

**ASSESSMENT OF INCREMENTAL HOUSING DEVELOPMENT IN URBAN  
FRINGE: A CASE OF OFADA TOWN, OGUN STATE, NIGERIA**

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## **Abstract**

*Housing is an integral part of human settlement that needs critical observations to accomplish aesthetical and conducive living environment. Nigeria has been expressing numerous migration from rural to urban center with little physical development to absorbed recent migrant. This paper aims at assessing physical and economic characteristics of incremental housing in the urban fringe. The economic activities of the inhabitants and causes of incremental housing in the study area. Data collection was based on structure questionnaire comprising of socio-economic characteristics of respondents, physical characteristic of building/condition, available infrastructure and providers. The survey administered 201 questionnaire to the inhabitants where data collected were analyses and presented in form of percentages. Qualitative and quantitative statistical analysis for validation of decisions. Findings therefore revealed that the high population concentration in Lagos metropolis require additional accommodations in the urban fringe, non-availability of loan, low income and recent development in the use of conventional building material contributed to incremental housing. Government should ensure that, there is legal framework to checkmate the activities of land speculators and adequate infrastructure provision to increase economic activities of the inhabitants.*

## **INTRODUCTION**

The problem of housing in many Sub-Urban African Countries emerge mainly from urbanization without financial development, a phenomenon that portrayed the 1990's making a new type of housing demand (Basorun and Fadairo 2012). The amazing ascent in populace, number and size of our urban communities in the course of recent years have showed in the intense lack of abiding units which brought about overcrowding, high rents, poor urban living conditions, and low foundation administrations and to be sure high wrongdoing rates (Ajanlekoko,2001). As of late urbanization has been joined by globalization, which is connected with the formation of new urban financial centers, expanded interest for administrations and new criteria for selecting and assessing economic activities (Marshall, et al, 2009). The processes of concentration and congestion in inward cities and the inverse procedure of dispersal at the urban edge (Emankhu,et al 2015). The decentralization of activities is very important in urban areas to bring adequate provisions for urban population at the fringe.

Settlements in and on the edges of urban areas in creating nations assume a proportional part to two types of housing in Europe and North America regarding giving open and moderate housing:

the traditional central-area slum housing and low-priced suburban housing (UN-Habitat, 2003). Differences may occur but they are not the same from one country to another or from towns, cities, and regions or from one locality to another. A number of attributes can be used to identify various types of informal housing: size, location, resident profiles and spatial organization (Tsenkova, 2010) but economy play an important role. The critical characteristic of informal housing processes is the incremental nature of house construction, infrastructure installation and provision of basic services (Wakely, 2004). Skewed spatial and financial advantages prevail in Western African urban communities, with the generally poor urban and peri-urban populace remaining basically excluded from socio-economic development opportunities (UN-Habitat, 2014). As the procedure of informality reacts to changing pressures, structures are added, settlements density or expand, occupants change, a rental market arise, grows and struggles for formal recognition and overhauling are very difficult (Huchzermeyer, 2008). The growth of urban populations is happening at a rate many times faster than the capacity to plan, build and manage urban settlements to meet this demand.

Housing qualities and process by which is built and occupied, are key part of the standards of households in developing Countries (Ayejiyo 2011). The physical characteristics of urban fringe comprises of competition and development pressures, landuse relationships and conflicts on land related matters. The limit populace with urban was seized by suburbanization weight, as populace developed with individuals who were not really indigenes (Essien & Akpan, 2013). These households are compelled to utilize informal mechanisms to access houses such as purchasing and illegal sub-divisions or squatting on public land and an incrementally building their abode (Greene & Rojas, 2008). The current rural-urban drift has further added pressure to the available population in most urban centres and the fringe extension (Duru and Auyanwu 2014). Housing in an fundamental part of human settlement that satisfy essential need and has a profoundly affects the quality of life, health, welfare as well as additionally efficiency of man (Ibem & Amole, 2010). Incremental Housing Development is not entirely new as it is fundamental to the traditional process of building houses. In many different part of the country

majorly in the fringe areas of the urban settlement. The procedure of incremental housing has been boundless distinguished as a methods through which a huge number of low pay workers or people have possessed the capacity to provide their own housing units (Wakely, 2015). An important characteristic of both these informal development processes is the incremental nature of house building, infrastructure installation and provision of urban services. Householders create, develop and upgrade their living arrangement when these turn out to be high needs for the venture of their assets and vitality and when expendable assets get to be accessible to them (Wakely, 2015). The lack of planning and budgeting for future low-income settlements remains a persistent problem (Wakely & Riley, 2011). The capability of Incremental Housing as a conceivable answer for housing accessibility, embedded in a participative planning process with the population knowledge and inclusion are a successful solution (Neves, and Amado, 2014). The study aim at assessing incremental housing development in urban fringe: a case study of Ofada town, Obafemi Owode local government area of Ogun state, Nigeria. Despite the presence of physical and regional planning authority in the area, housing continues to develop haphazardly. These above stated problems among many other problems give rise to the question of: what are the factors responsible for incremental housing development in Ofada area of Obafemi - Owode Local Government Area of Ogun State? This study therefore wants to have an in-depth understanding of the causes of these problems and as a means to suggesting appropriate recommendation and solutions towards solving the problems of housing provision in the fringe settlements of Ogun State.

## **OBJECTIVES**

To identify the socio-economic activities of the residents.

To examine the causes of incremental housing in the study area.

## LITERATURE REVIEW

The purpose of this reviews is to know the current and past effort of researchers on the study. The way toward supporting incremental housing systems is a one of a kind vehicle for excusing numerous urban administration forms by degenerating or appointing large portions of the administration's customary duties to the most suitable performing actors (Wakely & Riley, 2011). Alabge and Opoko(2013) concludes that fast increment in populace and urbanization in developing nations made it troublesome or unthinkable for government to address housing issues of citizenry. Urban development had prompted to considerably higher densities of populace and physical advancements in the urban periphery (Amao and Ilesanmi, 2013).

Csatari, Farkas, Lennert, (2013) inferred that urban periphery portrayed with a few difficulties like diminishing hugeness of agribusiness, brisk change of land proprietorship rights, nonattendance of ecological awareness and powerless group arranging and control. Ogral and Onatu, (2013) the subjective examination uncovers that there is a requirement for option component which ought to be point by point with existing activities to expand the entrance to different offices like: credit back, access to endowments and other administration alternatives. The critical characteristic of informal housing development processes is the incremental nature of housing development, stages in amenities provision (Wakely, 2004).

Olayiwola, and Adeleye concluded that, Nigerians need to survive the wounds of homelessness emergence good governance, increased land accessibility through availability of credit, provision of affordable housing and environmentally sound and serviced for human settlements. The inclusion of people in the development of their building was recognized among the lower wage workers as a method for furnishing themselves with moderate housing (Oloruntoba 2013). Globally solution to successful incremental housing is a challenge, but a challenge that need urgent approach to meet the aspirations of people.

Human have turned out to be progressively aware of their capacity to actuate change and this self-learning has been connected increasingly deliberately (UN, 1980). Therefore settlements in the urban area undergo change due to urban growth and with passage of time they are incorporated into the ever-growing urban centre. Manonmani, (2010) city does not grow outwards in well-defined patterns. It sprawls haphazardly, making rapid advances at one point, and hardly moving at all at another. This results into incoherent landscape which is the

characteristics of the fringe. Another characteristic and a unique quality is a wide mix of land uses ranging from a variety of commercial developments, unplanned residential development, insufficient infrastructural services and small scale industries. Urban periphery improvement is not just a procedure of transition land from its country use to urban utilize rather it is a complex process that includes numerous worries, for example, change in land proprietorship design arrive exchange prepare, sorts of advancement, administrative measures and their requirement (Olabode, Elegbede and Babatunde, 2010). The detailed approach to urban edge morphology requires reconciliation of territorial economic and building cycle data with a specific land use and ownership change (Gober and Burns 2002). Csatari et al. (2013) conclude that few variables contributed to the fast pace of changes like the diminishing significance of farming, the fast change of ownership rights, and the absence of environmental consciousness and weak community planning and control.

## **THE STUDY AREA**

Ofada town is situated in the Obafemi - Owode local government Area of Ogun State in Nigeria, The settlement lies south west of Lagos, off Kilometer 39 Lagos – Ibadan Expressway. the site is accessible through the redemption camp, mowe, Abeokuta and sagamu in ogun state. The Geographical Coordinates of Ofada are 6<sup>0</sup> North and 3<sup>0</sup> East the climate is tropically in nature, there is much less Rainfall than the summer also as the temperature in Ofada averages 27.1<sup>0</sup>C while the rainfall averages 1429mm. The Settlement that are closest to ofada settlement ate Bala, Abaren, Kori which its distances are 2.31km, 2.91km and 4.73km respectively. The major stream used mostly by the residents of Ofada is the “Omu River” which is towards the eastern part of the settlement. Ofada area is endowed with vast fertile land suitable for the cultivation of Ofada Rice, kolanuts, Sugarcane, Maize, cassava, Tomatoes and a wide range of vegetables. The area is generally regarded as the home of OFADA RICE. However, the predominant economic activities found in Ofada Area are Agrarian that is farm cultivation for the planting of food and cash crops even arable crops. Some of the inhabitant also engage in livestock rearing (poultry and fisheries) while others are civil servants, hunters and traders. In recent times the people of Ofada also engage in quarrying, artisan works and handicraft (e.g. tie and dye). The major landmarks in this area is the youth center and the area also boast of privately owned hotels, recreational and relaxation centers for the comfort of the residents. Moreover, the

major religions that are predominant in the study area are, Christianity, Islam and Traditional worshippers as they have festivals such as the Oro, Egungun, Ogun, among many other traditional festivals being present at the study area. Though the majority of the Residents of Ofada are Christians and Muslim while only few are traditional worshippers.

## **RESEARCH METHOD**

The study used primary and secondary sources of data. In the primary data; structured questionnaire was designed to covered personal data, social economic characteristics, infrastructure facilities, Housing survey and challenges on their involvement. A total number of 201 questionnaires was administered with systematic random sampling techniques to select the respondents on the principle of one from every ten (10) buildings. While the secondary sources emanates from past study on the issue and relevant text books and journals. Therefore both Descriptive and inferential statistics are used in the analysis of data obtained from the study area.

## **FINDINGS AND DISCUSSION**

### **Socio-economic profile of respondents**

The analysis revealed that, the area shows economic characteristics of the people in the area, farmers 47.4%, trader 29.8% and civil servant 22.8%. This shows that farmers and trader are predominantly more in the area while civil servant are of minority. The settlement is majorly known for their agricultural activities in the local government as well as in Ogun state, for production of rice and other farm products but the recent development in the area have reduced available land for farming. Viable economic activities in any area is to improve living standards (Ajanlekoko, 2001). The findings indicate that, 42.1% of the residents are self-employed, pensioners, 35.1%, public is 12.3% and private is 10.5%. This shows that artisans are more followed by pensioner, public and private employment, due to the congestion and urbanization challenges in Lagos prompt the people to move to fringe areas. The educational background of the people in the area as analyzed are secondary education is 36.8%, primary education 33.3%, tertiary education 19.3% and no formal education is 10.5% respectively. This indicates that secondary and primary education are more in the area than both tertiary and no formal education. This has encourage high rate of artisanship in the settlement. The level of income per annum of the residents are analyzed as follows, #60, 000 & above is 50.9%, #60,000-40000 is 28.1%, less than #18,000 is 12.3%. Majority of the residents received above minimum wage which is

#18,000 but considering their status (level of education and employment) they preferred to build their houses incrementally.

### **Housing and Infrastructure Analysis**

The findings shows the level of completion in housing. Those that are near completion is 40.4%, two or more rooms is 33.3%, and core housing is 14% while those that are completed remains 12.3%. The local materials used in building construction is 43.9% while the imported materials is 56.1%. This shows that more of imported materials are used in building construction in the area than the local ones, the conventional building materials are more expensive than the local building material that are affordable and surplus. The infrastructural analysis shows people is opinion as follows strongly agree is 31.6%, agree is 26.3%, strongly disagree is 24.6% while disagree is 17.5% respectively. The infrastructure provision in the area is a basically in conjunction with inhabitants and the government, most of the facilities are located at the core area while h incremental structure the areas dominated with incremental structure lack adequate infrastructure to support conducive living at that point individual provide electricity pole etc.



Plate1: Showing accessibility



Plate2: Showing building condition

Age of building in the study area, 5-10 years is 36.8%, 15-20 years is 26.3%, less than 5 years is 14%, 20 years & above is 12.3% while 10-15 years is 10.5 years. This shows that the oldest building in the area falls between 20 years & above which is 12.3%, while others fall below 20 years. Building age analysis the recently construction of housing at study area resulted from the congestion of Lagos that required accommodation along the fringe of the state. The old building above 20 years surface at core of the town while the new building spread towards the boundaries. Nonetheless, more profound understanding into these peripheries, which are liable to



uncertainty, casualness and lawlessness with regards to formal arranging procedures, can explain other options to prevailing planning and management directions (Marshall, et al, 2009). the Physical Characteristics and condition of building depends on the income of the occupants.

The loan accessibility for building construction by the people are 29.8% for strongly agree, 28.1% for agree, 24.6% for disagree while strongly disagree is 17.5%. 29.8% and 28.1% believed that when loan is accessed it will facilitate building construction while 24.6% & 17.5% do not support the idea. From findings , it was observed that those that support loan as a source of finance for building construction are predominantly civil servant and retirees but from findings where it can be easily deducted from the source of their income. While the others engage in incremental means to provision adequate shelter. Those that support the mortgage banks for housing loans are 61.4% for agree and 17.5 for strongly agree while 17.5% and 3.5% are for disagree and strongly disagree. Other means of encouraging housing construction were not given adequate attention like provision of infrastructure and cooperative funding (Olayiwola, Adeleye, and Ogunshakin, 2005). Those that supported bank charges on loan collection should be affordable are 66.7% while those that do not are 33.3 % respectively, This shows that most people who built houses in the area used bank loans.



Plate:3,4&5 Showing existing structures in the study area

Indebt interview conducted revealed that lands in that area are controlled by families whereby giving room for the activities of land speculators, this causes chaos in the environment because individual have accessibility to land without government regulations. The influx of the religious

activities along the axis increase value of land. Ofada is within Ogun state controlled by the Ogun state planning board under the jurisdiction of Mowe/ Ibafo local planning authority. The study revealed that 20% of buildings have approved building plan while other based their refusal on the processes involved in building construction that when the house is completed then approval will follow. Development control is a necessary tools in fringe areas, planning and building control will create conducive environment for proper and efficient carrying out of incremental development of buildings in the area. there is high population concentration in core areas of the urban centers and there is neglection of the Fringe areas which makes the areas unplanned and resulting to improper planning, there are existing government policies towards housing provision in the study area which is the policy of getting approval for every development in the study area and the planning authority is solely responsible for controlling of housing development in the study area but the planning authority lack adequate personnel and tools for effectively carrying out their responsibility for monitoring and controlling development in the study area but the planning authority lack adequate personnel and necessary tools to effectively carry out their responsibilities of monitoring and controlling development in the study area.

### Regression

In table 1, the table revealed the variables used for the study, that is, the income and occupation serving as the independent variables while the dependent variable is the Level of Completion of the building.

**Table 1: Variables Entered/Removed**

Model	Variables Entered	Variables Removed	Method
1	Income, Occupation <sup>b</sup>		Enter

a. Dependent Variable: Level of Completion

b. All requested variables entered.

The model summary is in table 2 above, this shows that there is a very strong positive relationship between level of completion of a building, income and Occupation with correlation coefficient (R) of 0.989 and adjusted R square ( $R^2$ ) values is 0.887. Which mean that 79% to 89% of variation between level of completion of a building, income and occupation.

**Table 2:Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.989 <sup>a</sup>	.893	.887	.41323

a. Predictors: (Constant), Income, Occupation

**Table 3:ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.989	2	32.995	400.046	.000 <sup>b</sup>
	Residual	8.856	199	.164		
	Total	74.845	201			

a. Dependent Variable: Level of Completion

b. Predictors: (Constant), Income, Occupation

Table 3, which is the ANOVA table indicates that the model so derived is a good model as it well describe the relationship between level of completion of a building with respect to income and occupation. The model is highly significant with p-value of 0.000 which shows that the model is adequate and sufficient. Since the F. Calculated value is greater than the F tabulation value.

**Table 4:Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.089	.176		.503	.617
	Income	.762	.053	.889	14.419	.000
	Occupation	.838	.068	.858	12.379	.000

a. Dependent Variable: Level of Completion

The model is:  $\text{Level of Completion} = 0.089 + 0.762 \text{ Income} + 0.838 \text{ Occupation}$

It is noticed that the p-value for the two independent variables are highly significant, signifying that they are essential variables in building completion. The constant value (intercept) in the model indicates that for an unemployed owner of a building under construction, the building stand a chance of completing the building by 8.9%. Also, a unit increase in income will cause 76.2% increase in completion of the building and a unit increase in occupation will cause 83.8% increase in the completion of the building. This is supported by the coefficient of determination R-square in table 2 which indicates that about 79.2% completion of a building is caused by the joint effect of Income and Occupation.

## **CONCLUSION AND RECOMMENDATION**

The main focus of this research was on the assessment of incremental housing project in urban fringe. The settlement majorly known for their agricultural activities in the local government as well as in Ogun state for production of rice and other farm products, but the recent development in the area have reduced available land for farming. It was discovered that housing form the highest priority of individuals living in the area. Failure of government to meet the housing needs the citizenry in giving helpful or satisfactory settlement, Increase in populace development and constrained monetary asset, housing nations to be among the real social issues confronting developing countries (Yust et.al 1997). Nigeria is not excluded from the problem. Secondly, the study revealed that congestion of urban core prompted the people to settle in the area. The current expenditure of household is higher, which affect the savings, these cannot allowed attention on urgent need of housing therefore depend on gradual processing. Finding from the study also emphasis that issue of building material should be sourced locally to reduce cost incurred on housing production. The use of onsite materials to encourage housing productions is an affordable and environmentally sustainable solution including reduction in transport costs and providing job to improve local economy (Neves, and Amado, 2014). The result of this study recommends that government should provide social amenities in urban fringe to commensurate the effort to low income earners moving towards the area, the fringe benefit will increase level of hygiene and promote conducive living environment. The government should ensure that there is a robust legal framework underpinning the role of land speculators which is the major problem in fringe areas

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