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POPULATION DYNAMICS AND HOUSING CHARACTERISTICS IN AJAH, LAGOS, NIGERIA

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Abstract

The housing characteristics in Ajah Lagos State peri-urban settlements is characterised by high level of informal development, poor quality and confronted with multi-dimensional challenges. Policy response to the pattern of growth does not match the pace of rapid housing development in Lagos peri-urban settlements. This research examined the characteristics of housing in the peri-urban settlements of Lagos State, Nigeria and specifically investigated the drivers of housing characteristics, socio-economic attributes of the residents, the quality of housing and the challenges of the management of the emerging peri-urban housing developments. Using a case study approach, housing characteristics in peri-urban settlements in Ajah Eti osa Local Government Areas were selected to represent the rapidly urbanizing metropolitan peripheral areas in Lagos State. Data were collected through primary and secondary sources. Findings revealed that major drivers of housing development in the study area are principally land affordability, low cost of living, easy linkage and proximity to urban centres, and provision of better quality housing through exclusive gated housing development. The findings also demonstrate that different housing initiatives in the peri-urban settlements performed differently in typology and resident's perception. Socio-economic attributes revealed a multi-cultural households composition, reasonable literacy level and mostly male headed households. Findings also showed factors that influence dwelling quality in the study area are choice of building materials, neighbourhood and locational quality. Challenges to governance are location-specific and mostly poor infrastructural development. It is recommended that improved quality and user performance peri-urban housing development can be achieved through residents' participation in housing policy design and also by timely regional policy response to the pace of housing characteristics in Lagos peri-urban settlements.

Keywords: *Population sprawl, housing, peri urban settlements, Ajah, Eti osa*

INTRODUCTION

The city allows us to work, recreate, have fun, and express ourselves together while sharing urban spaces. However, the concentration of the population and economic activity in a reduced space generates waste and environmental impacts. Cities are successful when they can maximize contact and interaction, facilitating the generation of ideas and disseminating knowledge while providing an environment that saves energy and resources and minimizes the environmental impact. Many elements interact, making a city more or less sustainable, more or less creative, and in short, more or less successful. One of the urban aspects that have generated the most attention is the physical expansion of cities accompanied by a significant loss of density, known in the international literature as urban sprawl. It is understood that urban sprawl is not only a physical phenomenon of the dispersion of buildings and expansion of the space occupied by the city but also a phenomenon increases in population. Population sprawl can take different forms. It may involve low-density residential developments or so-called "edge cities" (clusters of population and economic activity at the urban fringe) that give rise to business activity like office buildings, retail and even manufacturing. It can take the form of planned communities that have their own "downtown" or are aligned to a lake or park; individual houses pop up across formerly rural landscapes. In any case, a common way to document the presence of urban sprawl over time is to look first at the evolution of rural and urban population levels and then to look within urban areas at the evolving relationship between suburbs and central cities.

Population sprawl and housing characteristics in Ajah, a peri-urban settlement in Eti-Osa Local Government Area (LGA), Lagos State, Nigeria is generally characterised with poor environmental conditions and intractable informal development. This is influenced by the socio-demography of the heterogeneous population in communities such as Badore, Langbasa, and Sangotedo. It is common knowledge that policy response to the growth pattern does not match the rapid housing development in Lagos peri-urban settlements. Housing characteristics in these settlements contravened extant building codes in Lagos State. The spreading of the population in Ajah is due to inadequate knowledge of the socioeconomic composition of the migrants, most housing initiatives led by institutional and corporate bodies are not meeting the needs of the majority of low-income and middle-income groups because of affordability issues.

It has been argued that the most recent expansions in Lagos have been in the peri-urban (Nwokoro and Dekolo, 2012). The housing challenge is dominant in Lagos because of the high population growth rate and poor government intervention in housing development for the low-income group (Jiboye, 2011). An institutional failure translates to other challenges in Lagos peri-urban housing developments and ultimately impairs housing characteristics in Lagos peri-urban. Also contributing to the chaotic development pattern is the lack of adequate monitoring of the continuous development by the building regulation authority and lack of proper documentation of the pattern of growth as seen in most peri-urban developments in developing centres like Abraham Adesanya 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 of Lagos State; none of these scholars has addressed the urban transformation in terms of the influence of population dynamics on housing development, and characteristics. Therefore, this study examined population dynamics and housing characteristics in Ajah. It described the socioeconomic attributes of the residents, identified factors of population growth, and illustrated housing characteristics.

Urban and peri-urban dynamics

Population dynamics and housing types cannot be fully understood without capturing the link between peri-urbanization and urbanization. To have an in-depth understanding of housing characteristics in peri-urban settlements, housing theories must be discussed. Housing development in the peri-urban is a product of peri-urbanization, a direct consequence of unmanaged urbanization, the accumulation of multifunctional settlements of relatively substantial size. It is the product of the movement of people from rural areas to urban areas with population growth not equating to urban infrastructure size (McGranaham and Satterthwaite, 2014). Therefore, literature is reviewed in light of the objectives of this study, the examination of the characteristics of housing development in Ajah peri-urban settlements. According to Ade (2018), the impact of rapid population growth on housing development in a developing economy is usually a consequence of the push of the rural areas and the pull of the town. There is always an upsurge and conglomeration of people in city centres with the resultant effects on housing growth arising from acute unemployment. This growth and physical expansion of cities have been accompanied by unplanned urban sprawl, environmental pollution, deterioration, deficiencies in modern basic facilities, and general urban decay. As increased poverty and urbanization pressure urban facilities, most Nigerian cities have lost their original dignity, social cohesion, and administrative efficiency. This paper revealed the consequences of the problems of urbanization in Nigeria using empirical data from the metropolitan Lagos. The study is based on data collected from sixteen Local Government Areas consisting of 53 residential zones in metropolitan Lagos. Out of the total number of 135,820 properties, a size of about 1% (1,500) was randomly selected. Descriptive and inferential statistics were employed to resolve the objectives and the formulated hypotheses. Some of the findings include the upsurge in the city's population growth rate that took a sharp turn in the 20th century caused by rural-urban migration, resulting in an unprecedented high rent cost due to the insufficient housing delivery system. Also, the spatial expansion of the city was massive to the extent that the boundaries could no longer be differentiated from the adjoining Ogun State.

Sudhir (2018) asserts that Urban Sprawl is generally characterized by discontinuous, haphazard, uncoordinated, unplanned or poorly planned urban development. It is characterized by low density, excessive consumption of land, automobile

dependence, separation of land-uses, social segregation and displeasing aesthetics. The present paper tries to understand the characteristics of urban sprawl in different world cultural regions (developed and developing regions). The characteristics of urban sprawl were also studied in Noida city of Uttar Pradesh (India) through a survey carried out in 2016. A comparative analysis of characteristics of urban sprawl in developing and developed world cities reveals a significant difference in the characteristics of urban sprawl between the cities of developing and developed world. Olujimi (2019) asserted that the increasing urban sprawl in most cities in developing countries continues to attract the attention of national and international agencies, but the efforts had not achieved many results at checking the sprawl. Therefore, there is the need to re-evaluate these efforts and make necessary suggestions to reverse the trend. This study investigates the problems of urban sprawl in Nigeria. It utilizes published and unpublished materials and sundry informal investigations (observations) of the stakeholders in Nigerian cities' development and management of urban sprawl. The paper presents the urbanization trends in Nigeria, discusses the characteristic features of urban sprawl in its cities, and identifies the various factors responsible for urban sprawl. It evaluates strategies adopted so far at curtailing the sprawl. A major limitation of the various strategies adopted is the inadequate involvement of the people (developers) in checking the sprawl. Therefore, the paper suggests a people-oriented strategy in checking urban sprawl in Nigerian cities, which is expected to be facilitated by government planning officials.

According to Nnaemeka-Okeke (2016), urban environmental problems are of different dimensions and are mostly due to geologic, climatic and cultural factors. However, the cultural factors seem to be more pronounced in the Nigerian context because most of the identified urban environmental issues are so much associated with the way of life of the people, either as reactions to urbanization or their spatial heritage. Their effects are far-reaching on efforts to attain sustainable development in the country. Since no section of the country's urban environment is immune to environmental effects, there is an urgent need to seek workable solutions by applying planning, economic, legal, institutional and educational tools as suggested here. Isma'il et al. (2020), in their study, examined urban growth and housing problems in the in Ajah Eti osa Local Government Area of Lagos State in Nigeria. A questionnaire survey was used to acquire primary data, which was complemented with secondary data. The questionnaire survey respondents comprised the residents, government officials, and other stakeholders in urban and housing development in the area. A total of 400 questionnaires were administered using stratified and random sampling techniques. Data were analyzed using descriptive statistics and correlation analysis. Findings revealed a strong correlation between urban growth and housing problems in the area. The study also identified housing problems such as overcrowding and congestion, poor accessibility, substandard and inadequate housing, and insufficient basic amenities and infrastructural facilities in the area. There is a need for the government to plan for the future urban expansion of Ajah to avoid urban sprawl leading to more housing problems in the area. One approach to this is the development of satellite towns with good accessibility to the city centre. There is also the need to provide basic amenities and infrastructural facilities and utilities lacking in the area.

Moreover, Amao (2018) examined the rate of urbanization, housing quality and environmental degeneration in Nigeria. He discovered that poor housing quality has serious adverse effects on the environment and the health of city residents. Bhatta (2017) highlighted the negative impact of urban growth on the environment, including increased temperature, poor air quality, impact on water quality and quantity, and public health. Similarly, Oyeleye (2017) observed that the challenges of urban growth in Nigeria include housing problems, food insecurity, and climate change, which all impact the environment and livelihood. Similarly, Chindo (2018) analyzed the spatial growth of the greater Karu Urban area. He discovered that the consequences of urban growth could be positive or negative. The positive impact includes increasing G.N.P. and increasing recognition. However, the negative impact includes unplanned growth and dilapidated houses.

Several studies from the field of urban sprawl studied the phenomenon and process of urban sprawl and analyzed the spatial patterns of sprawl. Researchers explained urban sprawl in many ways, and everyone has one result that, if urban sprawl is unplanned, it harms the environment. Feng and Li (2012) studied the primary objective to recognize the spatial patterns of urban sprawl by taking one district as a study area. Four different years of Built-up area were studied to recognize the spatial pattern of sprawl. It is a growing problematic aspect of metropolitan and bigger city's growth and development in recent years in India. The study shows the extent and nature of sprawl in a region and the causes of growth. This study would help developers and town planners to plan growth patterns and assist various infrastructure facilities.

In this way, a challenge is made to evaluate the sprawl pattern, quantify sprawl and estimate the rate of change in built-up area over the period with the help of using G.I.S. and Remote sensing. Local infrastructure is the sum of point and network infrastructure and utilizes public and semi-public facilities- roads, bridges, public mass transport systems, postal services, and sewage. Population sprawl has been recognized as a problematic aspect of growth and development in Nigeria, but in Ajah, as a case study, the implications are not well understood for evolving policy and management options for effectively addressing the problem. The lack of planning policy to regulate and guide the growth and development of land use in the planning area is a critical challenge that has resulted in unauthorized and haphazard development, also lack affordable housing for low-income people due to the high price of land and the subsequent inability of these groups to buy land and build on it also lack comprehensive plans for land use and lack of government proper planning policies for the area outside the boundaries of the city this has resulted in the slum squatters area.

Sperandelli et al. (2013), their result shows that urban sprawl is a continuous process and is encouraged by a permissible master plan and increase of green space is the result of growth upon the remaining forests in urban regions. Yang et al.

(2015) studied the use of land in a new city district to maximize the quality of life of its workers and the productiveness of its living facilities, such as schools, shops, leisure places, and medical facilities. Researchers explained urban sprawl in many ways, and the urban sprawl hurts the environment, which is unplanned. So from the above literature, it is important to study the urban sprawl for a developing city, quantify the population sprawl, and estimate the rate of change in built-up area over a period. This is done by using the spatial images G.I.S. software. And it is also very important to predict the future growth of urban sprawl, i.e., prediction of urban sprawl to provide them with an adequate supply of all basic infrastructure facilities or needs. So following objectives are defined from the literature review.

The characteristics of the peri-urban can be judged by the morphology of the housing development in the built areas (Minghong & Xiubin, 2013). Urban policies play a vital role in determining settlement typologies (Phelps & Woods, 2011) as cited by (Shen & Wu, 2013). The most reliable variable for defining peri-urban built-up area is form and character of spatial unit (Yue, Liu, & Fan, 2013). Different classification of peri-urban development exists. They are infilling, expansion, linear development, large scale and sprawl projects. A revised classification listed five classes namely infill, expansion, isolated, linear and clustered peri-urban settlement pattern. A more comprehensive classification identified only three types of settlement patterns as infilling, edge expansion and leapfrog (Yue, Liu, & Fan, 2013). Infilling growth is the development of a small tract of land mostly surrounded by urban built up land. Edge growth is fringe development, an expansion of existing built-up area. Leapfrog development is land conversion unconnected with the existing built-up area, mostly industry oriented. Settlement patterns in some Indian peri-urban settlements are either edge expansion, envelopment or attainment. Envelopments is the annexation of surrounding landscape through the growth of existing urban areas (Dutta, 2012). Attainment occurs when small built-up clusters are dispersed in the landscape by extending urban areas. Attainment is usually as a result of improvement in accessibility made possible by the development of transport infrastructure. There is accessibility to inner townships leading to conversion of agricultural land for housing development (Dutta, 2012). Identified as characteristic of the settlement pattern in Lagos are four conceptualizations namely nucleated or clustered settlement, scattered or dispersed settlement, leapfrog settlement and ribbon or mushroom development pattern. Nucleated development involves the concentration of people of the same social class and income levels at the outskirt of the city. Development of this pattern is detached from other peri-urban. In scattered or dispersed settlement, buildings are speckled and spread out in a discontinuous development. Leapfrog development patterns are sporadic and often connotes ineffective use of land, the ribbon or mushroom development shows increasing concentration of human activities for residential and commercial purposes (Cobbinah & Amoako, 2012). Linear settlements along the transport routes were noted to be on the increase. Other settlement patterns are infilling growth that is low growth and modest growth, high growth rapid fragmented development, expansive growth with extensive dispersion at low population densities. These types of settlement patterns were also identified by Schneider and Woodcock (2008). Some peri-urban settlements are patchy, scattered and spread-out with a tendency for discontinuity (Cobbinah & Amoako, 2012).

Three housing quality components have been identified as neighbourhood, locational and dwelling quality. Neighbourhood quality is attributed to such as being conferred on a residence as a result of the environment it is located. This then brings into consideration the relationship between housing streets, open spaces and general settings in the neighbourhood (Rapoport, 1998). Environmental quality has to do with cleanliness, sanitation, parking space, accessibility, light, drainage and security. Locational quality of housing is the spatial position occupied by it relative to the central business district. Housing located close to such facilities like market, road, recreational facilities, schools, health facilities possess higher locational benefits (Adebayo & Aliu, 2010). Good locational position brings ease in travel time to work and gives a higher satisfaction to residents. Locational quality is a function of closeness to place of work, central business district and accessibility to public transport. The quality conferred on a building as a result of internal and external designs is regarded as structural or dwelling quality. Dwelling quality have to do with number of rooms per household, tiled toilet, tiled bath, tiled kitchen, light and water. Structural or dwelling quality is attributed to housing type, design, age of the building, aesthetics, lots size, windows, burglary proof, and patio. Housing quality is generally influenced by income, family size, education and race (Goodman, 1978). Methods of construction, materials for constructions, spatial arrangement, services and facilities functionality, aesthetics are also instrumental in defining the quality of housing (Bradley & Putnick, 2012). This was also emphasized by Mabogunje (1980) stating the role of spatial units and layout of the building. Indicators for measuring housing quality should embrace the physical characteristics of the dwelling and the broader environmental characteristics of the area under consideration.

Another major element of housing quality is the availability of sufficient space in the dwelling both internally and externally. Space is associated with the overcrowding rate in a building. This can further be measured by number of rooms per household, the household size and the family members' age (Aderamo & Ayobolu, 2010; Štreimikiene, 2014). Other instrument for assessment of housing quality are deficiencies of basic sanitary facilities, leaking roof and poorly lighted building. Peri-urban settlement mostly is associated with pollution of diverse kinds like refuse dumps, sewage plants thus imposing negative impacts on the residents. A study carried out on housing quality in peri-urban of Akure, emphasized on the role of frequency of collection of waste on quality of housing in the peri-urban (Olotuah, 2006).

Study Area

Ajah is a town in Lagos State that lies within Latitude 6°28'10.6"N (6.4696200°) and Longitude 3°33'46.3"E (3.5628700°) in the Eti-Osa LGA of Lagos State, Nigeria (Figure 1). Ajah is a large neighbourhood in the Lekki area of Lagos. It spans from Victoria Garden City (VGC) down to Abraham Adesanya roundabout on the Lekki-Epe express, and extends to

places like Badore, Ado, and Langbasa in its interior. It is one of the constantly developing places in the Lekki axis. It takes between 25-40 minutes to get to Victoria Island (V.I) from Ajah. (Figure 1). Ajah has a great multitude of over 150,000 people that are of different tribes. Some are foreigners, while some are Nigerians. The Nigerians living here are the middle and upper-class citizens that own companies and businesses. However, the population here cannot be compared with Lekki because Lekki is much more expensive than Ajah.

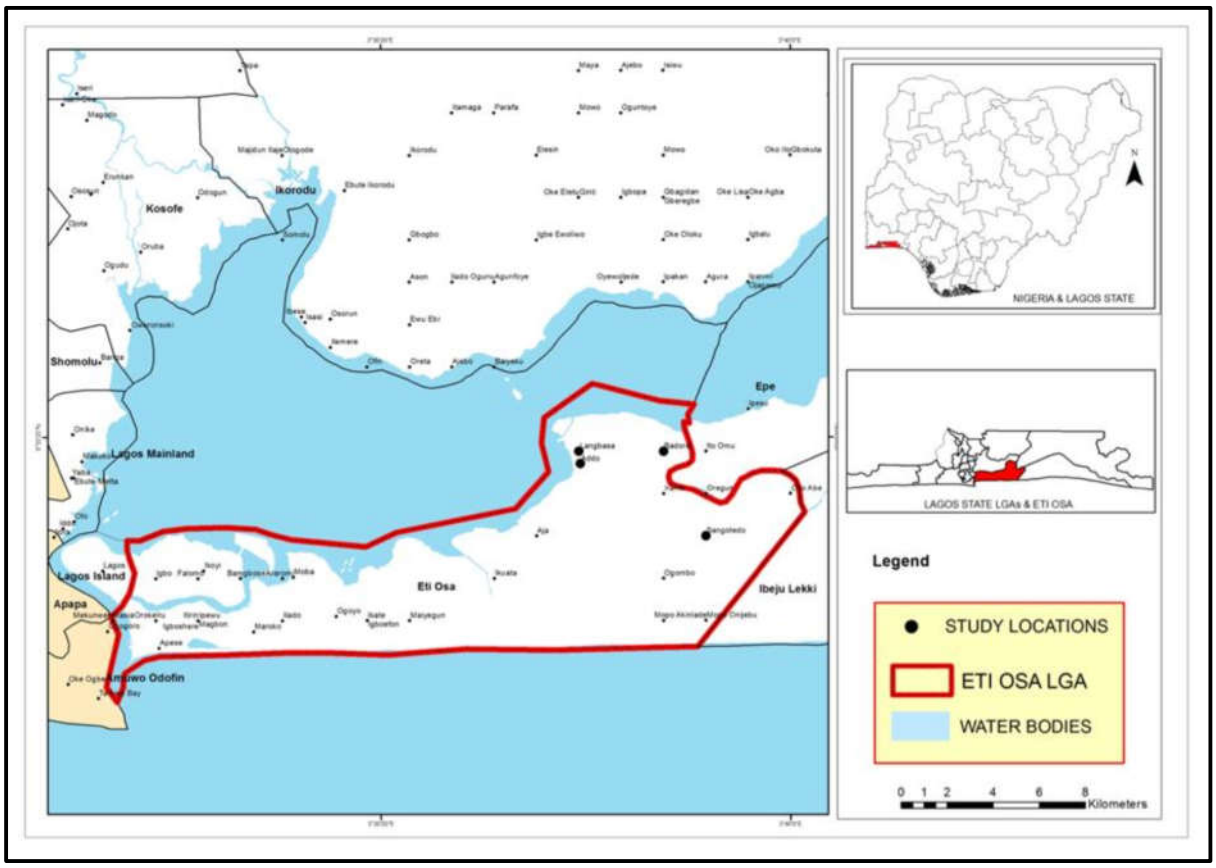

Figure 1: Ajah communities in Eti Osa LGA, Lagos, Nigeria
Source: Center for Planning Studies, Lagos State University, Ojo, 2022

Methodology

This study utilized both secondary and primary data. The secondary data were collected from Eti-Osa LGA. There were three traditional communities in Ajah: Badore, Ado, and Langbasa. The total number of buildings in the three communities was 35,820, they were captured on Google Earth. Yaro Yamane's (1967) Model was employed to determine the sample size of 399 (about 1% of the total number of houses). buildings for the three communities. Primary data was collected from both questionnaire administration and personal observations. The questionnaire has two parts, socioeconomic and neighbourhood characteristics. A systematic sampling technique was employed to select the sampled buildings. Descriptive and inferential statistics were employed to analyse data.

Results and discussions

Housing and Urban Development in Metropolitan Lagos

This section focuses on the spatial growth and the rapid rate of development in Metropolitan Lagos in order to show the significance and the role of housing in the study area. Since Lagos remains the most populous and unequalled state in Nigeria with most of its population concentrated in the Metropolitan area, it follows that housing for the people should be adequately researched, as shelter is one of the foremost priorities of life in urban development. Also obtaining reliable and accurate information on housing units as in the case of Metropolitan Lagos constitute a crucial step towards a better understanding of the structure of the urban housing market in Lagos. The comprehensive survey of all the buildings provides easy access to data and qualitative explanation of the spatial variations of the urban housing attributes.

Respondents' Gender Analysis of the research questionnaires as presented in table 4.1 shows that male headed households are higher than female in Ajah settlements. Home ownership among men is 52.5% against the recorded 47.5% among female. Male headed households were more pronounced in Ajah settlements. This implies more male participated in the study than female

Respondents' Age Group.

The most predominant age groups of respondents In Ajah settlements as presented in Table 4.1 were 41 and above (37.5%). Their occupations were public service, professional practice and they also dominate the business

ownership sector of the population. Other common age groupings are within 26-32 years (22.5%), 33-40 years (27.5%) These two groups constitute traders, artisans and civil servants. Age group under 25 (12.5%) constitutes the student population in the settlements.

This implies there are more adults in the study area also more adults participated in the study.

Respondents' marital status.
Table 4.1 presents 37.5%of the population as married while 17.5 were single ,13.5% were widowed, 11.5% were widower and 19.75%divorced. The prevalent occupations among the married population are trading and professional practices. The singles were mainly students and artisans.

Respondents' Ethnicity
The Yoruba ethnic group constitutes the largest portion of the population in Ajah settlements, it is 50% As illustrated in Figure 4.1, the Ibo tribe is 22.5% while other minorities comprise 15%. Hausa tribe is the least ethnic group it is 12.5%

This implies there are more Yoruba ethnic group in study area also more Yorubas participated in the study

Respondents' Level of literacy.
As shown in Table 4.1, illiteracy level in peri-urban settlements of Ajah is very low, the total is 2.2% of the sampled population size. People with secondary school education are 28.2% ,people with a first degree are 26.3%. Diploma education constitutes about 39.5% and it constitutes the highest number people , higher national diploma is 5.6%. There exists a reasonable literacy level in Ajah

Occupation
According to findings on occupation from the table 4.1 it shows civil servants as the commonest job of Ajah peri urban residents 33.5% of the population is engaged in this and it is because of the many government parastatals in the area. Petty traders are 24.5% of the population ,30% are self employed commercial enterprises and professional practices constitutes this population while 12.5% engage in other activities

Household sizes
As shown in the analysis in Table 4.1, there are four recognised household sizes in Ajah peri-urban settlement and they are greatly influenced by educational status, tribe and income level. Household size of 1-2 persons constitutes 20.5%. Household sizes of 3-5 persons is the commonest, having 32.5% of the respondents' population. It is mostly common among the highly educated and also the Yoruba race in the residents of Ajah The second predominant household size is 6-8 persons (26.5%), prevalent among the uneducated, low income group and the Ibo ethnic group

4.1 OVERVIEW OF DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Frequency Distribution on socio Demographic and economic Characteristics of the Respondents

Background Information	Label	Frequency (f)	Percentage (100%)	Valid Percent	Cumulative Percent
Gender	Female	190	47.5	47.5	47.5
	Male	210	52.5	52.5	100.0
	Total	400	100.0	100.0	
Age Group	18-25	50	12.5	12.5	12.5
	26-32	90	22.5	22.5	35
	33-40	110	27.5	27.5	62.5
	41 and above	150	37.5	37.5	100
	Total	400	100.0	12.5	
Marital status	Single	71	17.75	17.75	17.75
	Married	150	37.5	37.5	55.25
	Widow	45	11.25	11.25	66.5
	Widower	55	13.75	13.75	80.25
	Divorced	79	19.75	19.75	100.0
	Total	400	100.0	100.0	
Ethnicity	Yoruba	200	50	50	50
	Igbo	90	22.5	22.5	72.5
	Hausa	50	12.5	12.5	85
	Others	60	15	15	100.0
	Total	400	100.0	100.0	
Literacy level	SSCE	71	28.2	28.2	28.2
	OND	150	39.5	59.5	87.7
	HND	6	5.6	2.4	90.1
	B.SC	16	26.3	6.3	96.4

	Others	9	3.6	3.6	100.0
	Total	400	100.0	100.0	
Occupation	Civil servant	134	33.5	33.5	33.5
	Petty trading	97	24.25	24.25	57.75
	Self employed	120	30	30	87.75
	Others	49	12.25	12.25	100
	Total	400	100.0	100.0	
Household size	1-2	110	20.5	27.5	27.5
	3-5	101	32.25	25.25	52.75
	6-8	90	26.5	22.5	75.25
	9 and above	99	20.75	24.75	100
	Total	400	100	100	

Source: Field Survey, 2021.

4.2. Determinants of population sprawl

Table 4.2

In your view what is causing the population sprawl in Ajah		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	High price of land	40	10.0	10.0	10.0
	Proliferation of estate developers	48	12.0	12.0	22.0
	Rural urban migration or urban rural migration	196	49.0	49.0	71.0
	Cost of living	116	29.0	29.0	100.0
	Total	400	100.0	100.0	
Could the current trend of population sprawl in Ajah have effects on housing managements		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Agree	8	2.0	2.0	2.0
	Disagree	44	11.0	11.0	13.0
	strongly agree	228	57.0	57.0	70.0
	strongly disagree	120	30.0	30.0	100.0
	Total	400	100.0	100.0	
Is population sprawl considered as a threat to your community		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Yes	244	61.0	61.0	61.0
	No	156	39.0	39.0	100.0
	Total	400	100.0	100.0	
Are there any dedicated local measures to limit population sprawl		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Yes	202	50.5	50.5	50.5
	No	198	49	49	100.0
	Total	400	100.0	100.0	

Source: (Field Survey 2021)

causes of population sprawl: According to the respondents and analysis as shown in table 4.2 10% choose high price of land, 12% choose proliferation of estate developers, 49% choose rural urban or urban rural migration, 29% Choose cost of living.

This implies rural-urban or urban - rural migration happens to be the major of population sprawl in Ajah

Could the current trend of population sprawl have effects on housing in Ajah; As shown in table 4.2 among 400 respondents 59% of the total respondents agreed the current trend of population sprawl will have effect while the remaining 41% disagree

This implies the current trend of population sprawl in Ajah will definitely have effects on housing.

Population sprawl as a threat: Analysis of the field survey in table 4.2 shows that 61% of the respondents see population sprawl as a threat in Ajah settlements while 39% indicated that population sprawl can't be an issue.

This implies population sprawl can be a threat to Ajah residents if local measures are not provided to limit population.

Are there any dedicated local measures to limit population sprawl: Analysis of the field survey in table 4.2 shows that 56% of the respondents believes there are not dedicated local measures to limit population sprawl while 44% of the respondents on the contrary said local measures are provided to limit population sprawl in Ajah.

Through some personal interview in the study area local measures are not provided to limit population sprawl in the area

4.3 HOUSING TYPES AND RESIDENTIAL RENT VALUE

Table 4.3

Residential status		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Owner	180	45	45	45
	Tenant	220	55	55	100
	Total	400	100.0	100.0	
Dwelling type		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Single room	80	20	20	20
	Room and parlor	130	32.5	32.5	52.5
	Mini flat	120	30	30	82.5
	Standard flat	70	17.5	17.5	100
	Total	400	100.0	100.0	
Toilet type		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Put latrine	200	50	50	50
	Water closet	130	32.5	32.5	82.5
	In the bush	70	17.5	17.5	100
	Total	120	100.0	100.0	
House rent per month in Naira		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	1000-3000	36	9.0	9.0	9.0
	5000-10000	44	11.0	11.0	20.0
	10000-15000	232	58.0	58.0	78.0
	15000 and above	88	22.0	22.0	100.0
	Total	400	100.0	100.0	
If owned, value of land in Naira		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	500,000-2million	68	17.0	17.0	17.0
	2million-3.5million	60	15.0	15.0	32.0
	3.5million- 5million	168	42.0	42.0	74.0
	5million and above	104	26.0	26.0	100.0
	Total	400	100.0	100.0	
If dwelling is purchased		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Below 5 million-10million	36	9.0	9.0	9.0
	10-20million	124	31.0	31.0	40.0
	20-30million	164	41.0	41.0	81.0
	30million and above	76	19.0	19.0	100.0
	Total	400	100.0	100.0	
Duration of residency		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	1-5years	68	17.0	17.0	17.0
	6-10years	40	10.0	10.0	27.0
	11-15years	100	25.0	25.0	52.0
	16years and above	192	48.0	48.0	100.0
	Total	400	100.0	100.0	

Residential status: As shown in table 4.3. Among 400 respondents 45% are house owners while 55% are tenant

This implies there are lesser house owners in study area due to factors like land affordability, high cost of living.

Dwelling type : According to the respondents 20% lives in a single room ,32.5% lives in a self contained apartment,30% lives in a mini flat, the least percentage of the respondents lives in a standard flat 17.5%

This implies much percentage of the respondents lives in a self contained apartment in the study area due to high cost of of land, high house rent

Toilet type: According to respondents 49% of the population uses the pit latrine, 50% uses the water closet or the flush system while 10% uses other method.

Hence the water closet or the flush system is the most used toilet type in the study area.

House rent per month in Naira: The house rent varies according to the respondents as 9% pays between 1000-3000, 11% pays between 5000-10000, 22% pays 10000-15000, 58%pays 15000 and above.

Hence the house rent is more costly in the study area in which 58% of the respondents pays 15 above.

If owned, value of land in Naira: According to the respondents 17% choose 500,000-2million, 15% choose 2 million - 3.5million, 26% chose 3.5 million -5 million, 42% choose 5 million and above.

Hence there is high cost of land in the study area.
Duration of residency: The field survey analysis presented in Table 4.3 shows that 17% of the respondents has been living in the study area within period of 1-5 years, 48% have lived there between 6-10 years, 25% have lived between 11-25 years, the least 10% lived 16 years and above.

Hence this trend shows that rapid population sprawl has been primarily within the past ten years in Ajah Peru urban settlements.

4.4 SECTION D: CHALLENGES AND MANAGEMENT OF HOUSING

Table 4.4

Land affordability		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Low	112	28.0	28.0	28.0
	High	240	60.0	60.0	88.0
	Very high	48	12.0	12.0	100.0
	Total	400	100.0	100.0	
How can you describe the quality of your environment		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Bad	28	7.0	7.0	7.0
	Good	72	18.0	18.0	25.0
	Very	140	35.0	35.0	60.0
	Very good	160	40.0	40.0	100.0
	Total	400	100.0	100.0	
How can you describe land security in your area:		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Secured	72	18.0	18.0	18.0
	Not secured	96	24.0	24.0	42.0
	Poorly secured	92	23.0	23.0	65.0
	Highly secured	140	35.0	35.0	100.0
	Total	400	100.0	100.0	
Waste disposal system		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Bad	60	30.0	24.0	24.0
	Good	60	30.0	39.0	63.0
	Fairly good	40	20.0	27.0	90.0
	Very good	40	20.0	10.0	100.0
	Total	400	100.0	100.0	
Environment security		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Poor	180	45.0	45.0	45.0
	Good	112	28.0	28.0	73.0
	Very poor	68	17.0	17.0	90.0
	Very good	40	10.0	10.0	100.0
	Total	400	100.0	100.0	
How can you describe your drainage system		**Frequency (f)**	**Percentage (100%)**	**Valid Percent**	**Cumulative Percent**
Valid	Poor	120	30.0	30.0	30.0
	Good	80	20.0	20.0	35.0
	Very poor	212	53.0	53.0	88.0
	Very good	48	12.0	12.0	100.0
	Total	400	100.0	100.0	

Land affordability
According to the respondents as shown in table 4.4 land affordability in Ajah is very high total 72% of the population support this while 28% of the population somehow believe it is low.

Also through the interview conducted and the analysis of the research questionnaires this factor is also barrier to housing in Ajah urban settlements it is primarily fueled by the activities of land speculators engaging in land for unreasonable gain and profits.

Quality of the environment
According to the respondents on quality of the environment 25% of the respondents chose bad, 40% choose good, 20% on very bad while 25% choose very good.

This analysis shows quality of environment in Ajah urban settlements is good and reasonable to some extents

Land security:According to the analysis on table 4.4 24% of the respondents chose secured, 18% chose not secured, 23% on poorly secured, while 35% choose highly secured.

Through some interviews conducted Government acquisition by the central government has limited the hectares of land under the control of the natives thus causing repeated land ownership conflicts in Ajah settlements . The government does not have a good mechanism put in place to curb the nefarious activities of land speculators and the end results in neo-customary land system. This implies land are highly secured in Ajah settlements

Waste disposal system : According to the respondents 30% choose bad , 30% choose good , 20% choose very bad and also 20% choose very good.

This implies good waste disposal system is lacking in some places in Ajah settlements as indicated from table 4.4 only 50% of the total respondents have ascess to good waste management.

Environment security: As shown in table 4.4. Among the 400 respondents, 45% claimed to have a good environmental security while 55% said there was no environmental security in their neighborhood.

This implies environmental security is an issue in some areas in Ajah settlements.

Drainage system: Most of houses in Ajah Eti osa LGA settlements lack a good drainage system. As shown in Table 4.4 73% of the respondents live in areas prone to flooding and environmental pollution as a result of poor or lack of drainage system in their residential areas.

4.5 Test of Hypothesis
Having examined the personal data of the sample, the researcher proceeds to test the hypothesis formulated earlier in the study. Correlation will be used to test hypothesis.
H_o There is no significant relationship between urban sprawl and housing
H_i There is significant relationship between population sprawl and housing

Correlations

		ha1	ha2
ha1	Pearson Correlation	1	.144*
	Sig. (2-tailed)	400	.044
	N		400
ha2	Pearson Correlation	.144*	1
	Sig. (2-tailed)	.044	
	N	400	400

*. Correlation is significant at the 0.05 level (2-tailed)
Source: Researcher's computation using SPSS, 2021

From the table, it shows that the result of the hypothesis is greater than 0.05, which implies that the null hypothesis is rejected. The result shows 0.044<0.05. Therefore, there is significant relationship between population sprawl and housing.

4.6 Discussion of Findings
The findings in the tables shows that there is a significant relationship between urban sprawl and housing. Hence, the null hypothesis was rejected.

This is in agreement with the statement of Olujimi, (2019) asserted that the increasing urban sprawl in most cities in developing countries continues to attract attention of national and international agencies but the efforts had not achieved much result at checking the sprawl. Shen & Wu (2013) asserted that each housing initiative varies in building typologies, mode of construction, target users and conformity to standard & Housing development in the peri-urban calls for consideration of the socio-economic attributes of the different income groups of the migrants but this is not the case in most peri-urban housing developments. Nwokoro & Dekolo, (2012) in their study asserted that metropolitan Lagos is built up in terms of housing development. It has been argued that most recent expansions in Lagos have been in the peri-urban.

Also, according to Jiboye (2011) Housing challenge is dominant in Lagos because of high population growth rate and poor government intervention in housing development for the low-income group.

Sudhir (2018) further asserted that Urban Sprawl is generally characterized by discontinuous, haphazard, uncoordinated, unplanned or poorly planned urban development. It is characterized by low density, excessive consumption of land, automobile dependence, separation of land-uses, social segregation and displeasing aesthetics. Just like housing, Researchers explained urban sprawl in many ways; and everyone has one result that, if urban sprawl is unplanned then it has a negative impact on the environment.

Therefore, Urbanization is a structure of metropolitan city growth that is the reason for social, economic, and political forces and to the physical geography of an area. Some of the reasons for the sprawl contain population growth, urban economy, settlement patterns of infrastructure activities such as the construction of bridges, metal and concrete roads and the provision WiFi using public encouraging development. Housing issues are more critical in developing countries like Nigeria because of its magnitude and lack of resources to tackle it. Hence, the level of urban sprawl will greatly determine housing.

Summary, Conclusion and Recommendations

In this study, an attempt had been made to examine the population sprawl and housing characteristics in Ajah. The aim of this research is to examine the characteristics of housing and population sprawl in settlements of Ajah Eti osa LGA. The objectives are to examine the Socio economic attributes of the residents and its influence on the typology and quality of housing in the selected settlements; to examine the determinant of population sprawl in the study area; to identify various housing types in Ajah Eti osa LGA and to examine the challenges to governance and management of housing in Lagos peri-urban settlements in Ajah Eti osa Local Government area Lagos State. Research questions and hypotheses were formulated in relation to this in which geographically the study covers Ajah and it's environment. Also the variables in this study were conceptualized and the study was also supported with relevant recent literatures. A descriptive survey research design was adopted for the study and a sample size of 400 narrowed to residents of Ajah communities in Eti osa L.G.A. That is, a person from each household were randomly selected for sampling, using the simple random sampling techniques. The instrument used for the study was questionnaire, this questionnaires for the individual households were grouped into five sections, namely, general issues, Housing types and residential rent value; Challenges and management of housing and Determinants of population sprawl and demographic characteristics. Information and data collected through pretest of questionnaire and participation by expert as well as corrections on the research by my supervisor to determine the content, their relevance and appropriateness in the study. In this study, correlation test was used to test the hypothesis which was suitable for assessing population sprawl and housing characteristics in Ajah. The findings assert that there is significant relationship between population sprawl and housing.

Conclusion

This study concluded that there is significant relationship between population sprawl and housing. The major characteristics of urban sprawl are low density development, excessive consumption of land, automobile dependence, haphazard and uncoordinated development, separation of land-uses and unpleasant aesthetics. Low density development, excessive consumption of land and automobile dependence was found to be characteristics of urban sprawlUrban environmental problems are of different dimensions and are mostly due to geologic, climatic and cultural factors. However, the cultural factors seems to be more pronounced in the Nigerian context because most of the identified urban environmental issues are so much associated with the way of life of the people either as reactions to urbanization or their spatial heritage. Their effects are far reaching on efforts to attain sustainable development in the country. Since no section of the country's urban environment is immune to environmental effects, there is urgent need to seek workable solutions by the application of planning, economic, legal, institutional and educational tools as have been suggested here. One basic factor that is essential to successful implementation of planning project is to embrace sound planning practice that is based on evolving principles. It is time for city dwellers particularly in Nigeria and other developing countries to note that government resources are limited and its areas of attention are unlimited. This has made the need for collaboration between government and the public in curtailing urban sprawl. Therefore, the strategy of planning with the communities in a bid to check urban sprawl as suggested would go in no small measure at enlisting the support of the developers. It is hoped that if these tools are properly adopted it will result in the enculturation of the right environmental management practices that would prevent the further deterioration of our physical urban environment; hence the possibility of achieving sustainable development in Nigeria and Ajah area of Lagos State in particular in the nearest future is assured.

5.3 Recommendation

In view of the findings on population sprawl and housing in Ajah, the following measures were recommended:

- Certain sustainable measures should be offered such as preparation of action plan, the involvement of stakeholders and phasing programmes towards the development of the area.
- The solution therefore, readily lies with the people (i.e. the developers). All that is required is to guide the people through the use of effective advocacy in their physical development activities. Therefore, State Urban and Regional Planning Board (as designated in the Nigerian Urban and Regional Planning laws) or the agency saddled with the responsibility in the state need to adopt the approach of "planning with the people" and not necessary "planning for the people" with a view to collaborate the people's efforts with that of the government in their physical development bids.

- Built environment professionals (e.g. architects, urban planners, estate managers, builders, engineers, etc.) have a role to play in creating environment that does not jeopardize peoples' health and well-being`. They should accept the responsibility of being the "watch dog" over the environment in making sure that they use their professional expertise to protect the environment for the present and future generations.
- Going by the level of construction activities that go on in this country, there is a need for effective monitoring by the relevant authorities of every construction activity to make sure that such does not have adverse effects on the environment within, around or distance from the construction site.
- Solid waste management in urban areas seems to have engaged the attention of government at all levels in Nigeria. Despite the establishment of waste management agencies, the problem of solid waste management persists in urban areas in the country. Therefore, Public-Private Partnership or outright privatization of urban waste management activities should be explored.
- The Public-Private Partnership (PPP)should be involved in physical development planning of Nigerian cities with a focus at checking urban sprawl
- The use of advocacy in the enlightenment of the communities and land-owners residing at the city suburbs is to see their relevance
- The Local Planning Authorities should facilitate arrangement between the land-owners and relevant individual professional firms that would render the required services in the preparation of the layout plans. The arrangement therefore, is to ensure that these services are rendered on the understanding that agreed number of building plots would be released to the professionals in returns for their services.
- Authorities that their involvement in the facilitation of this arrangement should not be on the premise of exploiting the communities or the land-owners of their financial benefits but essentially to ensure that the city suburbs are well-planned.

References

[1]. Ade, M. A. and Afolabi, Y. D. (2018) Monitoring urban sprawl in the federal capital territory of Nigeria using remote sensing and GIS techniques Ethiopian Journal of Environmental Studies and Management Vol. 6 No.1 2018 http://dx.doi.org/10.4314/ejesm.v6i1.10
[2]. Amao, F. L., (2018) Urbanization, housing quality and environmental degradation in Nigeria. Journal of Geography and Regional Planning, Vol.5 (16), 422-429.
[3]. Bhatta, B., (2017) "Analysis of Urban Growth and Sprawl from Remote Sensing Data". Advances in Geographic Information Science. Berlin Heidelberg: Springer-Verlag.
[4]. Chindo, M. M. (2018) Geographical Study of the Spatial Growth of the Greater Karu Urban Area, Nasarawa State. Unpublished MSc thesis, Department of Geography, Ahmadu Bello University, Zaria, Nigeria.
[5]. Ewing, R. et al. (2002). Measuring Sprawl and Its Impact. Smart Growth America, Washington, DC.
[6]. Isma'il M., Ezra I., Abdulkadir M. Y., Muhammad A. T. and Hadiza T. A. (2020) Urban Growth and Housing Problems in Karu Local Government Area of Nasarawa State, Nigeria Global Journal of Research and Review ISSN 2393-8854 www.gjrr.org
[7]. Nnaemeka-Okeke R. (2016) Urban Sprawl and sustainable City Development in Nigeria Journal of Ecological Engineering Volume 17, Issue 2, Apr. 2016, pages 1–11 DOI: 10.12911/22998993/62277
[8]. Olujimi J. (2019) Evolving a Planning Strategy for Managing Urban Sprawl in Nigeria J Hum
[9]. Ecol, 25(3): 201-208 (2019) 29 May 2019
[10]. Owolabi, B. O. (2014) Characteristics of housing in Nigeria: A case study of Oyo state Academia Journal of Environmental Sciences 2(8): 133-151, November 2014 DOI: http://dx.doi.org/10.15413/ajes.2014.0118 ISSN: 2315-778X ©2014 Academia Publishing
[11]. Oyeleye, O. I., (2017) Challenges of urbanisation and Urban Growth in Nigeria. American Journal of Sustainable Cities and Society.
[12]. Sudhir K. S. (2018) Characteristics of Urban sprawl: a cross-cultural analysis Approved Journal No. 48514 ISSN: 2249-894X Volume - 7 | 26 November 2018. www.lbp.world https://www.researchgate.net/publication/329196573
[13]. United Nations Department of Public Information, (2008) Achieving the Millennium Development Goals in Africa-Recommendations of the MDG Steering Group. Retrieved from: http://www. mdgafrica.org.pdf, on March 2009.
[14]. Acheampong, R. A., & 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.
[15]. Adam, A. G. (2014). Informal settlements in the peri-urban areas of Bahir Dar, Ethiopia: An institutional analysis. Habitat International, 43, 90–97.
[16]. Adebayo, I., & Aliu, A. (2010). Evaluating the influence of housing quality on urban residents' wellbeing: the case of Lagos Nigeria. International Journal Of Academic Research, 2(6),
[17]. 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.
[18]. Amao, F. L. (2012). Urbanization, housing quality and environmental degeneration in Nigeria. Geography and Regional Planning, 5(16), 422-429.
[19]. Anofojie, A. E., Adeleye, O. A., & Kadiri, M. A. (2014). Housing quality assessment in selected public residential estates in Amuwo-Odofin L.G.A, Lagos, Nigeria. International Journal of Research In Earth & Environmental Sciences, 2(6), 7-17.

[20]. Appiah, D. O., Bugri, J. T., Forkuo, E. K., & Boateng, P. K. (2014). Determinants of periurbanization and land use change patterns in peri-urban Ghana. Journal of Sustainable Development, 7(6), 96-106.
[21]. [38] Jiboye 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. Available at www. irssh.com/…/16_IRSSH-114-V2N1… [39]
[22]. Ilesanmi A.O. (2013), The Legacy and Challenge of Public Housing Provision in Lagos, Nigeria, https://www.humanitarianlibrary.org/sites/default/files/2013/0
[23]. Mabogunje A.I. (2004): An African Perspective. In UNHABITAT Debate. Vol.10, No.4, Pp.12 [Makinde O., (2012). Urbanization, housing and environment: Megacities of Africa, International Journal of Development and Sustainability, 1(3). 976-993, https://pdfs.semanticscholar.org/6aeb/5f8179540cf927cdf694c 78023c620014903.pdf
[24]. Maslow, A.H. (1943). "A motivation". Psychological 396.. doi:10.1037/h0054346
[25]. National Affordable Sustainability; Housing theory of Review. 50 (4): Association, Areas. http://www.countrystudies.us/nigeria/
[26]. Nigeria Population Census human 370(2006). Policy (2006). National Population Census of Nigeria. Federal Republic of Nigeria. [48] Nubi, O.T. (2008): Affordable Housing Delivery in Nigeria. The South African Foundation International Conference and Exhibition, Cape Town, October, Pp. 1-18.
[27]. Ogunleye B. (2005). Environmental degradation control for sustainable urban growth in Nigeria In, Fadare et al. (Eds.).