

Drivers Of Housing Development In Ibeju-Lekki, Lagos Peri-Urban Settlement

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Abstract: As a result of saturation of spatial area of the urban core and availability of land in the peri-urban, government policy is aimed at developing the peri-urban to address the housing deficit in Lagos. This study examines the driving forces of housing development in Ibeju-Lekki, a peri-urban settlement in Lagos, Nigeria, to be used as a model for policy intervention on housing development. This study is built on the analysis of primary data from the fieldwork and the supplementary secondary data. The results show that affordable land for housing and commercial development is the major factors driving the growth of development in the peri-urban. A test of independence is submitted to test the validity of the hypothesis on the factors driving the development process in the peri-urban. The result indicates the need for a strict land zoning policy and enforcement of planning regulations to curtail informality and ensure a sustainable development.

Keywords: Urbanisation, Peri-Urban, Housing Development, Ibeju-Lekki.

I. INTRODUCTION

Urbanisation finds expression in outward expansion of built up area and conversion of prime agricultural lands in the peri-urban into residential and industrial uses. By 2025, Lagos is supposed to be the 11th most populous city in the world (United Nations, 2016). One of the major effects of urbanisation in Lagos is inadequate and affordable housing. Lagos state is spatially the smallest state in Nigeria with approximately 3, 577 square kilometers out of which 39% are wetlands (Dekolo & Oduwaye, 2011) and which constitutes 0.4% of Nigeria's total land mass (Opoko & Oluwatayo, 2014). An estimate of 2.55 million new homes is required for the next 5 years to meet housing needs of Lagos State. The state currently records approximately 20,000 people per square kilometer (LASG Economic Intelligence Unit (EIU), 2012).

There is a remarkable strain on housing and serviced land created by the rapid urbanisation. Household size has reduced to 3.8 persons per household from the 6.3 person per household provided for in the master plan thus calling for more housing units to supply more household formation. Expansion in Lagos is not just demographically but also spatially. Demand for housing in the peri-urban housing grew as limited land mass, high percentage of wetland, high table water has impacted negatively on the availability of land for housing in the urban core. Also prohibitive cost of renting accommodation in the city centre is an issue. There is an exponential rise in the price of land in metropolitan Lagos pushing the urban poor and low middle class to the city periphery. The establishment of new neighbourhood and satellite towns in the peri-urban including social and physical infrastructure is the ideal solution to housing challenges in Lagos State.

II. AIM OF THE STUDY

The aim of this study is to investigate the factors driving housing progress in Ibeju-Lekki Local Government Area in Lagos, Nigeria. The findings will guide in determining the pattern of growth and ultimate integration to the metropolitan region.

III. LITERATURE REVIEW ON DRIVER OF HOUSING DEVELOPMENT IN THE PERI-URBAN

Identifying the causative factors driving peri-urban growth calls for an understanding of human behavior, decision making process and interaction with geophysical settings and changes (Fazal, Banu, & Sultana, 2015). There are driving forces and conditioning forces behind the growth of the peri-urban. Driving forces are the result of complex interactions among social, economic, demographic forces and they usually operate more diffusely bearing over stable conditioning forces. Conditioning forces are relatively unchanging though may vary spatially in physical or cultural values. They involve physical actions in land transformation impacting at local levels.

There are factors driving the growth of the peri-urban. They determine the trends and patterns of growth. Notable actors are peri-urban farmers, peri-urban residents, entrepreneurs, property developers and government institutions (Salem, 2015). As residents, local land owning community and outside settlers, land acquisition by these actors are primarily for residential purposes. Entrepreneurs represent the demand side of the land market. They require space for commercial and industrial activities. Property developers control the supply and demand of land market. They have a greater hold on monetary and political powers, often not belonging to the village's community. They are associated with development of residential, commercial and industrial premises. They fill in the gap made by laxity of government in term of formal control, (Salem, 2015).

Attributed to driving peri-urban housing are limited and expensive land in the city core or built up area, response to improved transportation links and enhanced personal mobility in the city and provision of cheap land as an attractive target for investors' and developers. Another factor that has not much been discussed as a driver of peri-urban housing is the negative aspects of the city core like poor environment, social problems and pollutions. Some migrants see the peri-urban more serene for living than the city centre (Cobbinah & Amoako, 2012). Drivers for middle class differ from that of lower class peri-urban residents. For the middle class, the prevailing overcrowding and poor environmental quality is the motive for seeking for housing in the exclusive gated residential development at the peri-urban, (Acheampong & Anokye, 2013).

Noticed to have contributed to the peri-urban housing in Lagos are saturation of metropolitan Lagos, easy linkage with Lagos metropolis, potential for expansion and strong local growth for informal activities (Binns, Maconachie, & Tanko, 2003; Lawanson, Yadau, & Salako, 2012). Drivers of housing expansion are perceived infrastructural development, presence

of improved socio-economic activities and development of the tourism sector. Easy access of land for housing development is the main pull factor for potential residential developers for acquisition of land for building and commercial purposes (Appiah, Bugri, Forkuo, & Boateng, 2014).

Also the spread of basic amenities likes schools, clinics and potable water. The promotion of private sector as the engines of growth in developing countries by the OECD, 2006 led to promotion of private sectors in real estate development, tourism and hospitality. This has resulted in a steady growth in the peri-urban of most developing countries. Industrial development encourages the growth of cities. This creates attraction to the peri-urban in search of profitable opportunities. Industrial development does not exist without growth of service and commercial activities which in turn attract people to seek housing in the peri-urban (Cobbinah & Amoako, 2012). Identifying the causative factors driving peri-urban growth calls for an understanding of human behavior, decision making process and interaction with geophysical settings and changes (Fazal, Banu, & Sultana, 2015).

Peri-urban housing development in Greater Cairo as researched by (Salem, 2015) is driven by the provision of affordable housing solutions in the informal housing markets. Land accessibility at low cost is the primary driver of peri-urban settlement growth in Greater Cairo. Driving forces can either be push or pull. Push forces are involuntary movement due to displacement from the inner city or rural residents on land acquired for redevelopment. In Indonesia, the pull factors for peri-urban growth are opportunity to become involved in small industry, better living condition, and cheaper land for housing, property investment for the future and the presence of public and private institutions, also universities (Pradoto, 2012).

Housing development in the peri-urban is usually triggered by the urban expansion of the city. Rise in population leads to an increase in land demand for housing and other developmental needs (Fitra & Pradoto, 2014). Peri-urban settlements grew in Ghana to accommodate overspill of industrial activities and to offer housing for the urban population excesses from the congested city core (Acheampong & Anokye, 2013). Stimulating the growth of housing in the peripheral of city is also attributed to central city shifting its economy to service sectors, conversion of residential buildings to commercial or mixed use thus leading to creation of housing demand in the peri-urban (Shen & Wu, 2013). There are also seized opportunities in real estate development in creating well planned towns. Residents from central districts are moving to the peri-urban for better housing condition also stimulate the housing market growth in the peripheral (Pow, 2009).

Housing in the peri-urban is also identified as means of capital investment because of the threshold of entry that is relatively low. Location of housing in the peri-urban is given in transport, accessibility to employment and services. Although land values have a role, urban expansion is not without physical and policy constraints (Ravetz, Fertner, & Nielsen, 2013). In answering the question of what drives the growth in demand for land and building; and what enables the supply of development in the peri-urban, demographic social dynamics driven by population change, continuous decrease in

the average household size ages thus affecting the demand for housing, urban-rural migration favoured by spatial policy and improved transport and communications are factors to consider.

In a study conducted on the driving forces of residential development in a Chinese peri-urban, settlement patterns of peri-urban built up areas were noted to have axial expansion around the city core. Noted to have aided the growth of the peri-urban, was the linkage to the city core made possible via the development of roads along prominent urban corridors. Contributing also to the residential growth, were rapid development of infrastructure facilities and government-led housing development (Wu, Zhang, & Webster, 2013). Owing to the strategic location and multifunctional nature of peri-urban areas, there has been continuous push and pull tendencies from cities and the surrounding rural areas (Appiah, Bugri, Forkuo, & Boateng, 2014). Drivers of growth constitute among many, affordable rent in comparison to city and big towns (Lawanson, Yada, & Salako, 2012). There is uniqueness in driving forces of Chinese peri-urban housing. Relaxation of urban population control and the abandonment of welfare housing allocation system, the rise of consumer culture and changes in the quality and infrastructure development of the peri-urban have been noted as a major contribution to housing development in China peri-urban.

The peri-urban is emerging with massive investment in housing development and infrastructure development. Lower houses price, large living space and a better environment can be achieved. Moreover, property developers are packaging gated communities with high quality in standard to meet home buyers demand, (Shen & Wu, 2013). Urban expansion in the peri-urban is dictated by economic growth and restructuring employment opportunities, growth of transport infrastructure, population growth, household size change and decline in traditional rural-economies. Intangible impacts are considered in form of social segregation, changes in socio-cultural lifestyles (Piorr, Ravetz, & Tosics, 2011). Profitable growth contributes to peri-urban growth due to push of urban crowding and congestion thus need for relocation of economic activity to peri-urban zones aided by access to large land and major roads.

The peri-urban is a matter of investment for entrepreneurs, property developers and individuals. Spatial segregation and social fragmentation is aided by social and cultural preferences for housing locations. Settlements are segregated by kinship, income level and income groups. Socio-spatial segregation encourages gated communities, removal of local community services and urban sprawl. Self-determined lifestyle results in fewer people per household with growth in housing area demand. There are for two types of actors in the development of the peri-urban, the moving actors and non-moving actors. Moving actors are households, industry, businesses, leisure centres; and the non-moving factors are land owners and developers (Piorr, Ravetz, & Tosics, 2011). Improved mobility aids urban expansion. It encourages longer distance of commuting and the poor bear the burden of commuting.

The peri-urban serves as a multifunctional territory and the location for the likes of airports, high value housing. To developers, investors and business owners, the peri-urban give

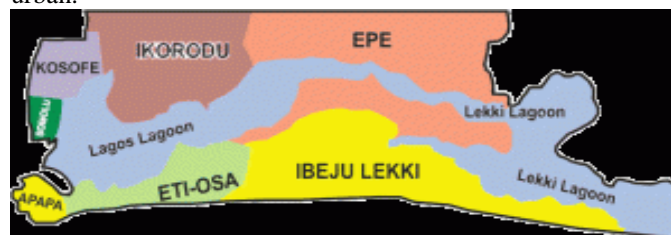
easier access to markets and higher profits with less investment. Entrepreneurs benefit from the potential pool of skilled workers. The moving actors are always bringing pressure to bear on the non-moving actors. Peri-urban is a rapidly growing multifunctional territory, with globalized industries, high mobility and transport dependence, fragmented communities and degraded landscapes. Peri-urban development is determined by the property (Piorr, Ravetz, & Tosics, 2011). There is tendency for the location of high value housing in a high quality environment and segregated from other social groups. Also there exist social housing and self-help housing with multiple problems.

IV. THE SCOPE OF THE STUDY

The spatial scope of this research will be limited to the identified peri-urban regions recognised by the Lagos State Government in Ibeju-Lekki Local government which covers 455 kilometer squares in land mass. The sample frame constitutes the existing buildings in the peri-urban as identified by the state government in the Lagos State Digest of 2013, which is the only current publication on the number of houses in Lagos State. The temporal scope would cover a period from 2006 to 2016. 2006 is selected as a base line because there was an accompanying data on population and housing units as captured by the National Population Commission. The scope of this study includes the examination of all the drivers of housing development in Lagos peri-urban settlement of Ibeju-Lekki, local government. Lagos, Nigeria.

V. THE STUDY AREA

Ibeju -Lekki Local Government Area is located at approximately latitude 40 15' north latitude 40 17' north and longitude 13015' east and 13020' east. It is bounded in the north by Ogun State and in the west by Eti-Osa Local Government. It is bounded on the east by Epe Local Government and joined in the south, by the Atlantic Ocean. It has a land mass of 455 kilometers square, which is approximately one quarter of the total land mass of Lagos State. There are 156 communities in Ibeju-Lekki, out of which 16 are considered to be peri-urban settlements. The population increased from 117,481 in 2006 to 179,189 in 2016 showing a continuous migration from Lagos urban centres to the peri-urban.



Source: Wikipedia

Figure 1: Map of Lagos State Showing Ibeju-Lekki Local Government Area

S/N	POPULATION(2006)	LAND MASS(Km2)	NO OF SETTLEMENTS	PERI-URBAN SETTLEMENTS	HOUSING UNITS(2006)	LOCATION
IBEJU-LEKKI	117,481	455	156	16	11,746	NORTH

Source: Centre for Rural Development, Lagos State Ministry of Rural Development (Year 2013)

Table 1: Selected Study Area In Lagos

VI. METHODOLOGY

This research adopts both qualitative and quantitative research methods. Qualitative method is used for in-depth analysis of case studies while quantitative method is adopted in answering questions on socio-economic variables, and also for better statistical aggregation of data.

A. THE RESEARCH STRATEGY

Case study approach was used to conduct fieldwork and to examine the actual phenomenon of the settlements in their natural context with regard to the spatial boundaries and changes. Case study method is ideal for investigating a contemporary phenomenon in its real context. In most peri-urban settlements, boundaries phenomenon and context are not well evident thus making case study the most flexible among research designs (Fazal, Banu, & Sultana, 2015). The case study approach helped at complementing the information from quantitative and qualitative data collected during survey research.

The selection of Ibeju-Lekki is based on the following criteria:

- ✓ Prevailing different drivers of urban expansion.
- ✓ Increasing socio-economic transformation and its impact on the housing character.
- ✓ Increase in number of peri-urban settlements over a period of ten years (2006- 2016).
- ✓ Improved linkages to adjoining states and good rural-urban linkages.

B. SOURCES OF DATA

Data collection for this study came through two sources, namely primary and secondary sources. Sources of primary data are structured interview and questionnaires. Structured questionnaires were developed and administered through personal interviews to collect primary data on a range of relevant socio-economic variables, demography, drivers of housing development, land uses and socio-economic challenges at the household level. A total of three hundred and seventy (370) questionnaires were administered randomly and a sum of three hundred and thirty six respondents (336) was returned to collect information as related to the study. The data collected was analysed using descriptive and inferential statistics. Semi-structured interview was gathered from all stakeholders as primary source of data. In accordance with the main objectives of the paper, the field survey instruments were designed and the personal interviews was conducted to address the research question. Secondary data was sourced from the following medium; archival methods, desk-study of

relevant publications and reports were used to complement the primary data.

C. TARGET POPULATION

- ✓ Residents within active years of 18-60 years and community heads
- ✓ Private developers
- ✓ Medium scale business owners
- ✓ District planning officials.
- ✓ Professionals like Architects, Town Planners, Estate Surveyors and Land Surveyors.

D. SAMPLING TECHNIQUES

- ✓ Cluster Sampling: Cluster sampling technique was used to show the extent of urban expansion. For adequate coverage, an earlier map (of the base line year, 2006) of the selected settlements was georeferenced with GIS imagery.
- ✓ Stratified purposeful & Random Sampling: stratified sampling method was used for collecting appropriate data of various types of drivers of housing development and socio-economic characteristics. Random sampling technique was utilized to collect data through survey research questionnaires and structured interviews, the major data collection instruments.

E. SAMPLE FRAME AND SAMPLE SIZE

The sample frame is the basis of material from which the sample is selected. The primary sample frame for this research is the sum number of identified residential properties in Ibeju-Lekki. Using Lagos State Government Digest of Statistics, 2013, identified residential properties for Ibeju-Lekki are 11,746.

a. POPULATION ESTIMATION AND SAMPLE SIZE

For adequate representation of the target population, the sample size will be from the population of the residents and the housing units.

Year	Population (POP2016=POP2006*(1+0.124) ¹⁰)	Identified Properties	Sample size
1991	24,937	1,635	
2006	117,481	7,701	
2012	154,507	10,128	
2016	179,187	11,746	*370

Source: National Population Commission; LASG Digest, 2013.

Sample Size: Author's Fieldwork.

Table 2: Sample Size

VII. ANALYSIS OF FINDINGS

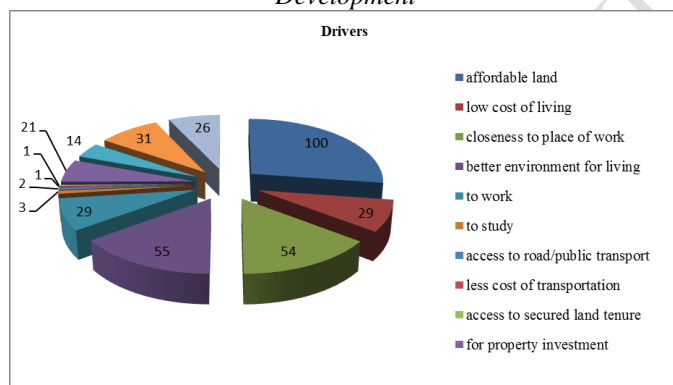
The studies in table 3 below shows that 27.3% of sample respondents' stated that affordable land for housing and commercial development is one of the major drivers of

housing development, 15% listed better environment for living matter, 14.8% chose closeness to place of work, 8.5% driven by desire to leave inheritance for children, 7.9% were driven by low cost of living, 7.9% stated availability of work as a driver, 7.1% driven by closeness to family and tribesmen, 5.7% showed that property investment is a drive, 3.8% driven by cooperative and freedom of land from government acquisition 0.8% were driven because of study, 0.5% were influenced by access to road and public transport, 0.3% by less cost of transportation, and 0.3% driven by access to secured land tenure.

Drivers	Frequency	Percent
Affordable Land	100	27.3
Low Cost Of Living	29	7.9
Closeness To Place Of Work	54	14.8
Better Environment For Living	55	15
To Work	29	7.9
To Study	3	0.8
Access To Road/Public Transport	2	0.5
Less Cost Of Transportation	1	0.3
Access To Secured Land Tenure	1	0.3
For Property Investment	21	5.7
Cooperative And Free From Government Acquisition	14	3.8
Leave Inheritance For My Children	31	8.5
Closeness To Family And Tribesmen	26	7.1
Total	366	100

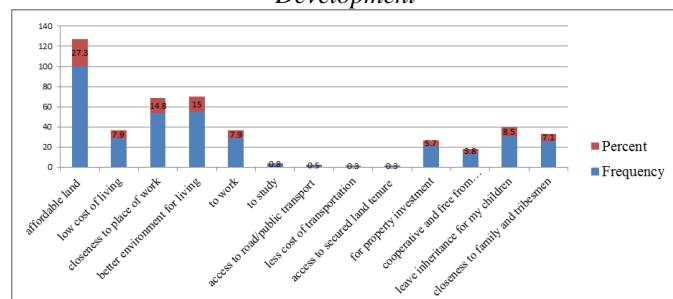
Source: Field Survey, August 2016.

Table 3: Analysis of Respondents' Drivers of Housing Development



Source: Field Survey, August 2016

Figure 2: Analysis of Respondents' Drivers Of Housing Development



Source: Field Survey, August 2016

Figure 3: Charts Showing Analysis Of Drivers Of Housing Development

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups (Combined)	532.001	7	76.000	4.654	.000
Linear Term Unweighted	94.287	1	94.287	5.773	.017
Weighted	99.887	1	99.887	6.116	.014
Deviation	432.113	6	72.019	4.410	.000
Within Groups	5846.677	358	16.331		
Total	6378.678	365			

Source: Field Survey, August 2016.

Table 4: Analysis Of Variance

The ANOVA shows that there is relative significance between some drivers which include better environment for living, closeness to place of work, affordable land, inheritance for children, closeness to work, low cost of living, closeness to family and tribesmen, and property investment.

VIII. DISCUSSION AND, CONCLUSIONS

Among many factors, the growth of housing development in Ibeju-Lekki was found to have been driven predominantly between year 2006 to year 2016 for affordable land for housing and other socio-economic developments, closeness to work, better environment for living and investment decision. These factors were also found to have driven growth in other studies. The prominence of land affordability as a driver of growth shows the impact of high cost of housing in the urban core on the growth of the peri-urban. Also observed to have aided development is government policy that favours zoning of industrial development in the city periphery.

Ibeju-Lekki has changed in land use due to conversion of agricultural land to residential and other developments. Government policy through housing initiative in the peri-urban has also brought about infrastructure development. In term of urban housing demand and supply, urban housing demand pattern is similar across cities in developing countries but the response through supply differs, it is a function of the efficiency of the public provision, (Adell, 1999). Housing prices and rents are lower at the periphery than at the city centres. Large household is mostly decentralized than small households. Influx of people to the peri-urban, especially the middle income groups have increased land speculation and culminate in a strong dynamic activities of developers not under regulation of the state.

In conclusion, there should be integration of the emerging peri-urban to the main metropolitan region. The peri-urban is a multipurpose interface serving both housing and socio-economic needs. Urban policy should study the pattern of growth and provide serviced land with efficient infrastructure services. Strict zoning should be enforced to curtail informality and the activities of land speculators should be checked.

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