

AN INVESTIGATION OF RURAL - URBAN LINKAGES OF THE LAGOS MEGACITY, NIGERIA

Taibat Lawanson¹., Omoayena Yadaua², and Idris Salako³

^{1, 2, & 3}Department of Urban and Regional Planning, University of Lagos, Nigeria
Email: tolawanson@gmail.com; Tel: +234 802 351 9666

Abstract

This paper has investigated the environmental challenges faced by Peri urban settlements in the Lagos Megacity. An intense study of the Isheri, Ibafo and Sagamu Interchange areas along the Lagos Ibadan Expressway axis was done. Socio economic characteristics, housing and environmental conditions as well as rural urban linkages were done to determine the flow of interaction between the settlements and the Lagos Metropolis. Data collection was by the administration of structured questionnaires on household heads of which 46 were sampled in Isheri, 113 in Ibafo and 191 in Sagamu Interchange areas respectively. Survey was by systematic random sampling. The study revealed a high level of interaction between the settlements and the Lagos Megacity as over 60% of respondents in the study area commute daily to work in Lagos. The study also revealed that land value, rental value in these peri-urban settlements had increase since 2005 when the highest rate of population influx was observed. Furthermore, environmental challenges especially poor infrastructure and security concerns had exacerbated. The paper concluded by suggesting strategies for mitigating these challenges and they include the introduction of participatory planning mechanisms as well as the enforcement of development control.

Keywords: Environmental Challenges, Lagos Megacity, Peri-urban settlements, Lagos Ibadan Axis

INTRODUCTION

According to the Organization for Economic Cooperation and Development (OECD (1979) the impacts of economic growth and physical expansion of the urban area are not confined within urban boundaries; they reach into much wider areas surrounding urban centres, creating so-called urban fringe areas, or peri-urban areas. Rakodi (19989) defines a peri-urban settlement as an area where urban and rural development processes meet, mix and inter-react on the edge of the cities.

It is often not a discrete area, but rather a diffuse territory identified by combinations of features and phenomena, generated largely by activities within the urban zone proper; hence the development of a peri-urban area is an inevitable consequence of urbanisation and as cities in developing countries continue to grow, the peri-urban area moves outward in waves.

At the broad theoretical level, it is suggested that there are economic, social, political and ideological linkages between urban and rural places. These find their physical expression in measurable flows of people, money and budgetary allocation. These flows are also associated with interactions between people, places and objects, but do not in themselves actually embody those interactions (Potter and Unwin, 1989). Firman (1996) identified four levels of interactions that occur between major cities and their adjoining settlements. These are:

1. the peri-urban regions: those areas surrounding the cities within a daily commuting distance from the core and characterised by high interaction with it;
2. the agricultural regions, often lying along the corridors connecting a large city core to smaller town centres;
3. densely populated rural regions;
4. sparsely populated frontier regions

Attempts to conceptualize peri-urbanization range from an emphasis on rural-urban linkages as footloose processes rapidly transforming territories, to the notion of peri-urban as a term qualifying areas with mixed rural and urban features. Rakodi, (1998) sees the peri-urban interface as a dynamic zone both spatially and structurally. Spatially, it is the transition zone between fully urbanised land in cities and areas with predominantly agricultural land use. It is characterised by mixed land uses and indeterminate inner and outer boundaries, and typically is split between a numbers of administrative areas. The land area which can be characterised as peri-urban shifts over time as cities expand. It is also a zone of rapid economic and social structural change, characterised by pressures on natural resources, changing labour market opportunities and changing patterns of land us.

Dayaratne (2003) averred that peri-urban areas are constantly undergoing major transformations. The phenomenon is usually triggered by the influx of large numbers of hitherto urban residents, pushed out by high housing costs in the city who seek for cheap

accommodation in the urban fringes. Poor migrant workers and informal sector operators also converge in these communities and inhabit poorly constructed and often hurriedly built shacks which are rented out as rooms. The situation in the study area is one of chaos where well-built residential dwellings are neighbours to such hazardous contraptions. As squatting is prominent, slums and shanties emerge while traditional agriculture gives way to new forms of production aimed at fulfilling the urban dwellers' needs.

Scant research exists on the phenomenon of peri-urban settlements in Nigeria. According to Jaiyebo, (2003), there is a dearth of information on the peri-urban interface in Nigeria, and rates of city expansion and migration to the city fringes are not adequately documented. Available studies include those of Areola (1994) who investigated the spatial growth of Ibadan and concluded that a full understanding of the economic and environmental determinants of Ibadan city's growth and spatial expansion can be gained only through detailed studies of the city and surrounding settlements. Maconachie and Binns (2003) study of the people-environment relationships in the rural-urban interface of Kano identified socio-economic and cultural factors as the most significant forces shaping the process of peri-urban change in the city.

Studies on the peri-urban interface of Lagos Metropolis include those of Mabogunje (1968), Odumosu (2002), CPMS (2005), Gandy (2006) and Salau (2006). They all made reference to this phenomenon in the context of the growth and development of the Lagos Metropolis and none considered the effect of peri-urbanization on the settlements which have been annexed to the Lagos Megacity. This study focuses on these settlements, examining their physical characteristics, environmental challenges and peculiar linkages with the Lagos Metropolis. It goes further to consider their potentials for ultimate integration with the Lagos Megacity

THE STUDY AREA

The spatial growth of Lagos Metropolis has gone beyond the physical boundaries of Lagos State and spilled over at many points into adjoining Ogun State. The resulting Lagos Megacity region includes the continuously expanding area comprising the 20 local government areas of Lagos State and the many rural and urban communities that are developing in proximity to the Lagos metropolitan area.

There are five major peri-urban axes and these are: the south-west (Ojo-Badagry), south-east (Lekki-Epe), north east (Ikorodu), North West (Alimosho-Igando) and north (Lagos-Ibadan).

This study investigates the Lagos Ibadan Peri-Urban axis. It is located on between Latitude 60 44' North and Longitude 30 25' East'' of Isheri North and Latitude 60 54' North and Longitude 30 7' East'' of the Sagamu interchange. In aerial distance, Lagos Ibadan Axis of the Expressway is about 32 kilometres between the Isheri North end of Lagos State and the Sagamu Interchange of the Expressway in Ogun State.

The peri-urban settlements of the Lagos Ibadan Axis are strategically located nodal settlements along the Lagos - Ibadan Expressway absorbing the spillover population from the Lagos Megacity. They are a cluster of small settlements along the axial of the Lagos Ibadan Expressway, which is a unimode transportation route that links Lagos with other parts of Nigeria via the Sagamu-Ore Expressway. The physical development of Lagos Ibadan corridor is further reinforced by various religious institutions that have taken over the corridor in recent years; and are major flash points for seasonal traffic congestion. They include the Redemption Camp at Mowe, Mountain of Fire Ministry Camp at Km 12, Deeper Life Ministry at Km 15, and NASFAT site at km 16. Other major land uses are those of various private universities, Cargo Airport at Sagamu Interchange, residential estates such as the Gateway Village, Riverview, Havillah, Sparklite Estates, Paradise City and others.

Table 1: Characteristics of the Lagos Ibadan Peri-Urban Zones

Characteristics	PERI URBAN ZONES ACTIVITIES
Peri-Urban Zone	Sagamu Interchange: 50%; Ibafo: 30%; Isheri: 20%
Dominant Settlements	Mowe; Ibafo; Ofada
Population Estimate (2003)	21,740
Land Area	450 km ²
Degree of Land Use	Minimal < 10%
Topography	Low and gentle 5 – 25 m
Main Access	Lagos-Ibadan Expressway
Roads & Highways	No Road Network; Transit Corridor
Water Supply	No Water Supply System
Economic Infrastructures	Rudimentary
Social Infrastructures	Rudimentary

Source: CPMS (2003) Ogun State Conceptual Regional Plan (2004 - 2025) Main Report

The peri-urban settlements have similar land use with slight variations along the population pattern. The two predominant uses of land are residential and peasant farming. Many of the communities (28%) have social infrastructure such as schools and police posts. Table 1 below highlights the key characteristics of the zone.

Eighty two settlements have been identified in this zone (CPMS, 2005) of which more than 70% are hamlets of less than 100 persons. Another 20% have population of between 1000 and 2500 each. The six dominant settlements are Ofada, Abaren, Orimerunmu and Arepo with population sizes in the range of 2,500 to 5,000; and Mowe and Ibafo with populations greater than 10,000. (CPMS, 2003).

The study area comprises three major areas:

- Isheri Area constitutes a substantial portion of the first OPIC acquisition; occupants in the area include the cattle and ram dealers on the bank of the Ogun River, Sparklite Estate, a private developer housing effort, the Isheri community to the east of the expressway and the OPIC head office. At its northern fringe are the settlements of Arepo and Warewa. This portion of the corridor is low-lying on both sides of the expressway.
- Ibafo Area This area is dominated by Ibafo, a town on both sides of the expressway, with several other settlements including Araromi, Magboro Akeran and Magboro Sofolarin. The area also contains three religious settlements, MFM, Deeper Life and NASFAT with their potential to create large flash traffic. The centre of Ibafo is approximately at 13.5 kilometres from the State boundary with Lagos State, and it extends for about 3 kilometres along the expressway. It is elliptical in shape, tapering off from the 3 kilometres along the expressway to less than 100 metres wide two kilometres away on both sides of the expressway.
- Sagamu Interchange Area is made up of the gateway city to the north of Ibafo, starting from Mowe and extending to the Sagamu Interchange. The dominant existing settlement is Mowe, which has grown to merge with Loburo and Pakuro. Others are Ofada, Orimerunmu, Abaren and Asese. Major settlements include the Redemption Camp and CETEP University There is projected to be about 26,500 Mowe today occupies an area of about 11 square kilometres, estimated from digital images.

About 90% of this land area is west of the expressway, and it extends about 3 kilometres inwards. Its extent along the expressway is about 3.5 kilometres starting at about kilometre 20 to 23.5 from the State boundary with Lagos State.

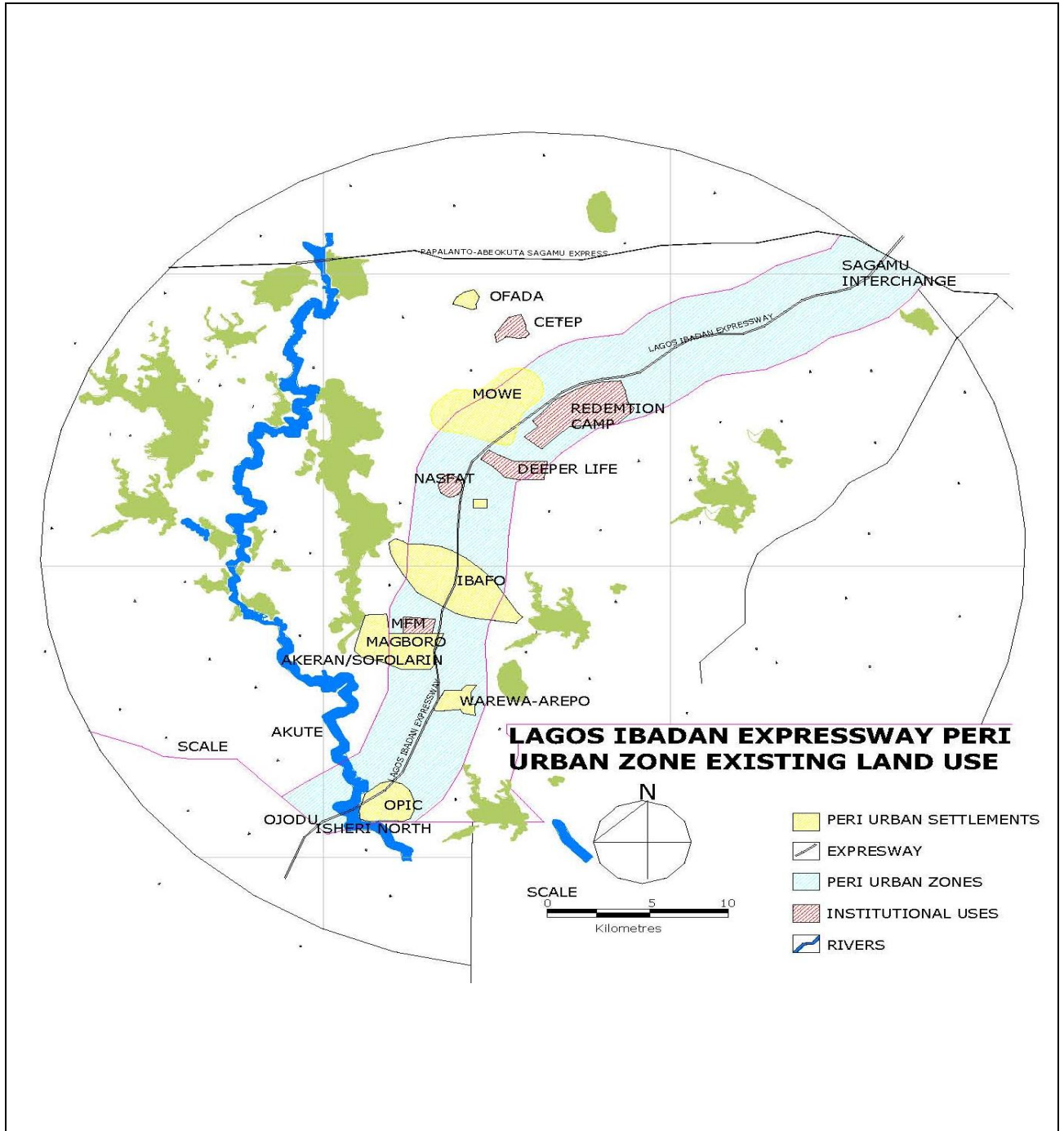


Figure 1: Land Use Pattern along Lagos Ibadan Axis

RESEARCH METHODOLOGY

Lagos Ibadan Peri-Urban Axis was purposively selected for this research because of its distinct geographic attribute of linking Lagos to the rest of Nigeria. The study area was delineated on the basis of its linear form of settlements along the Lagos Ibadan Expressway with scattered residential quarters for the purpose of questionnaire administration. Data collection was by systematic random sampling. Data was collected on the socio-economic characteristics of residents, physical and infrastructural facilities as well as their interaction with the Lagos Metropolis. A sample size of 5% of the sample frame of the estimated 6840 buildings (CPMS 2005) along the Lagos-Ibadan Axis was selected. 350 questionnaires were administered on household heads in 19 of the 82 settlements that make up the axis. 46 household heads in Isheri, 113 in Ibafo and 191 at Sagamu Interchange were sampled. Data analysis was by both simple descriptive as well as parametric analysis.

RESEARCH RESULTS

Socio-Economic Characteristics of the Respondents

The population is a relatively young one with about 71.1% aged between 20 and 40 years old. 7.7% of the respondents are less than 20 years of age, while those between 41 to 60 years make up 18% of the population. Those above 60 years of age are 9%. The pattern of the age distribution is similar across the three zones; this may largely due to the fact that the axis is a transitory zone for working age men, unable to afford the cost of living in the Megacity.

The survey also revealed that the male population was 93.5%, 54.9% and 39.8% in Isheri, Ibafo and Sagamu Interchange areas respectively. A significant proportion of the respondents are single; 43.5%, 41.6% and 48.2% in Isheri, Ibafo and the Sagami Interchange areas respectively, while there are more married people in Ibafo and Sagamu Interchange areas (46.9% and 45%). Only about 26.1% of the respondents in Isheri are married. The differing figures in gender and marital status in Isheri may be attributed to the Cattle Market which is a sector dominated by men.

The Lagos Ibadan Peri-Urban Zones is largely made up of Nigerian nationalities (86.3%) comprising of various tribes such as the Yoruba speaking people of the Ijebu, Awori, Egba, Yewa, and Egun extraction; the Igbo, Hausa, Isokos, Urhobos, Calaber, and Ijaw. The nationalities from the West African Coast are about 11.4% of the respondents, while 2.3% of the populations are from other African Countries. Educational level is a key determinant for measuring standard of living in the study area. The study carried out revealed that 26.0% of the total respondents are literate by United Nations standards, having completed a minimum of secondary education. 34.8%, 32.7% and 19.9% have secondary education in the Isheri area, Ibafo area and the Sagamu Interchange respectively, the high level of literacy across the three zones is attributable to its proximity to the Lagos Megacity.

The survey of occupational status of the respondents revealed that 26.6% are Government employee and self-employed respectively while the unemployed and retired accounts for 22.6% and 3.4% respectively. However, a breakdown of the occupational status of the three peri-urban zones revealed that trading, civil service and students/apprentice are the most common activities, representing 15.1%, 29.4% and 21.4% in that order, while 6.9% are engaged in teaching, 5.4% in farming, 10% are artisans, 9.4% are factory workers, and 2.3% are retirees. In all the peri-urban zones, the majority of the respondents are civil servants followed by students and apprentice while trading activities was high in Ibafo and Sagamu. While majority of the respondents (26.6%) are earning less than N10,000 per month, those who are earning between N10,000 and N20,000 are 26.6% and 25.4% are earning between N20,001 and N40,000. 3.1% earn between N40,001 and N60,000, 5.7% are earning between N80,001 and N100,000. those who claimed to earn above N100,000 per month are 3.5% of the respondents. Interestingly, mode income per month was less than N10, 00 for Isheri and Sagamu Interchange areas, and between N20, 000 and N40, 000 in Ibafo. 16% of the respondents in Ibafo area earn over N100, 000 monthly. It could be deciphered from all these that a larger proportion (62%) of the respondents earn less than N20, 000 per month.

Housing and Environmental Profile of the Study Area

Majority of the houses in the study area were built between 2000 and 2010. The period that recorded the highest rate of building was between 6 to 10 years, which recorded almost half of the total buildings surveyed.

This is followed by the period between 0-5 years recording a total of 17.1% of the total number of buildings. A study of the pattern of growth within the three peri-urban zones shows that majority of the new building construction has been more concentrated around the Isheri-Ibafo areas, which adjoins the Lagos Megacity. Housing types in the study area are small rooming house types (28.6%). The detached type of houses, 1.7% and compound houses 27.1%, while block of flats accounted for 25.1%. The dominance of the rooming type is explained by the rapid growth of the Lagos Megacity in to the adjoining peri-urban settlements by low income earners and the adaptable nature of its design. It is easier to build and less costly to adapt for higher returns. It is also easier to let out to the various sizes of households.

Residential areas in the peri-urban zones differ according to the areas, but, the emerging trend is the acquisition of large tracks of land for the construction of housing estates. Major housing projects are Gateway Estates Riverview Estates, Havillah Estates and Sparklite Estates. Residential use in the peri-urban zone covers 50.9% of the total land area. Squatting is widespread across the study area, especially in Isheri. The study also revealed that 30% of the respondents were landlords, while 39.7% were tenants. Interestingly 25.1% were squatters. In Isheri area, about 50% of the buildings were occupied by their owners, while 32.6% were squatters. In Ibafo, 29.2% are owner occupier, while rented apartments made up 27.4% and squatters were 15.9%. 46.6% of respondents in the Sagamu Interchange areas were rented, 30.7% were owner-occupiers, while 22% are squatters. Average number of rooms for exclusive household use is 2 in Ibafo area, 3 in Isheri and Sagamu Interchange areas respectively.

Household wastes generated in the study area are mostly mixed use related wastes such as cartons, papers, foodstuffs, animal waste, and other related commercial and household waste. Wastes generated in the area are disposed by incineration (15.3%), 6.9% in manure piles, 26.65% are thrown into canals and drains, while those collected by garbage operators accounted for 22.6%. A look at the house waste disposal pattern of the peri-urban zones shows a similar pattern for the areas; as disposals through landfills and incineration is the most common means of disposing waste, also, garbage collectors and indiscriminate disposal in to canals and drainage channels are also common.

The peri-urban zone is fed primarily by the Lagos – Ibadan expressway with no significant tee-off between the Berger Junction at Isheri and the Sagamu Interchange. About 58% of the settlements have access by road, and 20% indeed have tarred roads. However, the dominant mode of transport is the commercial motor cycle locally known as Okada. Only Mowe and Ofada have roadside drains. In the Isheri-Ibafo area, there are a few feeder roads, mainly serving rural communities and some OPIC estates. Most of these roads are earth roads, but a few were designed and constructed by OPIC. All of them have no defined road junctions at intersections with the expressway, which. Developments along the peri-urban settlements are therefore very difficult to access. Trailers park along the road at Ibafo constituting serious hazard to high speed vehicles and visual unpleasantness. In the Sagamu Interchange area, there are much fewer feeder roads feeding the expressway, reflecting the limited development in the area. There is, however, an old network of roads connecting Ofada, Mowe and Pakuro and linking with the Papalanto – Sagamu Junction Road. There are other earth tracks in the area linking the villages.

Rural Urban Linkages: Study Area to the Lagos Megacity

About 61.1% of all respondents work within the Lagos Megacity. 27.7% work within the peri-urban axis while only 9.7% work in Ogun State. They travel to Lagos mostly by public buses (63.1%) or private cars (31.1%). Outside of work, 23.4% visit Lagos at least twice weekly for social engagements and cultural interactions, while 17.1% to buy goods.

62.6% of the respondents are of the opinion that land value has grown with the increasing influx of workers within the city to the peri-urban zones. House rent in the Isheri zone was considered to have increased 100%, Ibafo 38.9% and Sagamu Interchange by 62.6% in the period between 2005 and 2010.

54.3% of the respondents in consider the Lagos Ibadan Expressway to exert a positive impact on their settlement. Reasons adduced include accessibility, increase land value and commercial returns. Those who consider the location of the Expressway as exerting a negative impact gave traffic congestion and accidents, noise, security and influx of strangers as their reasons. It was discovered that in between 2005 and 2010, when the highest growth rates occurred in the axis, basic infrastructure and social amenities generally worsened.

The respondents attributed the situation to the influx of people as well as the settlements still being adjudged rural when their populations had far exceeded rural limits.

Table 2: Changes in Peri-Urban Growth Indices

Indices	Improved	Worsened	No Change observed
Electricity	33.4%	59.1%	6.9%
Water Supply	43.1%	46.6%	9.4%
Security	31.4%	55.1%	12.6%
Cost of Travel	8.6%	62.0%	28.6%
Traffic Flow	9.1%	78%	11.1%
Land Value	32.3%	37.1%	30.0%
Rent Value	36.9%	48.6%	14.0%
Crime	38.0%	42.3%	16.3%
Pollution	34.0%	46.6%	17.7%

Generally, majority the respondents believed land value has increased consequent upon the proximity of the Lagos Megacity. Also believed to have increased are such indices as house rent (62.6%), traffic intensity (69.4%), population growth (76.6%), housing density (60.3%), urban spatial growth rate (64.9%), crime rate (66%), and environmental problems (60.9%). urban sprawl is the only stable activity, while land availability has reduced considerably (51.4%) occasioned by the different types of development taking place in the peri-urban zones as shown in table 3 below.

Table 3: Changes in Environmental Indices in the Study Area

Indices	Increased	Reduced	Stable
Land Value	55.7%	36.9%	3.4%
House Rent	62.6%	30%	4%
Traffic Intensity	69.4%	13.1%	13.7%
Population Growth	76.6%	19.7%	0.3%
Housing Density	60.3%	30.3%	6.0%
Urban Growth Rate	64.9%	21.1%	10.6%
Crime Rate	66.0%	19.1%	11.4%

Urban Sprawl	39.1%	47.4%	9.1%
Land Availability	25.7%	17.7%	51.4%
Environmental Problems	60.9%	15.1%	17.1%

In order to determine the intensity of interaction between the Lagos Megacity and the Peri-urban settlements, the gravity model was adopted

The formula for calculating the gravitation flow of one settlement from the other is:

$$\text{The Gravity Model} = \frac{\text{Population}^1 \times \text{Population}^2}{\text{Distance}^2}$$

Where:

D^2 = the distance between the settlements

P^1 = population of Lagos Megacity

P^2 = population of Lagos Ibadan Peri-Urban settlements

Table 4: Gravitational Flow between the Peri-urban Settlements and the Lagos Megacity

	Distance between the Settlements	Population of Lagos Megacity	Population of Settlement	Force of attraction
Isheri	10,000m	9,3000,000	4,700	437.1
Ibafo	18,000m	9,3000,000	10,000	287.04
Sagamu Interchange	32,000m	9,3000,000	10,800	98.06

From the foregoing, the force of attractions is stronger at the Isheri peri-urban zone. One may therefore say that the expected interaction between the Lagos Megacity Region and the Peri-Urban Settlements increases as the product of the populations of the two ($P_i P_j$) increases, and it decrease as the distance between the Megacity and the settlement (d_{ij}) increases. As shown from the calculations above, the attraction between the Lagos Megacity regions and Isheri peri-urban zone (437.1) increases as its approaches Ibafo and decreases as it approaches the Sagamu Interchange

DISCUSSION

This paper has examined issues relating to the peri-urban settlements along the Lagos Ibadan axis of the Lagos Megacity. The objectives of the study are to determine extent and character of peri-urban settlements of the Lagos Megacity and the relationships that exist between the peri-urban settlements and the Lagos Megacity region looking at the social and economic interactions between them.

The rapid growth of the Lagos Ibadan Expressway peri-urban settlements and its reflection on the environmental quality of life of the residents has been found to have been largely influenced by its close proximity to the Lagos Megacity and this situation has created a number of environmental effects on the peri-urban settlements. Majority (92.3%) of the respondents believed the town has experienced some changes as a result of the proximity.

An easily notable effect of the Lagos Megacity on the peri-urban settlements is the phenomenal increase in the population of the Lagos Ibadan Peri-urban settlements over time due to massive relocation of residents from the Lagos Megacity. Study of the trends of population growth pattern of the Lagos Megacity and that of the Lagos Ibadan Peri-urban settlements shows direct positive correlation. This research found out that about 76.6% of the people in the Lagos Ibadan Peri-urban settlements moved in from Lagos and about 89.8% of this group moved in less than 10 years ago. Factors such as cheaper land, cheaper rent, social engagements and cultural interactions, political affiliations nearness to Lagos and nearness to work place were identified as reasons for moving to the Lagos Ibadan Peri-urban settlements.

There is intense interaction between the Lagos Megacity and the Lagos Ibadan Peri-urban settlements. The spatial pull of Lagos reaches peri-urban axis of the Lagos Ibadan Expressway and a dominant commuting pattern between them exists with great implications for the entire Peri-urban settlements. A large number of people living in the Peri-urban settlements were found to be working in Lagos and commuting to Lagos on daily basis. This study found that about 96.3% of the respondents commute to Lagos on daily basis and about 64% of this group do so for employment purpose only.

Traffic situation in the Lagos Ibadan peri-urban zones was generally considered by the respondents to be worse accounting for about 78% of the total respondents the traffic intensity shows that there is an increase in the capacity of the traffic; proximity to the Lagos Megacity was adduced by the respondents for the increase. Another effects of the Lagos proximity on the peri-urban settlements is the increase on house rent and land values. The value of land and house rent in the Lagos Ibadan peri-urban settlements has risen sharply especially between the last 10 and 15 years.

The study of land and housing development pattern in the Lagos Ibadan peri-urban settlements axis shows that land value has increase by (55.7%) in the peri-urban zones, which relates directly with upsurge in its population resulting from the spill-over of the Lagos Megacity. Majority of the developments in the peri-urban zones are located along the axial of the Lagos Ibadan Expressway, most of which are done without necessary planning approvals.

Due to the outward and uncoordinated growth of the Lagos Megacity, and the unplanned settlements along the peri-urban corridors of the Lagos Ibadan Expressway with the attendant land use conflicts, there is the threat of growing environmental problems. The use of contiguous land between the Lagos Megacity and the Lagos Ibadan Expressway peri-urban settlements consequent upon the conurbation process has important ramifications for the environmental management of the zones. The use of land is basic to all human activities and as population increases the intensity of activity becomes accelerated with consequent effects on the uses of land. It therefore implies that activities in the Lagos Megacity have spilled-over into the adjoining peri-urban settlements. The issue of land use spill-over between the Lagos Megacity and peri-urban settlements has become a problem within the last many years with the rapid increases in developmental activities especially residential and religious settlements that have led to the erosion of the character and integrity of the Lagos Ibadan Expressway. The attendant effects are high land values, high traffic intensity and hold-ups.

The development of these religious settlements and the corresponding residential development all have their implications and ramifications in terms of infrastructures, environmental pollution, farmlands and agricultural lands, social services, economic base, that brings about an undue pressure and burden on the peri-urban settlements resulting in the lopsided use of land and created by the over-spill of the Lagos Megacity into the peri-urban zones.

As the Lagos Ibadan peri-urban settlements grows in spatial dimensions as a result of the forces exerted by the Lagos Megacity, most of the development occurring along the axis of the peri-urban settlements are largely mixed use residential, commercial, institutional use in nature, but, the spate of speed of this developments activities has outstripped environmental management process necessary for proper development and planning of the peri-urban zones. This situation is such that there are developments activities going on at a fast rate with a very low rate of infrastructural provision and environmental management.

Majority of the Lagos Ibadan peri-urban settlements residents are of the opinion that the proximity of the Lagos Megacity has definite effects on environmental quality of the peri-urban settlements, especially in the areas of pollution, environmental sanitation, water quality, housing, traffic, and crime rate. The study revealed that basic infrastructure as well as security and traffic have generally worsened with the influx of people into the area. This study has shown that the growth potential of any particular settlement is inversely proportional to its distance from the Lagos Megacity. Settlements that are in close proximity to the Lagos Megacity have a higher propensity to grow demographically and spatially than those that are far from such centres. This explains the phenomenal growth and expansion of the Lagos Ibadan peri-urban settlements due to its close proximity to the Lagos Megacity. The attraction between the Lagos Megacity region and Isheri peri-urban zone increases as it approaches Ibafo and decreases as it approaches the Sagamu Interchange. The expected interaction between the Lagos Megacity Region and the Lagos Ibadan Expressway Peril-Urban Settlements increases as the product of the populations of the two increases, and it decrease as the distance between them increases.

CONCLUSION

This study has revealed the environmental issues of peri-urban settlements along the Lagos Ibadan Axis of the Lagos Megacity. The major elements that were considered are the need for a positive approach to peril-urban development in development planning; the need for effective governance of the peri-urban settlements of the Lagos Megacity; environmental management of the peril-urban settlements and the coordination of development proposals and Implementation mechanisms for infrastructure, housing and land supply in the peril-urban zones.

The many socio-economic and environmental problems currently found in the peril-urban settlements of the Lagos Megacity make it imperative that efforts are made to define the parameters for environmental management and sustainable patterns of peril-urban management.

The issues concerning planning, infrastructure, housing, land supply environmental sanitation, traffic management and community participation need to be addressed in an integrated manner through a division of responsibilities between the state and local governments. Activity centres in the peril-urban settlements should be identified and redesigned to create rooms for offices, supermarkets, small-scale industrial centres, restaurants, entertainment centres and other urban amenities. These centres should receive the full attention of the Physical Planning Departments of the Lagos and Ogun State Governments and representatives of the Lagos Chamber of Commerce and industries as well as of the Nigerian Economic Summit Group to relocate or establish new employment generating enterprises in the peril-urban settlements.

Curtailling the further spread of incompatible and illegal developments within the peril-urban settlements is an issue of considerable importance. Anticipating such development by realistic zoning and facilitating the quick and easy access to well laid-out and, if possible, serviced plots of land by individuals or estate developer can be important strategy in this regard.

Apart from the problem of solid waste and generally poor environmental sanitation, the Lagos Megacity Region peril-urban settlements suffers from water and air pollution due to the poor waste disposal facilities, traffic intensity along the Expressway, discharges of cattle waste from the operators of the Kara Cattle Market and Slaughter Slab greatly impair the quality of water in the Ogun River. Citizens in the peril-urban settlements must be mandated by the local governments to maintain clean and sanitary environment and every household must own refuse dust-bin for their waste materials. The Lagos and Ogun State Governments should relocate and merge many of the existing public centres such as markets, motor parks, bus terminals, abattoirs and re-develop with adequate infrastructural facilities.

A participatory planning strategy which seeks to involve the residents themselves in determining their management of their environment, their needs in terms of the priority infrastructure and services required their willingness to contribute to the cost of providing such facilities and their engagement in poverty-reduction activities to improve on their social, economic and political situation need to be put in place in the peril-urban settlements.

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