

¹Dorcas Oluwaseyi ADEOYE, ¹Oluwole Oluwaseun AJAYI,
¹Oluronke Omolola ODUNJO, ²Abimbola ALABI

MECHANISMS FOR FINANCING INCREMENTAL HOUSING IN NIGERIA: A CASE OF IBADAN, OYO STATE, NIGERIA

¹Department of Architecture, Faculty of Environmental Sciences, Ladoke Akintola University of Technology, Ogbomoso, NIGERIA

²Department of Urban and Regional Planning, Faculty of Environmental Sciences, Ladoke Akintola University of Technology, Ogbomoso, NIGERIA

Abstract: Access to housing finance by all income groups is essential for the provision of adequate shelter for all. Thus adequate housing finance is considered the most important factor in housing production since it helps to procure the essential components of housing, namely land, on-site and off-site infrastructure, building materials as well as offsetting construction costs. The study examined the mechanisms for financing incremental housing for the low and moderate income households' housing in Ibadan with a view to providing information that could inform policy towards effective incremental housing delivery in the study area. This was achieved by examining the various Mechanisms for financing incremental housing in the study area and assessing the effectiveness of these financing mechanisms for incremental housing delivery in the study area. Two hypotheses were tested for the study. The first one stated that the mechanisms for financing incremental housing differ significantly across the Local Government Areas in the study area was tested, while the second one stated that sources of incremental housing financing vary with incremental housing process. The results for housing development of the low and moderate income groups occurred in phases with the incremental process taking as much as 8-12 years for construction while improvement of the existing structure took about five and a half years. The practice among the households is that of heavy reliance on savings in financing progressive housing. An estimate of an average amount employed from the different mechanisms for the entire construction process gave an estimated construction value of construction in the study area as ₦2023416. Chi-square analysis indicated the financing mechanisms for incremental housing construction at the level of foundation, main structure, roofing and internal fixtures vary significantly across the Local Government Areas. Chi square value of 75.659 significant at $p < 0.01$ was obtained and the hypothesis that sources of incremental housing financing vary with incremental housing process was accepted. This finding perhaps set the stage for the next chapter that deals with analysis of factors affecting mechanisms for incremental housing financing.

Keywords: housing, incremental, financing mechanism, low and moderate income earners, informal settlements

1. INTRODUCTION

Housing the urban low and moderate income groups is a global problem. Housing is a basic and fundamental right that should not only provide shelter and space for households to live in privacy, security and dignity, but also serve as points of reference through which households can access other services and utilities. Over the years, housing in many of the developing nations has been functioning as springboard for human and economic development that impact on health, security, income flow and self-esteem of families (Drayton and Ashoka, 2008). The ability of household to satisfy this basic need depends on the household resources. According to UNHABITAT (2003), urbanization trend in developing world had reached levels in the order of 35% of its total population in the 1990s and were projected to reach about 57% by the year 2025. With the growing urban population and urbanization that is ahead of housing development and economic growth, majority of households are forced to live in informal settlements that are characterised by sub-standard housing, inadequate or absence of basic infrastructures and services, unauthorised land occupation, lack of building permit and /or a violation of building and planning regulations and lack of access to formal housing finance (Bitiir, 2008; UNHABITAT, 2008b). Informal settlements in developing countries account for between 30% and 75% of all urban settlements (UNHABITAT, 2003). In Nigeria, about 80% of the population lives in settlements that are unplanned with poor housing conditions (Housing National Technical Working Group Report, 2009). Currently, one billion people live in urban slum world-wide and this figure is projected to rise to more than 1.4 billion by year 2020. Shelter conditions of the low and moderate income households in urban areas of developing countries are not only deplorable but grossly inadequate. Reasons given for the worsening housing situation include rapid population growth, looming poverty and poor governance (Mushumbushi, 2011).

Access to housing finance by all income groups is essential for the provision of adequate shelter for all. Adequate housing finance is considered the most important factor in housing production because it helps to procure the essential components of housing, namely land, on-site and off-site infrastructure, building

materials as well as offsetting construction costs (UNCHS, 1996). Equally, UNHABITAT (2005) notes that finance is one of the important factors that ensure sustainable housing production that can fill the gap between the extreme outcomes of current systems and processes of affordable housing that is inadequate and adequate housing that is unaffordable. Desirably, efficient housing finance system for the low and moderate income groups would not only enhance sustainable management of the physical environment but also ensures economic prosperity, cultural integration and social equity (Erguden, 2001; UNHABITAT, 2005). However, the precariously low income and the informality of the economy of most low and moderate income groups constrained the capacity to secure and sustain funds needed for outright purchase or construction of housing (Ferguson and Smets, 2009). More than 80% of Nigerians earn US\$60 or less per month indicating that this proportion of the population cannot employ formal finance in their housing (Centre for Affordable Housing Finance, 2010). It is estimated that formal finance accounts for a mere 5-20 per cent of housing finance in developing countries much of which is consumed by the top 20 per cent of the income spectrum, which results in the production of no more than 10 per cent of annual national housing totals (Okpala, 1994). The formal financial institutions prefer to lend to those with established credit records and regular incomes to ensure payment of monthly installments as well as borrowers with some sort of collateral (UNESCAP, 2008). The unwillingness of formal housing finance institutions to offer credit and the inability of government to provide for their housing needs (even through the low-standard and low cost programmes such as site and services) have left individuals in the low and moderate income groups with no other choice than to find alternative option to their housing right by building incrementally and in phases over a long period of time and by employing incremental housing financing strategy that allows construction and improvement of dwelling using accumulated reserves of families and small short loans (Ferguson, 1999). Over 70 % of the world's population in developing countries are said to be accessing shelter through incremental housing process (Ferguson, 2008b). This has made incremental housing approach a leading actor in the housing supply chain as well as being seen as a solution to low and moderate income housing needs. Gattoni, (2009) argue that incremental building process will continue to be how future generations build and how most of future housing stock will increase since it offers greatest opportunity for change in housing development. It is seen as an option that is more sustainable, inclusive and tended towards bottom-up approach. Incremental approach to housing development allows for a “grow-as-you-go” process with households choosing a “starter” home they can afford and then expanding or altering it over time in accordance with their evolving social and financial situation. The approach could be by starting with a small unit and extending or building a larger unit slowly over time (Ferguson, 2008b). A typical feature of this process is the household occupying an incomplete house with all other features gradually provided depending on availability of finance. In this situation, the families wait a long time before obtaining a complete house with all features and the waiting period may last for up to 15 years in some cases (Omirin, 1992). The motivating factor for incremental housing is said to range from the urge to own a house to underlying basic problem of lack of alternative (Bitiir, 2008). Incremental housing financing strategy represents the only affordable approach to shelter financing of most low-income households and many moderate income families who use personal and non-personal sources of fund (Ferguson, 2008a). The financing mechanism's quicker access, lower entry cost, more flexible monthly payments and ability to customise the construction of units to fit household's needs and resources makes it popular among the urban poor. Funds for this housing process are from diverse sources ranging from individuals, groups, small loans from money lenders, sweat equity, barter arrangements, and financial self-help organisations to remittances from family members and children abroad. Incremental housing financing mechanisms not only finance steps in progressive housing but ensure the affordability, flexibility and sustainability of the process (Ferguson, 1999). Incremental housing process remains a major mode of production of housing for low income groups in urban areas in Nigeria due to rapid growth of urban population, inadequate formal supply of housing and lack of access to formal housing finance to meet their needs. This study seeks to examine the financing mechanisms for incremental housing of the low to moderate income families and factors that impact on the mechanisms in Ibadan, South Western Nigeria with a view to providing information that could inform policy towards effective incremental housing delivery in the study area. This was achieved by:

- ≡ Examining the various Mechanisms for financing incremental housing in the study area.
- ≡ Assessing the effectiveness of these financing mechanisms for incremental housing delivery in the study area;

Two hypotheses were tested for this study. The first one stated that the mechanisms for financing incremental housing differ significantly across the Local Government Areas in the study area was tested. The second hypothesis stated that sources of incremental housing financing vary with incremental housing process.

2. METHODOLOGY

— Study Area

Ibadan is situated in South-western Nigeria (3° 45" to 4° 00" E; 7° 15" to 7° 30" N). It has two distinct seasons; dry (October – March) and wet (April – September). Initially, the city began as a war camp (1829) and since the 1960s has grown to become the nation's largest urban centre. This is attributed to its location in the heart of the Yoruba ethnic territory and its close proximity to Lagos, Nigeria's economic nerve-centre and her immediate past federal capital. Ibadan is currently the capital city of Oyo State and there has been agitation since 2006 for it to constitute a state on its own. It occupies a land area of 634.3 Km² and has a population of approximately 3.5 million (NPC, 2006). The presence of various establishments has attracted many people to the city. It is against this background that this study has examined mechanisms for financing incremental housing and factors affecting the mechanisms for the low and moderate income households' housing with a view to providing information that could inform policy towards effective incremental housing delivery in the study area. However, the city of Ibadan is chosen because, it is a traditional urban centre with phenomenal urban growth which explains the rapid spread out of the city (horizontal growth). Also the city has significant urbanisation and industrialisation with a large area of land coupled with the fact that, it is one of the largest cities in Africa (Ayeni, 1994 and Dosumu, 2002), which makes it ideal for a kind of research like this. Ibadan is considered to be a typical Nigerian city, the biggest in Oyo state and thus it is suggested that the findings and recommendations of this study may be relevant to other cities in the country and those of other cities in developing countries in Africa.

— Research Design

≡ Types and Sources of Data

The research relied on both primary and secondary sources of data. Data was specifically collected on household characteristics and the different sources of financing for incremental housing as well as variables that allow for the assessment of incremental housing financing mechanisms of the low and moderate income groups in the study area. The research was done using purposively sampled highly urbanized Ibadan city while data was collected from randomly selected local governments in the city. In order to have a good knowledge and better explanation of issues, it is necessary to combine broad descriptive and theoretical generalisation or abstraction with detailed studies of the particular whether these are local or sectoral (Massey, 1985). Therefore, in complementing the data collected from the field, a host of information was also sourced from archival sources for this research. Published literature on finance of incremental housing was reviewed. Financing types, sources of fund, methodology and international model among others were sought in literature to give a better understanding and explanation of the factors affecting mechanisms for incremental housing financing in the study area. The secondary information obtained through literature served two purposes;

- to establish an understanding of the existing knowledge gap with respect to the research issues being investigated and to avoid repetition of similar studies, and
- to provide documentary analysis needed to supplement the interviews and discussions made with the relevant independent sources (Mushumbusi, 2011)

Equally, published reports, policy documents, white papers and gazettes were reviewed to supplement the documentary data. Specifically, information was obtained from the following sources from the sampled city-Ibadan:

- Independent National Electoral Commission (INEC) for the documents delineating the localities.
- Ministry of Physical Planning and Planning Authorities for development control records in the local governments selected for the study
- Ministry of Lands and Housing for records on houses in the selected localities
- National Bureau for Statistics (NBS) for record on income distribution of households in the study area

≡ Instrument used for Primary data collection

Data from primary sources involved direct observation, questionnaire administration, in-depth interview, focus group discussion and photographs.

≡ Direct Observation

Direct observation was used to investigate the localities with houses undergoing incremental construction and financing. Direct observation with the use of observation checklist has the advantage of bringing out the actual manifestation of situations. And to capture certain information which the selected household head might not want to disclose. The observational checklist were administered along with the questionnaire with the checklist containing information on infrastructure, social facilities, building details and general condition of the housing environment. In all, 811 observational checklists were administered.

≡ Questionnaire Administration

Questionnaire data for the research were collected through the use of pre-tested set of questionnaires so as to ensure objectivity in the responses from the respondent. According to Olatubara (2009), experiences from the pre-testing exercise could engender a need for the refinement of the instrument to avoid ambiguities, to incorporate more information and streamline the classification and measurements of the different types employed. The pre-test were carried out in localities other than that of the study area but in the same socio-cultural and geographic vicinity to minimise bias in the main study. Two sets of questionnaire were administered for the study. The first set of questionnaire was served on owner of the houses or household heads of sampled houses in the selected localities. The first questionnaire was designed to elicit response from respondent on their socioeconomic characteristics, tenure, sources of fund for incremental housing, incremental housing financing and housing outcome among others. The questionnaire administration was done through field visits to owners of inhabited progressively built houses in the chosen localities from the randomly selected local government areas.

The second questionnaire was addressed to the provider of incremental housing financing. Those that were sampled were mainly money lenders, rotating savings and loan associations, cooperative societies, community groups, micro-finance institutions, material retailers and civil societies in the study area. The questions that were addressed include type of incremental housing loan granted, sources of fund, repayment period, interest rate and collateral requirements. This questionnaire also considered the constraints and risks associated with the financing mechanisms of the low and moderate income groups as well as mitigating measures to the constraints proffered. The questionnaire was administered on randomly selected heads of the organisations so as to give every one of the provider organisations equal opportunity of being selected in the study area.

≡ In-Depth Interview

Key person interviews was designed to give a sense of how individuals involved in housing administration perceived incremental housing financing as well as to develop a sense of overall institutional context within which incremental housing is being carried out. The interview was semi-structured because it allows interviewees to develop their ideas and speak freely on the issues raised. According to Bernard (2002), semi-structured interview is generally considered to be the best type of interview format when interviewing high level bureaucrats and elite members of the society. The interview of state level officials considered among other issues, whether incremental housing finance is addressed or encouraged by housing strategy or programme or policy of the government. Also, issue of tenure and efforts made to regularise them, burden of incremental housing on planning authorities and efforts to relax building and planning controls to accommodate incremental housing process such as granting anticipatory planning permit was discussed in the interview. The issue of the role the government, formal finance market and financial self-help organisation played or can play in enhancing incremental housing financing was sought from the interviewees. Why these roles were not being played currently and what can be done to ensure that they play the role was part of responses that were elicited from the interviewees. After each interview, review of all the questions was carefully done to make sure that every response had been properly recorded and was clear, readable and comprehensible.

≡ Focus Group Discussion (FGD)

The inability of the survey-based approach to adequately capture subjective perception of respondents brought about the need for contextual methods such as focus group discussion. This is important because contextual method is not only locality specific but allows the researcher to draw on different conversational and observational sources of contextual information (Alabi, 2009). Focus group discussion was used to discuss issues among participants. It also helped to recall forgotten ideas of one participant by others as well as facilitating information, which the selected households may not want to disclose. Therefore, the main objective of the Focus Group discussion is to draw upon respondents' attitudes, feeling, beliefs, experiences and reactions in a way which would not be feasible using other methods. The FGD elicits information in a way that allows researcher to ascertain why an issue is important and what is important about it as well as to know the gap between what people say and what they do (Gibbs, 1997;Nwokoro, 2008). Focus group discussion was held with selected members of those that build incrementally and relevant public leaders to corroborate the findings, especially those from interviews and help in improving the reliability of the data. The assistance of Community Development Associations (CDAs) or Landlord Associations in the localities was enlisted for the recruitment. According to Milstead (2008), an ideal size of focus group is generally considered to be between 6 and 12 and for this purpose an eight member size Focus group was adopted.

≡ Sampling frame and size, sampling procedure

Mixed methods sampling technique, involving the use of both probability and purposive sampling strategies were employed in selecting the study area and household for the study. Probability sampling involves selecting

a relatively large number of units from a population, or from specific subgroups of a population, in a random manner where the probability of inclusion for every member of the population is determinable (Teddlie and Yu, 2007). The purposive sampling, on the other hand, involves selecting units based on specific purposes associated with answering research study's questions. The mixed method approach utilizes sampling techniques that yield rich information in all cases. Combining the two orientations allow mixed methods to generate complementary databases that include information that will show both depth and breadth regarding the incremental housing finance in Ibadan city, Nigeria. First, Ibadan city was purposively selected for the study based on the fact that it is the largest in terms of spatial extent, occupied by black people in the sub-sahara region of Africa (Ayeni, 1994 and Dosumu, 2002). It is one of the fastest growing cities in Nigeria and therefore, capable of reflecting the socio-economic as well as cultural attributes of the region selected. The second level of selection is on the basis of local government areas; four local government areas (about 70%) out of the six that make up the suburban areas of the city were randomly selected based on the fact that 'urban Ibadan' is filled up and congested and housing construction can only be found majorly in the urban fringe. The selected local government areas are the ones that receive most of the excess population and activities from the city and these were Oluyole, Egbeda, Ona Ara and Lagelu as shown in Table 1.

Table 1: Selected Wards, Communities and Sample size in the Study area

Local government	Wards selected	Communities with Developments	Selected Communities (50%)	Sample Size
Oluyole	Ward 1	Ayegun	Ayegun	22
	Ward 2	Odo-Ona Elewe, Idi-Iroko, Podo	Odo - Ona Elewe Podo	32 28
	Ward 5	Idi-Ayure, Odo-Ona Nla, CRIN, Toll gate, Odo-Ona kekere	Odo Ona Nla CRIN Odo-Ona kekere	23 22 47
	Ward 10	Arapaja	Arapaja	39
Egbeda	Ward 5	Olodo,	Olodo	26
	Ward 7	Wakajaiye	Wakajaiye	32
	Ward 9	Egbeda	Egbeda	51
	Ward 10	Alakia, Olode	Olode	34
Ona Ara	Ward 1	Akanran, Olorunda	Akanran	25
	Ward 3	Badeku	Badeku	41
	Ward 11	Odi-odeyale, Amuloko, Idi-Osan,	Amuloko Idi-Osan	26 55
	Lagelu	Ward 4	Ejioku, Igbon, Ariku	Ariku
	Ward 5	Lagelu market, Kajola	Lagelu market	35
	Ward 6	Lagun	Lagun	24
	Ward 7	Lalupon I	Lalupon I	33
	Ward 8	Lalupon II	Lalupon II	46
	Ward 9	Lalupon III	Lalupon III	55
Total	17		21	742

Source: Authors' field survey (2019)

The third stage involves the identification of the wards. The wards that border the metropolis were purposively selected for the study because they have ongoing developments and reflect the consequences on housing when incremental housing process were initiated and driven by the low and moderate income families. Having selected the wards, this was followed by the selection of communities. The list of communities in each ward was first compiled and random sampling technique was used to select 50% of the communities with ongoing developments. Where there was only one community in the selected ward with ongoing development, that community was purposively selected. Table 1 shows the sampled communities. A total of one thousand four hundred and eighty-four (1484) houses were identified. Fifty per cent (50%) of the number of houses counted that are under construction or improvement and are inhabited, constitute the sample size employed for the study. Lastly, Google earth and ground trotting respectively were used in capturing incremental houses in the selected community (ies) in the study area. Seven hundred and forty two inhabited houses were identified either under construction or improvement.

≡ Sample Frame

In order to determine the sampling frame, the visual technique of selection was employed with the aid of summary chart earlier prepared on incremental housing process linking key factors. The total number of the houses under construction (completely new dwellings) and those undergoing improvements that are inhabited were captured through Google earth and visually selected, counted and listed in the identified communities in each Local Government Area. This study was limited to houses under current construction or

improvement that are inhabited so as to reduce bias that might result in remembering issues relating to financing of incremental housing where such owners had completed their houses long ago or uncompleted houses where construction or improvement process had stopped long ago. The study, which was limited to financing of incremental housing, did not consider the site and services scheme or core housing variants for two reasons. One, the relatively high rate of transfer of plots and houses in these variants will prejudice or mask the findings of the study and two, the need to reduce the scope of the study itself.

≡ **Sample Size**

The use of Google earth and physical identification census were adopted to identify inhabited incrementally built houses in the communities in the study area. The houses sampled were randomly selected from the listed houses along the streets and pathways where the incrementally built houses were identified. In randomly selecting the houses considered by the study, identified houses in each community was numbered and then the random number table employed to minimise bias in the sampling process. Thus, 742 questionnaires were administered on the household heads of the houses and therefore, constitute the sample size employed for the study. In each selected house, not more than a household head was interviewed.

≡ **Data Analysis**

For the purpose of this study, the data collected in both ordinal and interval scales were analysed using the descriptive and inferential statistics. The descriptive statistics adopted frequencies, tables, bar charts, percentages and graphs to show data generated in the research study. The inferential statistics used the bivariate and multivariate analytical techniques to draw inferences on the data collected from the study areas. Chi-square, canonical correlation and regression analysis were used in testing the hypotheses. The statistical package for Social Sciences (SPSS) version 16.0 for Windows was used in the analysis. In order to test the research hypothesis, statistical analysis, which investigated main sources of finance for incremental housing was carried out. Maps and other graphical illustrations were used in data presentation. The analysis of the focus group discussion, key person interview and the open-ended conversation followed the steps stated by Dawson, Manderson and Tallo (1982), quoted by Alabi (2009). The steps followed were: preparation of transcripts from note books and audio recorder; coding of transcript in a way that indicates what the participants are talking about and assigning them with code words; and entering information in the log book thus enabling the keeping of responses together according to the topic or theme of interest by tallying them.

3. RESULTS AND DISCUSSION

— **Nature and Scope of Financing Mechanisms**

Informal incremental housing development finance is said to commonly employ individual and group savings, windfall, and fabrication of building materials by households, sweat equity, small loans from neighbours, moneylenders, barter arrangements and community self-help and remittances from family living abroad (Ferguson and Smets, 2009).

Low and moderate income households join wide variety of sources to build their houses. The sources are not mutually exclusive of one another but a stage could use one or more or all the sources. Table 2 shows the different sources of informal housing finance mechanisms employed in incremental construction process in the study area. From the response of the household heads, the major sources of financing indicated have been grouped into savings, financial assistance from family and friends, informal credit market, formal credit market and other sources such as barter arrangement, community self-help among others.

Table 2: Proportion of Respondents Employing the Financing Sources for the Different Stages of Construction
 Source: Fieldwork, 2019

Stage of construction	Savings		Family Assistance		Informal credit market		Formal Credit Market		Others	
	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age
Land Purchase	569	76.7	106	14.3	49	6.6	8	1.1	10	1.3
Foundation	602	81.1	102	13.7	24	3.2	8	1.1	6	0.8
Super Structure	537	72.4	127	17.1	53	7.1	16	2.1	12	1.6
Roofing	557	75.1	123	16.6	54	7.3	6	0.8	8	1.1
Internal Fixtures	590	79.5	85	11.5	56	7.5	6	0.8	5	0.7
Drainage & Sewage	654	88.1	52	7.0	26	3.5	2	0.3	8	1.1

Note: The percentage does not add up to 100 because of multiple sources used by individual household. Here savings took the highest proportion of the housing finance mechanism being employed.

— **Savings**

A quick glance at Table 3 shows savings consistently taking over 70 percent of respondents' source of incremental housing finance. The implication of this is that there is lack of appropriate housing finance scheme for the low and moderate income groups and thus the available option is to save and build. Most families are motivated to save because of the aspiration to own or build a house. Thus, reasonable proportion

of personal income from all sources is saved to procure and assemble materials needed for the progressive housing of the low and moderate income households. Savings has been mentioned as source of fund for land purchase foundation, super-structure, roofing, internal fixtures, drainage and sewage by over 80 percent of the household heads in the study area. The prevalence of savings over other sources of financing might not be unconnected with the avoidance of risk of not being able to meet loan repayment due to income irregularity by the low and moderate income households. Equally, the use of savings is higher in some stages than the other as shown in Table 3.

More households used savings during foundation and super/main structure compared to other stages in the study area. Fewer savings was needed for the building of drainage and sewage than was the case in the construction of other aspects. In the study area only 88.1 percent indicated savings for drainage and sewage. This findings corroborated studies in literature in which savings is used the more in early stages of construction than in the later stages (Smets, 2004; Sheuya, 2007). This situation is not unconnected with the fact that there are more opportunities now available to the households to generate more incomes such as from rent of a room or space and from home base enterprise. Savings utilised in incremental housing financing can be cash or in kind. The cash savings can be in the form of physical cash or assets that can easily be turned to cash such as jewelries, inherited properties and others. Savings can also be in kind such as in advance purchase, fabrication and storage of building materials to prevent other household necessities from utilising the fund and to serve as hedge against inflation. The progressive construction strategy of the incremental building process is equally said to be a saving mechanism as household resources or cash are converted into structure such as foundation, walls and others that can be built and left for the next stage while more resources are gathered. In this way, households' cash is protected from emergencies and consumption (UNHABITAT, 2005; Mitlin, 2008). Other forms of saving employed in incrementally built houses in the study area include sweat equity or labour contribution by the households to the construction activities to save cash that would have been expended on such labour. (See Table 3) Involvement in the fabrication of the building material such as block moulding, gathering of sand, supply of water and other less specialised aspects of the construction process is equally typical of households in the study area. From Table 3, an indication of a good mix of the different forms of savings utilised by respondents is reflected and not less than 70 % of the respondents agreed to be using the three dominant types of savings in their incremental housing financing in the study area. This situation is not unconnected with low level of income and the need to protect housing savings from other household essentials such as health, education and feeding. Own labour / sweat equity had the highest (91.9%) usage in the study area. The use of own labour or sweat equity in construction is a common practice because the poor and moderate income families contribute their own labour to the construction of their houses, especially in the less technical aspect of construction such as clearing of site, fetching of water, digging of foundation and soak away pit, concrete mixing, backfilling, fetching of sand from drains and gutters, moulding of blocks and others. Cash and sale of jewelry or inherited properties is equally embraced as means of savings used in financing incremental housing. 70.5 percent of the respondents agreed to be using this in the study area. Cash is needed to pay the wages of construction workers and make immediate purchase that could not have been stored during progressive house building. Thus some cash have to be held by the household either at home or bank or in a form of very liquid asset that can be easily realised when needed.

— Family Assistance

Family assistance could be in the form of cash donation or cash remittance from family or friend, granting of interest free loan, donation of building materials such as cement, blocks, roofing sheets, labour contribution from relatives and friends during construction and others. Shown in Table 3 is the proportion of respondents employing family assistance in financing the different stages of incremental housing construction. From Table

Table 3: Specification of Savings, Family Assistance, Informal credit and Formal

Financing Mechanism	Frequency	Percentage
Savings		
Cash/Sale of Property	523	70.5
Material Purchase /Storage	619	83.4
Own Labour/ Sweat Equity	682	91.9
Others	59	8.0
Family Assistance		
Cash Donation/ Remittance	119	16.0
Interest Free Loan	87	11.7
Material Donation	76	10.2
Labour Contribution	134	18.1
Others	7	0.9
Informal Credit		
Saving and Loan Association	43	5.8
Microfinance	17	2.3
Community Fund	21	2.8
Cooperative Credit	67	9.0
Material Credit	59	8.0
Others	11	1.5
Formal Credit		
Mortgage	4	0.5
Commercial Bank	7	0.9
Insurance/Pension	3	0.4
Others	4	0.5

Source: Fieldwork, 2019.

Note: * Others include unidentified sources but the source was mentioned by the Interviewees

3, more respondents obtained family and friends assistance during foundation, super/main structure and roofing that are capital intensive than in other stages of incremental housing construction. Assistance from family and friends are usually rendered in all the stages of incremental construction but more during major stages of the construction such as land purchase, foundation laying, super/main structure and roofing either alone or in conjunction with other sources. From Table 2, a consistent rise in the proportion of assistance can be seen from land purchase to super/main structure in the study area and this declining from roofing stage to drainage and sewage stage. The trend in the study area as the application of family assistance still progressed to roofing stage before declining. The generally observed trend might not be unconnected with the importance attached to these stages by family and friends and the belief that a house is completed as soon as it is roofed. Therefore, the owner can be left to manage the construction process with little or no assistance again. The influence of family assistance on incremental housing financing was captured in FGD by the view of participant 6 in Arapaja in Egbeda LGA, a 51 year old grade level 05 female civil servant, who stated: *As a widow with four children in school, my junior brothers and sisters in overseas had helped me to complete my house to the level it is now though not yet been plastered.*

The different types of family and friends' assistance used in financing incremental housing in the study area are depicted in Table 3. A cursory look at the Table 3, cash donation/remittances from family and friends had the highest proportion in the study area. Labour contribution which has the highest proportion (18.1%) among the different forms of family assistance might not be unconnected with the traditional practice related to voluntary assistance and reciprocal exchange that is still highly embraced in moderately urbanised localities in South-western Nigeria, where people of the same trade or town union or of the same social or religious group freely assist one another when embarking on developmental project such as housing.

— Informal Credit Market

Informal credit market is another type of incremental housing finance source that plays a significant role in small scale economies where low and moderate income households found themselves. The informal credit market cuts across a continuum from purely commercial relations as in commercial lenders to purely social relations as in cooperative practice. The broad classification includes personal lenders, commercial lenders and financial self-help organisations. This source includes financing mechanisms such as informal savings and loans association credit (5.8%), micro-finance institutions credit (2.3%), community funds credit (2.8%), cooperative association credit (9.0%), material credit from retailer/wholesaler/micro-finance (8.0%) and others (1.5%) such as credit advancement in anticipation of agricultural produce harvest. From table 4.18, informal credit market facilities were applied to the different stages of incremental construction in the study area. The application of this financing mechanism rose progressively from land purchase (6.6%) to super/main structure (7.1) to roofing (7.3%) up to internal fixtures (7.5%) and but declined at foundation stage (3.2%) and drainage to sewage (3.5%). This might be due to the level of income and possibly the prevalence of encouraging environment for this type of credit thus making it available for the smoothening of financial flow in the localities in the study area. Table 3 indicates the proportion of the different types of informal credit market facility used by the respondents. A quick look at the table shows that informal credit market facilities were more from informal savings and loan associations, cooperative associations and material credit. The use of cooperative association credit and material credit were similarly embraced in the study area while microfinance and community credit were lowly embraced by households in the study area. This situation might not be unconnected with availability of the cooperative associations in most urban localities where they are formed along the line of trade or establishments or neighbourhood as well as the increasing number of material seller willing to offer credit facility and the awareness of such facilities in the study area. Community fund credit and material credit equally came up as part of informal credits employed in financing incremental housing. Material credit from retailer or micro-finance institution is gradually gaining acceptance as an informal credit market facility that can be used in financing incremental housing as some respondents claimed neighbourhood cement seller, block makers plank sellers etc advanced materials to them which they gradually paid for at immediate future time. This low proportion is perhaps due to newness of this informal market credit facility in the study area as micro-finance institutions only evolved from community banks in 2007.

— Formal Finance Market Credit

Formal credit market is a market dominated by formal financial institutions that grant traditional mortgage finance loan over a long term (10 to 30 years) at market interest rate with adequate collateral in the form of a first lien on real property which the financial institutions can be effectively foreclosed without egregious costs in resources and time (Ferguson, 1999). Formal credit market considered in this study includes mortgage institutions, commercial banks, insurance / pension fund companies and others. A closer look at Table 2 shows that formal credit market facilities are applied to all the different stages of incremental construction, though at a very low rate of less than 1 percent in the study area. The general trend in the study area might not be

unconnected with the inability of households to meet the requirement of formal credit market because of their irregular and non-verifiable income that cannot support long term regular loan repayment, the possession of only para-legal title to property that is not acceptable to formal credit market and the non-profitability of the small loans required by the households for the different stages of incremental housing development to formal financial credit market. From Table 3, more of the respondents in the study area agreed to have used formal credit market facility of commercial bank than others. In the study, mortgage institutions (0.5%), commercial bank (0.9%) and insurance (0.4%) and pension funds were all employed while only commercial bank credit and others were used by other respondents. The few respondents obtained on formal credit are possibly those that are in public sector or organised private sector employment that could meet the conditions of granting credit facilities by these formal financial institutions.

— Other Sources of Financing Incremental Housing

Other sources of finance for incremental housing in the study area include barter arrangements, community self-help arrangements and others. The barter arrangement uses the exchange of goods and services with one another. On the other hand, community self-help arrangement is predicated on mutual help or assistance in which incrementally building household that is being helped is expected to willingly assist others in their own progressive construction any time in the future. According to Table 2, these other forms of incremental housing financing sources accounted for less than 7 % in all the different stages of incremental housing construction in the study area. This development is probably due to changing cultural value that encourages individualism over collectivism or communalism.

— Pattern of Finance Mechanisms for Incremental Housing

In order to ascertain the pattern of incremental housing financing mechanisms across the study area, chi-square test was performed to know if incremental housing financing mechanism varies significantly across the Local Government Areas. Shown in Table 3 are the χ^2 values from the cross tabulations of local government areas with the incremental financing mechanisms for each stage of the housing process.

Table 4: Distribution of Financing Mechanisms across Construction Stages and LGAs

LGA	Savings	Family Assist.	Informal Credit	Formal Credit	Others	Deg. of Freedom (d.f)	Chi-Square/ (P-value) /Remark
Land Purchase							
Oluyle	152(78.4)	25(12.9)	12(6.2)	2(1.0)	3(1.5)		
Egbeda	112(57.4)	56(28.7)	20(10.3)	3(1.5)	4(2.1)		17.324
Ona-Ara	156(81.3)	23(12.0)	9(4.7)	2(1.0)	2(1.0)	12	0.067
Lagelu	149(82.2)	22(12.2)	8(4.4)	1(0.6)	1(0.6)		Not sign.
Foundation							
Oluyle	123(79.4)	23(14.8)	6(3.9)	2(1.3)	1(0.6)		26.034
Egbeda	205(77.7)	46(17.4)	8(3.0)	3(1.1)	2(0.8)	12	0.007
Ona-Ara	152(85.9)	17(9.6)	4(2.3)	2(1.1)	2(1.1)		Sign.
Lagelu	122(83.6)	16(10.9)	6(4.1)	1(0.7)	1(0.7)		
Super-Structure							
Oluyle	152(75.6)	29(14.4)	13(6.5)	4(2.0)	3(1.5)		45.568
Egbeda	205(74.5)	38(13.8)	21(7.6)	7(2.5)	4(1.5)	12	0.0005
Ona-Ara	84(64.6)	31(24.8)	11(8.5)	2(1.5)	2(1.5)		Sign.
Lagelu	96(69.1)	29(20.9)	8(5.8)	3(2.1)	3(2.1)		
Roofing							
Oluyle	153(79.3)	26(13.5)	12(8.2)	1(0.5)	1(0.5)		
Egbeda	201(73.4)	47(17.1)	21(7.7)	2(0.7)	3(1.1)	12	31.452
Ona-Ara	111(74.5)	23(15.4)	11(7.4)	2(1.3)	2(1.3)		0.002
Lagelu	92(69.7)	27(20.5)	10(7.6)	1(0.7)	2(1.5)		Sign.
Internal Finishes							
Oluyle	121(73.8)	24(14.6)	17(10.4)	1(0.6)	1(0.6)		
Egbeda	168(74.7)	34(15.1)	19(8.4)	2(0.9)	2(0.9)	12	41.863
Ona-Ara	154(86.5)	12(6.7)	9(5.1)	2(1.1)	1(0.6)		0.000
Lagelu	147(84.0)	15(8.5)	11(6.3)	1(0.6)	1(0.6)		Sign.
Drainage & Sewage							
Oluyle	126(86.3)	12(8.2)	6(4.1)	-	2(1.4)		
Egbeda	221(88.4)	15(6.0)	10(4.0)	1(0.4)	3(1.2)	12	21.057
Ona-Ara	185(89.8)	13(6.3)	6(2.9)	-	2(1.0)		0.056
Lagelu	122(84.7)	12(8.3)	4(2.8)	1(0.7)	2(1.4)		Not Sign.
Overall/Ave.							
Oluyle	113(76.9)	19(12.9)	11(7.5)	2(1.4)	2(1.4)		
Egbeda	167(75.9)	30(13.6)	17(11.6)	3(1.4)	3(1.4)		
Ona-Ara	114(80.3)	16(11.3)	8(5.6)	2(1.4)	2(1.4)		
Lagelu	97(75.8)	20(15.6)	8(6.2)	1(0.8)	2(1.6)		

Authors' Computation (2019) Note: Percentages in brackets

From the cross tabulation in Table 3, it is evident that Lagelu uses more savings for land purchase; Ona-Ara uses more savings for foundation; Oluyle uses more savings for super/main structure and roofing, while Ona-Ara uses more savings for internal fixtures and drainage than all other LGAs. Equally, Ona-Ara leads in the

use of savings for foundation. Family assistance is applied the more in Egbeda for foundation, Informal credit facilities application is highest in Lagelu for foundation, formal credit facilities is highest in Oluyole for foundation while Ona-Ara leads for other sources for foundation.

In the same vein, Oluyole leads in the use of savings for superstructure. Family assistance and Informal credit facilities are applied the more in Ona-Ara for superstructure, formal credit facilities is highest in Egbeda for superstructure while Lagelu leads for other sources for superstructure. For roofing, Oluyole leads in savings, Lagelu has the highest in family assistance, Oluyole has the highest in informal credit facilities, Ona-Ara has highest in formal credit while Lagelu has highest in others for roofing. In the same manner, for internal fixture; Ona-Ara has the highest in savings, Egbeda has the highest in family assistance; Oluyole has the highest in informal credit facilities, Ona -Ara has the highest for formal credit while Egbeda has the highest for others for internal fixtures. For drainage; Ona -Ara has the highest for savings; Lagelu leads in the use of family assistance by households, Informal credit facilities application is highest in Oluyole for drainage and sewage while Lagelu has the highest use of formal credit facilities and others in drainage. On the overall average, Ona-Ara has the highest overall average in the proportion of the households using savings. Lagelu has the highest proportional use of family assistance. Egbeda leads in the use of informal credit market and formal credit market while Lagelu leads in others.

Arising from the cross tabulation in Table 4 is the chi-square values. It shows chi-square values being significant at $p < 0.05$ for all the stages of incremental housing construction except land purchase and drainage. This result means that financing mechanisms for incremental housing construction at the level of foundation, super/main structure, roofing and internal fixtures vary significantly across the Local Government Areas except for land purchase and drainage. This development could be due to these two stages marking the commencement and the end of the core house where reliance could be solely on self in providing fund for the stages. Therefore, our hypothesis which states that there is difference in incremental housing financing mechanisms across Local Government Area is accepted.

— Financing Mechanisms for Incremental Housing Improvement Process

Improving incrementally, like incremental construction of the main building employed variety of sources in its financing. Many of the sources that have been identified in literature as being employed in incremental improvement are savings, small loans from neighbours, money lenders, barter arrangement, community self-help, remittances from family abroad and others. (Sheuya, 2007; Ferguson and Smets, 2009).

Table 5: Proportion of the Financing Mechanisms Employed for the Different Phases of Improvement by Respondents

Stage /location	Financing source									
	Savings		Family Assistance		Informal credit mkt		Formal credit mkt		Others	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Addition of rooms	200	33.9	22	31.4	12	20.7	6	37.5	1	11.1
Fix Roof	102	17.3	19	27.1	11	18.6	5	31.3	1	11.1
Plaster walls	82	13.9	14	20.0	13	22.4	1	6.3	1	11.1
Fix Utilities	96	16.3	6	8.6	10	17.4	2	13.0	6	66.7
Fix floors	74	12.6	5	7.1	7	12.1	1	6.5	0	0.0
Fix doors	35	5.9	4	5.7	5	8.6	1	6.5	0	0.0
Total	589	100	70	100	58	100	16	100	9	100
Overall Total	589	79.4	70	9.4	58	7.8	16	2.2	9	1.2

Source: Fieldwork, 2019.

Other sources similarly listed are common savings schemes, loans or grants from employers, cooperative societies, and credit and savings societies, borrowing from friends or family members, inheritance, sales of inherited land or jewelry and savings in informal credit associations. It has been noted that the low and moderate income group employed a mix of different sources of funds in financing their incremental improvement (development) because of the inadequacy of a single or a particular source in carrying out the needed transformation. A glance at table 5 shows that among those that have embarked on improvement; savings was applied by over 79 % consistently for more of the respondents in the study area. This shows the role of savings in incremental improvement and housing process. This perhaps corroborates the assertion that for those who build their own houses, finance for construction comes mainly from personal savings. Family assistance for improvement comes mainly in the form of cash donation or remittance from relatives and friends, granting of interest free loan, donation of labour or building materials and others. From Table 5, not less than 5 % of family assistance was applied by those that embarked on improvement of their houses in all the different phases of incremental improvement in the study area. Family assistance had the highest of 27 % in the study area for addition of room /shop and fixing of roof. The informal credit market sources such as informal savings and loan associations, micro-finance institutions, community associations, cooperative associations and material credits granting organisations were equally employed in financing incremental improvement. From the Table 5, respondents used formal credit market such as mortgage bank, commercial

bank, insurance or pension fund for financing improvement. A critical glance at Table 5 shows a generally low usage of the facilities which accounted for 2.2 % of the total respondents in the study area. Addition of room/shop and fixing of roof attracted the highest proportion of 37.5% and 31.3% respectively. Other sources of funding for improvement are barter arrangement and community self-help. These were rarely employed except for addition of room, fixing of roof, plastering of walls and fixing utilities. Community solidarity is equally employed in financing improvement during emergencies or major disasters where groups donate materials to individuals during fire, wind storm, flooding and others.

— Financing Mechanisms Expenditure for Incremental Construction Process

An estimate of the amount from different financing mechanisms employed in the different stages of incremental housing process would give an in-sight into the amount of fund required by every low and moderate income families for incremental housing process and the relative contribution of each mechanism to the incremental construction cost. Presented in Table 6 is the estimated average amount from different financing mechanisms expended for incremental construction process in the study area.

Table 6: Average Amount from Different Mechanisms Employed in Financing Stages in Incremental Construction

Average Amount / Standard Deviation () in N						
Const. Stage Location	Savings	Family Assistance	Informal Credit	Formal Credit	Others	Total
Land Purchase	242769	29543	56756	35435	26574	391077 (19.3%)
Foundation	204675	32143	38427	29300	-	214545 (10.6%)
Super/Main Structure	287546	74927	151346	70000	-	583819 (28.8%)
Roofing	102792	34284	79742	31074	48000	295892 (14.6%)
Internal Fixtures	79057	56174	64872	35000	-	235103 (11.6%)
Drainage and Septic Tank	82128	35871	94796	62037	28148	302980 (15.0%)
Overall Average	907292 (44.0%)	262942 (13.0%)	485939 (24.0%)	262846 (13.0%)	102722 (6.0%)	2023416 100%

Source: Fieldwork, 2019

A quick insight into the table shows the relative importance of savings. Savings has the highest (44.0%) contribution to the average estimated amount for the incremental construction process in the study area. Next to savings is the informal credit facilities in terms of amount obtained for the progressive housing of the low and moderate income groups which accounted for (24.0%) in the study area.

Note: The amount generated for the different stages and sources was based on estimate provided by the respondents in the questionnaire. More than a quarter of the amount employed in the study area is from informal credit market; such as savings and loans associations, cooperative societies, thrift and credit unions, material credit retailers and others.

The application of family assistance and formal credit facilities amounted to not less than 13.0 percent each of the contribution to the average estimated amount for the incremental construction process in the study area. The estimated construction cost of construction in the study area is ₦2,023,416 and at current exchange rate of ₦ 350/US\$ it amounts to \$5781.33. The huge amount required, probably accounted for the long period it takes the households in completing the construction process. Similarly, the FGD brought out diverse view from the discussants on the cost of building incremental house in the localities. Cost of inputs such as land, building materials and capital, the size, quality and time of building were identified as responsible for the variation in cost. The absence of uniform cost and its higher trend in the study area was well captured by participant 3 in Olosan in Egbeda, a middle-aged male artisan with secondary school leaving certificate who stated thus: “When I was constructing my 3 rooms and a parlour house 15 years ago it only cost me about N800,000 to the roofing level but my friend who has just roofed the same type of building has spent N1,700,000 over the period of 5 years that he started the work”

— Financing Mechanisms Expenditures for Incremental Improvement Process

Presented in Table 7 is the average amount estimated by the household heads as being used, from the different financing mechanisms, for incremental housing improvement process. From Table 7, incremental improvement process is financed by different sources of fund like in incremental construction process.

In the study area, savings accounted for about 35 percent of the improvement, which is personal incomes available to the household such as personal savings from regular employment, rental income, home based enterprise income and others, while family assistance accounted for about 19 percent in the study area, Informal credit market accounted for more than 25 percent in the study area which is the highest while formal credit accounted for not less than 15 percent in the study area. In all, the estimated amount for improvement in the study area is ₦1,449,345.

Table 7: Average Amount from Different Mechanisms Employed in Financing Stages in Incremental Construction

Average Amount from different sources used for improvement purposes						
Improvement Location	Savings	Family Assistance	Informal Credit	Formal Credit	Others	Total
Addition of Room	95557	38212	106435	41295	29451	311068 (21.5%)
Fixing of leaking roof	92435	56215	82695	61000	-	292345 (20.2%)
Plastering of Wall	72195	59295	92125	35000	71256	59326791 (22.5%)
Provision of Utilities	68180	49011	18057	56000	-	191248 (13.2%)
Repair of Floor	72000	32134	57290	12015	-	173479 (12.0%)
Fixing of Door and Window	79294	32435	25235	17450	-	154414 (10.6%)
Total	499779 (34.4%)	267302 (18.4%)	382037 (26.3%)	222760 (15.3%)	100707 (6.9%)	1449345 100%

Source: Fieldwork, 2019

— Incremental Housing Process and sources of Incremental Housing Financing

In order to ascertain the nature of relationship between incremental housing process which is the major phases or stages of incremental construction and the sources of incremental housing financing, chi-square test was performed. From the descriptive analysis, majority of respondents in incremental construction process use savings for the different stages, with savings consistently being employed by over 70 % of the households. Family assistance has the highest application by the households in super/main structure and Internal Fixtures/ Finishes. Similarly, informal credit is also highest for super/main structure and Internal Fixtures/ Finishes while formal credit is highest for drainages, super/main structure, roofing and Internal Fixtures/ Finishes. Chi-square test also shows that there is significant difference in the proportion of the sources of financing used across the different stages of incremental housing, which could be due to importance attached to the different stages by households, family and friends and credit assistance granting organisations.

Table 8: Relationship between Housing Process (Stages) and Mechanisms for Incremental Housing Financing

Housing Stages	Savings	Family Assistance	Informal Credit	Formal Credit	Others	Degree of Freedom (d.f)	Chi-Square χ^2 Remark
Construction							
Land Purchase	597(80)	102(14)	32(4)	7(1)	4(1)		
Foundation	597(80)	95(13)	36(5)	5(1)	9(1)		75.659
Super structure	566(76)	112(15)	45(6)	12(2)	7(1)	20	(0.000)
Roofing	600(81)	87(12)	35(5)	15(2)	5(1)		Sign.
Finishes/Internal Fixtures	575(77)	110(15)	42(6)	11(2)	4(1)		
Drainage	582(78)	94(13)	51(7)	12(2)	3(1)		
Improvement Location							
Addition of Room	216(78)	35(13)	15(5)	7(3)	2(1)		
Fixing of leaking roof	240(87)	21(9)	11(4)	3(1)	1(0)		
Plastering of Wall	235(85)	25(9)	12(4)	3(1)	3(1)		15.472
Provision of Utilities	159(79)	29(14)	10(5)	1(1)	1(1)	20	0.614
Repair of Floor	184(79)	32(14)	13(5)	2(1)	2(1)		Not
Fixing of Door and Window	95(80)	15(13)	7(6)	1(1)	0(0)		Sign.
Others	15(79)	15(11)	1(5)	1(5)	0(0)		

Source: Fieldwork Analysis, 2019. Note: % in bracket

Chi square value of 75.659, which is significant at $p < 0.01$, was obtained for incremental construction. This means that there is variation in incremental housing financing sources and the incremental housing process. Thus, the hypothesis which stated that sources of incremental housing financing vary with incremental housing process is accepted.

This hypothesis perhaps corroborates the one on financing mechanisms for incremental housing. Improvement on the other hand shows no significant difference with the χ^2 test.

— Household’s Perspective to Non-Personal Financing Mechanisms

Source of finance for incremental building process is wide and varied, ranging from personal sources to non-personal sources. In this section, non-personal sources of funds for progressive housing are examined in details based on the household’s perspective. The non-personal sources considered are finances through self-help organisations or informal credit market and the formal credit market.

— Financial Self-help Organisations

Financial self-help organisations are financial intermediaries granting financial assistance to members or clients of the organisation for their developmental projects such as housing. The financial self-help organisations in the study area offering financial assistance to incremental housing developers are informal savings and loan associations, micro-finance institutions, community savings and credit associations, cooperative societies, material credit granting organisations, social and religious groups among others. The financial self-help organisations like most informal sector financial intermediaries rely excessively on trust and self respect in ensuring continuity, and in some instances third party guarantee and peer pressure may be required to overcome default risk. The distributions of the financial self-help organisations in the study area, according to the household heads, are shown in Figure 1. From the Figure 1 financial self-help organisations assisting in financing incremental housing were identified in the study area.

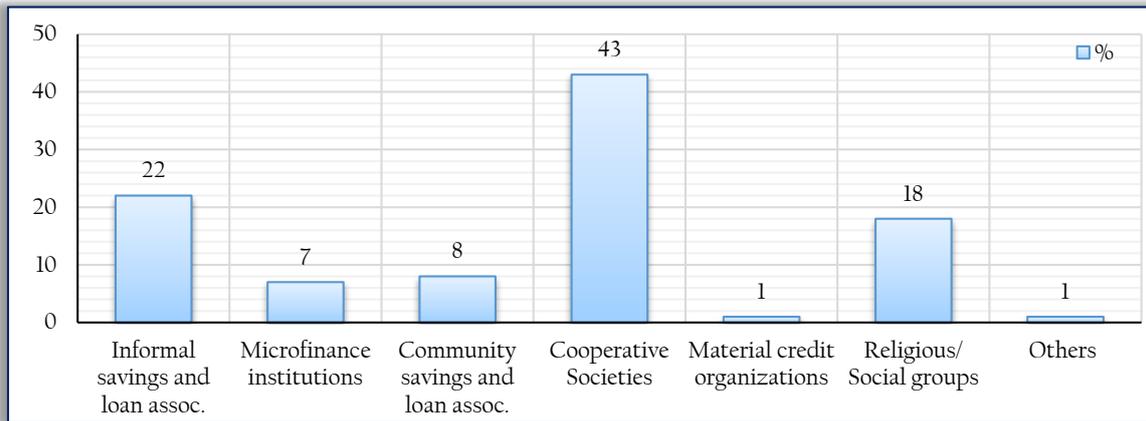


Figure 1: Financial Self Help Organisations Identified by Respondents; Source: Fieldwork, 2019.

Informal savings and loan associations accounted for 22 percent of the identified organisations in the study area. Microfinance institutions accounted for 7 % of the identified organisations in the study area while Community savings and loan associations on the other hand accounted for 8 percent of the identified organisations in the study area. Cooperative societies with the highest proportion accounted for 43 % of the identified organisations while Religious and social groups have 18 % in the study area. Material credit granting organisations accounted for 1 percent of the identified organisations in the study area.

Generally, a fair number of cooperative societies (43%) and informal savings and loan associations (22%) were identified in the study area as assisting the low and moderate income households in their incremental housing financing while there are limited and religious/social group(18%) microfinance institutions (7%) offering housing financial assistance. Cooperative societies and informal savings and loan associations accounted for over 60 % of the identified organisations by respondents.

The very low number of material credit giver (1%) identified is possibly due to non-recognition of their services as a financial service by respondents as many believed it to be normal sales transaction. This was corroborated by the view of participant 2 in Lagelu LGA, an Artisan in his forties with primary education who stated thus: *To me the neighbourhood building materials business outlets are only exploiting us to sell their goods and equally milking us with the extra charges they normally add to their cash price because we are not buying in bulk. I do not believe they are rendering any financial assistance to us at all.*

Regarding the adequacy of credit from financial self-help organisations and its regularity in meeting incremental housing construction and improvement, many of the respondents are of the view that the credit was never adequate and regular. This situation is not unexpected considering the low or weak capital base of these financial self-help organisations. Additional sources of funds used by respondents in complementing inadequate financial assistance from financial self-help organisation include savings, donations, remittances, rent advances and others.

— Collateral Requirement of Financial Self-Help Organisations

Collateral is an asset pledged in respect of a credit facility obtained from a lender. It is to reduce the lender's risk for the credit granted. Some of the identified collateral required by self-help organisations by UNHABITAT (2005), include land title and buildings, lien on assets, obligatory savings, assignment of future income or wages, personal guarantees or co-signers, joint liability and group guarantees and other financial assets such as life insurance policies and pension fund. This is shown in figure 2. Some of the self-help organisations employed more than one collateral instrument to secure their credit such as the use of savings and group guarantee.

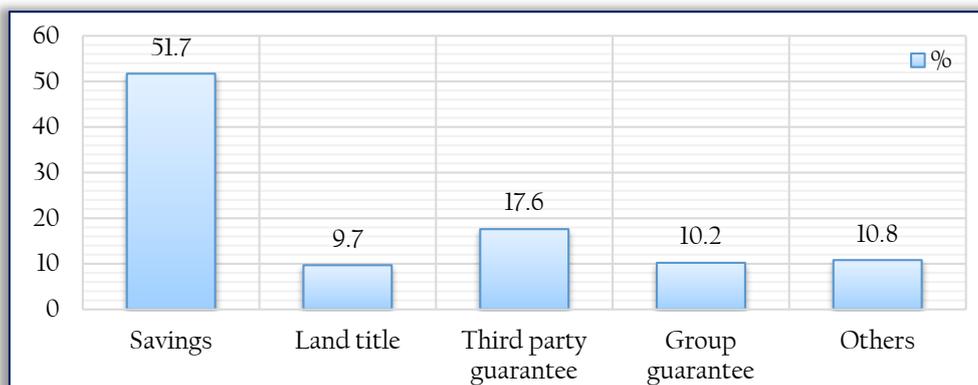


Figure 2: Collateral Required for Credit by Financial Self Help Organizations; Source: Fieldwork, 2019

However, high reliance on savings could possibly be for it to serve as a means of ensuring repayment by the borrower as savings shows the capacity of the borrower to make regular repayments and accumulate sufficient funds for required down payments as most borrowers may be dispersed and not be in the same neighbourhood.

— Providers’ View Point of Incremental Housing Financing

Enquiry into organisations assisting the low and moderate income group in financing their progressively built houses revealed that several types of organisations are involved in this process. These range from limited liability organisations to registered associations and unregistered associations. They give varieties of assistances from loans to material credit. In order to evaluate the activities of these organisations, and with the help of household heads questionnaire was administered to the identified organisations offering such assistances in the study area. 75 organisations were identified in the study area and they include; cooperative societies, microfinance institutions, credit unions, rotating savings and credit associations, accumulated savings and credit associations, material retailers among others. Figure 2 presented these organisations according to the nature of their business.

From Figure 3, 17.3% of the organisations in the study area were involved in mobilisation and granting of loans, 6.7% in mobilisation of deposit and granting of mortgage credit, 5.3% in granting of credit facility alone, 69.3% in granting of material credit and 1.3% in other forms of credit provision.

Material credit was the highest proportion identified, among the organizations. This shows that the commonest assistance the low and moderate income families obtained in incremental housing process in their localities is material credit from cement seller, plank seller, block makers, sand and gravel suppliers, retailer of plumbing and electrical materials and others on terms of half down -payment and balancing of outstanding payment at the end of the month or when fund is available. This finding suggests that interventions aimed at promoting housing financing in the informal urban localities could also target the opportunities offered by material credit retailers. The material credit is an option, which financial institution including formal and microfinance seemed not to have exploited. Other forms of assistance identified include produce merchants that advance credit either in cash or kind to produce farmer in exchange or pledge from the farmers to pay back with produce during the harvest season.

— Loan Conditions and Criteria

There are a number of requirements that must be met to enable the borrowing households obtain credit as well as collateralised the risks and constraints associated with giving out the credit by borrowing organisation for eligibility criteria for the credit facilities granted by the fund providers. According to Escobar and Merrill (2004), these arrays of requirements include but not limited to client history and track record with the same organization, family income estimate, client ownership of the home or land, savings account, technical assistance and host of others. Essentially, most organisations apply eligibility criteria such as regular and verifiable income from the household heads, which the credit is to rely on for its repayment, secure tenure on

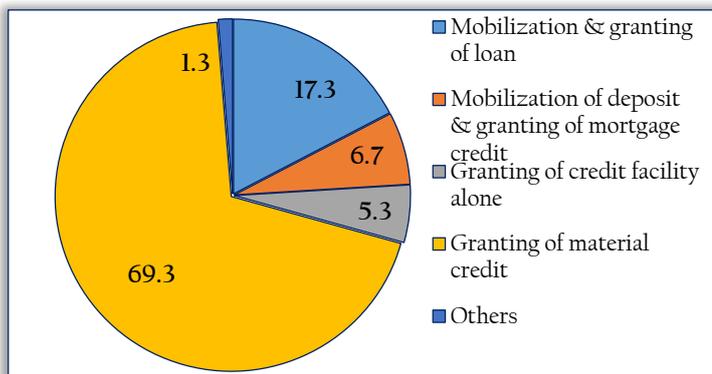


Figure 3: Nature of Business of Organisations Providing Credit
 Source: Fieldwork, 2019

the land, which the credit is to be applied so that there will be no loss of investment through eviction or demolition, repayment capacity on the part of the household heads, minimum savings period during which the borrower must have demonstrated some consistency in savings, maximum savings deposits to secure the credit and ensure the repayment of the credit even with stoppage of one or more months of repayment. Consistently, more than four-fifth (96%) of all the organisations identified applied the criteria of regular and verifiable income, secure tenure, repayment capacity and minimum savings deposit in granting credit in the study area. From Figure 4, it can be seen that there is high proportion of the organisations that apply regular and verifiable income and repayment capacity compared to savings period and savings deposit requirement. This situation is not unexpected considering the proportion of the assistance obtained in the form of material credits which may merely request for the evidence of regular and verifiable income, repayment capacity and in some cases secure tenure to grant credit. While the minimum saving period and minimum savings deposits are common requirements of the savings and loan organisations, deposits and mortgage credit organisations and credit alone organisations in addition to other requirements of the material credit organizations

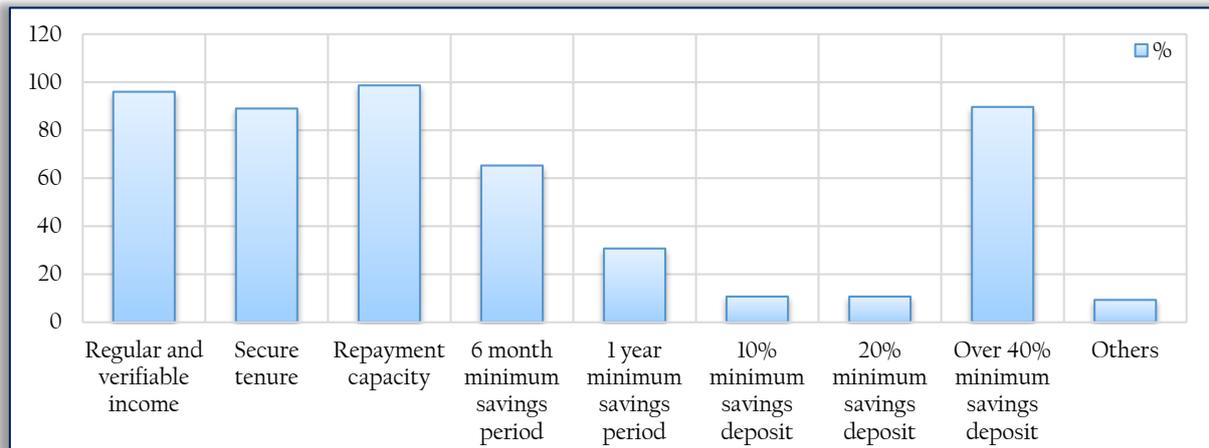


Figure 4: Loan Conditions and Criteria; Source: Fieldwork, 2019

— Loan terms and Conditions

Loan terms and conditions are factors and circumstances attached to the loans, and these include interest charged, collateral requirement, and moratorium and amortisation periods. From Table 9, interest charged by organisations in the study area ranged between 6 % to over 20 %. In the study area, over 20 % interest rate accounted for the highest and was closely followed by 10 percent interest rate, with 6 % interest rate charge being the least applied by the organisations. This trend is not unexpected as informal credit market rarely charges what conventional mortgage institutions charge as interest, with the informal credit market interest rate most of the time doubling that of formal credit market. From Table 13, collateral requirement is another condition applied in credit disbursements while savings, third party guarantee and others such as shares or any other assets were highly favoured as collateral for credit. 92.0 % of organisations in the study area applied savings, 28. % land title, 74.7 % third party guarantee and 9.3 % applied other means such as shares and jewelries.

The high proportion of organisations requiring savings is to ensure that repayment of the credit is secured while third party guarantee is also to secure the credit in case of abscondment or default although Merret and Russel (1994) argued that third party enforcement may be difficult and ineffective. Equally, the use of other assets such as shares and jewelries is also to provide cover for the borrower in case of default. The high proportion of material retailer credit possibly explains the dominance of savings and third party guarantee as collateral. Moratorium period is a period in which the agreement upon that payment would not commence. Payment at the onset of the loan accounted for 34.7 % while allowance of resting period of 3 months accounted for 38.7 % while that of 6months accounted for 28.0%. This trend might not be unconnected with low income of the

Table 9: Loan Terms and Conditions Applied by Organisations

Loan term and Condition	Total	
	Freq.	%
Interest charged		
6%	4	5.3
10%	24	32.0
15%	19	25.3
20% and above	28	37.3
Collateral required		
Savings	69	92.0
Land title	21	28
Third party guarantee	56	74.7
Others - shares, other assets	7	9.3
Moratorium		
0 month	26	34.7
3 months	29	38.7
6 months	21	28.0
Amortization		
12 months	35	46.7
24 months	21	28.0
36 months	15	20.0
Over 36 months	4	5.3

Source: Author's Fieldwork, 2019

households, which would require some ‘resting’ period to recover from deposit or down payment made to acquire credit for their incremental housing, a common feature among the informal savings and loan associations, the deposit mobilising and mortgage credit granting organisations as well as material credit granting organisation. Amortisation period is the period of time frame over which the repayment of credit is to be spread. Organizations providing assistance spread repayment of credit over different time frame. The commonest being 12 months as this was indicated by 46.7 percent in the study area. Following this is 24 months with 28.0 %, 36 months with 20.0 % and over 36 months with 5.3 % a development that might be due to the low capital base of most of the organisations and the need for replication.

— **Loan Constraints**

A number of factors have been identified as militating against successful implementation of credit assistance to low and moderate income households. Table 15 indicates the constraints on the path of delivery of housing credits by the organisations offering assistance to the low and moderate income groups in their incremental housing financing. From the Table, the major constraints identified were land/tenure security and low level of income while low capital base and loan awareness were only moderately mentioned by the organizations. Other less prominent constraints were cost of land, loan diversion, lack of technical assistance and monitoring, loan delinquency rate, building codes and planning regulations and others. Land/tenure security has become a risk because of the problem of ascertaining the status of the land security with para-legal title, such as purchase receipt or building plan in some cases, which does not confer any good title on the land built upon or show that the household has the right to use the land. The need to ensure that there is no eviction or demolition or litigation on the property while the loan is still subsisting constrained availability of the credit from organisations assisting the low income group.

≡ **Cost of land** – The cost of serviced lands in most cases are too exorbitant and beyond affordability level of the low and moderate income groups. This, usually forces the group to land in critical locations that are without infrastructural facilities that may oppose credit granting policy of incremental housing financing organisations. In Figure 5, 28 % of organisations offering assistance to the low and moderate income groups indicated this as a problem in the study area. The low level of income is another factor constraining the credit granted by organisations to incrementally building households. Low income determines how much households could get as credit facility and the adequacy of the credit for incremental building. The affordability issue was being raised by 77.3% of the organisations in the study area as constraining delivery of housing credit. Loan diversion (37.3%) is another constraint affecting the delivery of credit to incremental housing process. Some households divert credit advanced for housing development to some other uses but this is reduced with technical assistance to guide the use of the credit. Lack of technical assistance and monitoring also constrained delivery of housing as wastages could be recorded on the credit advanced due to lack of technical expertise in the use of the credits. In Figure 5, 29.3% of the organisations in the study area affirmed lack of technical assistance and monitoring as affecting the delivery of housing credits. Loan awareness also constrained the number of households assessing housing credit from organisations delivering such. Loan awareness was indicated by 48% of the organisations in the study area. Low capital base that constrained the reach of the credit facility was also indicated by 53.3% in the study area as constraining credit delivery to incrementally built houses of the low and moderate income households.

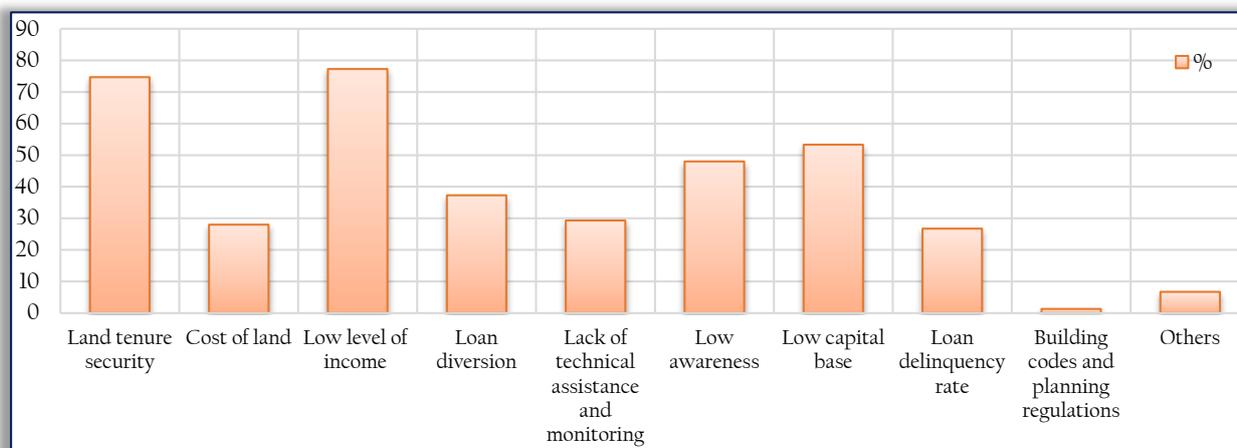


Figure 5: Constraints of Housing Credit Delivery; Source: Fieldwork, 2019

≡ **Credit delinquency rate** – delinquent credit will not allow the replicability of such, and thus will constrain the delivery of housing credit to more households. In Figure 5, 26.7% of the organisations advancing credits to housing in the study area, alluded to loan delinquent rate as constraining the delivery of credit to

many of the households that needed to be reached. Building codes and planning regulations have also been said to be constraining housing credit delivery as the building codes and planning regulations determine what could be built or not. Most of the households requesting for the credits build in the informal settlements that are equally termed illegal settlements thus constraining credit granting organisations in giving credit. This factor was mentioned as constraining credit delivery by 1.3% of the organisations in the study area.

— Constraint Mitigating Measures

Credit risks/constraints mitigating measures such as proof of ownership of property to enable it be used as collateral, savings to ensure the repayment of the credit, personal guarantors/co-signers that could be held in case of default, insurance to indemnify the provider of credit in case of eventuality and others are applied to remedy the situation. From figure 6; 48% of organisations offering assistance in the study area, claimed to have introduced proof of ownership as substitute to title in granting credit so as to enable many households benefit. Personal guarantor (co-signer) is equally used to mitigate default by specifically requesting for personal guarantor or co-signer that can be called upon to make repayment in time of default, abscondment or even death. This measure which is to reduce default is being employed by 82.7% of the organizations. This high proportion shows that it is a common means of guiding against default and discontinuity of the credit facility. Insurance 25.3% is also used by the organisations where clients or households are encouraged to take up insurance to insure the credit facility so that in time of default the credit providing organisation will be indemnified. The low patronage, of this mitigating measure might not be unconnected with its affordability and awareness among the low and moderate income households.

The use of small and sequential loans over shorter loan period is also being employed as means of reducing default. This measure is used by 54.7 % of the organisations in the study area, in reducing the risks of default. In fact, short-term, small loans is said to match how most low-income households traditionally build their homes and better fit with the financial services they required.

Limiting credit facility to locality and immediate neighborhood as well as known people accounted for 92% of the organization and is another way most of the organisations protect their investment and reduce default.

4. CONCLUSIONS

The influence of socio-economic attributes, informal locality attributes and the socio cultural attributes have been considered to give a basis for detailed analysis. Most households come into the incremental housing process at a relatively matured age and also applying supplementary income. The practice in most urban localities is to obtain land in the informal market with households developing their plots with little or no institutional arrangement for housing development. Housing development of the low and moderate income groups occurs in phases with the incremental process taking as much as 8-12 years for construction while improvement of the existing structure takes about five and a half (5¼%) years. The different financing mechanisms employed by the low and moderate income households in financing their incremental housing process have been presented which is the practice of heavy reliance on savings in financing progressive housing among the households. Other mechanisms were equally applied but to a lesser extent. An estimate of an average amount employed from the different mechanisms for the entire construction process gave an estimated construction value of construction in the study area as ₦2023416 and at current exchange rate of ₦350/US1\$ it amounts to \$5781.33. Chi-square analysis of the different financing mechanisms for the different stages of construction across the Local Government Areas of the study area indicates that financing mechanisms for incremental housing construction at the level of foundation, main structure, roofing and internal fixtures vary significantly across the Local Government Areas. Thus, we accepted the hypothesis that stated that there is difference in incremental housing financing mechanisms across Local Government Area. In establishing the relationship between the incremental housing process stages and the financing mechanisms, the study also reveals through Chi-square test, that significant difference exist in the proportion of the sources of financing used across the different stages of incremental housing. This hypothesis perhaps corroborated the views of respondents that assistance and support from family and friends, informal credit market and the formal credit market vary with the stages of construction. Provision of credit for incremental housing of the low and moderate income class is not institutionalized and the varying informal sources

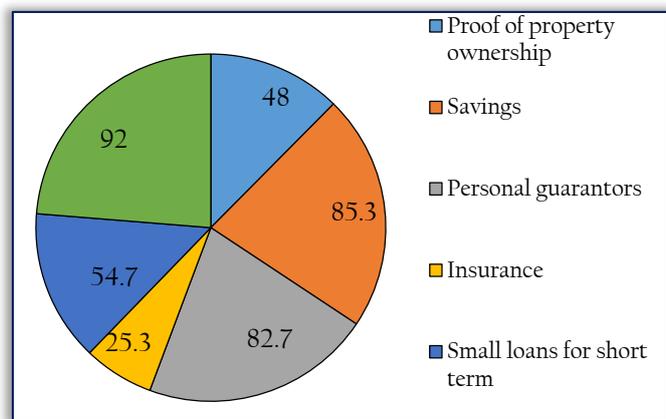


Figure 6: Mitigating Measures to Housing Credit Delivery Constraints Source: Author's Fieldwork, 2019.

available, that is dominated by material credit organisations, are constrained in their operation by low income, absence of secure tenure, building codes and planning regulations among others.

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