus, a nexus exists between residents' participation and residential satisfaction (Fakere et al. 2017).

Scholars have defined residential satisfaction in several ways. Mohit et al. (2010) defined residential satisfaction as the feeling of contentment residents experience when their needs are met in the houses of their abode. It is the degree of contentment experienced by households with reference to their existing housing situation (Ogu



2002). According to Abdul-Ghani (2008), it is an indication that there is little or no complaint about the housing unit since the needs and aspirations of the household has been achieved in it. Residential satisfaction in this study refers to the extent to which the occupants of houses in the study area are gratified that their housing needs have been met in their housing. The concept of satisfaction is broadly used in the evaluation of residential environments (Amole 2009). This is because residential satisfaction is a very important indicator of happiness, wellbeing and the quality of life of the housing users (Elyes and Wilson 2005). In addition, Isa and Jusan (2012) stated that high levels of residential satisfaction indicate a high quality of life of residents.

Several studies (Arnstein 1969; Choguill 1996; Moser 1989; Davidson et al. 2007; International Association of Public Participation, IAP2 2016) have developed frameworks to examine participation in different aspects of housing development in several countries and regions. However, existing frameworks have not provided a relationship between the levels of participation and satisfaction, despite satisfaction being an important outcome of participation. Choguill (1996) is unique due to its focus on developing countries like Nigeria, thus it is of particular importance to this study. This study tested this framework for its suitability with a view to modifying it to suit the study area. The study does not intend develop a new framework; however, the modification is necessary for a better application of the Framework to specific groups.

For the purpose of this study, emphasis was placed on residents' participation in housing, vis-a-vis its effects on the level of residential satisfaction. These two are considered together because, housing goes beyond the house; it includes all the accompanying infrastructural services. Since housing is a broad term that not only refers to the house but other concomitant facilities, it is therefore pertinent that this study addresses both aspects of housing. More so, Ojo, Olatoye-Ojo and Gbadegesin (2015) stated that the importance of housing and infrastructure on the economy requires that both should always be treated together. In addition, participation in this study is in two aspects: participation in decision making for government housing projects and participation in self-help housing projects. Choguill (1996) highlighted two objectives of residents' participation in housing that differentiates it from participation in other aspects of life such as political and human rights-based participation. First, the people claim their rights and are able to influence decisions in the housing process. Second, they are able to build improvements to their communities and living environments, to enable them lead healthy and productive lives.

The relationship between the level of participation in housing development and satisfaction in developing countries has not been thoroughly explored in literature. This study attempts to fill the gap. The goal of this study is therefore to propose a strategic framework for residents' participation in housing by modifying Choguill's Framework for better application by residents in Akure, the Capital City of Ondo State in Southwest Nigeria. To achieve this goal, the study explores the levels and extent of residents' participation in housing, and its relationship with satisfaction in Akure. It examined the levels of residents' participation and the effects of each level on satisfaction. The findings of this study will provide a basis to argue for its adoption of residents' participation by policy makers, city planning officials, and



developers in the context of the city where necessary. It is not so much for the use of community organizations because they are usually not resource holders. In addition, the findings of this study might be difficult to apply to other cities if the situations in such cities are significantly different from what obtains in the study area. Presented in the following sections are: review of related literature, Choguill's Ladder of community participation for underdeveloped countries, framework for resident's participation in housing provision, research methods, questionnaire, focus group discussions, results and discussions, participation and satisfaction in housing, ladder of residents' participation in Akure, and conclusions and implications of the study.

2 Review of related literature

Housing according to Olotuah (2005) is a building structure in which people live for the reason that meets their shelter and social needs. This means that housing transcends provision of shelter, but must also accommodate the social and lifestyles needs of the residents. Therefore, provision of housing would be inadequate if it only provides a "roof over one's head". This is where residents' participation in housing development comes in. As argued by Ettouney and Abdel-Kader (2003), residents' participation creates an opportunity to meet the varied and changing housing needs of the users.

Adedayo (2012) examined how users' participation in housing could be achieved in Nigeria through a process called mass customization. The focus of the study was to check the rampant mass housing schemes with generic designs in the country, by making the designs to be owner specific. The study showed how design briefs in mass housing in Nigeria could be customized through the development of a customization brief model with the aid of a network of computers. Findings showed that the benefits include developing housing units that addresses client's needs and aspirations, and reduces post-construction changes. Babatunde et al. (2012) evaluated several kinds of infrastructural projects that are suitable to be executed through public-private partnership (PPP) in Lagos, Nigeria. The infrastructural projects studied were roads, water, electricity, and so on. The study focused on enhancing the delivery of infrastructural projects in Nigeria; the target groups of the study were the private sector and the public sector. Furthermore, Bovaird (2007) examined cases of users' participation in Brazil, United Kingdom, and France. The case studies showed some of the most remarkable ways in which participation is having an impact in public services, from the conception and planning phases to the service delivery and evaluation phases. Findings revealed that users' participation provides a vital integrating mechanism amongst the stakeholders, and the potential to raise the efficacy of public policy. These studies however did not account for users' satisfaction, which is an important outcome of participation.

Ammar et al. (2013) examined the effects of residents' participation in design and implementation works, on users' satisfaction with the quality of the apartments in multi-story housing projects in Gaza, Palestine. Questionnaire survey was used to collect data for the study, which was analysed using bivariate correlation. The



study found a significant positive correlation between residents' participation and their level of satisfaction with their houses, which emphasized the importance of the relationship between the two variables. Furthermore, Isa and Jusan (2012) examined users' participation in housing and its effects on users' occupancy and satisfaction in Malaysia. It investigated the housing delivery system in Malaysia in relation to residents' occupancy status and the level of residential satisfaction. The study stressed that the level of residents' satisfaction with the design, facilities and quality of housing has an effect on their occupancy. It found a remarkable dissatisfaction and non-occupancy in the Malaysian housing sector, proffering users' participation in housing in the country as an approach solve the problem.

Residents' participation in housing is a construct that includes several levels of varying degrees. Thus, researchers have developed frameworks to highlight the different levels of participation. Samah and Aref (2011) developed a framework by examining the level of participation in community development in Malaysia, using the review method. It was done in order to show how the degree of residents' involvement in community development projects determines their levels of empowerment. Through the findings, the study developed a framework of participation that was arranged in a continuum from "individual empowerment" through "collective empowerment" to "interpersonal empowerment". The framework developed is relevant to Malaysia and other similar countries. IAP2 (2016) examined the levels of public participation, using the review method. It developed a framework, which in ascending order include "inform", "consult", "involve", "collaborate" and "empower". The framework is applicable to any aspect of public participation. These frameworks present different levels of participation; however, the framework most closely suited to the housing situation in Nigeria is the one developed by Choguill (1996).

2.1 Choguill's Ladder of community participation for underdeveloped countries

Choguill (1996) proposed a ladder of community participation for underdeveloped countries as a guide to governments and non-governmental organisations (NGOs) in terms of approach required to achieve success in housing. The levels in the framework include "self-management", "conspiracy", "informing", "diplomacy", "dissimulation", "conciliation", "partnership", and "empowerment". This Framework analysed the existence and methods of community participation in the selected regions of study. It showed that community participation in the developing countries was not merely a means to enable the people to meet the basic needs, which they are usually deprived of, but also a means to influence decisions about developments that affect them. Although, Arnstein (1969) was adequate for analysis in developed countries, Choguill (1996) furthered this work because it would provide misleading results within the context of the developing world. Choguill identified eight rungs (levels of involvement), arranged in a ladder form, with self-management and empowerment at the two extremes in ascending order. It is important to note that, while Choguill's Framework has been criticized by few researchers (Collins and Ison 2009; Nance 2013) for lack of complexity, focus on the powers of the participating parties, and



failure to consider how outcome and process relate, it is a very important framework to consider when dealing with a developing context. Moreover, this study focuses on tackling the latter shortcoming of the existing ladder.

Despite, the achievement of Choguill's Ladder of Participation, it might not be applicable to the entire developing world. There is possibility for minor or major alterations to the ladder, specific to certain regions or cities depending on the existing situations in such places. Thus, it might be necessary to test this ladder for suitability in different cities or regions in the developing world. The findings of this study buttress this point because the ladder does not accurately capture the existing situation in Akure. Examples of these are "conspiracy" and "self management", which are different in the study area from what Choguill presented in the ladder. "Conspiracy" was not found in the study area, while, "self management" occurred in two distinct forms, which had to be separated. This necessitates a modification of the Ladder for the study area. In addition, satisfaction is an important result of participation and it is conspicuously missing from Choguill's ladder. Previous studies (Carroll and Rosson 2007; Isa and Jusan 2012; Fakere et al. 2017) have shown that the relationship between participation and satisfaction is a vital consideration in the study of housing. The ladder in this study not only shows the different rungs of involvement, but it also shows the implications of each level for satisfaction.

2.2 Framework for residents' participation in housing provision

A framework for residents' participation in housing was developed by modifying the framework of Choguill (1996). It is important for frameworks such as this to be based on appropriate generic theories. Thus, Decision Theory is the theory upon which this framework is based. Decision Theory (also known as Rational Choice Theory) is the study of uncertainties, preferences, and other issues relating to making optimal or rational choices (Less-Wrong 2013). Baron (2008) observed that, Decision Theory could be divided into three parts, namely: normative (rational choices through rational agents: e.g. computer), descriptive (how non-ideal agents make choices), and prescriptive (bridging of the gap in decisions between the normative and the descriptive) Decision Theory. The Decision Theory upon which this framework is based is the Descriptive Decision Theory. Descriptive Decision Theory was chosen because it explains existing situation in the study area; what choices residents make in getting involved in housing development, how those choices are made, and the reasons for those choices. The descriptive levels in the new framework are individual self-help (level 1), community mutual-help (level 2), no-information (level 3), dissimulation (level 4), information (level 5), and financial contribution (level 6).

The Prescriptive Decision Theory was used partially in the proposed framework in addition to the descriptive because it had been prescribed in the previous framework. It recommends how to move from the non-ideal situation to the ideal levels of residents' participation. This involves rational decisions that should be made by government authorities and the residents of the communities in order to ensure that housing projects are satisfactory. The prescriptive levels in the new framework are conciliation (level 7), partnership (level 8), and empowerment (level 9). The proposed framework includes the levels of residential satisfaction expected from each



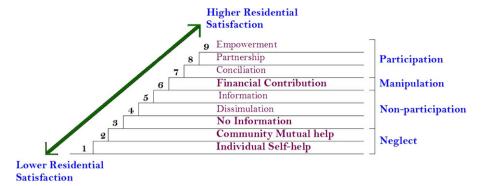


Fig. 1 Ladder of residents' participation in housing in Akure, Nigeria

rung, unlike in the previous framework. From the findings of the quantitative aspect of the study, the level of residential satisfaction increases with level of residents' participation in the study area (Fakere 2017). These show the implications of applying each of the levels in the framework, with respect to satisfaction.

Fig. 1 shows that the framework is in ladder form and is divided into nine rungs. The hierarchy of the framework is based on the residents' ability to influence decision-making in planning and implementation of housing projects. The descriptive aspects of the framework explain the findings from the study area, while the prescriptive aspects of the framework are the recommended levels of residents' participation in housing development. In the framework, participation in government housing projects (Levels 3–9) are above those of self-help (Levels 1–2) because, self-help projects are usually a result of government neglect, and residents have no choice but to provide housing for themselves in spite of meagre resources, unlike in government projects where government authorities usually provide the funding. These recommended levels describe how residents' participation should be operated in the study area.

Choguill (1996) originally had eight rungs; however, the proposed framework has nine levels due to the findings in the study area as shown in Sect. 4.2. From the framework used, the rung of Conspiracy was not retained because it does not pertain to the study area. Conspiracy, according to Choguill (1996) is when government plans disguise ulterior motive that are meant to benefit other groups, such as total clearance of slum areas in urban centres for the purpose of re-development for other groups of people. Thus, the term "no-information" replaced "conspiracy" because the new term was more appropriate due to the findings of this study and some aspects of housing were done without informing the residents. In addition, "self-management" (level 1) in the previous framework was split into two, which are "individual self-help" and "community mutual-help". This is because in the study area, there are several aspects of residents' participation that are done purely through individual self-help, while others are purely through community mutualhelp. Lastly, "financial contribution" was included in the proposed framework, unlike in the previous framework because some aspects of housing are done through that means. The rungs in the previous framework that were retained are inform-



ing, dissimulation, conciliation, partnership and empowerment as shown in Fig. 1. Generally, this study aims to answer the following questions: what are the levels of residents' participation in housing provision in Akure and what are their influences on housing satisfaction? How is the framework of residents' participation in housing provision in Akure different from that of Choguill?

3 Research methods

3.1 Questionnaire

This primary data for this study were collected through structured questionnaire survey and focus group discussions (FGDs). The questionnaire was used in this study because an objective of this study is to test the hypothesis establishing a relationship between participation and satisfaction in the study area. Other approaches such as experimentation and interviewing cannot achieve this aim within this context. It was structured according to the themes of the study in order to make the sequence of questions easy to follow and read by the respondents. The first section relates to the first theme and is about the levels of residents' participation in housing provision, while the second section is about levels of satisfaction with housing.

Choguill's (1996) Ladder of Participation were adapted to this study, converted to questions and tested on the study area as shown in Tables 1 and 2. These levels in ascending order include self-management (1: lowest), conspiracy (2), informing (3), diplomacy/dissimulation (4), conciliation (5), partnership (6), and empowerment (7: highest). Levels 1 to 4 indicate lower levels of participation, while levels 5 to 7 indicate higher levels of participation. In Choguill's Framework, diplomacy and dissimulation were in two different levels. However, for this study, they were adapted as one single level to suit the study area because of their similarities, in which case the residents are made to believe that they influence decisions, which had been made by others. The respondents were asked to select from the options that correspond

Table 1 Level of Residents' Participation in Housing

Levels		Freq	%
1	I provided my housing by myself without restrictions/support from any designer/professional (self-management)	19	6.2
2	I was not involved at all in the process of providing my housing (conspiracy)	142	46.7
3	I was only informed about decisions made about my housing (informing)	15	4.9
4	The designer/planner had too much control over decision making about my housing than I did (diplomacy/dissimulation)	45	14.8
5	I chose my housing design from alternatives that were developed by the designer/planner (conciliation)	22	7.2
6	I discussed my needs with the designer/planner and made joint/ equal decisions about my housing (partnership)	40	13.1
7	I made the major decisions about my housing while the designer/ planner made only minor ones (empowerment)	21	6.9



Empowerment (%) Partnership (%) 3.0 4.9 3.9 8.2 5.6 Conciliation (%) 4.6 5.3 Dissimulation/diplomacy 3.0 6.2 Informing (%) 19.4 4.3 2.0 3.0 2.6 Conspiracy (%)
 Table 2
 Level of Residents' Participation in Housing
 24.7 36.2 10.9 30.3 15.1 9.5 Self-management (%) 40.5 9.92 43.8 57.6 72.4 Waste Manage-Infrastructure Electricity Drainage Security Roads Water

2.0 0.7 1.0

with their level of participation in housing. The levels of satisfaction with housing were defined as very dissatisfied (1), dissatisfied (2), neutral (3), satisfied (4), and very satisfied (5). The respondents selected the options that correspond with their level of satisfaction.

Copies of the questionnaire were administered in the study area; and the number of housing units in the study area was 5449 buildings. The sample size for the study was three hundred and fifty-nine (359), which was generated using online Sample Size Calculator (with a confidence interval of 5). Simple random sampling technique was used to select the houses that were studied and heads of households (both males and females) in each house were the basic focus of questionnaire administration and other research enquiries, while the focus was on private housing. The percentage return for the questionnaires was 84.7% (304 copies), which was deemed as sufficient for the study. The analysis used Spearman's Rho Analysis because the variables involved were in ordinal scale. It was used to predict the strength and the direction of the relationship between participation and satisfaction. The test was carried out at an alpha level of 95% confidence and 0.05 significance level, two tailed, to check the level of significance and relationship between the two pairs of variables.

A pilot survey was conducted in the study area prior to the fieldwork, which was done to identify possible problems that may arise from the questions during the survey and if there are problems with the overall structure of the questionnaire, it might be necessary to amend it at the pilot testing stage. Using twenty copies of the questionnaire, the Cronbach's Alpha Test for reliability was conducted. In order to facilitate meeting of respondents, data was collected at the homes of the residents during the morning and evening hours as well as on weekends. The Cronbach's Alpha Test yielded a value of 0.780, which means that the sections required no revision, since George and Mallery (2003) stated that no revision is necessary for a questionnaire with a value of 0.7 and above.

3.2 Focus group discussions

Focus group discussions (FGDs) were conducted in four communities in the city; namely Alagbaka Phase 2, Aule, Don Bosco, and Fanibi. These communities were amongst the ones in the study area where the questionnaire survey was carried out and the participants of the FGDs were amongst those that completed the questionnaire. In order to avoid unnecessary repetition of similar information from the other communities in the study area, these four communities were randomly selected out of the 39 existing communities due to homogeneity in the levels of residents' participation housing development (Fakere 2017). As a result, the communities selected are practically representative of the population.

FGDs are used to explore the experiences, perceptions, and understanding of a group of people who have similar experiences with regard to an event or situation (Kumar 2014). FGDs were used in this study due to the richness of data they generate within the context of a given study, by creating an opportunity for interaction among the community members (Fakere et al. 2018). Its use enables the collection of holistic and reliable data through mutual interactions between participants rather than through individual sources (Fakere et al. 2018). The levels of participation



in housing provision and the impact it has on the residents cannot be ascertained through observations, personal interviews or experiments, but requires provision of information by the people that reside in the area. FGD is the best approach because the residents are the ones collectively and directly affected by it.

The participants were asked questions relating to their level of participation in housing provision namely: "What is your level of involvement in housing provision?" "In what ways do you collaborate with government authorities or designers in the provision of housing in this community?" "What is your level of participation in the provision of infrastructure in your community with specific examples and cases?" These questions were designed to explore the views of the residents regarding their levels of participation with housing and to understand the extent of their involvement.

The FGD sessions were conducted between August and November 2016, in the residences of the community association chairpersons in each of the communities. The last Saturday of every month is reserved for environmental sanitation, and the residents usually held residents' association meetings to discuss matters pertaining to their communities. This practice of communal meetings, which has been established by the communities, provided the platform to collect data for this research using an FGD guide. This study took advantage of this period to hold the FGD sessions, which lasted for about thirty minutes each. There were between five and eight members of the same community in each of the FGD sessions, which includes the leaders of the communities. Between two and three participants in the sessions were female; this was important to ensure a balanced gender dimension. The FGD sessions were conducted using three trained assistants for taking down notes and for audio recording of the discussions with the permission of the participants. Thematic Content Analysis was used to manually transcribe and analyse the FGD data from the sessions. Thus, responses to the questions were analysed to identify key themes, common and uncommon patterns in relation with their levels of participation.

4 Results and discussion

4.1 Participation and satisfaction in housing

Table 1 reveals that for the level of participation in housing, 6.2% of the respondents were in Level 1, 46.7% of them were in Level 2, 4.9% were in Level 3, and 14.8% indicated that they were in Level 4. In addition, 7.2% of the respondents were in Level 5, 13.1% were in Level 6, while 6.9% were in Level 7. This means that majority of the respondents (72.6%) had a low level of involvement in the process of providing their housing. The FGD corroborated this finding: several of the participants that are house owners discussed their needs with the architect, who produced the design of the houses. However, some of the residents that inherited the house and those that live in a family house indicated that they were only informed about the decisions already taken about the design of the houses.

Table 2 reveals that for the level of participation in electricity provision, 40.5% of the respondents were in Level 1, 76.6% of them were in Level 1 for water supply, 43.8% were in Level 1 for roads, and 57.6% indicated that they were in Level 1



Table 5 Spearman's Kno test for level of participation in house design and satisfaction							
	Spearman's rho Correlation	Significance, p-value	Remark				
Level of participation in housing	0.395	0.000	Signifi- cant				
Satisfaction with housing							

Table 3 Spearman's Rho test for level of participation in house design and satisfaction

for drainage provision. In addition, 41.8% of the respondents were in Level 1 for domestic waste management, 72.4% were in Level 1 for security. This means that majority of the respondents had low level of involvement in the process of providing the infrastructural facilities in their communities. This implies that government authorities have largely neglected their responsibilities to the communities by not providing infrastructure for them. Moreover, since the facilities were important to them, they resorted to providing them through self-help efforts either as individuals or as communities rather than waiting endlessly for the government to intervene. The FGD corroborated this finding by showing that self-help effort is rampant in the study area.

The Spearman's Rho Correlation was used to test for significant relationship between the level of residents' participation in housing and satisfaction with housing. Table 3 indicates that there is a significant relationship between the two variables. The association is significant at 5% level in the study area with p = 0.000 and Correlation coefficient value of 0.395. It implies that there is significant relationship between the level of participation in housing and their level of satisfaction in the study area. It also shows that the level of residents' satisfaction with housing increases with their level of participation; and that the higher the level of residents' participation in house design, the more likely people are to be highly satisfied with their housing. This is in consonance with Carrol and Rosson (2007), which also

 Table 4
 Spearman's Rho test for level of participation in house design and satisfaction

	Spearman's rho Correlation	Significance, p-value	Remark
Level of participation in electricity supply	0.156	0.006	Signifi- cant
Satisfaction with electricity			
Level of participation in water supply Satisfaction with water supply	0.272	0.000	Signifi- cant
Level of participation in road Satisfaction with road	0.459	0.000	Signifi- cant
Level of participation in drainage Satisfaction with drainage	0.338	0.000	Signifi- cant
Level of participation in waste management	0.261	0.000	Signifi- cant
Satisfaction with waste management			
Level of participation in security Satisfaction with security	0.290	0.000	Signifi- cant



found that residents' participation enhances satisfaction and allows for good decision-making.

The Spearman's Rho Correlation was used to test for significant relationship between the level of residents' participation and satisfaction with infrastructure variables. Table 4 indicates that there is a significant relationship between all the variables. The association is significant at 5% level in the study area with p = 0.000 for water supply, road, drainage, waste management and security, while p = 0.006 for electricity. It implies that there is significant relationship between the level of participation in all the infrastructure variables and their level of satisfaction in the study area. It also shows that the level of residents' satisfaction with housing increases with their level of participation; and that the higher the level of residents' participation in infrastructure, the more likely people are to be highly satisfied with their housing.

4.2 Ladder of residents' participation in housing in Akure, Nigeria

This section reports mainly on the findings from the FGDs. In ascending order, the levels in the ladder are individual self-help, community mutual-help, no information, dissimulation, information, financial contribution, conciliation, partnership and empowerment. In the real world, there could be up to 150 rungs with fewer sharp distinctions among them (Arnstein 1969). However, this would present complexity, and make it more confusing in identifying the different levels and should be avoided.

Higher levels of participation lead to higher levels of users' satisfaction in Akure (Fakere 2017; Fakere et al. 2017). This framework also shows this relationship. Higher rungs in the ladder of participation results in higher level of satisfaction while, lower rungs result in lower levels of residential satisfaction. In using this Framework, it is important to identify the level that would most likely result in successful housing development processes depending on the type of project. The levels where only the residents are involved appear at the lower levels (Levels 1–2). Next, above it are the levels where only the government authority or professionals participate (Levels 3–5), and then the highest levels are occupied by the levels where both the government/ architect and the residents were actively involved (Levels 6–9). The classifications in this framework for the evaluation of residents' participation is based on the degree to which residents are able to influence planning and implementation decisions in housing projects that affect them, with or without government involvement.

Level 1: individual self-help: Individual self-help is at the bottom rung of this framework of residents' participation in housing development in Nigeria and reflects "neglect" (Choguill 1996). This is when the provision of housing is based on residents' efforts only, usually without success. Users without any outside influence or support also do their financing. It takes place when residents provide housing for themselves due to neglect by the authorities that are responsible for such. In addition, it occurs when the residents do not employ the use of a designer, but design the house entirely by themselves. This is at the bottom of the framework because it is the most serious evidence of government neglect where residents have to develop their housing environment from their meagre resources. Another reason



is that, proper participation should involve a minimum of two parties, whereas in this case it is not so (Arnstein 1969; Choguill 1996). This is also, why several people cannot provide such for themselves because they cannot afford it. The implication of this level of participation is that the level of satisfaction derived by the residents is low (Fakere 2017). This is because the residents with their meagre resources or without professional input carry out the duties meant to be carried out by the government or designer, and therefore the projects are usually not successful. The reason is ignorance of the crucial role of the designer, which means that the professional expertise would be lacking in the project. The information gathered from the FGD revealed that this is very common in the study area. It was observed that there was no supply of pipe-borne water anywhere in the study area (Fakere et al. 2018): therefore the residents resort to providing water for themselves through hand-dug wells, and boreholes. The participants at Aule stated that, "some of the houses in this community were constructed by private individuals and every household has its own water scheme; and there is no pipe borne water coming from the mains. Each household provide water either through hand-dug wells or through boreholes. In fact, we are not sure whether the mains pass through this community at all." In the study area where the government did not provide drainages, several of the residents provided drainages privately in front of their own houses. The participants at Don Bosco noted that, "individual property owners provide drainage channels in front of their plots as they deem fit. While some can afford to do it, others cannot. The government has no input there".

Level 2: community mutual-help: Community mutual-help is on the second rung in the framework. This is when residents of a community come together to provide housing for themselves through decision-making and financing amongst themselves, usually with low success rates. This is usually in the form of mutual decisions and contributions towards the development of their housing environment. It takes place when residents of a community organize themselves to develop their housing environment due to neglect by the government authorities that are vested with such responsibilities. It also occurs in situations where communities organize themselves to construct houses for their members. According to Fisher and DeFilippis (2015), community organizing has constantly been a basic component of efforts to transform the society, though it is insufficient to achieve the transformation on its own, because it needs some outside support. It was necessary to separate "individual selfhelp" from this level because though, the circumstances that lead to both are similar; the processes of achieving the housing development projects in each of them are different. This is so because both exist without government support; however, community mutual-help would require local community organization to function, while individual self-help does not. Community mutual-help is higher than individual selfhelp because, when residents of a community come together for such purposes, it lightens the individual burden compared to when it is done through personal efforts. Another reason is that, it is valuable in building social capital and individual competencies, while providing a basis for community involvement in governmentinitiated projects. In addition, the scale and scope of participation is wider, compared to individual self-help approach. The implication of this level of participation is that



the level of satisfaction derived by the residents is low (Fakere 2017). This level of participation is necessary to build social capital, which is an important characteristic to have for community integration and growth. However, the level of satisfaction is low because of government neglect, while the residents with their meagre resources carry out the duties meant to be done by the government, and therefore the projects are usually not successful. The FGDs revealed that community mutual help is very common in the study area. The FGDs revealed that in the study area, the residents contribute regularly to employ guards for the security of lives and property in their communities. The participants at Ijapo stated that, "security is through communal effort as well. In fact, that is the core of our monthly residents' association meetings. It is the main reason that we began to meet, and later, infrastructural development was added to it. We contribute money monthly to hire private guards and we pay them. The security men work from 6pm to 6am. There is usually restriction of movements from 8pm for the people that are not known to the community. Each household contribute about N400 (about \$1) monthly; and it was higher than that when we were fewer. The crime rate was previously high when there were fewer houses in this neighbourhood. Nearly every house then were victims, and then the population increased and we employed security guards which helped to reduce the crime rate." In addition, the community also contribute money to maintain the roads within their communities while, in some districts of the study area, the community members contributed to open up new roads at inception instead of the government. The participants at Fanibi stated that, "roads have been through community efforts with no governmental influence. We also contribute money to build culverts in our community in order to facilitate access. The road has been very rough over the years and government was doing nothing about it, therefore we resorted to cast concrete on the roads to make them more motorable. We also had to blast some rocks on the roads because the main road to our community is very rocky. The initial openings of the roads were done by the community". Individual self-help and community mutualhelp are usually bottom-up approaches to housing development without government involvement or support. In the study area, private individuals constructed houses, and unlike in Choguill (1996), NGOs that assist communities in housing and infrastructure do not exist in the study area. In addition, this finding shows that Akure is a unique city where oftentimes, communities develop the housing environment on their own due to neglect from the government authorities that should be responsible for it.

The findings for levels 1 and 2 are contrary to the findings of most research on self-help housing (Kowaltowski et al. 2005; Yap and Wandeler 2010; Soliman 2012), which found that self-housing can lead to positive outcomes. This implies that self-help and mutual-self-help housing can bring about very positive results in other contexts or situations. Mutual self-help also assists in building social capital within the community. However, in this case, they lead to lower levels of housing satisfaction because of the peculiar situation in the study area. Fakere et al. (2018), Fakere and Ayoola (2018) observed that self-help and community mutual help housing provision in the city is a direct response to the neglect by government authorities vested with such responsibilities. The studies found that people use their meagre resources, in spite of pervasive poverty, to provide housing and infrastructure



for themselves without external assistance and with little successes. Onyebueke and Ezeadichie (2011) supported this assertion by stating that it is a general problem in Nigeria because self-help initiatives in the country are a direct response of rural and urban communities to government neglect, despite a high rate of unemployment and pervasive poverty. For self-help initiatives to be successful there is a need for adequate funding of the process and the projects through external assistance usually in the form of non-governmental organizations, developers and government authorities; however, this was not the case in the study area. This phenomenon contributes to the poor state of housing and infrastructure in the city of Akure (Lawal and Basorun 2015; Omole 2010; Ojo and Oloruntoba 2012).

Level 3: no information: No information is at the third rung in the framework. This occurs when the government authorities assume to know exactly what the community's most pressing needs are, and go ahead to provide them without recourse to the community members. The implication of this level of participation is that the level of satisfaction derived by the residents is low (Fakere 2017). This is because the housing development project embarked upon by the government would usually not be the most pressing for the people because their opinions were not sought. Since the residents are not involved at this level, the likelihood of the housing development project meeting their utmost needs is low, thereby influencing their satisfaction level negatively. No information is higher than community mutual-help because, at this stage the impact of government/designers would be felt, though they do not involve the people. The FGDs revealed that housing projects constructed in the study area were done without involving the residents at any level of decision-making or construction. The participants at Ijapo stated that, "the roads and drainages in this community are usually done through government and communal efforts. Government provides some of the roads and drainages, and some other ones are done through communal efforts. Government does not usually inform or involve us when they plan to construct roads or drainages in our community. Also, tenants are not informed about the design of their houses of residence because they were not known during that stage". In Don Bosco District in the study area, there was disagreement between the residents and the road constructors during the construction. The participants stated that, "there has been no collaboration with the government on housing and infrastructure projects in this area. They designed and awarded the projects without our knowledge. However, when they were constructing the roads, we insisted on some qualities. The World Bank financed the project. For the drainage, they refused to allow us to have any say at all. In fact, we tried to do that during the construction of the drainage of one of our major roads here. We told them that the way they are constructing the drainage would cause a huge problem in the area. In addition, the consultant that designed it never carried out the study of the area in spite of the information we gave them. Therefore, when there is rain, it does not flow properly through the right channel. They ought to have provided the necessary drainage in terms of culverts, which they did not do. Therefore, we still have the problem. Along the drainage channel, they ought to have blasted a rock to enable the water flow properly. This was not done, therefore it always flows back to the other side."



Level 4: dissimulation: Dissimulation is at the fourth rung in the framework. This occurs when the government is motivated by political gains to engage in for housing development. In this level, the government authority usually does not involve the residents in the proposed housing projects in their community, while those projects are not meant to benefit them. Dissimulation could begin, as no information (level 3) before the residents discover the insincerity and react. In addition, dissimulation usually happens in slums when the government totally clears the slums for redevelopment for other classes of residents, while disguising their real intentions from the residents. Therefore, when the residents protest after discovering their motive during the construction, the constructors disguise their intentions as genuine towards the community. It can also take the form of the government authority making promises to the residents, usually in exchange for something, while they actually do not intend to fulfil such promises. Dissimulation is lower than information in the rung because, there is no financial involvement from the residents. The implication of this level of participation is that the level of satisfaction derived by the residents is low (Fakere 2017). This is because the residents are still not involved in decisionmaking in this level, and do not derive any meaningful benefits in the project. The FGDs revealed that in Don Bosco, residents living on a street in the community halted the construction of one of the culverts when they discovered that all the runoffs from several other streets were channelled to their street without constructing the drainage on their street to channel the run-offs to the nearest stream. According to the participants, "there is a case in one of the streets in our community where we saw that the construction of culvert would be detrimental to the state of the already bad road. We mobilized ourselves and stopped the completion of the construction. We put pressure on the government through several visits to their offices to construct the drainage first and channel it properly to the nearest stream before continuing the culvert. They promised to do this and we allowed them to continue the work after several months. However, they returned completed the culvert and constructed a few metres of the drainage and left. This worsened the state of that road to the extent that the condition of that road worsens whenever rain falls. They deceived us and we would have resisted their efforts if we knew they had ulterior motives". At Fanibi, a politician came to the community to seek for votes from the community promising to construct a terribly degraded road when he assumes office. The participants noted that, "we attempt to collaborate with the government on the aspect of infrastructure, especially roads, but they are not forthcoming. The state of the roads in our community is appalling and it is beyond us to construct the road. Sometimes, political contestants come to our meetings and request for what they can do for us. Then, they promise to construct our roads if we vote for them. But, after they win the election, we don't see them any longer, thereby defaulting on their own side of the agreement. Sometimes, we go to meet them in their offices and remind them of their promises and they promise that we would hear from them. But, we never hear from them."

Level 5: information: Information is at the fifth rung in the framework. This occurs when the government authorities enable the residents to learn about their intentions in proposed housing development projects. In this rung, the information flows only from the government authorities to the resident communities. This is



usually without recourse to feedback from residents or negotiation between the parties (Wilcox 1994). The residents are only made aware of the decisions that had already been taken on their behalf by the resource holders (IAP2 2014); hence, it is a top-down approach. Information is higher than dissimulation in the rung because the beneficiaries are made to be aware of government authorities' intentions about the housing development, though they still do not participate in decision-making. The implication of this level of participation is that the level of satisfaction derived by the residents is average (Fakere 2017). This is because, though they are informed about proposed projects, they are still not afforded the opportunity to influence decisionmaking and direction of the projects. Therefore, the decisions are still made for them by the other party; this has negative effects on their level of satisfaction. The FGDs revealed that in the study area, this level occurred in housing and road construction. According to the participants at Ijapo, "tenants do not participate in the design of the houses of their abode, whereas those that inherit the houses were only informed about the decision taken about their house designs." The participants at Don Bosco noted that, "the government informed us about their plans on how to manage our domestic wastes in this community. They did not involve us in the planning but told us about the decisions that they made on our behalf." In addition, those that inherited the houses and those that live in family houses were informed about decisions already made about the design of the houses.

Level 6: financial contribution: Financial contribution is at the sixth rung in the Framework. This occurs when the residents have to make financial contribution to government projects in the form of counterpart funding or payment for services rendered for the provision of housing. In such cases, refusal to make such payments means that they would be cut off from receiving such services. Therefore, the community members contribute amongst themselves in order to pay for the provision or repair. Financial contribution is higher than information in the rung because, there is residents' financial involvement. The implication of this level of participation is that the level of satisfaction derived by the residents is average (Fakere 2017). This is because the residents are still not involved in decision-making at this level. However, they derive some benefits from the project after paying for the repair and maintenance. The FGDs reveal that this is very common in the study area. The participants of Don Bosco stated that, "in this community, some tenants complained that their landlord asked them to pay for the repair of the roof that was damaged by rainstorm. The community is looking into the matter to find a resolution to it." The Community also stated, "When the transformer is faulty, the authorities usually ask us to pay to have it repaired, else we would be left with no electricity supply. We also have power generating sets and inverters due to epileptic power supply." The FGDs also reveal that at Alagbaka Phase 2, all the electricity equipment were provided only by the community, without any government support. The participants stated that, "up to a point on getting our electricity to the junction there, that was brought in by the community in the 1970s. It was from that transformer that Ijapo got its light. So when we were still not getting electricity supply in this area, we had to make other arrangements and contributed our money to assist in the installation of a new transformer closer to ourselves and that is why we have light now." The participants at



Fanibi and Don Bosco noted that, "the waste management people come on weekly basis to clear the collected refuse. However, sometimes, when they forget to collect refuse from some parts of the community, we go to meet them and inform them about it. We pay the authorities N500 (\$1.38) monthly. The problem with the waste collectors is that they are not regular". The waste management authorities decide the rate and frequency of payment and inform the residents who comply by paying such amounts to have their wastes disposed by the authorities.

Level 7: conciliation: Conciliation is the third highest in the rung and is the level from where the prescriptive participation begins. This level of participation was found in the study area. This is the rung from where the residents begin to influence proceedings in housing development. It occurs when the architect, or government authorities have done the initial design of the house but it is not finalized until the individual residents or community has ratified it. Conciliation is higher than financial contribution because, at this stage the residents truly begin to influence decisionmaking from the design stage of the project. At this level, the designers make more decisions about the projects than the residents do. The implication of this level of participation is that the level of satisfaction derived by the residents is high (Fakere 2017). This is because the residents are allowed to have some influence on the outcomes of the housing project, thus incorporating some of their housing needs. The use of alternatives in house designs is common in the study area. The participants at Fanibi stated that, "the architect must be given guidelines. He can professionally advise the clients; then we come to a compromise as to what we want. Some people also ask the architect to give them several designs from which they choose one." The participants also stated, "The government authorities proposed that we would be paying N500 (\$1.38) monthly and we agreed to be paying that amount."

Level 8: partnership: Partnership is the second highest rung in the framework. It occurs when there is an agreement between the designer or government authorities and the residents or community to share decision-making responsibilities about the housing design and implementation. It could be expressed as the users discussing their needs with the designer and both parties reaching a consensus about the final design. In partnership, the government or the residents could be the party that reaches out to the other. Partnership is higher than conciliation in the rung because, the level of involvement of both parties in decision making about the project is identical. This means that the ability of the residents to influence decisions is more intense than in conciliation. Partnership works when both parties agree from inception, about their roles and responsibilities at every stage of the project. Proper documentation of this agreement, where necessary, would forestall uncertainty and misunderstanding during the implementation stages. In partnership, both parties operate in the "expert" space, where collective intelligence is more pronounced (Lee 2006; Fischer et al. 2005; Atlee 2003). The professionals operate as experts in technical, design, technological, and construction aspects of the project, while the residents/community operate as experts in knowing their own needs and setting their priorities, through experiences of living in different environments. This could also include sharing the financial burden between the parties. The implication of this level of participation



is that the level of satisfaction derived by the residents is high (Fakere 2017). This is because the residents are allowed to have more influence on the outcomes of the housing project, thus incorporating more of their housing needs. The FGDs reveal that in the study area, it is common for owner-occupiers to discuss their housing needs with the designers of the houses. According to the participants at Don Bosco, "some people will just want to discuss their housing needs with the architect and for the architect to build it. However, some people already know what they want before they even think of building. Therefore, there must be full participation. The architect must be given guidelines. He can professionally advise the clients; then we come to a compromise as to what we want." The participants also stated, "The electricity poles on the major road were provided by the government; while the others were provided by the community."

Level 9: empowerment: Empowerment is the highest in the levels of participation in the framework. It is the highest level in the rung because; most of the decisionmaking powers rest on the residents instead of the architect or government authority. This occurs when the residents or community has more control over decisionmaking than the architect, resource-holder or the government authority in housing development projects. It could be a top-bottom or bottom-up approach but the people are allowed to take responsibility for their living environment with government support, when the government is unable or unwilling to undertake such responsibilities by themselves. Empowerment is at the highest rung because, in this level, the residents have the greatest freedom to influence the planning and direction of the housing development projects, compared to other levels. For housing projects, the government authority would be the financier of the project. The resident would produce a sketch of the project while the designer would guide the residents, and produce the design to specifications. In this level, the designer would determine the more technical aspects, while the residents determine others. However, the general arrangement of internal spaces and their sizes have been largely determined by the resident. The implication of this level of participation is that the level of satisfaction derived by the residents is very high (Fakere 2017). This is because the residents are allowed to have major influence on the outcomes of the housing project, thus incorporating most of their housing needs. Empowerment shows that residents can with outside help; solve their own housing development problems (Choguill 1996).

5 Conclusions and implications of the study

This study showed a positive relationship between the level of participation and satisfaction, which suggests that satisfaction could be enhanced through enhancing the level of residents' participation. A greater percentage of the respondents did not participate in housing provision in the study area compared to those that did. Thus, non-involvement of residents in housing development in Nigerian cities, especially Akure has resulted in dissatisfactory housing environments (Omole 2010; Ojo and Oloruntoba 2012). This is so because Nigerian housing policies and practice generally do not support democratization of the housing development process (Fakere



and Ayoola 2018). This study revealed rampant top-down approach to housing development and has documented the negative environmental and social consequences of this phenomenon. This occurred mostly when dealing with communities and, a contrast with what is obtainable in the housing process of several developed and developing countries as revealed in literature (Ettouney and Abdel-Kader 2003; Isa and Jusan 2012; Ammar et al. 2013; Nuttavuthisit et al. 2015).

The study proposed a framework for residents' participation in housing provision in Akure, Nigeria, as a useful tool for involving residents in the process. The framework proposed contains nine rungs in a continuum. Each rung shows a direct relationship with the level of residential satisfaction. The study has demonstrated like the findings of Carrol and Rosson (2007) and Ammar et al. (2013), that housing development supported by appropriate levels of residents' participation will provide tangible results in the provision of access to satisfactory housing. Higher levels of participation, which are conciliation, partnership and empowerment, are observed to be more effective in achieving satisfactory housing than lower levels of participation. Conciliation, partnership and empowerment (levels 7 to 9) are suggested for adoption in housing in the study area because these levels allow residents to influence the processes and outcomes of the projects. The lower levels (1–6) are not recommended because the residents are not allowed to influence the directions and decisions about housing development projects.

Nevertheless, in some other contexts, financial contribution and information could lead to satisfactory housing depending on the type of projects involved. In some instances and contexts, the resource holders could make a presentation in a meeting with the community members and inform them about a housing project that they intend to provide for them. At times, the resource holders might request that the beneficiaries contribute financially to the projects. This is still a one-way flow of information to the beneficiaries to enable them to understand the problems, opportunities, alternatives or solutions especially from the point of view of the resource holder (IAP2 2014). In some other contexts, the information may be provided to the community members through leaflets, newsletters, posters, radio messages, press releases, etc (Wilcox 1994). In such situations, these levels of participation may possibly lead to satisfactory housing if the beneficiaries accept the housing projects from the resource holders because it addresses their vital and pressing needs.

The nine levels in ascending order are individual self-help, community mutual-help, no information, dissimulation, information, financial contribution, conciliation, partnership and empowerment. In addition, the level of housing satisfaction increases with increase in the level of participation, making individual self-help to have the lowest level of satisfaction, while empowerment had the highest. In addition, the framework developed in this study is different from Choguill's in that, conspiracy (level 2 in Choguill's), does not apply to Akure; and, self-management (level 1 in Choguill's) occurs in two different forms in Akure. Two levels of participation were found in Akure that were not in Choguill's framework: financial contribution and no information.

Unlike in Choguill's study, NGOs that assist communities in housing projects were not observed in the study area, and only government authorities act as external forces. This was unexpected because, NGOs are usually devoid of bureaucratic



processes and it would be easier for them to work to involve the residents in housing development process than government authorities. Choguill (1996) has shown that NGOs are already assisting communities in housing development in Brazil, Philippines, Honduras, Canada, Indonesia, Pakistan, Bangladesh, Colombia, Turkey, Japan, etc. There is a need to establish relevant NGOs that would assist communities in housing and infrastructure in the study area to complement government's efforts. Choguill (1996) argued that results of a study might have applicability within its geographical region. For this reason, the results of this study of Akure should be applicable to other cities with similar situations in Nigeria.

The findings of this study would be required by policy makers, developers and building professional in understanding the likely implications, and effects of their decisions regarding housing, depending on the level of participation that are adopted for such projects. Government should always prioritize proposed housing development projects based on identified community preferences and, people that would not be affected by such decisions should not do this on their behalf. This is necessary in changing the status quo. It shows that there is need for policy makers and resource holders in Akure and Nigeria to reconsider the process of housing development in order to make way for pro-people approaches. Thus, this study has emphasized the importance of residents' participation in housing development processes, and the framework is for application in future housing development projects. However, developing specific strategies for residents' participation in housing by adopting the framework proposed in this research is an area for further research.

The limitations of this study include the use of sampling in the study; using other samples from the same research population could generate slightly different results. Another limitation of this study is its geographic spread in which case the findings might not necessarily be generalizable to other cities in the country, especially to those that are not similar to the study area. In addition, this study assumed that the residents of the study area had sufficient knowledge of the subject area of the research in the communities where they lived.

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