Settlement Dynamics In The Northern Fringes Of Port Harcourt Metropolis

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ABSTRACT: Growth in Port Harcourt has been experienced in terms of population and space. However, while some settlements in the northern fringes of Port Harcourt metropolis are growing rapidly, some are almost stagnant if not shrinking. This work has identified reasons why Port Harcourt is growing towards the north, factors for changes in population, land-use and infrastructure, the magnitude of the changes in population and infrastructure have been identified, the role of both the public and private sector in addressing the issue of rapid growth of settlements that are immerging as the bigger settlements in an unplanned and uncontrollable way have been discussed. Questionnaires were administered, oral interviews were conducted and personal observations helped in gathering information about the study area. Findings indicates that there is correlation between population and infrastructural development, some settlements are densely populated while others are sparsely populated, some settlements need facilities that will cause multiplier's effect while others need facilities that will serve their basic needs. People are moving to the northern fringes of Port Harcourt metropolis because land is available, less expensive and the topography encourages infrastructural development. This work has assessed the dynamics of settlements in the northern fringes of Port Harcourt metropolis by looking at changes in population and infrastructure.

Keywords: Settlement, Settlement Growth, Settlement Dynamics and concept of infrastructure

INTRODUCTION

Stone (1965), describes settlement as the description and analysis of distribution of buildings by which people attach themselves to land, in other words, settlement is any place where humans live. Settlement includes hamlets, villages, towns, and cities. There have been spatial dynamics of settlements in the northern fringes of Port Harcourt metropolis, these dynamics refers to changes in land use, population and infrastructure over time. These changes come with their own problems. For example, changes in population have the problems of inadequate housing and other infrastructural endowment to meet the needs of the populace. Changes in infrastructure have the problem of rapid urbanization in an uncontrollable way. Changes in land-use has effects on the economic and social activities. even the climatic condition of the area. For such changes in population, land-use and infrastructure to take place, there must be factors that are responsible. According to Owei et al (2008), in 1991, the population of Igbo-Etche was 22, 626 but in 2008, the population has risen to 56,221. Aluu used to be 7,051 as at 1991, but in 2008 it has risen to 17,520. Same thing applies to Igwuruta which was 13,463 but has almost tripled, in fact in 2008 it has a population of 33,452. For such big changes to occur in such a magnitude, there are factors responsible. This research work tends to explore the factors that are responsible for such changes over time.

STATEMENT OF THE PROBLEM

Settlements in the northern fringes of Port Harcourt metropolis are settlements in Ikwerre and Etche Local Government Area of Rivers State. The 1991 population census has the population of Etche to be 242,296; the 2006 population census has a total figure of 249.939:

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The increase is not much. Owei etal (2008) gave the population of Igbo-Etche as 22,626 in 1991 and 56,221 in 2008; it doubled itself, but the total figure in 2006 did not in any way double itself, so it indicates that while some settlements in Etche Local Government area are growing rapidly, some are almost stagnant if not shrinking. Same thing applies to Ikwerre Local Government area. The 1991 population census gave the population of Ikwerre Local Government Area as 125,385; in 2006 it has risen to 188,930; but no much difference. According to Owei etal (2008), the population of Aluu in 1991 is 7,051, in 2008 it has risen to 17,520, almost tripling itself, but the 1991 figure of Ikwerre Local Government Area did not in any way tried to double itself at the 2006 census. It is also an indication that some settlements are growing rapidly while some are not. There must be reasons for some settlements to grow rapidly while some are not. It is for this reason that the research have been proposed to address the following research questions.

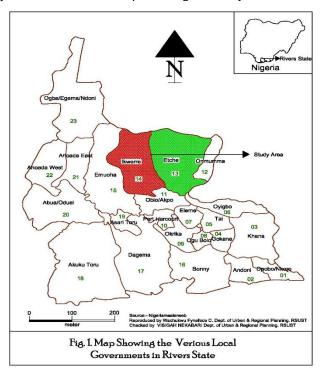
GOAL AND OBJECTIVES

The broad goal of the study is to determine factors that are responsible for the changes in population and infrastructure of the settlements in the northern fringes of Port Harcourt and to determine the magnitude of such change. The objectives the study will focus on the following specific objectives;

- 1) To identify reasons why Port Harcourt metropolis is growing towards the north.
- 2) To determine factors that are responsible for the changes in population, land-use and infrastructure in the northern fringes of Port Harcourt metropolis.
- To identify the magnitude of such changes in population and infrastructure in the northern fringes of Port Harcourt Metropolis.
- 4) To ascertain the contributions of both public and private sector in addressing the issue of rapid growth of the settlements that is immerging as the bigger settlements in such an unplanned and uncontrollable way.

SCOPE OF THE STUDY

The study was conducted in Ikwerre and Etche Local Government Areas of Rivers State. These local government areas are in the northern fringes of Port Harcourt Metropolis. It is bounded in the north by Imo State, in the South by Obio/Akpor Local Government Area, in the East by Omuma Local Government and in the West by Emohua Local Government Area of Rivers State. The study area falls on co-ordinates 4.50°N-4.09°N, 6.30°E-7.00°E of the google earth map. It is endowed with vast agricultural land which is also suitable for infrastructural development, and infrastructural development is just a factor in settlement dynamics. Below is a map showing the study area.



REVIEW OF LITERATURE

MEANING OF SETTLEMENT

Stone (1965), sees settlement as the description and analysis of the distribution of buildings by which people attach themselves to the land. Jordan (1966) emphasizes that settlement geography not only exclusively investigates the distributions, but even more the structure, processes and the interaction between settlements and its environment. That more recently, the study of settlement has evolved into the interaction of humans with the physical and ecological world. Settlement is a term used in statistics, Archeology, Geography, landscape, urban and Regional Planning, and other subjects for a permanent or temporary community in which people live, without being specific as to size, population or importance.

SETTLEMENT GROWTH

Settlement growth is where the original community population has grown enough due to births or new people moving in, which requires that new buildings be built to house them or that existing buildings be made larger. In other words, it is the result of natural growth of a

community. Lean *etal.* (1966), asserts that the nature of existing economic opportunities in a nation is a guide to the size and character of the future urban population, level of income, consumption, land use etc. It is so because the less industrialized countries have a greater potential rate of urban growth than advanced countries whose population is already urbanized, which is to say that the rate of urban growth is closely related to the rate of industrial growth. Urban growth involves the processes of internal reorganization and outward expansion.

THE CITY OF PORT HARCOURT

According to Ogionwo (1979), the area comprising the municipality of Port was prior to 1918, largely farmland and secondary forest. The urban area was established by the colonial government when in May 1913, Lord Lugard acquired approximately 25 square miles of land from the indigenous Ikwerre and Okirika people. Wolpe (1974), made it clear that Port Harcourt's origin is rooted in the 1909 discovery of coal in Eastern Nigerian's Udi division. Effective explanation of the coal fields required the development of distribution network to enable coal to be carried to Lagos and other West African Ports. The search for a site that would be suitable both as a seaport and a railway terminus led to the exploration of Bonny River and eventually to the discovery of natural harbour which was subsequently named after Lewis Harcourt who served as a secretary of state for colonies from November 7, 1910 to May 26, 1915. He adds that Port Harcourt is lying about forty feet above sea level and a very few degree above equator, Port Harcourt has the reputation of being next to Lagos, the mostly climatically comfortable city in Nigeria. Because of its location on the edge of the Niger Delta's mangrove foreshore, much of Port Harcourt was not habitable, consisting in main of winding creeks and muddy swampland. In the early 60's the city's population was spread among a number of dry-land residential lay-outs ranging from the plush, low density Europeanized sections that accommodated the city's expatriates and Nigeria upper-class to the mud and thatch villages of Port Harcourt's small indigenous settlements. Then the greatest population of Port Harcourt was concentrated within the medium-to-high density sections known as the Main Township and Mile 2 Diobu.

SETTLEMENT DYNAMICS OF PORT HARCOURT METROPOLIS OVERTIME

According to Owei etal (2006), Port Harcourt is one of the nation's fastest growing cities. The Rivers State statistical agency put the annual growth rate of the city between and at over 5%. As at 2004, Port Harcourt metropolis covers an area of 180,000 hectares with a population of 1,017,461. Anyanwu (1979), said that Port Harcourt is one of Nigeria's major sea ports and the centre of the nation's oil and gas industry. It was established in 1912 by the British colonial government because it site met the locational requirement for a rail and a port. According to Obinna etal (2010), like many cities in Nigeria, Port Harcourt has record rapid growth in population and area spread. From an estimated population of 5,000 in 1915 it grew to 30,200 in 1944. By 1963, its population was 179,563 and by 1973 it has reached 231,532 persons. The Port Harcourt municipality's population was given as 440,399 by the 1991 national census. The 2006 national census shows this population is more than a million. Ede etal (2010), made it clear that in terms of its physical size, the city grew from 15.54 sqkm in 1914 to a metropolis covering an area of 360 square kilometers in the 1980's. Physically the spread has occurred in both a south-easterly direction and a northerly direction. To the south, growth was through Marshland colonization in squatter settlements locally called "waterfronts". The growth has also occurred in a northwesterly and northerly-easterly direction through the entrapment of indigenous enclaves of semi-rural and rural communities within the built-up area of the city. The Port Harcourt urban fringes stretch to Choba, Rumuokoro, Elelewo, Rukpokwu and Woji. But Owei etal. (2006) asserts that much of this growth is unplanned and unregulated, no wonder the Rivers State Government in 2009 established the Greater Port Harcourt City Development Authority as part of its efforts to manage of the city's growth. Okeye (1975), said historically several Ikwerre and Okirika villages occupied the area around Port Harcourt City before 1913. That the natives were rural and their occupations were farming and fishing. Considering that the population was only 5,000 people at the inception of the city, the pressure on the land was perhaps minimal. The growth of Port Harcourt and its regions has been phenomenal since

inception in 1913. Growth has been experienced in terms of population and space. According to Owei etal (2008), in terms of population, two years after its founding, the population was 5,000. Census figure for the city through history are 7,185 in 1921; 15,201 in 1931; 71,634 in 1953. The 1963 census gave the city's population as 179,563 and its 1973 it was 213,443. The 1991 census fixed the population of Port Harcourt metropolis at 645,883. The projection for 1996 by the national population is over one million. Spatially speaking Owei etal (2008), said that Port Harcourt has grown to cover much of the upper Bonny River basin. Originally the city covered 25km² area. In the landuse and vegetation map of Nigeria (1975/76) the built up area of Port Harcourt covered 17.4km². Twenty years later, a similar map showed the extent of the city as 89.4km². This is a five-fold increase. By the 1976 local government reform. Port Harcourt stretched from Choba and Rukpokwu in the north, Iriebe in the east and the main western channel of the Bonny River in the west. This is an area of over 239.6km². It is noted from land-use and vegetation maps that during 1970's and 1980's there was reclamation of vast area of marginal land in the south of the city bordering Bonny River. The total area of land reclaimed for the period of 1965-2005 is 2,279,364. 60km².

Table 1: Some Previously Rural Settlements that Port Harcourt has Sprawled into.

S/No	Settlement	Major activity
1.	Rumuola	Petroleum Production
2.	Oginigba	Industrial Estate
3.	Rumuomasi	Local Air Port
4.	Woji	Housing Estate
5.	Rumueme	Housing Estate/Oil
6.	Rumuobiakani	Oil Company
7.	Rumuogba	Oil Company
8.	Rumulepirikon	Major Junction
9.	Rumuokwuta	Major junction
10.	Rumuibekwe	Housing Estate
11.	Elelenwo	Oil production
12.	Eliozu	Major junction
13.	Akpajo	Petroleum plant
14.	Rumukwurusi	Oil company Camp
15.	Rumokoro & Bori Camp	Military zone/ major junction
16.	Rumolumeni	College/naval base
17.	Nchia & others	Petroleum refineries
18.	Ozuoba	Major transport artery
19.	Eneka	Major transport artery
20.	Iriebe	Farm settlement
21.	Choba	University
22.	Igbo Etche	Mixed activities
23.	Oyigbo	Oil/power plant
24.	Aluu	University
25.	Rukpokwu	Mixed activities
26	Igwuruta	Major junction
27.	Umuagwa	International Airport

Population 1991 2008		Distance to city centre
4,327	10,751	6
4,124	10,247	6
19,193	47,690	7
6,635	16,486	7
22,427	55,726	7
8,451	20,999	8
2,697	6,701	8
8,333	20,705	8
5,213	12,953	9
2,006	49,084	9
8,645	21,481	10
1,321	3,282	11
5,195	12,908	11
19,875	49,385	11
16,115	40,141	12
10,847	26,952	13
42,421	105,407	14
7,415	18,424	15
5,409	13,440	15
3,549	8,818	17
10,968	27,253	18
22,626	56,221	18
43,403	107,847	19
7,051	17,520	20
4,689	11,651	20
13,463	33,452	22
7,108	17,661	27

Source: Owei etal (2008). Land market distortions in Nigerian cities and urban sprawl, 44th Isocarp Congress, Dalian, China, 19-23 September, 2008.

SETTLEMENTS DYNAMICS OF ABUJA OVERTIME

Owei *etal* (2008), said the Federal Capital Territory, Abuja was created as a new seat of Federal Government of Nigeria by military decree-decree 6 of 1976. It also established the Federal Capital Development Agency (FCDA) to manage the development of the new capital. A portion of the FCT was designated as the Federal Capital City (FCC). The FCT covers an area of approximately 8,000 sqkm while the Federal Capital City itself occupied 25,000 hectares. At creation, FCT comprised of 845 villages, 150

Table 2 Growth of Settlements in FCT, 1987-2001

S/NO	Settlements	Size in 1987 (Km²)	Size in 2001 (km²)	Growth rate %
1.	Abuja FCC	15.862	105,127	40.2
2.	Dutse Alhjaji	0.092	1.742	128.2
3.	Gwagwa	0.237	1.743	128.2
4.	Idu/Karmo	0.464	6.051	86.0
5.	Karu/Nyanyan	2.725	27.965	66.2
6.	Kubwa	0.112	13.565	858.0
7.	Kuchigoro	0.024	1.084	315.5
8.	Lugbe	0.105	4.594	305.4
9.	Zuba	0.649	4.298	40.2

Source: Jinadu (2004) In: Owei etal (2008), land market distortions in Nigeria cities and urban sprawl, 44th Isocarp Congress, Dalian, China, 19-23 September, 2008.

Table 3: Population Growth in FCT

S/NO	Settlements	1991 Population	2006 population	Land area km²
1.	Abaji	21,081	58,444	1,016
2.	Abuja municipal area	226,949	778,567	1,813.
3.	Bwari	N/A	227,216	939
4.	Gwagwalada	79,306	157,770	1070
5.	Kuje	44,338	97,367	1682
6.	Kwali	N/A	85,837	1234
	Total		1,405,201	

Source: National Population Commission Abuja.

Owei *etal* (2008), further stated that the pressure on land for development in these settlements outside the FCC is intense as Abuja remains the destination of choice for urban to urban migration in Nigeria. Essentially, the FCC is designed for the rich. Housing within the Federal Capital City is beyond the reach of the low income and even the majority of the middle income, which is expedient to those who are entitled housing through their employers.

THE CONCEPT OF POPULATION

According to Basorun (2003), population relates to the totality of people in an area as well as plants and animals that render support to human existence. He describes three components of population to be fertility, mortality and migration. According to Izeogu (1989), Port Harcourt City

of these within the FCC and up to 5km radius. The FCC has been the focus of planning and development in the territory's thirty years of existence. Its planning is divided into four phases and several districts. For purpose of administration, the local population within the FCT was divided into 4 area councils in 1991. Since 1998, these have been increased to six. The population of the FCT in 1976 was about 124,000. The 1991 national census gave a population figures of 371,674. The provisional population figure from 2006 census is 1,405,201.

has risen from 7,000 residents in 1921 to more than 800,000 in 2006. The population growth rate is estimated at 3.05% in 1996. The population of Port Harcourt is estimated at 1,620,214 (2007), with the Port Harcourt urban area at 2.7 million in population. The population of Port Harcourt is 1,148,665 according to the geo-names geographical database.

THE CONCEPT OF INFRASTRUCTURE

Steven (2003), sees infrastructure as the basic physical and organizational structure needed for operation of a society or the services and facilities necessary for an economy to function. It can be generally defined as the set of interconnected structural elements that provides framework supporting an entire structure of development. The term typically refers to the technical structures that support a society, such as roads, bridges, water supply, sewers, electricity grid, telecommunications etc. Bruce (1981), further explains that it is possible to conceive of the city as a built form containing activities. Buildings are relatively fixed in terms of the services they offer and absolutely fixed in terms of location, while the needs and requirements of activities can change fairly rapidly as technology and taste change. If the requirement of activities namely: residential, commercial and industrial change at a significant enough rate, then there is the danger of mismatch (that is, a supply lag between the services and facilities of the current stock and those that activities now require). Port Harcourt is a major industrial centre as it has a large number of multinational firms as well as other industrial concerns, particularly business related to the petroleum industry. It is the chief oil refinery city in Nigeria. The podium block of Rivers State secretariat is an icon of Port Harcourt metropolis. An eighteen storey building, it has the tallest building in the south/south and south/east geopolitical zones combined. The city has an international airport at its northern fringes, two sea ports (Federal Ocean Terminal, Onne, Port Harcourt Wharf), three stadia (Sharks stadium, Liberation stadium and the new Adokive Amiesimaka stadium), and two refineries. The City plays, host to the Rivers State University of Science and Technology, University of Port Harcourt, Ignatius Ajuru University of Education, College of Arts and Science etc. Health Centres, Police stations, markets, lots of residential houses, primary and secondary schools, lots of communication routes, etc.

NORTHERN FRINGES OF PORT HARCOURT METROPOLIS

According to Ede *etal* (2013), the vision for a new Port Harcourt City was marked by the enactment of the Greater Port Harcourt City Development Authority (GPHCDA) Law No. 2 of 2009. The law mandate to implement the Greater

Port Harcourt Master Plan. The Master Plan covers an area of approximately 190,000 hectres of land and includes whole of Port Harcourt City local government area, Obio/Akpor, Ikwerre, Oyigbo, Eleme, Okirika and Ogu-Bolo Local Government Areas of Rivers State. Amongst all these local government areas, Etche and Ikwerre local government areas are in the northern fringes of Port Harcourt metropolis. They fall on coordinates 4⁰50¹N-4⁰9¹N, 6°30'E-7°0'E. on the google Earth map. Etche is a local government area in Rivers State, Nigeria. Etche shares a national assembly constituency with Omuma local government area. Some settlements in study area are Umuebulu I, Umuebulu II, Umuebulu III, Chokota, Okehi I, Afara, Nkarahia, Ogbodo, Azumini, Omuike, Omuechetu, Imogu, Opiro, Umuazu, Uborum, Nabo, etc. Patrick (1999), said that these settlements in the northern fringes of Port Harcourt metropolis mostly engage in agriculture, that cassava and yam are important crops. Ekine etal (2008), said the people also engage in small scale palm oil production etc.

METHODOLOGY

THE POPULATION OF THE STUDY

The area under consideration covers all settlements in Ikwerre and Etche Local Government Areas of Rivers State. Ikwerre Local government has one hundred and fifteen (115) settlements while Etche has one hundred and sixty four (164) settlements, therefore the study area covers 279 settlements. Based on 1991 the population census, Etche has a population of 242,296 while Ikwerre has a population of 125,385 persons. The 2014 projected population of the study area is 1,154,518 persons.

THE RESEARCH DESIGN

The research adopted a cross-sectional and correlation analysis which was carried out on a randomly selected sample.

THE SAMPLE SIZE AND SAMPLING PROCEDURE

Using Yaro Yamane's formula with 5% level of significance,

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size, N = total population, e = level of significance (0.05), 1 = constant

$$n = \frac{1,154,418}{1+1,154,518(0.05)^2} = \frac{1,154,518}{28862925} = 400$$

Therefore, 400 questionnaires were administered in the study area.

DISCUSSION OF FINDINGS

Rivers State is growing at 5.8%. The projected population from 1991 populations census to 2014 reveals that settlements like Ogbodo has the population of 23,305 while Nabo has just 737 which is just an indication that for the settlements to have almost equal population, facilities that will cause multipliers effect must be located in the

settlements that is less populated while basic needs of the settlement that is highly populated should be provided. A thing of note is that the projected population of Etche Local Government Area from 1991 to 2014 is 760,809 while that of Ikwerre is 393,709 which gives us the population of the study are as 1,154,518.

TABLE 4: SEX OF RESPONDENTS

Sex	No. of respondents	%
Male	258	64.5
Female	142	35.5
Total	400	100

Source: Authors' Field survey. 2014.

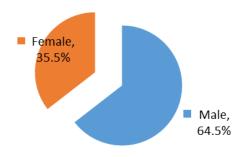


Fig. 2: Sex of Respondents

The analysis shows that out of 400 persons interviewed, 258 representing 64.5% were males while 142 persons representing 35.5% were females.

Table 5: AGE OF RESPONDENTS

AGE COHORTS	NO. OF RESPONDENTS	%
20-30	114	28.5
31-40	118	29.5
41-50	90	22.5
51-60	50	12.5
60 and above	28	7.0
Total	400	100

Source: Authors' Field survey, 201

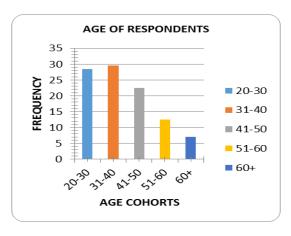


Fig. 3: Age of Respondents

Analysis on table 5 shows that 28.5% were between the ages of 20-30 years, 29.5% were between the ages of 31-40 years, 22.5% were between 41-50 years, 12.5% were between 51-60 years while 7.0% were 60 years and above.

TABLE 6: MARITAL STATUS OF RESPONDENTS

STATUS	NO. OF RESPONDENTS	%
Single	136	34.0
Married	204	51.0
Separated	30	7.5
Widow	20	5.0
Widower	6	1.5
Divorced	4	1.0
Total	400	100

Source: Authors' Field survey, 2014

From table 6 above, 136 persons representing 34.0% are single, 204 representing 51.0% are married, 30 persons representing 7.5% have separated, 20 persons representing 5.0% are widows, and 6 persons representing 1.5% are widowers while 4 persons representing 1.0% are divorced

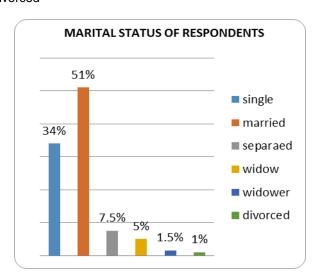


Fig. 4: Marital Status of Respondents

TABLE 7: EDUCATION LEVEL OF RESPONDENTS HOUSEHOLD

Level	Male	%	Femal e	%
University/Polyte chnic/College	56	4.7	44	3.7
Secondary	304	25.6	236	31.6
Primary	128	10.8	118	9.9
Nursery	60	5.1	58	4.9
No formal	12	1.0	28	2.4
Total	560	47.0	628	53.0

Source: Authors' Field survey, 201

TABLE 8: SETTLEMENT RATING

Rating	No. of Respondents	%
Bad	10	2.5
Fair	80	20.0
Good	272	68.0
Very	38	9.5
good	30	9.5
Total	400	100

Source: Authors' Field survey 2014

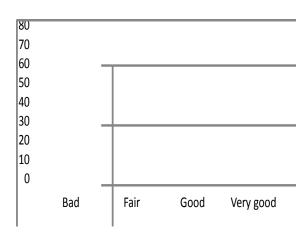


Fig 5: respondents rating of settlement

From table 9, 68.0% rates the settlements good, 2.5% rates them as bad, 20.0% rates them fair while 9.5% rates the settlements very good.

TABLE 9: CHOICE OF RESETTLEMENT

Response	No. of Respondents	%
Yes	100	25.0
No	300	75.0
Total	400	100

Source: Authors Field survey, 2014.

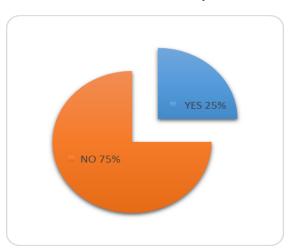


Fig. 6: Choice of Resettlement

From table 9, 75.0% strongly opposed resettling while 25.0% accepted resettling.

Table 10: Reasons for settling here

Reasons	No. of Respondents	%
Indigene	150	16.45
Economic	164	17.98
Cheap rent	208	22.80
Land available	290	31.79
Nearness to office	100	10.96
Total	912	100

Source: Authors' Field survey, 2014.

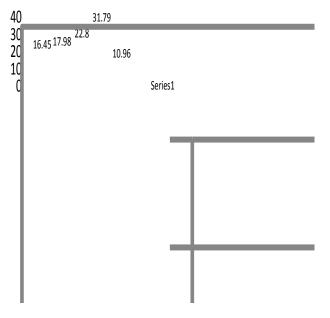


Fig. 7: Reasons for Settling in Community

From table 10, 16.45% gives their reasons for settling in the study area as being indigenes, 17.98% said it is for economic reasons, 22.80% said because rent is cheap in the study area, 31.79% attributes it to the availability of land in the study area while 10.96% said that the study area is close to their places of work.

TABLE 11: OCCUPATION OF RESPONDENTS

Occupation	No. of Respondents	%
Civil servant	118	29.5
Trading	94	23.5
Artisans	128	32.0
Farming	50	12.5
Others	10	2.5
Total	400	100

Source: Authors' Field survey, 2014

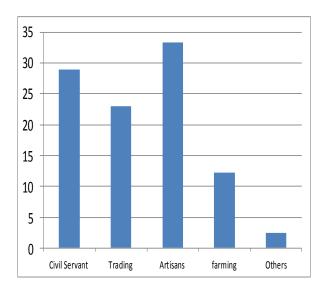


Fig. 8: Occupation of Respondents

Table 11 indicates that 29.5% are civil servants, 23.5% are traders, 32.0% are artisans, 12.5% are farmers and others represent 2.5%

TABLE 12: AGE/SEX DISTRIBUTION OF RESPONDENTS HOUSEHOLD

	1	Г	1	1
%	Male	Age	Female	%
1.5	18	61+	8	0.7
0.7	8	56-60	18	1.5
3.4	40	51-55	26	2.2
2.5	30	46-45	8	0.7
4.2	50	41-45	32	2.7
2.9	34	36-40	60	5.1
7.2	86	31-35	112	9.4
2.0	24	26-30	64	5.4
0.7	8	21-25	84	7.1
4.7	56	16-20	76	6.4
4.0	48	11-15	50	4.2
6.7	80	5-10	28	2.4
6.6	78	Less than 5	62	5.2
47.0	560	Total	628	53.0

Source: Authors' Field survey, 2014.

TABLE 13: REASONS FOR SETTLING HERE

Reasons	No. of Respondents	%		
Indigene	150	16.45		
Economic	164	17.98		
Cheap rent	208	22.80		
Land available	290	31.79		
Nearness to office	100	10.96		
Total	912	100		

Source: Authors' Field survey, 2014.

EXISTING FACILITIES IN THE STUDY AREA

Analysis of the functional settlement hierarchy in table 14 reveals that rental hall rates highest, followed by churches,

after which schools takes third position. But some things are really lacking in the study are; industries, police station, banks, hospitals. It is also noted that based on hierarchy of existing facilities, some settlements has more facilities than other, for example Okehi I, Nkarahia, Ogbodo has more facilities while settlements like Chokocho, Nabo, umukenyi, Imogu and others lacks some facilities.

CONCLUSION

Settlement describes the distribution of buildings by which people attach themselves to land. Settlements in the northern fringes of Port Harcourt metropolis has experienced changes in spatial dimension and in population. This paper has tried to establish factors that are responsible for the changes in population and infrastructure overtime. From the study it is obvious that although there is correlation between population and infrastructural development in the northern fringes of Port Harcourt Metropolis, however, some settlements are densely populated while others are sparsely populated. As regards infrastructural development, while some settlements have more infrastructure others are in serious need of infrastructure. It is also noted that people are moving to the northern fringes of Port Harcourt because the rent there is cheap, land is available, less expensive and topography of the area encourages infrastructural development and economic development. This paper has attempted to assess the dynamics of settlements in the northern fringes of Port Harcourt Metropolis by looking at the changes in population and infrastructure.

RECOMMENDATIONS

Major industries should be established within the northern fringes of Port Harcourt Metropolis. Manufacturing is the key to the provision of additional job opportunities. If this is done it will reduce the dependency rate of the people in the study area. The fact that there must be an attraction before population will grow. It is recommended that growth centre strategy should be used for the settlements so that there will be multiplier effects which will cause the settlements that are less populated to grow gradually. As regards the settlements that are highly populated, their basic needs should be provided for their comfortable living. The findings of this work has proved that some respondents are farmers although not the predominant occupation in the study area. The area is richly blessed with arable land, therefore there should be realistic transformation of existing production system in such a way that will bring improved contribution to the economy of the study area. Agricultural land should be given priority. Land development scheme should be adopted, since the area is still growing in population and infrastructure so as to ensure orderly development of the area and avoid the northern fringes of Port Harcourt metropolis to grow in an unplanned manner.

Table 14: Facilities in the study area (Functional Hierarchy)

S/No	SETTLEMENT	SCHOOL	HOSPITAL	MARKET	POLICE STATION	POSTAL AGENCY	PETROL STATION	HALL	нотег	сниксн	BANK	ELECTRICITY	INDUSTRY	COURT	SECRETARIAT	TOTAL	RANK
1.	NKARAHIA	1		1	1			11		4		1	1	2		23	2 nd
2.	OGBODO	4	1					9	1	7		1				22	3 rd
3.	AZUMINI	4		1				1	1	4		1	1			13	5 th
4.	ALIMINI	2					1	12		7	1	1	1	1		22	3 rd
5.	NABO						1	2		6		1	2			12	6 th
6.	OMUAHUNWO	1						3	1	3		1	1			10	8 th
7.	MBODO	1		1	1			4		7		1				15	4 th
8.	OMUIKE	1						3	1	3		1				9	9 th
9.	OMUODA							2		3		1				6	12 th
10.	OMUIGWE	1	1					3	1	2		1				9	9 th
11.	OMUCHIOLU	1					1	3		2		1				8	10 th
12.	OMUOKIRI	1						1	1	3		1	1			8	10 th
13.	IMOGU	1					2	3		6		1	2			15	14 th
14.	OMUECHETU							1			1	1				2	15 th
15.	UMUMESIOBI	1		1				2		2		1	1			8	10 th
16.	UBORUM	1						2		3		1				7	11 th
17.	UMULORI							3		3		1				7	11 th
18.	UMUAKURU	1		1				2		1		1				6	12 th
19.	UMUALIKPO		1					1		2		1				5	13 th
20.	UMUAZU	1						1		2		1				5	13 th

21.	UMUASUKPU			1				2		3		1				7	11 th
22.	UMUEBULU I	2	1	1				2	1	4		1	1			12	6 th
23.	UMUEBULU II	1						2	1	5		1				10	8 th
24.	UMUEBULU III	2	1	1			1	2		3		1	1			7	11 th
25.	OJIA	1														6	12 th
26.	OBOKWU				1	1		2		2						6	12 th
27.	UMUGWOCHA	1		1			1	3		2						7	11 th
28.	OPIRO	2		1				2		5		1				11	7 th
29.	NIHI	1		1						2		1				5	13 th
30.	ABARA	2		1			1	1		2		1				5	13 th
31.	ELE-LE	1		1			1			1		1				4	14 th
32.	OKEHI I	3	1	1	1	1	1	4	2	5	1	1	2	1	1	24	1 st
33.	СНОКОСНО		1				1			1		1				4	14 th
34.	UMUKENYI EGWI	3		1								1		1		6	12 th

Source: Authors' Field survey, 2014

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