

## IMPLICATIONS OF RESIDENTIAL AND WORKPLACE LOCATION IN IKORODU, LAGOS PERI-URBAN

**\*ADEDIRE, F.M. AND IWEKA, A.C.O.**

Department of Architecture, University of Lagos, Nigeria

\*Corresponding author email: [funmidire@gmail.com](mailto:funmidire@gmail.com)

### Abstract

*This paper discusses the socio-economic implication of residential and workplace location in Lagos peri-urban with focus on the case study of Ikorodu, a rapidly urbanising suburbia in Lagos State, Nigeria. Data were collected through primary source by administration of 383 questionnaires to household heads in purposively selected eighteen peri-urban settlements and through the use of an observation schedule. The quantitative data were analyzed using descriptive analysis while the qualitative data were analysed by content analysis. The result shows the major benefits of residential location in Ikorodu as shown from the residents' perception are quality environment for living and the potential for economic growth. The most prevailing challenge to residential location was inadequate infrastructure development. Enterprise wise, the major benefit is availability of good customer base. Findings also show that development in the peri-urban has outgrown the provided infrastructure. It is therefore recommended that effort should be made to update data on pattern and extent of development in order to ascertain the infrastructure needs and distribution in the peri-urban. There should be an effective policy design for improved infrastructure development.*

**Key Words:** Peri-urban, Housing development, Locational benefits, Locational challenges

### Introduction

Housing deficit in the city centre has significantly influenced residential development in the peri-urban of Lagos. Prompted either by forced relocation or voluntary relocation to the peri-urban, the migrants constituting mainly the low income group and middle income group and, guided by limited economic resources see the peri-urban, a transition zone between the rural and urban as the ideal place for personal housing development or rental housing (Allen,

2003). In the face of restricted land supply in metropolitan Lagos, creation of different housing initiatives in the peri-urban of Lagos seems to be ideal for controlling housing deficits in the urban centre (Towry-Coker, 2002; Opoko and Oluwatayo, 2014).

Economic growth also contributes to peri-urban growth in Lagos. Due to push of urban crowding and congestion, there was relocation of various work places and economic activities to peri-urban zones aided by access to large land and

major roads. The promotion of private sector as the engines of growth in developing countries by the OECD, in 2006 led to promotion of private sectors in real estate development, tourism and hospitality (Lawanson *et al.*, 2012). This has resulted in a steady growth in the peri-urban of most developing countries (Appiah *et al.*, 2014) and this is partly responsible for the growth of peri-urban in Lagos State, Nigeria.

However, physical development in Lagos peri-urban settlements is generally characterised by high level of informal development, poor quality housing and confronted with multi-dimensional challenges. Most housing under the self-help housing development and mostly owner occupied developments create a distortion of the master plan because of lack of effective monitoring and limited economic capacity of the low income group. Migrants face a lot of hindrances to housing development in term of conflict-ridden tenure, neo-customary land rights and arbitrary increase in land prices due to land speculation activities (Firman, 2004). It is also known that policy response to the pattern of growth does not match the pace of rapid housing development in Lagos peri-urban.

Prior works on Nigerian peri-urban development have been limited to land use changes, rural-urban linkages, agricultural land use and housing quality (Binns *et al.*, 2003; Olotuah, 2006; Dung-Gwom, 2008; Lawanson *et al.*, 2012; Nwokoro and Dekolo, 2012; Emankhu and Ubangari, 2015). All these prior works have references to the general growth in the peri-urban. None of these scholars has addressed the socio-economic implication of residential development in Lagos peri-urban in

terms of residents' perception on the challenges and benefits of housing and workplace location in Nigeria peri-urban settlements.

An assessment of the socio-economic implication of residential and workplace location in Lagos peri-urban is vital because the peripheral locations in Lagos accommodate a large share of the urban population. This study thus aims at capturing the urban transformation taking place in term of housing and workplace developments in Lagos peri-urban settlements. Lack of empirical data on the nature, rate and pattern of development in the peri-urban has been the bane of integration of the interface to the neighbouring metropolitan region.

To fill the research gap, this study will examine the challenges of residential and workplace location in Lagos peri-urban through residents' perception to bring to bear the socio-economic limitations and potentials. The study area, Ikorodu peri-urban settlements have been experiencing the direct influence of urbanisation in terms of housing development and accompanied with establishment of workplaces to serve the growing peri-urban population. These changes call for attention in term of policy and planning. This study will help in capturing the rapid growth that is not provided for in the conventional development planning, it also would address the increasing negative pattern of growth to curtail informality and aid in balanced distribution of infrastructural facilities.

#### ***Review of Literature***

Urban demands and pressures on suburbs and peri-urban come in form of space for housing, commercial development, infrastructure, educational

facilities. The peri-urban at the receiving end also requires municipal markets, services and innovations. Urban periphery serves as the attractive points of investment in land intensive industrial activities, accommodates the overspill of industrial activities from congested city core and also provide housing the urban population excesses (McGregor *et al.*, 2004). In return, the peri-urban relies on the rural area for socio-cultural services such as aesthetics, amenity, recreation and cultural identity. In the other direction, rural depend on the peri-urban for employment, investment, and access to services (Browder *et al.*, 1995; Simon *et al.*, 2004; Acheampong and Anokye, 2013).

Investigation by Iaquina and Drescher (2010), shows that the urban periphery is a zone surrounding the main built-up areas, with a lower population density, but belonging to the functional urban area. It includes smaller settlements, industrial areas and other urban land-uses within a matrix of functional agriculture. Their findings also indicate the urban fringe as a zone along the edges of the built-up area comprising of a scattered pattern of lower density settlement areas, urban concentrations around transport hubs, large green open spaces such as urban woodlands, farmland, golf courses and nature reserves.

In Nigeria, drivers of peri-urban housing growth constitute among many, affordable rent in comparison to city and big towns (Lawanson *et al.*, 2012). Cobbinah and Amoako (2012) assert that industrial development promotes 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. Other identified drivers of peri-urban settlement developments are population growth, rising household incomes and transportation improvement (Dutta, 2012).

As researched by Salem (2015), notable actors in the development of peri-urban settlements are farmers, peri-urban residents, entrepreneurs, property developers and government institutions. Improved infrastructure, socio-economic activities, easy access to land for building and commercial purposes by residential developers are contributors to development (Appiah *et al.*, 2014). Also contributing to residential development in the peri-urban is the perceived availability of better housing for the middle income group to counter the decline in environmental quality in urban centres (Dutta, 2012; Acheampong and Anokye, 2013).

Lawanson *et al.* (2012) in their research on rural urban linkage in Lagos Megacity posited that residential development in Lagos peri-urban rose in response to population growth, rising household income, and improved transportation. This corroborates the findings of Cobbinah and Amoako (2012) stating that being motivated by the personal mobility and provision of cheap land in the peri-urban, the urban core, because of limited and expensive land market gradually experience loss of sizable urban population seeking for housing to the peri-urban.

Residential location in the peri-urban continues to experience rapid growth because of lower houses price, large living space and the possibility of a better

environment. In Nigeria, drivers of peri-urban housing growth comprise among many, affordable rent in comparison to city and big towns (Lawanson *et al.*, 2012). Land acquisition by residents, local land owning community and outside settlers are primarily for residential purposes. Entrepreneur represents 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 bridge the gap created by laxity of government in term of formal control (Salem, 2015).

However, the peri-urban suffer from urban pressures, gain from proximity to urban areas, markets and culture. Some of urban pressures are housing shortages, transport congestion, decline of landscape quality, economic restructuring and social change. Though, improved mobility aids urban expansion, it encourages longer distance of commuting and the poor bear the burden of commuting. As stated by Iaquina and Drescher (2010), while the peri-urban settlements proffer solutions to housing needs of the urban population, negative impacts can be attributed to reduction of public service due to lack of economies of scale by scattered settlement patterns. People are encouraged to relocate to the peri-urban due to the ease of linkages to city centres for their needs (Tacoli, 1998; Vidova, 2011).

Also supported by Alonso Access Space Trade off Model, closeness to the

city centre commands low cost and time of commuting, and high cost of land. Places farther to the city centre will attract low cost of land and high cost of commuting. The model factors in the role of household income in trading off benefits at the centre. Three types of cost are factored in, namely the cost of land, the cost of commuting and the cost of consumption. The cost of land per square meter goes down with increased distance. Price of housing close to the urban centre is higher than housing of the same quality and are at a higher distance. The model further posited that the price of land is determined by the revenue-earning capacity of different users at different locations relative to a dominant market (Harvey and Jowsey, 2004).

The fundamental principle derived from Alonso's model therefore is that though the amount of space available increases geometrically at distances away from the central market or urban core. Land prices tend to fall in order to compensate for increased transport costs. Relating to the peri-urban location to the city core, residents in peri-urban areas are expected to cover relatively longer commuting distances to the city centre for work and non-work related purposes. Proximity to the city centre determines the price of land and eventual cost of housing in the peri-urban. There is a trading off access to essential services at the urban centre for housing in the interface. This model is relevant to this study due to duplication of the same phenomenon in Lagos peri-urban.

In most peri-urban settlements, the remoteness of residential areas and inadequacy of means of transport is a challenge for residents to travel short distances without using automobile

(Cobbinah and Amoako, 2012). The level of transport costs including time imposed will depend on the level of municipal transport infrastructure development and transport system efficiency. The potential effect on households' decisions will depend on the sensitivity of their incomes to either accessibility needs or space needs. Acheampong and Anokye (2013) through their research found that the unplanned and poorly managed nature of most peri-urban locations can potentially impose challenges with regards access to socio-economic facilities and services which in turn can affect convenience within the vicinity of the dwelling as investigated.

In principle, peri-urban locations can offer adequate space at a relatively lower price. Simon (2008) stated that in most peri-urban, there exist inadequate sanitary conditions, low housing density, increasing commuting time due to poor condition of the roads. Among the significant changes in the peri-urban is the displacement of poor original settlers of the middle income and high income earners as land prices rise (Browder *et al.*, 1995). The growth of peri-urban settlements in Ikorodu is aided with the development of Ikorodu urban corridor and additional feeder roads. In light of these reviews, it can thus be inferred that housing in the peri-urban areas presents both location-specific advantages and challenges which ideally, should influence households' decision to choose accommodations there or not.

#### **Study Area**

Ikorodu is a municipality in Lagos State, which is one of the most populous states in the Federal Republic of Nigeria. Ikorodu is located in the North East of Lagos State along the Lagos lagoon and

situated at a distance of approximately 36km north of Lagos. In year 2016, the projected population for Ikorodu was 944,158 (LASG Ministry of Economic Planning and Budget, 2016). Ikorodu has a large industrial area containing many factories and notable commercial services. At large, Lagos state is spatially the smallest state in Nigeria with approximate 3,577 kilometers square out of which 39% are wetlands (Aluko, 2010; Dekolo and Oduwaye, 2011). Lagos land constitutes 0.4% of Nigeria's total land mass (Opoko and Oluwatayo, 2014).

Between 1994 and 2008, the built up area of Lagos Nigeria increased from 397 kilometer squares to 610 kilometers square and most of this expansion has been in the peri-urban (Nwokoro and Dekolo, 2012). Estimated population in Lagos in 1995 was 6.5 million, the 29th largest in the world. The estimated population of 2000 and 2002 was 8.8 million and 10 million respectively (Opoko and Oluwatayo, 2014). Lagos is expected to be the third largest city in the world with an estimated population of 24 million by year 2020 (United Nations, 2016). Towards the end of the 19th century, the built up area of Lagos was 4 kilometers square. It grew from 46.6 kilometers 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).

#### **Research Methods**

This study employed a case study strategy in the field survey. Data used in this study were provided by a questionnaire survey of purposively selected 18 settlements in Ikorodu municipality. The survey took place between August and October 2016 in the

study area. Multi-stage sampling was adopted in selecting the sample size made up of randomly selected 384 housing units in the study area. A total of 383 questionnaires were administered to household heads as the selected respondents and 379 questionnaires were retrieved. The high return rate was achieved by the administration of the questionnaires during non-working days and hours and also on the spot collection system adopted. Data on residents' perception of challenges and benefits of residential location and enterprise location were obtained. Data processing and analysis for this study were performed using the Statistical Package for Social Sciences (SPSS) 22 windows. Data analysis was done using descriptive statistics were used to generate percentages and frequencies of respondents' responses in the peri-urban.

## **Results and Discussion**

### ***Socio-economic Benefits of Residential Location in the Study Area.***

The field survey presented in Table 1 reveals the locational benefits of housing development in Ikorodu peri-urban settlements. The major benefits of residential location in the peri-urban are potential for economic growth which constitutes 44.6%, good environmental quality which contributes about 22.4% of the locational benefit, low rental value and ease of linkage to the city centre. In terms of job opportunities, Ikorodu centre is home to several organisations. Job

opportunities exist in diverse sectors. There is presence of many government organisations, institutions of higher learning, manufacturing companies, port, and commercial banking all aiding the growth of Ikorodu peri-urban. 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 excellent quality housing thus encouraging growth and the development of surrounding peri-urban which benefit from the extension of services from the government-led housing. 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 for transportation to the core of Lagos metropolitan region. Residential locational benefits in Ikorodu peri-urban are not limited to the earlier mentioned benefits, others locational benefits are socio-cultural environment (2.4%), security of life and property (2.4%), proximity to the city (2.9%), minimal environmental pollution (1.8%), availability of recreation (1.8%), and availability of good customer base (2.4%), employment opportunities (1.7%) and other unidentified benefits constituting 7.7%.

Table 1: Benefits of Residential location in the study area

Variables	N=379	%
Good environmental quality	85	22.4
Potential for economic growth	169	44.6
Good infrastructural provision	6	1.6
Conducive socio-cultural environment	9	2.4
Proximity to the city	8	2.9
Ease of linkage to the city	15	4.0
Good customer base for business	9	2.4
Low housing rent	17	4.5
Minimal environmental pollution	7	1.8
Availability of recreation/resort	7	1.8
Security of life and property	9	2.4
Employment opportunities	6	1.6
Others	29	7.7

**Challenges of Residential Location in the Study Area**

Residential location in the peri-urban does not come here without challenges. The analysis of the research instruments of observation schedule and structured questionnaires presented some challenges of residential location in the peri-urban. Following Table 2, the challenges to residential location in the peri-urban are many but can be categorised into three. The major challenges are poor infrastructure (45.6%), poor

environmental condition (14.8%) especially in self-help housing areas and poor road conditions within the peri-urban settlements (12.7%). This corroborates the findings of Lawanson *et al.* (2012) in their study on rural-urban linkage in Lagos mega city. Other notable challenges in Ikorodu peri-urban are inadequate health facility (4.7%), water scarcity (2.4%), security problems, lack of good schools for children (1.6%), high traffic congestion (1.3%) and high cost of daily transportation (4%).

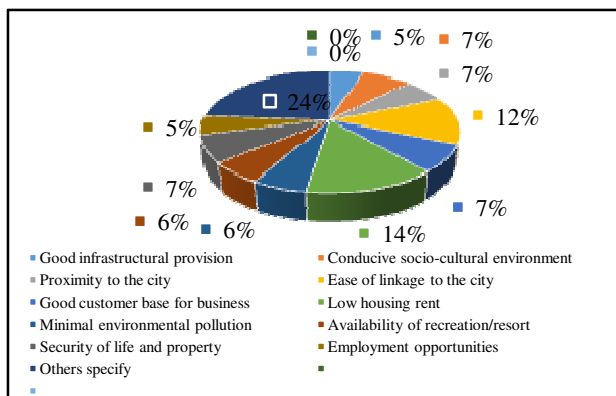


Fig. 1: Analysis of Benefits

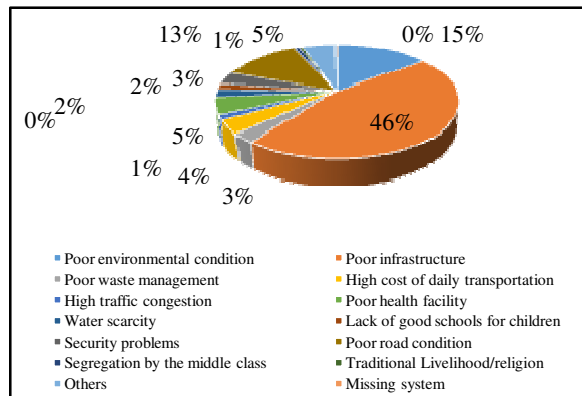


Fig 2: Analysis of challenges



Fig. 3: Typical poor neighbourhood quality in the study area blocked drainage in the study area

Table 2: Challenges of Residential location in the study area

Variables	N=379	%
Poor environmental condition	56	14.8
Poor infrastructure	173	45.6
Poor waste management	10	2.6
High cost of daily transportation	15	4
High traffic congestion	5	1.3
Poor health facility	18	4.7
Water scarcity	9	2.4
Lack of good schools for children	6	1.6
Security problems	13	3.4
Poor road condition	48	12.7
Segregation by the middle class	3	0.8
Traditional Livelihood/religion	2	0.5
Others	20	5.2
Missing system	1	0.3

### ***Types of Workplace in the Study Area***

As earlier stated, Ikorodu is a dynamic location serving various types of workplace among which civil service is the most predominant. Analysis of field survey presented in Table 3 shows different classes of workplace and employment in Ikorodu. The first group of employment in Ikorodu is civil service (19.8%), retail trading (18.7%) and local craft (8.7%). The second group is made up of academic institutions (7.4%),

manufacturing (7.4%), hospitality (6.3%) and industrial enterprise (5%). The least dominant establishment is made up of religious institutions and other allied enterprises. Notable commercial benefits indicated through the field work are high customer base (36.7%), little competition (19.8%), limited regulatory demand (6.3%) and affordable land for business location (12.1%) and other unspecified commercial benefits (25.2%).



Table 3: Respondents' type of workplace in the study area

Variable	N=379	%
Civil service	75	19.8
Hospitality	24	6.3
Local craft	33	8.7
Petty trading/retail	71	18.7
Academic institutions	28	7.4
Religious	2	0.5
Manufacturing	28	7.4
Industrial enterprise	19	5
Others	99	26.1

**Benefits of Workplace Location in the Study Area**

Table 4: Benefits of workplace location in the study area

Variable	N=379	%
High customer base	139	36.7
Few competition	75	19.8
Limited regulatory demand	24	6.3
Affordable land for business location	46	12.1
Others	95	25.2
Missing System	0	0

Analysis of the field survey on socio-economic benefits of workplace location in the study area (Table 4) shows among the various socio-economic benefits, 25.2% indicate ease of travel to place of work, and 36.7% benefit from high customer base, 19.8% benefits by few competitions, 12.1 % have land affordability for business location as the socio-economic benefits and 6.3% benefits from limited regulatory demands in comparison to the urban centres.

**Conclusion and Recommendation**

The most considered benefits of residential location in Ikorodu were potential for economic growth and good environmental quality. The most prevailing challenge to residential location was poor infrastructure development. Noted classes of benefits are proximity or ease of linkage, socio-economic benefits and socio-cultural

benefits. Categories of challenges are socio-cultural challenges, poor infrastructure development, transportation problem and poor environmental quality. The commonest workplaces were government services, retailing stores and local craft. In Ikorodu, 85.5% of the respondents had business locational benefit while a smaller population of 13.7% found no benefit. The most relevant benefits in Ikorodu were high customer base, ease to place of work and little competition. This implies that Ikorodu is mostly commerce driven. The multi-dimensional changes taking place in Ikorodu peri-urban settlements should be measured to provide complimentary infrastructure services. Regional development policy should not be discriminatory in distribution of amenities rather there should be inclusion of the end users in the design stage especially projects

targeting low-income group and middle income group settlements. Appropriate housing delivery strategy should be looked into by housing providers in terms of the provision of an efficient and user responsive housing units to limit challenges confronted by the low-income group.

### References

- Acheampong, R.A. and Anokye, P.A. (2013). Understanding Households' Residential Location Choice in Kumasi's Peri-Urban Settlements and the Implications for Sustainable Urban Growth. *Research on Humanities and Social Sciences*, 3(9): 60-70.
- Allen, A. (2003). Environmental planning and management of the peri-urban interface: perspectives on an emerging field. *Journal of Environment and Urbanization*, 15(1): 135-147.
- Aluko, O. (2010). The impact of urbanization on housing development: The Lagos experience, Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 3(3): 64-74.
- Appiah, D.O., Bugri, J.T., Forkuo, E.K. and Boateng, P.K. (2014). Determinants of Peri-Urbanization and Land Use Change Patterns in Peri-Urban Ghana. *Journal of Sustainable Development*, 7(6): 96-106.
- Binns, J., Maconachie, R. and Tanko, A. (2003). Water, land and health in urban and peri-urban food production: the case of Kano, Nigeria. *KANO water LDD revised*, 14(5): 431-444.
- Browder, J.O., Bohland, J.R. and Scarpaci, J.L. (1995). Patterns of development on the metropolitan fringe: Urban fringe expansion in Bangkok, Jakarta, and Santiago. *Journal of the American Planning Association*, 61(3): 310-327.
- Cobbinah, P. B. and Amoako, C. (2012). Urban Sprawl and the Loss of Peri-Urban Land in Kumasi, Ghana. *International Journal of Social and Human Sciences*, 6(1): 388-397.
- Dekolo, S.O. and Oduwaye, A. (2011). Managing The Lagos Megacity And Its Geospatial Imperative. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*.
- Dung-Gwom, J.Y. (2008). The Nature of Peri-Urban Developments in Jos, Nigeria. *World Congress on Housing XXXVIIAHS*.
- Dutta, V. (2012). Land use dynamics and peri-urban growth characteristics: reflections on master plan and urban suitability from a sprawling north indian city. *Environment And Urbanization Asia*, 3(2): 277-301.
- Emankhu, S.E. and Ubangari, A.Y. (2015). The Nature Of Peri-Urban Development In Lafia, Nasarawa State. *International Journal of Geography and Regional Planning Research*, 1(3): 1-8.
- Firman, T. (2004). New town development in Jakarta Metropolitan Region: a perspective of spatial segregation. *Habitat International*, 28: 349-368.
- Fitra, H.A. and Pradoto, W. (2014). The Influence of Social Behavior to The Emergence Residential Segregation in Sleman Regency D.I Yogyakarta.

- Jurnal Pembangunan Wilayah dan Kota*, 10(3): 235-247.
- Harvey, J. and Jowsey, E. (2004). *Urban land economics*. Basingstoke: Palgrave Macmillan.
- Iaquinta, D.L. and Drescher, A.W. (2010). Defining Peri-urban: Understanding Rural-Urban Linkages and Their Connection To Institutional Contexts. *Paper presented at the Tenth World Congress of the International Rural Sociology Association*. Rio de Janeiro.
- Jiboye, D.A. (2011). Urbanization challenges and housing delivery in Nigeria: the need for an effective policy framework for sustainable development. *International Review of Social Sciences and Humanities*, 2(1): 176-185.
- Lagos State Ministry of Housing. (2016). *Housing needs in Lagos*. Lagos: Lagos State.
- LASG Ministry of Economic Planning and Budget. (2013). *Digest of Statistics*. Lagos: Lagos Bureau of Statistics.
- LASG Ministry of Economic Planning and Budget. (2016). *Digest of Statistics*. Lagos: Lagos Bureau of Statistics.
- Lawanson, T., Yadau, O. and Salako, I. (2012). An investigation of rural-urban linkages of the Lagos megacity, Nigeria. *Journal of Construction Project Management and Innovation*. 464-581.
- McGregor, D., Simon, D. and Kwasi, N.-G. (2004). The changing urban-rural interface of African cities: definitional issues and an application to Kumasi, Ghana. *Journal of Environment and Urbanization*, 16(2), 235-248.
- Nwokoro, I.I. and Dekolo, S.O. (2012). Land use change and environmental sustainability: The case of Lagos Metropolis. *Wit Transactions On Ecology and The Environment*, 157.
- Olotuah, A.O. (2006). Housing Quality In Suburban Areas (An Empirical Study of Oba-Ile, Nigeria). *Dimensi Teknik Arsitektur*, 34(2): 133 - 137.
- Opoko, A.P. and Oluwatayo, A. (2014). Trends in urbanisation: implication for planning and low-income housing delivery in Lagos, Nigeria. *Architecture Research*, 15-26.
- Pierr, A., Ravetz, J. and Tosics, I. (2010). *Per-Urbanization in Europe in Towards European Policies to Sustain Urban-Rural Futures*. Italy: Synthesis Report.
- PLUREL. (2009). *Peri-urban transition processes*. Denmark: PLUREL.
- Salem, M. (2015). Peri-urban dynamics and land-use planning for the Greater Cairo Region in Egypt. *Journal Sustainable Development*, 1: 109-119.
- Simon, D., McGregor, D. and Nsiah-Gyabaah, K. (2004). The changing urban-rural interface of African cities: definitional issues and an application to Kumasi, Ghana. *Journal of Environment and Urbanization*, 16(2): 235-248.
- Simon, D. (2008). Urban Environments: Issues on the Peri-Urban Fringe. *Annual Review Environmental Resources*, 33: 167-185.
- Tacoli, C. (1998). Rural-urban interactions: A guide to the literature. *Environment and Urbanisation*.

- Towry-Coker, L. (2002). Megacities: The Lagos Example/Nigeria. *Konrad-Adenauer-Stiftung E. V.*
- United Nations. (2016). *Urbanisation and housing*. New York: United Nations.
- Vidova, J. (2011). Theory of urbanity and its effect on housing development and housing. *e-Journal of New World Sciences Academy*.
- Wu, F., Zhang, F. and Webster, C. (2013). Informality and the Development and Demolition of Urban Villages in the Chinese Peri-urban Area. *Journal of urban studies*, 50(10): 1919–1934.