# Factors Influencing Housing Development in Lagos Peri-Urban Settlements: Cases of Ibeju-Lekki And Ikorodu

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### **ABSTRACT**

This paper examines the factors influencing peri-urban housing development in Lagos with focus on the drivers of rapid spatial changes in the case studies of Ibeju-Lekki and Ikorodu, both rapidly urbanizing peri-urban settlements in Lagos, Nigeria. Data was collected through primary source by administration of 373 and 384 questionnaires to household heads in purposively selected peri-urban settlements in Ibeju-lekki and in Ikorodu, Lagos respectively. The quantitative data was analysed using descriptive statistics and factor analysis. The result shows that major factors influencing peri-urban housing development in the study area are land affordability, low cost of living, easy linkage, proximity to the urban centre and provision of better quality housing through exclusive gated housing development. The study recommends a re-classification of Lagos peri-urban settlements based on change in land use due to housing development. This can be achieved through an appropriate policy design for improved infrastructural development and also to curtail unsustainable development pattern.

**Keywords:** Urbanisation, Lagos peri-urban, Housing Development, Ibeju-Lekki, Ikorodu.

### INTRODUCTION

The emergence of housing development outside Lagos metropolitan region is a phenomenon that is occurring in large scale like other in other cities peripheral in developing countries (Allen, 2003; Simon, McGregor, & Nsiah-Gyabaah, 2004; Lawanson, Yadua, & Salako, 2012). Rural areas located on the outskirts of Lagos metropolitan region is becoming urban in nature and thus has become a source of concern to urban planners and development experts. Rapid urban population growth and the need for households to acquire land for residential development are major factors driving Lagos peri-urban housing development. The rapid expansion of urban areas to surrounding suburbia, rural areas formerly designated for agriculture is as a result of urbanisation-induced

spatial demands for housing and socio-economic activities in most developing countries (Adell, 1999; Webster, Cai, Muller, & Luo, 2003; Pacione, 2009). The study by Law, Rogan, Zoghaib, & Zarges (2008) indicates that residential land comprised over 50 percent of all major urban land uses in peri-urban settlements, noting that one of the key drivers of periurban housing development is the availability of cheap housing for urban middle class and low-income groups. It has been argued by Nwokoro & Dekolo (2012) that most recent expansion in Lagos has been in the peri-urban. In addition to the guest for land for housing development, improved transport infrastructure has aided the emergence, development and growth of most peri-urban areas (Lawanson, 2005). The challenge of housing in the city centre has

influenced housing development in the peri-urban, because of high population growth rate and poor government intervention in housing development for the low-income group (Jiboye, 2011). With limited land supply and continuous population growth, the creation of satellite towns in Lagos peri-urban is ideal for mitigating the unabated housing challenge in Lagos State (Towry-Coker, 2002).

The socio-demography of the residents in the peri-urban greatly influence the affordability, housing typology, and the quality of housing. There is need to put into consideration the socio-economic attributes of the different income groups of the migrants in both government-led and private organisation-led housing developments (Shen & Wu, 2013). Associated mostly with households in the peri-urban are the low-income group and the middle-income group. Regarding tenure in the peri-urban housing developments, owner occupied housing is known to be common among the educated middle-income group while the tenure among the low-income group is partly owned and rented. Also, each economic group have different motivation for living in the peri-urban, to the lowincome group, affordability of housing is the major motivation but to the middle and high-income group, they seek better environmental quality by relocating to the peri-urban for housing.

With the peripheral areas playing vital role in housing development, it is necessary for government to play a strategic role in building a balanced city by developing infrastructure and policy that could guide in managing the spatial growth of Lagos peri-urban in achieving sustainable development. Therefore, the objective of this study is to examine the factors influencing housing development in Lagos peri-urban settlements from residents' perception. Focus specifically will be on residents' motivation for living in the selected peri-urban settlements and the various housing initiatives in the study area.

## The review of literature

Based on literature, two definitional approaches can be adopted in explaining the peri-urban interface. The first approach uses discrete spatial limit in defining

the interface. Generally, a distance of about 30-50 kilometers beyond the urban built up edge is recognized for generalizing the extent of the peri-urban interface in large cities. However, a distance of about 150 kilometers from the main built-up area of cities and 300 kilometers in the case of larger cities may constitute the peri-urban interface by (Webster, Cai, Muller, & Luo, 2003). The second approach to defining the peri-urban interface adopts a broader and more functional parameter. It considers the rural-urban continuum in defining the interface. This concept sees the interface as a zone between fully urbanized land in cities and areas used formerly for agricultural purposes (Allen, 2003).

Peri-urban settlements suffer from a lack of infrastructural development. These areas are expanding rapidly with an increasing number of people occupying them for housing and providing essential life support services for urban residents (Puttal & Ravadi, 2014). Noted also to have contributed also to driving peri-urban housing are limited and expensive land in the city core or built up area, improved transportation links, enhanced personal mobility, and availability of cheap land for investors and developers (Acheampong & Anokye, 2013). Findings also shows another factor that enhances peri-urban housing development is environmental pollution and societal challenges in the city core. Some migrants see the peri-urban as possessing better housing quality than the city central.

Further asserted by Cobbinah and Amoako (2012) was that industrial development promotes the growth of cities. This creates attraction to the periurban in search of economic opportunities. As investigated by Salem (2015), housing development in the peri-urban of Greater Cairo is made possible by land affordability and access given to the informal housing markets, who are the major drivers of periurban residential development. Wu, Zhang, & Webster (2013) posited also that economic reform contributed to the growth of Chinese peri-urban settlement. Most peri-urban settlement grew to provide housing for the increasing population, also to provide housing for workers by corporate organization and government bodies. Land in the city core is expensive and not

within the reach of low and middle-income earners for housing development thus the movement to the periurban for affordable land for residential development either by individuals or corporate organisations.

Transport and communications are key factors in addition to infrastructure in facilitating and encouraging urban-rural migration regarded as counter urbanisation. Also, Maryati and Humaira (2015), noted that the peri-urban grew because rapid development cannot be accommodated only by the core areas in term of land availability. Housing development in the peri-urban is usually triggered by the urban expansion of the city. Increase in population leads to an increase in land demand for housing and other developmental needs as investigated by Fitra and Pradoto(2014) in Indonesia. This is partially responsible for the growth of peri-urban in Lagos

The conditioning forces operating at the Lagos peri-urban level are mainly voluntary movement due to displacement from inner city as a result of high cost of housing or displacement of rural residents due to acquisition of rural land for redevelopment while the driving forces are the quest for personal housing, improved infrastructure and services and closeness to places of work made achievable by improved transportation as indicated by Lawanson, Yadua, & Salako (2012) on investigation of the urban-rural linkage in Lagos metropolitan region.

There are two types of actors in the development of the peri-urban, the moving actors and non-moving actors. Notable actors are peri-urban farmers, peri-urban residents, entrepreneurs, property developers and government institutions (Salem, 2015). Moving actors are households, industry, businesses, leisure centres; and the non-moving actors are land owners and developers (Piorr, Ravetz, & Tosics, 2011). Land acquisition by residents, local land-owning community and outside settlers are primarily for residential purposes. The major drivers of peri-urban development are population, housing, services, infrastructure, economy and employment.

There are driving forces and conditioning forces behind the multi-dimensional development in the peri-urban. Driving forces can either be push or

pull. Push forces are involuntary movement due to displacement from inner city or rural residents land acquired for redevelopment. The pull factors for periurban growth may be an opportunity to engage 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).

In Nigerian cities, citing Lagos as an example, the urban periphery serves as the attraction points of investment and land intensive industrial activities (McGregor, Simon, & Kwasi, 2004). The periurban is emerging with massive investment in housing development and infrastructure development. Lower houses price, large living space and better environment were motivation for relocation to Lagos peri-urban. In Lagos, drivers of peri-urban housing growth constitute among many, affordable rent in comparison to city and big towns. In most cases, the peri-urban housing development is shaped by the property market (Piorr, Ravetz, & Tosics, 2011).

# The context of the study

The selected case studies of Ibeju-Lekki and Ikorodu are both Local Governments in Lagos State, which is one of the six south-western states in the Federal Republic of Nigeria. Lagos State was created on May 27, 1967 by Decree No. 14 of 1967. Geographically, Lagos State share boundaries with Ogun State both in the north, east and in the west with the Republic of Benin. It stretches in the south for 180 kilometers along the coast of the Atlantic Ocean. It lies on the coastal flood plain of the Bight 0.4% of Benin, approximately between Latitudes 6° 23' N - 6° 41'N and Longitudes 2° 42'E-3° 41'E. Nigeria. According the 1991 national census, Lagos State had a population of 5,725,116 out of a national total of 88,992,220. The 2006 National Census credited Lagos state with a population figure of 9,113,605. There are twenty Local Government Areas in Lagos, sixteen of these are within the metropolitan Lagos while the remaining four local government areas are outside the metropolitan region. Lagos has one of the highest urban growth rate in the world (Jiboye, 2011; United Nations, 2016) and thus is one of the cities most impacted by urbanisation in term of housing. Towards the end of the 19th century, the built-up area of Lagos was 4 kilometer square, it grew from 46.6 kilometer square in 1911 to 70.5 kilometers square in 1950 and subsequently 405.53 in 1993. As at 2006, the areal extent of Lagos state was 999.6 kilometers square (Aluko, 2010). Lagos is presently expected to be the third largest city in the world with estimated population of 24 million, growth rate of 3.2 % per annum and urbanisation growth rate at 16% according to United Nations (2016). Expansion in Lagos is not only demographically but also spatially. Going by the daim of (LASG Economic Intelligence Unit, 2012), an estimate of 2.55 million new homes are required for the next 5 years to meet housing needs of Lagos state. The intelligence unit also asserts that Lagos state currently records approximately 20,000 people per square kilometer. Household size has also reduced to 3.8 person per household by 2008, calling for more housing units to supply more household formation (Towry-Coker, 2002; Opoko & Oluwatayo, 2014). Effects of urbanisation in Lagos manifest in form of poor services delivery, lack of adequate housing and affordable housing, proliferation of slums, traffic conditions, poverty and other vices. Lagos remains a

major center of commerce in Nigeria till today and thus the attraction of immigrants continually to the state.

## The case study areas.

The selected cases for this study are Ibeju-Lekki peri-urban and Ikorodu peri-urban, Lagos state. Both are Local Governments in Lagos State. Ibeju-Lekki and Ikorodu Local Government Areas are the focus of this study because both regions have different dynamics of urbanism in terms of spatial growth, rate of housing development, demographic composition and socio-economic development. While Ibeju-Lekki serves the housing needs of migrants from Lagos Island and its environment, Ikorodu absorbs people from Lagos Mainland and the environ (Lagos State Ministry of Housing, 2016). Also, Ibeju-Lekki represents the least urbanized peri-urban in Lagos in term of population growth and housing development, it is about 75 kilometers long and about 20 kilometers. Ibeju- Lekki Local Government land area is about 646 kilometers square, equals one quarter of the total land mass of Lagos state. Ikorodu Local Government represents the highly urbanized peri-urban in Lagos in term of residential development and population growth. It has a land area of 345 kilometers square.

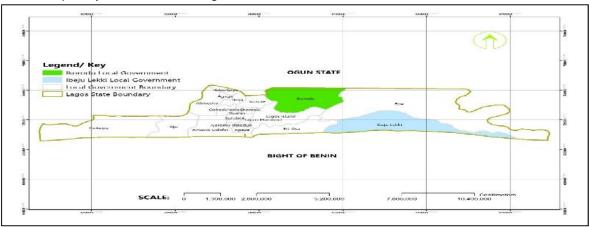


Figure 1: Map of Lagos State showing Ibeju-Lekki and Ikorodu

Source: Adedire (2016).

#### **METHODOLOGY**

This study employed case studies methodology in the field survey. Data used in this study were obtained through questionnaire survey of

purposively selected 34 settlements consisting of 16 settlements in Ibeju-Lekki and 18 settlements in Ikorodu. Purposive sampling was adopted because a total of 100 peri-urban settlements exist in the two

study areas and they are dispersed over a wide geographical area. To reduce cost, dusters of settlements were chosen from all wards in the two Local Government Areas to carry out this study. Twostage sampling was adopted in selecting the sample size made up of randomly selected 370 housing units in Ibeju-Lekki and 383 housing units in Ikorodu. The sample frame was a representative of the three housing units namely self-help housing, developer-led housing and private-developer-led housing in both case studies. A total of 753 questionnaires were administered to household heads as the selected respondents and 745 questionnaires were retrieved. Approximately 98% return rate was achieved by the administration of the questionnaires during nonworking days and hours and also on the spot collection system adopted. Data on residents' perception of types of housing initiatives and drivers of housing development were obtained.

Data processing and analysis for this study was carried out using Statistical Package for Social Sciences (SPSS) 22 for windows. Statistical package for social science was used also for the statistical analysis of the quantitative data in this study. Three types of analysis were conducted on the data. Firstly, descriptive statistics was used to generate percentages and frequencies of respondents' category of housing initiative in the peri-urban. The second analysis was carried out on the drivers of housing development using descriptive analysis to sort the frequencies and percentages of the respondents. Factor analysis was further carried out on the items considered for descriptive analysis, this helped in solving multicollinearity-related problem among the listed drivers. The variables that loaded on each factor were categorised as the major factors influencing housing development in the case studies areas.

### RESULTS PRESENTATION AND FINDINGS.

**Table1:** Housing Initiatives in the study area.

| Housing Initiative            | lbeju-Lekki | Ikorodu   |  |  |
|-------------------------------|-------------|-----------|--|--|
| Self-help Housing             | 309(84.4)   | 271(71.5) |  |  |
| Private developer/Cooperative | 53(14.5)    | 98(25.6)  |  |  |
| Government allocation         | 4(1.1)      | 10(2.6)   |  |  |
| Total                         | 366(100)    | 379(100)  |  |  |

Source: Field survey (2016).

Numbers in bracket represent percentages; Figures outside bracket represent frequencies

## Housing Initiatives

Housing initiatives as shown in Table 1 were mainly of three types in the study area. In the first case study, Ibeju-Lekki, self-help housing is the commonest constituting about 84.4% of the housing development. Private developers' initiatives are about 14.5% of the housing development in the peri-urban while government housing initiative was 1.1%. In Ikorodu, housing ownership came mainly from self-help housing (71.5%). More than half of the total land acquisition was through the natives thus informing the high conflictive land issues in Ikorodu peri-urban

settlements. Government participation in land allocation was negligible at 2. 6 % but more active than that of Ibeju-Lekki. The second important player in housing development in Ikorodu peri-urban were the private developers, constituting 25.6 %. This analysis suggests that government participation in housing development in the case studies has been minimal. The private-led initiative is targeted at the high middle-income group and high-income group through creation of exclusively gated residential developments. Self-help housing has been the predominant initiatives from the residents' perception.

## Factors influencing housing development in the study area.

**Table 2:** Respondents' motivation for living in the study area.

|   | Case study areas |          |  |  |
|---|------------------|----------|--|--|
| Variables                                   | lbeju-Lekki      | Ikorodu  |  |  |
| Land Affordability                          | 100(27.3)        | 69(18.2) |  |  |
| Low cost of living                          | 29(7.9)          | 79(20.8) |  |  |
| Proximity to place of work                  | 54(14.8)         | 43(11.3) |  |  |
| Quality environment                         | 55(15)           | 49(12.9) |  |  |
| Employment                                  | 29(7.9)          | 61(16.1) |  |  |
| Study                                       | 3(0.8)           | 7(1.8)   |  |  |
| Good road network and public transportation | 2(0.5)           | 3(0.8)   |  |  |
| Low cost of transportation                  | 1(0.3)           | 10(2.6)  |  |  |
| Conflict-free land tenure                   | 1(0.3)           | 10(2.6)  |  |  |
| Property investment                         | 21(5.7)          | 27(7.1)  |  |  |
| Cooperative acquisition                     | 14(3.8)          | 4(1.1)   |  |  |
| Source of inheritance                       | 31(8.5)          | 11(2.9)  |  |  |
| Closeness to family/kinsmen                 | 26(7.1)          | 16(4.2)  |  |  |
| Total                                       | 366(100)         | 379(100) |  |  |

Source: Field survey (2016).

Numbers in bracket represent percentages; Figures outside bracket represent frequencies

Based on the analysis of the responses from questionnaires obtained from the field work in Table 2, there are several factors noted for driving housing development in the study areas. Each settlement has different motivations for growth and the socioeconomic attributes of the residents also play significant roles in determining the residential location preferences in the peri-urban. There were predominantly seven factors influencing the growth and also there exist other insignificant factors according to the responses from the questionnaires. The most influential factors for housing development in Ibeju-Lekki peri-urban are land affordability (27.3 %), quality environment for living (15%), proximity to work (14.8%), Source of inheritance (8.5 %), low cost of living (7.9%), employment (7.9%), closeness to family and tribesmen (7.1 %), property investment (5.7 %), conflict-free land acquisition (3.8 %), and other less significant factors.

Housing development in Ikorodu peri-urban is driven by different factors than Ibeju-Lekki. The analysis of the field work showed three primary drivers of growth, low cost of living (20.8%), affordable land (18.2%) and employment opportunity (16.1%). The secondary drivers of development in the peri-urban were shown to be quality environment for living (12.9%), proximity to places of work (11.3%), property investment (7.1%) and closeness to kinsmen (4.2%). Other influential but not dominant drivers of housing development in the peri-urban are to study, leave inheritance for children, access to public transportation and secured land tenure.

Therefore, through this study, seven dominant factors were found to be driving housing developments in the study areas. In Ibeju-lekki the primary drivers are land affordability, better environment for living and closeness to work. The secondary drivers in Ibeju-Lekki were property investment, closeness to kinsmen, employment and

low cost of living. In Ikorodu, the primary drivers are low cost of living, land affordability and availability of employment. Secondary drivers in Ikorodu are closeness to work, closeness to kinsmen, study, and property investment. In comparison to metropolitan region, availability of affordable land for housing development and commercial purpose is the major driving force of housing growth in Ibeju-Lekki.

#### DISCUSSION

With saturation of the city cores and uncontrolled cost of housing, most families prefer buying land in the peri-urban for their residential development and other commercial purposes like building manufacturing base for production. With an unabated population growth in urban growth in Lagos and most offices located in Lagos Island, the peri-urban of lbeju- Lekki becomes the ideal place for the high middle class and the low-income group working in central Lagos. Conversion of most residential houses to commercial buildings in Lagos Island has also created a dearth in housing and a huge deficit in housing while the limited housing developments are not within the reach of the low-income group but restricted by affordability to the wealthy in the region.

Availability of gated exclusive residential developments mostly under government initiatives and public private partnership development has also made the peri-urban settlements in Ibeju Lekki a perfect alternative for high income workers who would prefer to have their own housing to spending much on housing in Lagos urban centres. The most preferred housing initiatives for the high income in the peri-urban are private developer-led housing development. The high middle-income group and middle income that are mostly civil servants dwell in government-led housings, but this initiative is limited in Ibeiu-Lekki periurban settlements. The low-income group have residential locations in self-help housing regions in the peri-urban. Structured interviews showed the perception of the peri-urban residents towards housing in most part of metropolitan Lagos as negative. The environmental congestion, poor sanitation, traffic congestion and overcrowding issues in central Lagos

has made housing in the less urbanizing peri-urban more preferable for some high income and high middle-income earners.

However, because of the presence of numerous government owned organisations in Ikorodu, there is a good location of government-led housing developments to serve the workers. These government-led housing developments are well serviced with good quality housing thus encouraging growth and the development of surrounding peri-urban which benefit from the extension of services from the government-led housing. Ikorodu central is a home to several organisations. Job opportunities exist in different sectors. There are presence of many government organisations, institutions of higher learning, manufacturing companies, port, and commercial banking all aiding the growth of Ikorodu peri-urban. With the improvement of the urban corridor of Ikorodu Expressway, many urban residents were motivated to relocate to Ikorodu both for housing development and other reasons. Vehicular movement has also improved remarkably and there is also the contribution of waterways transportation to the core of Lagos metropolitan region. Also, to have received attention are feeder roads within Ikorodu linking the peripheral settlements to the urban areas.

# Factor analysis on the drivers of housing development in the study area.

Further data compaction using data analysis was carried out on the drivers of housing development in the study area to determine the major factors. The variables that loaded adequately are land affordability, proximity to places of work, quality environment, good road network and public transportation, low cost of transportation, conflict-free land tenure, property investment and closeness to kinsmen. These factors were further categorised into three major groups by factor analysis loading. The groupings are availability and affordability of conflict-free tenure land, proximity and good transportation links and, quality environment. Further data analysis on the drivers of housing development in Ikorodu using factor analysis (Table 3) showed different factors loaded adequately and

differently from what was experienced with Ibeju-Lekki. The major factors were low cost of living, employment opportunities, closeness to place of work, better environment for living, low cost of transportation and

inheritance for children. These factors were further categorised as socio-economic benefits, quality environment and good transportation links

Table3: Factor analysis on the drivers of housing development in the study area.

| Drivers of housing development              |       | Ibeju-Lekki |        |        | Ikorodu |        |
|---|-------|-------------|--------|--------|---------|--------|
|   | 1     | 2           | 3      | 1      | 2       | 3      |
| Land Affordability                          | 0.33  | 0.403       | -0.185 | -0.853 | 0.228   | -0.201 |
| Low cost of living                          | -0.15 | -0.033      | -0.488 | 0.587  | 0.208   | -0.038 |
| Proximity to place of work                  | -0.04 | 0.712       | 0.369  | -0.056 | 0.337   | 0.358  |
| Quality environment                         | 0.574 | 0.051       | -0.156 | 0.403  | 0.465   | -0.212 |
| Employment                                  | 0.014 | -0.726      | 0.261  | 0.146  | -0.007  | 0.66   |
| Study                                       | 0.007 | -0.04       | 0.053  | -0.025 | -0.191  | -0.025 |
| Good road network and public transportation | 0.735 | 0.151       | 0.211  | -0.024 | -0.173  | -0.023 |
| Low cost of transportation                  | 0.326 | 0.131       | 0.422  | 0.058  | 0.259   | 0.45   |
| Conflict-free land tenure                   | 0.676 | 0.093       | 0.061  | -0.023 | -0.155  | -0.02  |
| Property investment                         | 0.532 | -0.174      | 0.008  | 0.098  | -0.621  | -0.124 |
| Cooperative acquisition                     | -0.1  | 0.003       | -0.005 | 0.015  | -0.06   | -0.24  |
| Source of inheritance                       | 0.3   | 0.059       | -0.528 | 0.193  | 0.374   | -0.477 |
| Closeness to family/kinsmen                 | -0.06 | -0.079      | 0.479  | -0.009 | -0.35   | -0.051 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization

Ibeju-Lekki: Rotation converged in 4 iterations. Ikorodu: Rotation converged in 7 iterations.

### CONCLUSION

Driven by high cost of living in central Lagos, empirical evidence shows that there has been an increasing housing development in Lagos peri-urban of Ibeju-lekki and Ikorodu. While Ikorodu is driven by quest for low cost of living, Ibeju-lekki is driven by better quality environment due to the availability of various gated housing developments. In Ibeju-lekki, the primary drivers of housing developments were land affordability, quality environment for living and proximity to work. The influx of high income group has led to change in the land market in Ibeju-Lekki. The need for business locations and employment also aided the growth of Ikorodu housing development. In Ikorodu, the primary drivers are low cost of living, land affordability and availability of employment. The

benefits or residential location in Ibeju-lekki were ease of linkage, socio-economic benefits and socio-cultural ambience. In Ikorodu, the benefits were proximity or ease of linkage, socio-economic benefits and socio-cultural benefits. These studies show that Ikorodu is more commerce driven than Ibeju-Lekki peri-urban.

### RECOMMENDATION

Effort should be made to update data on pattern and extent of development in order to ascertain the infrastructural needs and distribution in the periurban. Government should be involved in the housing process of self-help housing development in terms of education on spatial adequacy, dwelling quality, suitability of construction materials to be used and in subsidizing the building regularisation assessment fee

since it is the predominant housing initiative in the study area. Effort should be made to update data on pattern and extent of development in order to ascertain the infrastructural needs and distribution in the periurban.

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