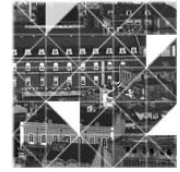# CIDADES, Comunidades e Territórios

Tenure insecurity and incremental housing development in the peri-urban interface of Ibadan, Nigeria

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Abstract

The increasing urbanization being experienced in African countries exacerbates their current housing needs and tenure insecurity. Despite the strictness of the formal land market in Ibadan, Nigeria, urban residents find it easier to access land from informal land market in the city, which results in incremental housing development. Based on the Self-help Theory, the study examined the contribution of tenure insecurity to the development of incremental housing in peri-urban Ibadan. A cross-sectional research design (relying on quantitative and qualitative data) was employed in the study. A total of 248 heads of household were selected from six Local Government Areas of Ibadan and each one of them was administered a structured questionnaire. Ethical protocols were followed and informed consent was obtained. The study revealed that the majority of these incremental developers was illiterate. Factors that accounted for the incremental development included fear of eviction (which is associated with tenure insecurity), high rent costs and lack of funds (as associated with income poverty). The study recommended enhancing access to secure land titles as this has multiplier-effects on housing.

Keywords: incremental development, tenure insecurity, land governance, informality.

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1. Introduction

Urbanization, amongst all global phenomena, is one of the oldest that shapes the way in which people live, play and work (Aduwo et al., 2016; Streule et al., 2020). UN-Habitat (2010) declares that more than 50 per cent of the world's population lives in cities and it is envisaged that by the year 2050, 70 per cent of the world's population will be living in cities and this will mostly take place in developing countries. According to Oluseyi (2006) and Akintande et al. (2020), Nigeria has been identified as the most populous nation in Africa, with a growing population of over 130 million and over a hundred cities. Cities, like Ibadan, in the developing nations are experiencing increases in housing and land needs owing to increasing urbanization (Oluseyi, 2006). Rapid urbanization appears to restrict access to the formal land market and exacerbates housing needs, urban poverty, tenure insecurity and the development of squatter settlements (Cohen, 2006; Agbola & Agunbiade, 2009).

The pressure generated in the land market as a result of this increasing urbanization has warranted the urban poor to take over most of the undeveloped land in the peri-urban interface of cities in a bid to meet their urban land and housing needs (Grgic et al., 2012; Saleem et al., 2014). The additional driving force behind this action could be that land is easily accessed in this area as the cost of land is affordable. Moreover, development can be undertaken irrationally and incrementally because of lesser attention by the development control authorities.

The growth of Ibadan into a metropolitan city in Nigeria has caused the city to grow at a rate that is difficult to manage, particularly in terms of the informal developments found in its peri-urban areas (Makinde, 2012). For instance, between the year 1991 and 2006, Adelekan et al. (2014) reported that the average population growth rate per year in the metropolis was 0.5 per cent, while the average growth rate for the peri-urban areas was 4.8 per cent annually over the same period. This increasing unplanned urbanization in Ibadan has led to urban sprawl and irregular development across the city (Abiodun & Bayode, 2014; Popoola & Akande, 2016; Popoola et al., 2018b). This scenario is also established in the UN-Habitat (2010) report where it was claimed that the peri-urban interface is characterized by slums and squatter settlements, birthed by strict access to secure tenure. Meanwhile, the unnecessary bureaucracy and the expensive and complex procedure of land development have been identified as aggravating factors in the interest of the urban poor in the informal land market, where tenure security is not guaranteed (Masum, 2014; Adeyeni et al., 2016).

Land-holders with no secure tenure are prone to forceful eviction by government without any compensation. Additionally, Williams and Murie (2015) claim that they also have no chance of securing housing loans to develop their lands. Housing is one of the basic human needs and is a pre-requisite for the survival of man (Onibokun, 1985) that everyone would want, irrespective of their income-level. In order to meet these housing needs, residents are subjected to incremental housing development in the peri-urban areas as their only option. The implication of this incremental housing, if not checked for effective and responsive planning processes to be put in place, will result in an increased global urban slum population with a forecast increasing from 925 million slum dwellers to 2 billion over the next three decades (UN-Habitat, 2002). Incremental housing development has been noted to proliferate slum and squatter settlements and takes a long time to build. Popoola et al. (2015) assert that such development is imperfect (yet it is still trending in African cites) due to limited construction expertise and poor materials. This trend shows a failure on the part of the government to provide adequate housing to meet residents' housing needs (Matovu, 2000; Gattoni, 2009).

This study therefore seeks to examine tenure security vis-a-vis incremental housing development in peri-urban interface cities, using the city of Ibadan in Nigeria as a study area. The rationale for this study is to make innovative suggestions towards improving access to secure tenure which will correspondingly influence the pace of housing improvements, with the belief that the improved quality of housing automatically translates into an improved quality of life. The research questions that guide this study are:

• What are the housing characteristics of the peri-urban housing developments in Ibadan?

• What is the state of tenure security amongst peri-urban housing developers in Ibadan?

• What is the incremental housing production experience in the study area?

2. Theorizing Incremental Housing for Tenure Security through the Self-Help Lens

Self-help is described by Williams (2005) as the process by which poor people take control of their housing construction with the understanding that progressive improvements are to be expected and eventually achieved. The concept of self-help housing was introduced in contemporary literature by John Crane in the 1940s, when he promoted the first pilot project of its kind in Puerto Rico. During the 1940s, Puerto Rico became the first jurisdiction in the world where self-help became central to its housing policy (Williams, 2005).

Turner (1972; 1991) advanced the Self-help theory by introducing the expression 'self-help housing improvement'. He argued that this could be facilitated, especially if the security of tenure could be provided to settlers. Turner (1972;1991) advocated for self-help housing as an alternative solution to the low-income groups' needs, whilst arguing that the mechanism uses local systems and appropriate technology, with local materials and labour as well as the skills available in the community. This self-oriented approach was one towards maintaining individual or household tenure security. Tenure security is the protection that land-holders have against involuntary removal from the land they hold, and/or the loss of benefits they derive from that land caused by state or other persons' intervention, unless due to a legal process and adequate compensation (Kanji et al., 2005; Reerink, 2011). In achieving tenure security, Turner (1972;1991) recommended the integration of formal and informal housing development, while attesting self-help building as an exceptional mechanism that would solve the housing problem of low-income groups. He argued that household needs and priorities, like the size of the household and family incomes, are changing over time. Hence, this has the potential to extend the cost of construction over a given time (Turner, 1972; Bahumwire, 2015).

In the literature, land tenure security has been defined in different ways with varying indicators. Some of these dimensional definitions of land tenure security include: the degree of confidence that land users will not be arbitrarily deprived of the rights they enjoy over land and the economic benefits that flow from it; the certainty that an individual's right to land will be recognized by others and protected in cases of specific challenges; or more specifically, the right of all individuals and groups to effective government protection against forced evictions (UN-Habitat, 2010). Jean-louis (2010) advanced this narrative by conceptualizing tenure security in three different ways. He defined tenure security: (a) as a legal construct that often takes the form of a title to a property; (b) as de facto security based on the actual situation; (c) and as it is perceived by dwellers. Jean-louis (2010) concluded that tenure security is a scenario where a land-holder has authoritative documents that identify the ownership of an asset, and it is recognized by a state power. The United Nations Expert Group Meeting (UNEGM) (2002) proposed five generic and systematic indicators for determining a secure tenure in any setting. These indicators are integrative factors such as formal documentation of tenure; local perceptions of security; a low occurrence of evictions; gender balance in ownership and evictions; and national/local provisions against evictions.

De Soto (2000) advanced a central claim that the poor in developing countries such as Nigeria possess huge resources, but hold these resources in defective forms as dead capital that cannot be used to create wealth. He argued that formal property rights (such as titles) and the security of tenure that these property rights are essential for mobilizing dead capital; encouraging home improvement and upgrading; and obtaining formal credit, including that in the urban informal settlements of the developing world. De Soto's (2000) claim that legal titles are not necessary to promote self-help housing improvement has been criticized in literature. Rather, increasing the de facto/perceived security of tenure is enough to promote self-help housing improvement. The relevance of this theory to the study of incremental housing development and tenure insecurity is that the theory promotes incremental housing as the only means for the urban poor to have access to housing. Meanwhile, the only means by which this could be enhanced is through the provision of secure tenure for the settlers. Thus, the theory suggests the promotion of land tenure security so that incremental developers can have legal title to compete for housing loans and in turn afford them the willingness to improve housing developments. Consequently, through such means, the proliferation of informal housing in human settlements can be ameliorated.

Many empirical studies (such as Gelder, 2010; Wajahat, 2012; Gelder and Luciano, 2015; Adianto et al., 2016; Ojo, 2016) have been conducted in the area of land management, tenure security and incremental housing, which are related to the issues that this paper seeks to investigate. For example, Adianto et al.'s (2016) self-help study in urban (neglect to peri-urban interface) in Jakarta revealed that in the absence of the right of ownership as the basis of objective secure tenure, urban dwellers still deliver self-help (incremental) housing improvements despite residents' limited access to land rights of ownership. In another instance, Gelder and Luciano's (2015) work in the metropolitan area of Buenos Aires, Argentina, revealed meaningful relationships amongst all three indicators of tenure security (perception, de facto and de jure) and investments in housing improvement. As advocated by Turner (1994), the relevance of tenure security (both legal and de facto) remains critical to self-help housing development and improvement. This is due to the fact that residents improve homes incrementally over time because of the cost of building; the limited and bureaucratic nature of access to property titles; restricted access to loans; and weak financial capacity (Gelder, 2010; Wajahat, 2012; Ojo, 2016). Therefore, this study shall focus on examining tenure security through incremental housing development in the peri-urban interface of Ibadan in Nigeria.

2.1. Housing Conditions in Nigeria

Effective economic activities functioning and development level fulfilment in either urban or rural environments are reliant on the availability of sufficient infrastructural provisions, such as housing, good road networks, potable water supply systems and drainage systems (Ihuah and Benebo, 2014). While the overall importance of these infrastructures' adequate provision cannot be over-emphasized, their significance of provision, which is to enhance housing satisfaction and values as well as to promote the social and economic life of the people in that built environment, is essential in this study specifically (Ihuah et al., 2014). Popoola et al. (2015) pointed out that Housing goes beyond the materials used in construction, but also refers to a collection of facilities that makes the designed building efficient, functional and livable by human and individual standards. Housing represents a place of satisfaction and safety, characterized by human protection, a place of human abode and dwelling.

However, in Nigeria, studies by various researchers (Lawal, 2002; Ayodele and Alabi, 2011) have argued that the Federal Housing Authority of Nigeria has concentrated their energies mainly on the provision of numbers of housing units, without giving adequate attention to adequate infrastructure provisions to these developed housing estate units. This experience continues to limit livability amongst residents in the country. In fact, Oluwande (1983) and Popoola et al. (2018b) iterate that poor housing conditions (overcrowded, ill-ventilated and poorly designed accommodation) have a direct effect on poor children's health conditions and neighbourhood security in Nigeria. Bello-Schünemann and Porter (2017) opine that the provision of necessary infrastructural facilities (housing and its complimentary services) has not kept pace with the rapidly growing urban population in Nigeria. Moreeover, Thompson et al. (2021) have also alluded to the general lack of basic infrastructural facilities and services in Nigeria. Such experiences prompted studies (Popoola and Magidimisha, 2020, Popoola et al., 2018a) which pointed out that community-based associations and individuals, through the self-help approach, remain a viable solution to residential sustainability. This is evident in over 23 million housing deficits in the country - a development that has resulted in the growth and development of slums within cities and along peri-urban corridors (Okoye et al., 2017). In the view of Lawanson et al. (2012), Adedire (2018) and Adu-Gyamfi (2021), tenure affordability, social amenities and the opportunity to engage in incremental housing remain drivers of peri-urban growth and city sprawl.

3.   Brief on the Study Area

Ibadan is made up of 11 local government areas (LGAs), 5 of which are urban, with the remaining 6 being peri-urban and villages (Figure 1). This study only covers the Ibadan peri-urban areas found in the following six LGAs: Akinyele, Egbeda, Ido, Lagelu, Oluyole and Ona-Ara. Of the land extent of the Ibadan region (3,145.96 m2), the

Ibadan peri-urban zone covers 85 percent, while 15 percent falls within the 5 core/urban LGAs (Agbola & Alabi, 2010). Ibadan is directly connected to many towns in Nigeria and its rural hinterland is connected by a system of roads, railways and air routes.

The increasing urbanization of Ibadan has led to the migration of its population from the rural regions to the city. As a result, people and developments spread out to the peripheral areas of the city (Owoeye & Ogundiran, 2015). The transition to this zone has been the concern of planners because most of the dwellers in these peri-urban areas are proliferating slum developments as most of them have no secure tenure. An overriding problem facing peri-urban dwellers in Ibadan is the low level of access and high cost of transport to jobs, markets, schools and the centres of administration of public services (Makinde, 2012; Ipingbemi & Adebayo, 2016). According to Owoeye and Ogundiran (2015), most dwellers in the peri-urban zone of Ibadan have no secured land tenure. The zone lacks land-use plans and it is structurally at variance with planning standards. This, according to Adeyeni et al. (2016), is a major contributor to incremental housing developments in the Ibadan region.

Figure 1. Map of Ibadan's Peri-Urban Local Government Areas
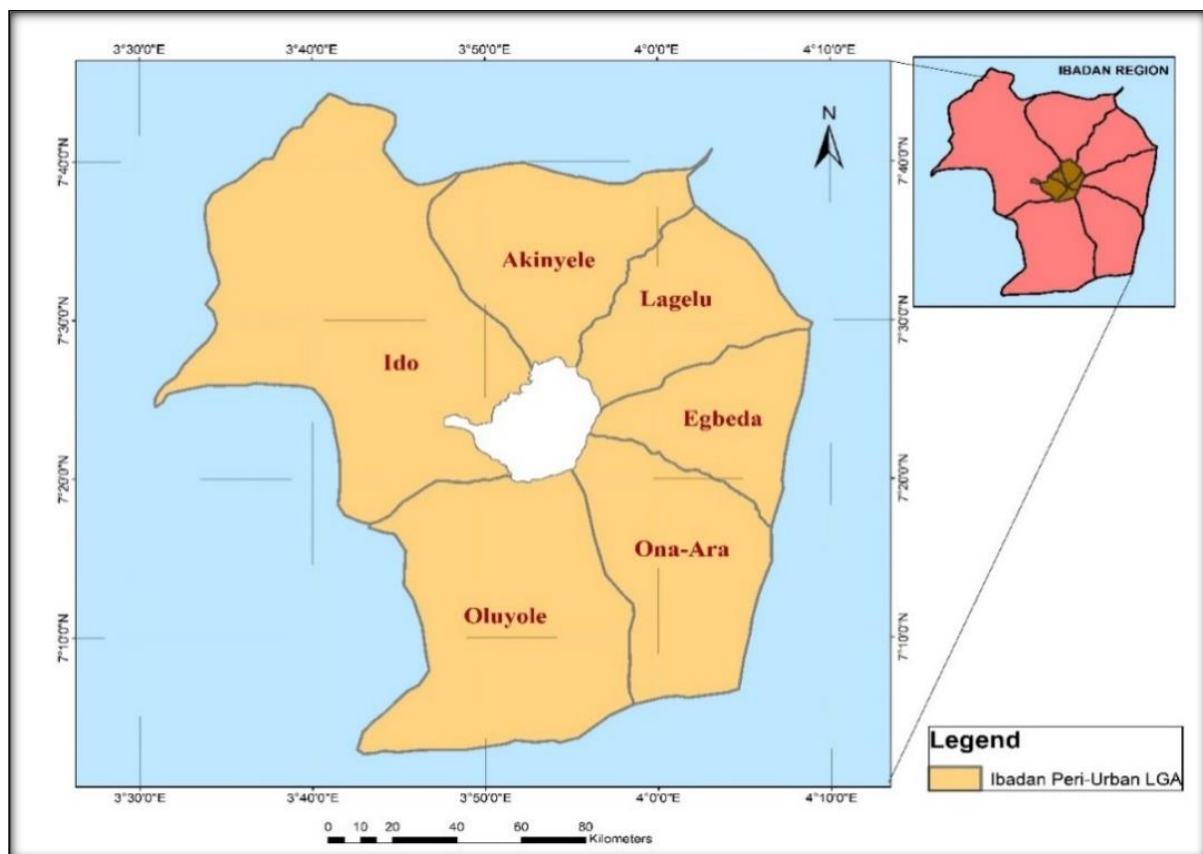
Source: Authors' Own Mapping (2020).

4. Research Methods

This study employed a cross-sectional survey research design. In this type of research design, data is collected at once, without any follow-up actions. Furthermore, data for a cross-sectional research design could be collected using any mode of data collection based on the researcher's ingenuity. It could be through telephone interviews, mailed questionnaires, self-administered questionnaires, electronic mail or focus-group discussions (FGDs)

(Ballou & Lavrakas, 2008). In this study, self-administered questionnaires and the FGD were employed. Moreover, the latter (FGD) is usually used to complement the findings of the former method (questionnaire survey).

The study relied on qualitative and quantitative data which were retrieved from both primary and secondary sources. The secondary sources provided both qualitative and quantitative data that was retrieved from an extensive literature review and local government archives. For instance, the lists and description of Enumerated Areas (EA) (the recognized smallest system of housing units) under the Ibadan peri-urban areas were obtained at the Ibadan office of the National Population Commission (NPC). A collection and cluster of a number of enumerated areas forms a locality in this study. Primary sources provided qualitative and quantitative data that was sourced through the use of household head questionnaire surveys, personal observations and Focus Group Discussions (FGDs).

Figure 2. Pictorial Evidence and Visual Analysis of Sampled of Incremental Houses within the Sampled Enumerated Areas

Source: Authors' Own Mapping (2020).

A multi-stage sampling technique was adopted in the study. At the first stage, the six local government areas that constitute the peri-urban interface (namely Akinyele, Egbeda, Ido, Lagelu, Oluyole and Ona-Ara LGA) of Ibadan were first identified. From the LGAs, two localities from each of the six LGAs (following the list provided by NPC) were randomly selected (using a random table), thus making up twelve localities. This was second stage of the sampling process. The second stage was followed by the purposive selection of one enumerated area from each of the twelve localities having the proliferation of incremental housing, giving a total of twelve EAs (Figure 3).

Informal discussions with the Bureau of Physical Planning and authors' field observations were engaged in the purposive selection of the sampled enumerated areas.

The totality of incremental housing in the selected enumerated areas was 497 housing units. This number was arrived at through field observations, informal discussions with house occupants and a housing census. Incremental houses were self-help and physically incomplete buildings (see Figure 2). Owing to limited manpower, time and finance, fifty percent of the incremental housing, which adds up to 248 units (Table 1), was selected using systematic random sampling. In this systematic random sampling, the first unit was selected randomly, whilst others were selected based on every 5th unit. The targeted respondents in this research study were the owners of the houses where available or, if not, the most senior heads of the households living in the sampled incremental buildings. For every sampled respondent, informed consent forms were obtained, which is an ethical requirement for studies involving participants.

Consequently, the participants for the FGDs were incremental housing developers. The participants were selected based on their willingness to participate in the discussion. As a result, the FGD was fit to be conducted in three Enumerated Areas (Olorisha-oko, Akaran and Tose). The participants comprised both genders, with the number being between 6 to 12 willing incremental developers. The decision aligns with the view of Shrestha et al. (2020), which established that a minimum of 6 and maximum of 12 people are suitable for FGDs.

Furthermore, other research instruments used for the data collection, apart from the structured questionnaire, included the Global Positioning System (GPS) and a digital camera. The GPS was used in collecting the coordinates of the enumerated areas and a digital camera was used for taking pictures of the incremental houses. The retrieved data was compiled and analyzed using the Statistical Package for the Social Sciences (SPSS V20).

Figure 3. Map of Enumerated Areas and Selected Localities
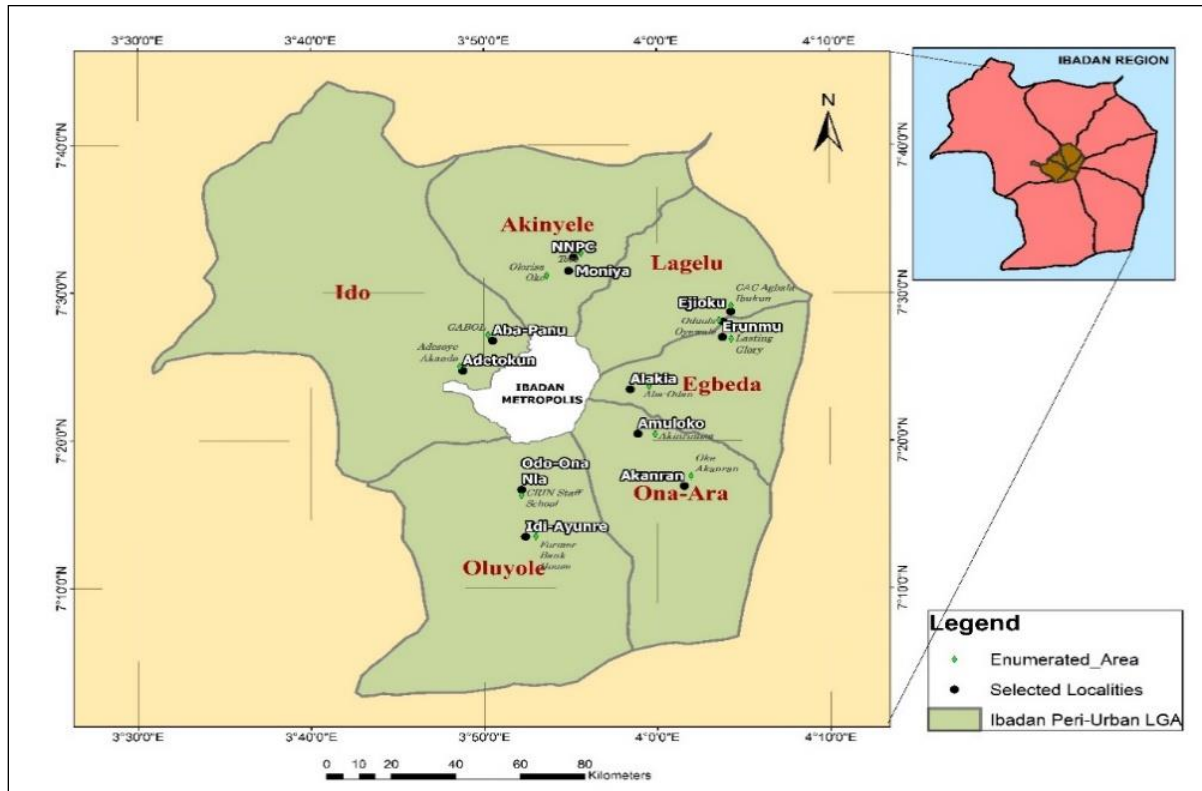
Source: Authors' Own Mapping (2020).

Table 1. Sampling Procedure and Sample Size

LGA	Locality (A cluster of enumerated areas)	Selected Enumerated Area (the recognised smallest system of housing units)	Sample Size (50%)
Akinyele	Moniya	Olorisa-Oko	20
	Power Line	Tose	24
Ido	Aba Panu	Gabol	14
	Adetokun	Adesoye-Akande	16
Lagelu	Lalupon	Oduola-Oyewole	25
	Ejioku	CAC Agbala-Ibukun	24
Ona-Ara	Amuloko	Akinrimisa	24
	Akanran	Oke-Akaran	18
Oluyole	Idi Ayunre	Former Bank House	17
	Odoonanla	Crin Staff School	24
Egbeda	Alakia	Aba-Odan	16
	Erunmu	Lasting Glory	26
Total			**248**

Source: Authors' own compilation (2020)

5. Findings and Discussion

5.1. Socio-Economic Characteristics of the Sampled Respondents

The study investigated the social and economic characteristics of the selected respondents. The enquiry on the educational status of the respondents revealed the educational class to which the incremental housing developers belonged, as well as the relationship between their educational status and tenure security. From the analysis as presented in Table 2, 38.3 percent of the total respondents had no formal education; 13 percent claimed to have a primary school certificate; and 24.6 percent claimed to be secondary school graduates, whilst the respondents with a tertiary education made up 24.2 percent. This distribution shows that the majority of the developers of incremental housing is illiterate. The implication is that there is a likelihood that the majority of the developers is ignorant of the consequences of not having a legal tenure document, despite being house owners. An investigation regarding the respondents' occupations revealed that the dominant developers of incremental housing were artisans (covering about 36 percent of the respondents). In addition, 33 percent of the respondents claimed to be civil servants, while about 30 percent and 1.2 percent claimed to be traders and farmers respectively. Meanwhile, the Focus Group Discussion also revealed that the majority of the traders who participated in the FGD was composed of motorcyclists and taxi drivers. The implication of this is that, as most of them earn a daily-income, it would be difficult to have huge savings and as such, there is a high chance of not seeing a legal title as important because of the high cost of securing a legal title in Ibadan.

The common average income of the respondents was between twenty and forty thousand naira, which was the earnings of about 57 percent of the respondents. In addition, 28 percent of the respondents claimed to earn less than 20 thousand naira monthly, while 5.7 percent claimed to earn between 40 and 80 thousand naira. This composition reveals that the majority of these incremental developers are low- and medium-income earners. Based on the international monetary rate, the exchange rate of 1 USD to ₦381 was set for this study in order to further investigate the monetary wealth of the respondents. The World Bank recommends that the amount needed per person per day is US$1.90, which equates to US$58.9 per month, or ₦22440.9, with approximately 28% falling below this level (World Bank, 2020), which is regarded as the poverty line below which people are considered to be poor. This finding validates the Self-help housing theory propounded by Turner (1991) which proposes that the incremental housing type is not for the urban high-income class, but for the low-income earners who want access to housing by any means. This is the case especially in Nigeria, where low-income house ownership has been linked to self-esteem and life-satisfaction (Rohe & Stegman, 1994).

Table 2. Socio Economic Characteristics of the Respondents

Educational Status	No.	%	Income Level	No.	%	Occupational Status	No.	%
No formal education	95	38.3	Less than ₦20,000	69	27.8	Artisanship	89	35.9
Primary School	32	12.9	₦20,001 to ₦40,000	140	56.5	Civil Servant	82	33.1
Secondary School	61	24.6	₦40,001 to ₦80,000	39	15.7	Farming	3	1.2
Tertiary School	60	24.2	**Total**	**248**	**100.0**	Trading	74	29.8
Total	**248**	**100.0**				**Total**	**248**	**100.0**

Source: Field Survey (2020).

5.2. Housing Characteristics and Tenure Status of Sampled Buildings

An investigation was also carried out regarding the characteristics of incremental housing (see Table 3) using certain housing indicators (namely wall conditions; sources of power and water; and toilet types) obtained from the existing literature (Popoola et al., 2015). The findings revealed that 98.8 percent of the respondents claimed that they have been living in their buildings between 1 to 10 years, while only 1.2 percent declared that they have been living in their buildings between 11 and 20 years. With these years of occupancy, the implication is that these developers do not prioritize upgrading to qualify as incremental developers for this study. An investigation on wall finishing was carried out to determine the physical outlook of the selected incremental houses. The findings showed that 98.8 percent of the buildings were neither plastered nor painted externally, while 2 (0.8%) and 1 (0.40%) of the houses were only plastered, and plastered and painted, respectively. Meanwhile, in Africa, regarding building plastering and painting, these are purposely for concrete protection and decoration respectively (Kumar, 2007). The implication of this result is that the incremental developers see housing as a mere shelter (somewhere-

to-stay). Thus, nothing is included regarding beautifing a home. This is perhaps because of the socio-economic underpinnings such as income, education, religion and beliefs.

Some major components of adequate housing are water, electricity and toilet facilities (Popoola et al., 2015). Sadly, out of the sampled incremental housing units, 81 per cent of units relied on the community and neighbours' wells as sources of their drinking water, while 19 percent used their own personal wells where domestic and drinking water was fetched from. None of the incremental houses had a personal borehole, which depicts the financial status of the developers. Furthermore, the source of electricity was also investigated.

As at the time of the study, 39.5 percent of the respondents had no source of power. They perhaps relied on their neighbours to charge their mobile phones and other gadgets. However, 40.5 percent of the houses relied on the Ibadan Electricity Distribution Company (IBEDC) as a source of power, while 19 percent relied on generating sets as a source of power. When investigating the available toilet types, the pit latrine was the dominant toilet facility available in 67.7 percent of the houses. This type of toilet has been identified to negatively threaten human health because it aids the microbiological and chemical contamination of ground water (Kiptum & Ndambuki, 2012). Houses that used ventilated-improved-pit and water closet toilets were 8.1 percent and 5.6 percent, respectively. However, a significant number (18.5%) of the housing units had no toilet facilities. This means that the households in those houses practiced open defecation, where faeces were thrown into a body of water or bush, thereby degrading the environment. This practice has been associated with Sub-Saharan Africa and Asia, which is seen as a threat to human health and the environment. For instance, it has the likelihood of causing vector and water-borne diseases; contamination via microbes; air and olfactory pollution; and malnutrition in children (Rajgire, 2013; Spears et al., 2013).

Table 3. Characteristics of Building Complementary Facilities

Age of Building	No. of Buildings	%	Source of Power	No. of Buildings	%	Source of Water	No. of Buildings	%
0 to 10 Years	245	98.8	IBEDC	103	40.5	Private Well	47	19.0
11 to 20 Years	3	1.2	Generator	47	19	Community well	201	81.0
			None	98	39.5	Total	248	100
Total	248	100	Total	248	100			
Wall Condition	**No. of Building**	**%**	**Toilet Type**	**No. of Buildings**	**%**			
Plastered	2	0.8	Pit Latrine	168	67.7			
Plastered &painted	1	0.4	Ventilated-improved-Pit Latrine	20	8.1			
Not plastered	245	98.8	Water closet	14	5.6			
Total	248	100.0	None	46	18.5			

Source: Field Survey (2020).

An investigation was also carried out into the nature of tenure held by the owners of the incremental housing. Table 4 reveals that 99.2 percent of the respondents reside in owner occupied land and houses. One participant resides in a squatter home and one resides in an inherited house on inherited land. Further investigations into tenure security showed that 99.2 percent of the private land and house owners only had land purchase receipts as a formal proof of ownership. The inherited land-owner had obtained the red-copy of the survey plan of the land. However, none of them claimed to have any legal titles like a certificate of occupancy (C of O) or any form of other legal document.

The main reason referred for this is the bureaucratic nature and high and unbearable cost of securing land, which the average urban poor cannot afford. For instance, as of 2018, the cost of securing a C of O for private land in the Edo and Ogun states of Nigeria was ₦300000 (1000USD at/₦) and ₦450000 (1500USD), respectively. The State Commissioner for Lands, Housing and Survey in 2018 said "(...) the Home Owners Charter C of O was pegged at ₦125,000 (417USD)". This was a 60-day processing time. Yet, it is not certain that an application for this document would be successful. This perhaps warranted Aluko et al. (2004) to submit that the process of securing a C of O in Nigeria is cumbersome, costly and time-consuming. In fact, Popoola and Magidimisha (2020) reported that the bureaucratic process involved in the approval for building or land demarcation, coupled with rural-peri-urban culture, are some of the limitations to improved land or building formalization in Oyo State, Nigeria. The cost-intensiveness of the formalization of tenure amongst households in the sampled incremental homes is also buttressed by the financial poverty conditions of about 28% of the sampled respondents.

The study's evidence also points to the idea that much of the owned land was acquired and bought from informal private individuals or families (88.3%) and communities (10.9%). Only two households acquired the land from the government. This experience resulted in a few incidents of land disputes in the study area. The investigation into land disputes in the selected areas revealed that the disputes over land was not rampant as 99.2 percent of the respondents claimed that there was no occurrence of land disputes, while only 2 respondents (0.8%) indicated that disputes had occurred. This result contradicts earlier studies (Lombard, 2016) which claimed that land disputes are more prominent in peri-urban areas because of the intensive construction and available land to compete with in the area. However, the claim of the respondents could literally imply that they were privileged to have bought the land from the rightful and truthful owners. Based on experience, it also reveals that family and individual ownership are becoming the most people-approved means of acquiring land. It was also revealed from the field interviews that family, individual and community territorial land ownership exists in the peri-urban areas of Ibadan. Instances of land disputes are often attributed to invasions beyond the person's land rights.

An investigation into the fear of being evicted, which has been associated with insecure tenure in the literature (Gelder, 2010; Van-Gelder & Luciano, 2015), and participants' perceptions of tenure insecurity (see Table 4) revealed that 79.4 percent claimed to feel secure in being the owners of the land. It also affirmed that they could never be dispossessed of their properties. This could be possible because most of them have never experienced disputes regarding their property. Conversely, 15.7 percent affirmed that they felt slightly secure as the owners of the land, while 2.8 percent of the respondents declared that they were not sure if they would be dispossessed of their property. Despite the fact that the majority of them have no legal title, none of them claimed to have a fear of eviction. However, the implication of this is that perhaps the majority of these developers is ignorant of what an insecure title implies and its resultant effects.

Table 4. Nature of Tenure

Nature	No.	%	Source of Land	No.	%
Owner- Occupier	246	99.2	Bought from individual/family	219	88.3
Squatter	1	0.4	Bought from a community	27	10.9
Inherited	1	0.4	Bought from Government	2	0.8
Total	_248_	_100.0_	Total	_248_	_100.0_
Document conferring Ownership	**No.**	**%**	**Occurrence of Land Dispute**	**No.**	**%**
Land receipt	246	99.2	Yes	2	0.8
Red-copy of Survey Plan	2	0.8	No	246	99.2
Total	_248_	_100_	Total	_248_	_100_

Fear of Being Evicted and Tenure Security Level				
		Tenure Security level		
		Feel secure	Slightly secure	**Total**
Fear of being Evicted	No, I will not be dispossessed	197 (79.4%)	39 (15.7%)	236
	Maybe, I'm not sure if I'll be dispossessed	7 (2.8%)	5 (2.0%)	12
	Total	204	44	248

Source: Field Survey (2020).

Furthermore, there was assessment of the performance of land governance, which according to Deininger et al. (2012) is the way and manner in which decisions about the use of and control over land are made in their areas using the six principles of good land governance (Palmer et al., 2009), namely equity, accountability, transparency, efficiency/effectiveness, rule of law/legal security and participation (involvement in decision-making). The opinions of the respondents were subjected to a descriptive analytical technique called "weighted mean score". The essence of this choice was to know the ranks of the variables. The variables and their ranks used included the following: exceptional (-4), highly satisfactory (-3), satisfactory (-2) and unsatisfactory (-1). The principle with the highest mean score of 1.87 was 'accountability'. This means that the opinion of the majority of the respondents was that the accountability of the land governance was exceptional. This finding implies that there were questioning and appealing mechanisms for conflict resolution regarding land, and that land-sellers take up the responsibilities involved in the land market. The variable with the second highest mean score was efficiency and effectiveness, with a score of 1.63. This means that the respondents were highly satisfied with the efficiency and effectiveness of the decisions made regarding the land in their respective areas, which could be responsible for their claims that they have not been experiencing land dispute and conflicts. Other principles that have lower ranks can be seen in Table 5.

Table 5. Assessment of the Land Governance

Principles	E	HS	S	U	W/S	N	M/S	Rank
Equity	-	-	68	180	316	248	1.27	6th
Accountability	-	-	216	32	464	248	1.87	1st
Transparency	-	-	150	98	398	248	1.60	3rs
Efficiency/effectiveness	-	-	156	92	404	248	1.63	2nd
Rule of law/legal security	-	-	134	114	382	248	1.54	5th
Participation (involvement in decisions making)	-	-	137	111	385	248	1.55	4th
Total					2349		9.46	

(Note: E= Exceptional, HS= Highly Satisfactory, S=Satisfactory, U=Unsatisfactory. N= no. of respondents W/S=Weighted Score, and M/S=Mean Score)

Source: Field Survey (2020)

The study also investigated the number of selected incremental houses that had planning approval, as this is another indicator to access tenure security. Jean-louis (2010) defines tenure security as being when a land-holder has authoritative documents that identify the owner of an asset, and it is recognized by a state power. As the study revealed, of the 248 selected incremental houses, 99.2 percent had no physical planning approval at the time of this study, while only 0.8 percent did. This corroborates the submissions of Williams (2005) who affirmed that the majority of incremental developers do not seek planning consent. Interestingly, none of the developers claimed to have received any development control notices from their respective planning authorities.

Additionally, the reasons for developers not seeking planning approval were investigated. The major reason adduced by 76.6 percent of the sample was that the process of approval was long and expensive and they could not afford it (see Table 6). To validate this, in Oyo State, Nigeria, the planning approval of a residential building on a single plot could be as high as ₦150,000 (including tax payment) and could take a month (estimated from www.oyostate.gov.ng). From the analysis, 8.1 percent claimed that they did not possess legal titles, which was a requirement for approval. A further 6.9 percent complained about the time and resource-consuming, tedious and frustrating and 'illogical' government bureaucracy involved in the approval process. This, however, complements earlier studies (see Oladiti, 2018) which attested to the cumbersome bureaucratic nature of the public sector in Nigeria.

Cementing this, 5.2 percent identified the weak sensitization and awareness of information about where and how to process the planning approval. This is not new, as Aliyu and Usman-Kaoje (2017) also reported on the poor planning process and procedure knowledge. To ease this, the study suggested public sensitization programmes through mainstream and social media platforms by various stakeholders. Sensitive to this study is the response of 2.4 percent who claimed that it is possible to be evicted by government, which was why they did not seek planning approval. Perhaps they see such an attempt as a means of attracting government's attention and exposing themselves to eviction.

Table 6. Planning Implication

Possession of Planning Approval	No.	%
Yes	2	0.8
No	246	99.2
Total	*248*	*100.0*
Reason for not Seeking Planning Approval	**No.**	**%**
Fear of eviction by government	6	2.4
I do not have a legal land title to process the approval	20	8.1
Government bureaucracy is too much	17	6.9
I cannot afford it	190	76.6
I do not know where and how to process the approval	13	5.2
Total	*246*	*100.0*

Source: Field Survey (2020).

5.3. Incremental Housing Experience and Process

An investigation was carried out to identify the factors that influenced incremental housing development. The findings revealed that a simple majority (35.9%) of the respondents affirmed that a lack a of access to a housing development fund was the principal reason that they embarked on incremental building. This corroborates the focus group discussion, during which the respondents said that "everybody desires adequate housing, but funding poses a restriction". Moreover, 33.5 percent established that they got to know that the execution of their proposed building plan was unrealizable with their available income/budget and status, which lured them into building incrementally. This depicts that most of the developers really envisioned building mansions without considering their income level, whereas building should be a realistic phenomenon. Possibly, the majority of these developers could have escaped living in incremental housing if they had gone for a building choice that was simple, feasible and affordable for them.

Another ultimate reason for incremental development, as claimed by 19.4 per cent of the participants, was the fear of eviction by the government. Since they had no legal title, the only option they had was to develop incrementally. Threats from landlords in the respondents' former rented apartments (9.7%) and the increasing house rent in the urban areas (1.6%) lured some respondents to embark on these incremental building projects, such that they could also have autonomy and be free from the exploitation of land-owners. This, however, complements Mukhija's (2014) submission that to the low-income households, the building type (incremental housing) is the available option to escape from increasing housing rents (see Table 7).

Table 7. Reasons for Incremental Development

Reasons for incremental housing	No.	%	Factors limiting access to mortgage	No.	%
Threat from landlords	24	9.7	No collateral	75	30.2
No access to fund	89	35.9	Social discrimination	2	0.8
Unrealizable proposed plan	83	33.5	No means to pay-back	123	49.6
Fear of eviction	48	19.4	Bureaucracies are too much	46	46
High Housing rent	4	1.6	No information/publicity	2	2
Total	248	100.0	Total	248	248
Completed rooms	**Before moving-in**		**Presently**		
1 to 2 Rooms	248 (100%)		220 (88.7%)		
3 to 5 Rooms	-		28 (11.3%)		
Total	248		248		

Source: Field Survey (2020).

The number of rooms completed before moving in and presently were investigated and the results are presented in Table 6. The essence of this was to know the extent to which incremental developers were upgrading. All the respondents (100%) claimed that they completed 1 to 2 rooms before moving in, while 11.3 percent of the respondents had upgraded the number of rooms completed since they moved in. The implication of this is that since they moved into their houses, the respondents were satisfied with the quality and condition of the houses and perhaps had no compelling need to upgrade. Corroborating this is the claim of a woman between the age range of 50 to 55 years at the Olorisha-oko Enumerated Area (EA) of the study area who was one of the FGD participants. In her words, she claimed that:

> "(...) I am a widow with five children and my priority now is to feed my children and send them to school. The last thing I can think of now is to upgrade my house. Myself and my children are satisfied with this house, in as much as it protects us from wind, sun and rain (...)"

In essence, this response validates one of the postulations of the Self-help housing theory which argues that most of the developers of such housing models are satisfied with their housing conditions because self-help housing is seen as an alternative solution to their housing needs (Turner, 1991). However, the view of this participant can be suggested for further research in order to have empirical evidence on the satisfaction of incremental housing owners. Furthermore, an informal discussion with one of the incremental house owners, who was a woman within the age range of 45 to 50 years at the Oke-Akaran Enumerated Area of the study area, also reveals a sense of boast and satisfaction. In her words, she said:

> "(...) Although I can say when I started, the incremental building process is though (emotionally, time-consuming and capital intensive), but now I am proud house-owner and in the same class with my former rented house landlord (who she mentioned continually harassed them before moving out) (...)"

This evidence is a pointer to a possible induced forced eviction which might be caused by the harassment of housing occupants by landlords, although the cause of the harassment as claimed in this case remains subjective as the landlord was not interviewed. Popoola et al. (2020) reported that forced and induced eviction remains a common event amongst the urban poor in Nigeria. In their argument, many legally or illegally evicted residents often resort to building new homes incrementally, or migrating into other communities. This, according to the authors, further creates negative shock and stress for household livelihoods and economic sustainability. To ease this economic stress, an investigation into the access to a mortgage during the course of construction and what factors were responsible for its inaccessibility was carried out. Interestingly, none of the incremental housing developers had access to a mortgage. Perhaps they have raised funds from family-members, daily savings and

other sources. Moreover, they might have relied on other cost-reduction approaches in building. For example, using local materials, as well as labour and skills. A further investigation regarding inaccessible mortgages revealed that 49.6 percent of the respondents had no means to pay back the mortgage if they attained it. In addition, 30.2 percent of the respondents declared that they had no collateral to use to convince the mortgagee, while 18.5 percent claimed that mortgage bureaucracies were too much for them to pass through.

Other factors identified by the respondents were a lack of information or publicity on mortgage availability (0.8%) and social discrimination by the mortgagee (0.8%). This corroborates the claim of one of the interviewees who stated that "[the] mortgagee engaged in bias and favouritism in favour of the rich people". This is in line with the findings of Theodore and Stand (1998), which revealed discrimination in accessing mortgages between the minorities (Blacks and Hispanics) and white applicants in the United States. The study established that the minority applicants were deliberately denied mortgages. All these conditions of fund inaccessibility are applicable to the urban poor, as none of the mortgage conditions can affect the bourgeois and rich in society because they will be able to satisfy requirements like the submission of an approved building plan, collateral and the domiciliation of the applicant salary accounts with the bank or mortgage institution.

A further investigation into the effectiveness of the approaches to enhance the quality of incremental housing in the peri-urban interface of Ibadan was undertaken. The approach that was highly effective (see Table 8) and had the highest mean score of 3.79 was the 'equal access to secured land, which 200 of the total respondents claimed would be highly effective compared to the other approaches. This corroborates the assertion of Uwayezu et al. (2018) that tenure security allows households to see their properties as an investment which gives them the motivation to capitalize on opportunities to improve their homes.

Another significant approach that is declared highly effective, having a mean score of 3.77, is the reduction in the cost of building materials, which was mentioned by 192 of the respondents. This implies that if the costs of building materials like cement, fittings, sand and timber are reduced, then the urban poor would be able to afford the cost of building adequate and healthy housing. This is similar to the submission of Bredenoord (2017) and Aliyu and Chunho (2020) that the reduced cost of construction materials is a good strategy for enhancing housing quality because developers would be motivated to upgrade their houses.

Table 8. Identified Approaches towards Enhancing the Quality of Incremental Housing

Approaches	HE	E	I	HI	W/S	N	M/S	Rank
Access to mortgage	119	129	-	-	863	248	3.48	3rd
Equal access to secured land	200	43	5	-	939	248	3.79	1st
Efficient development control	3	245	-	-	747	248	3.01	5th
Halting activities of land speculator	2	64	182	-	564	248	2.27	8th
Halting activities of land grabbers	29	213	6	-	767	248	3.09	4th
Residents' Enlightenment	-	244	2	2	738	248	2.98	7th
Reduced-cost of building materials	192	56	-	-	936	248	3.77	2nd
Informal workers expertise in building industry	2	89	157	-	746	248	3.01	5th

(E= Exceptional, HS= Highly Satisfactory, S=Satisfactory, U=Unsatisfactory. N= # respondents, W/S=Weighted Score, M/S=Mean Score)

Source: Field Survey (2020)

In order to identify the factors that accounted for the incremental housing, such as the level of education or income, a two-way ANOVA was used to test for the relationship between incremental housing improvement and the respondents' education and income levels. An analysis presented in Table 9 revealed that the significant value for the interaction of the dependent variable and income, which is 0.008, is significant at a 0.05 critical value, while the other independent variable (education) is not significant. This result implies that the major motivation behind housing improvement is an increase in the level of income. This result therefore agrees with the theory of Self-help housing by Turner (1972) and the submission of Bahumwire (2015) that income is a salient driver of housing improvements. However, education has nothing to do with housing improvement. These findings corroborate earlier studies, like Stein and Castillo's (2005) in America and Mitlin's (2000) in Brazil, Mexico, India, the Philippines and Thailand, which have established a significant relationship between income and housing improvements.

Table 9. ANOVA Test (Dependent Variable: Incremental Development)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1.208a	11	.110	1.030	.421
Intercept	139.096	1	139.096	1304.545	.000
Education	.090	3	.030	.280	.840
Income	.043	2	.022	.203	.008
*Education * Income*	1.046	6	.174	1.636	.138
Error	25.163	236	.107		
Total	338.000	248			
Corrected Total	26.371	247			

(a. R Squared = .046) (Adjusted R Squared = .001)

Source: Field Survey (2020)

6. Recommendations and Conclusion

The study has examined tenure insecurity and the development of incremental building in the peri-urban zone of Ibadan. Although tenure insecurity is not the major driver of incremental housing development, other factors such as income and mortgage also played significant roles. This could be recommended for further investigation. In order to improve the housing quality and access to secure land in the peri-urban interface of Ibadan, feasible recommendations are suggested by the study. Firstly, from the point of view of physical planners, there is a need to enhance development control activities in the peri-urban zones of Ibadan and other cities in the world as the study reveals that none of the developers had ever received any notice from the respective planning agencies, despite the fact that most of them had no development planning approval. The implication of this will be the further growth of illegal buildings and squatter/informal neighbourhoods, which might not be obvious now, but could have serious implications regarding achieving sustainable development. Since planning is said to be futuristic,

there is a need to arrest or curb the situation before it gets out of control, with the rapid pace of urbanization and the increasing housing need in the city of Ibadan.

Secondly, the study finds that there is an urgent need for government's intervention in terms of the provision of a housing fund and simplified bureaucracy to enhance improved housing development in the peri-urban interfaces. Thirdly, in order to enhance the sense of ownership of the incremental developers and encourage further improvements on their properties, the study suggests the need for government to exercise tenure regularization/ratification in some areas where most land-owners proved to be squatters. This tenure regularization, which is the issuance of a tentative title on land, will enhance incremental developers' access to mortgages because mortgagees only recognize legal documents as evidence of property ownership. Fourthly, with the growth of informal developments becoming prominent in the peri-urban interface, which connotates that the urban poor are desperate for shelter, the study suggests a swift intervention in the production of low-cost housing estates which should adequately target the urban poor. This will practically enhance access to adequate housing and will assist in the reduction of the development of illegal and informal housing in peri-urban interfaces. Furthermore, the paper recommends an outright resurrection and revival of several institutional housing schemes that are either dead or slumbering in cities like Ibadan.

The study also suggests the promotion of good urban land governance, which could be achieved by the formulation of a pragmatic and feasible government policy to halt or curb the activities of speculators and land-grabbers. This approach will enable people, irrespective of their income, gender or social status, to have equal access to land. Moreover, the policy is envisaged to enhance residents' security of tenure and thus give developers the leverage of improving their housing units at will, without the fear of eviction.

Conclusively, the need for an investigation into the motivating factors and construction processes involved in incremental housing development is identified in this study. This future research points at the present study's limitations as the property developers were not part of the study population sampled. In the same instance, observation and data evidence point out that socio-economic variables such as resident income, landlord-tenant conflicts and high rental costs can promote incremental development. Therefore, the authors suggest a further investigation into these identified issues in order to ascertain the extent to which they drive incremental developments.

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