Residents' Satisfaction with Residential Quality of Life in the Old Port -Harcourt Township of Port -Harcourt Municipality

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ABSTRACT: *This study assessed residents satisfaction with residential quality of life in two neighbourhoods of Port Rivers State, Nigeria – that is two from the old PortHarcourt township of the city. The study set out to ascertain residents' satisfactiom of neighbourhood attributes, sanitation attributes and residential quality of life. Neighbourhood attributes were studied in situ without experimental manipulation and at one period in time, i.e. the study adopted a passive-observational research design. The study utilized both secondary and primary data sources. Primary data was collected using face-to-face administration of a largely pre-coded household questionnaire, to a probability sample of 193 respondents, drawn from the 2 neighbourhoods. Data analysis was based on responses from 193 questionnaires retrieved and the univariate analytical method was adopted. The study found, that residential quality of life in Port Harcourt Municipality was low with garbage on the streets and neighbourhoods. The study further revealed that most residents were dissatisfied with their residential conditions such as electricity supply, water supply and waste collection and disposal. The study further revealed that 45.5%of the residents in Old Port Harcourt townshipand 26.0% in Coronation Layoutwere unhappy with their residential quality of life. A key conclusion of the study was that the improvement of neighbourhood residential conditions as perceived by the residents was important in raising residential quality of life, and recommendations included that in the provision of public infrastructure and services , the perceptions and preferences of the beneficiaries/target population must be taken into account to achieve user satisfaction. To achieve adequate provision of infrastructure and amenities government should take advantage of funds available in the National Urban Development Bank, assistance from international development agencies and through private-public-partnership (PPP) arrangements.*

INTRODUCTION

The concept, Quality of Life, encompasses the basic conditions of life, including adequate food, shelter, and safety, as well as "life enrichers", which are based on the individual's values, beliefs, needs and interests (WHO-IACCID, 2000).Measuring quality of life means that we value quality within people's lives and that we want to maintain and/or enhance the things that already, or could, add quality to people's lives. It also infers that we want to take action to improve the things that currently detract from quality of people's lives (WHO-IACCID, 2000).The search for quality of life, particularly in the city, has occupied post-industrial and predominantly urbanized societies (such as the United States of America and Great Britain) for more than 40 years. This has led to initiatives to measure the concept in urban areas (Senecal, 2002) who argued that, the concept of

quality of life, as applied to the urban environment, is usually understood in two ways. The first concerns the living environment and involves the patterns of advantages, disadvantages and opportunities that affect each citizen through accessibility to services, facilities and amenities. Other elements of the living environment include economic vitality and social equity, which encapsulate an infinite number of specific issues, notably, the quality and affordability of housing. The second approach relates to the natural environment in urban spaces. This approach holds that such factors as air, water, soil quality; and the amount of available green space affect the ways we live (Senecal, 2002).

Senecal (2002) added that other aspects that may be used to identify quality of life include aesthetic value, satisfaction with one's home, and patterns of governance and there are also issues of perception that take into account people's experiences in the city, the routes they travel, and the sensory quality of their surroundings.

Nowadays, cities have become the target of quality of life measurement since they exhibit contemporary culture, ranging from technological development to social progress. Indeed, the process of urban planning and management is aimed at raising quality of life, especially with regard to improvement of facilities and services that fulfil socio-economic needs such as education, health, housing, entertainment, and safety (Discoli, *et. al.,* 2006).

Port Harcourt, one of Nigeria's major cities, has been experiencing rapid urbanization since its inception in 1913. The city has grown from 5,000 persons in 1915, two years after its inception, to 79,634 in 1953, and to 179,563 in 1963 (Ogionwo, 1979). The 1991 census gave the city's population as 440,399 and the 2006 census fixed it at 541115. The population was projected from the census figure of 2006 to a projected population of 963,373 in 2010 assuming linear growth and an average annual growth rate of 5.2%. This level of population growth has meant considerable spatial expansion, which has engulfed once distant villages on the urbanperiphery, to the extent that they can no longer be distinguished but have become part of the urban fabric (Wokekoro and Owei, 2006).

Urban infrastructure and services have failed to keep pace with this growth. In addition to rising urban poverty, there is a worsening of urban environmental problems. Such challenges as poor solid waste management, uncontrolled housing and neighbourhood development, flooding, traffic congestion, poor state of the urban physical environment and rising crime rates have been documented (Ugwuorah, 2002). More recently, Obinna, Owei and Mark (2010) have also noted the deplorable housing, inadequate space, and absence of basic services in the informal settlements of the city.

This state of affairs triggered the desire to measure residents' satisfaction with residential quality of life in old Port Harcourttownship of Port Harcourt Municipality. The aim was to demonstrate the nature and magnitude of deficient conditions in the old Port Harcourttownship in the municipality and propose appropriate measures to deal with them. It is pertinent to note here that subjective indicators refer to people's perceptions or evaluations of aspects of their lives, for example, housing (Andrews, 1980).

A worthy goal of any government is to improve the quality of life of its citizens, especially residential quality of life. One way to achieve this is through the study of resedents' satisfaction with residential quality of life. A study on QOL provides statistics of direct normative interest, which would facilitate concise, comprehensive, and balanced judgments about the conditions of major aspects of a society" (Andrews, 1973).

Quality of Life indicators are important to policy makers, researchers, etc. because they, among others allow governments to evaluate how well they are doing in relation to their development goals and objectives; permit comparison of quality of life between neigbouroods, cities and countries and may be used by researchers to evaluate the performance of any spatial unit. It may be used to educate the public, and broaden national debate about social, economic and environmental conditions, with a view to holding government and business accountable (Henderson, Lickerman and Flynn, 2000).

We are now in the era of the Millennium Development Goals (MDGs). The essence of the MDGs is to improve the quality of life of the people. This study has provided information on one important aspect of the MDGs – the residential environment, in Port Harcourt, especially regarding residents' satisfaction with residential quality of life in the city.

The outcome of this study will serve as an *ex post facto*evaluation of the development efforts of government over time, thereby providing an insight into necessary action to improve residential quality of life in the city. The study will also yield information that would be invaluable to a wide variety of persons, including researchers, residents, outside observers and environmentalists

Goal and Objectives of the Study
The goal of this study is to assess residents' satisfaction with residential quality of life in the old Port Harcourtt township of Port Harcourt Municipality.
The objectives of the study are to:
(i)   ascertain residents' satisfaction with neighbourhood attributes;
(ii)   ascertain residents' satisfaction with residential quality of life.
(iii)   obtain Neighbourhood Satisfaction Index (NSI)
(iv)   ascertain the variables that are most important to residents in improving residential quality of life in Port Harcourt.

Background Information about the Study Area
Port Harcourt, capital city of Rivers State, Nigeria, lies 40 km up the mouth of the Bonny River, in the Niger Delta. Originally known as "Igwu-Ocha" by the indigenous Ikwerre, was founded in 1913 by the British in an area traditionally inhabited by the Ikwerre and the OkrikaIjaw. It was named after Viscount Harcourt, then British Secretary of State for the Colonies. The initial purpose of the port was to export the coal, which geologist Albert Ernest Kitson had discovered in Enugu in 1912 (Ogionwo, 1979).

 It is one of Nigeria's fastest growing cities. The average annual growth rate of Port Harcourt between 1963 and 2010 has been computed to be 5.2%. The growth of Port Harcourt is tied to the

social and economic history of the country. Figure 1.1 is a map of Port Harcourt Municipality showing the study locations.

The city is a major educational, administrative, and industrial centre, and is regarded as the oil capital of Nigeria, since it hosts most of the nation's multi-national oil and gas exploration and production companies, two refineries, petroleum-related service companies, as well as a fast expanding commercial sub-sector (Wokekoro and Owei, 2006).
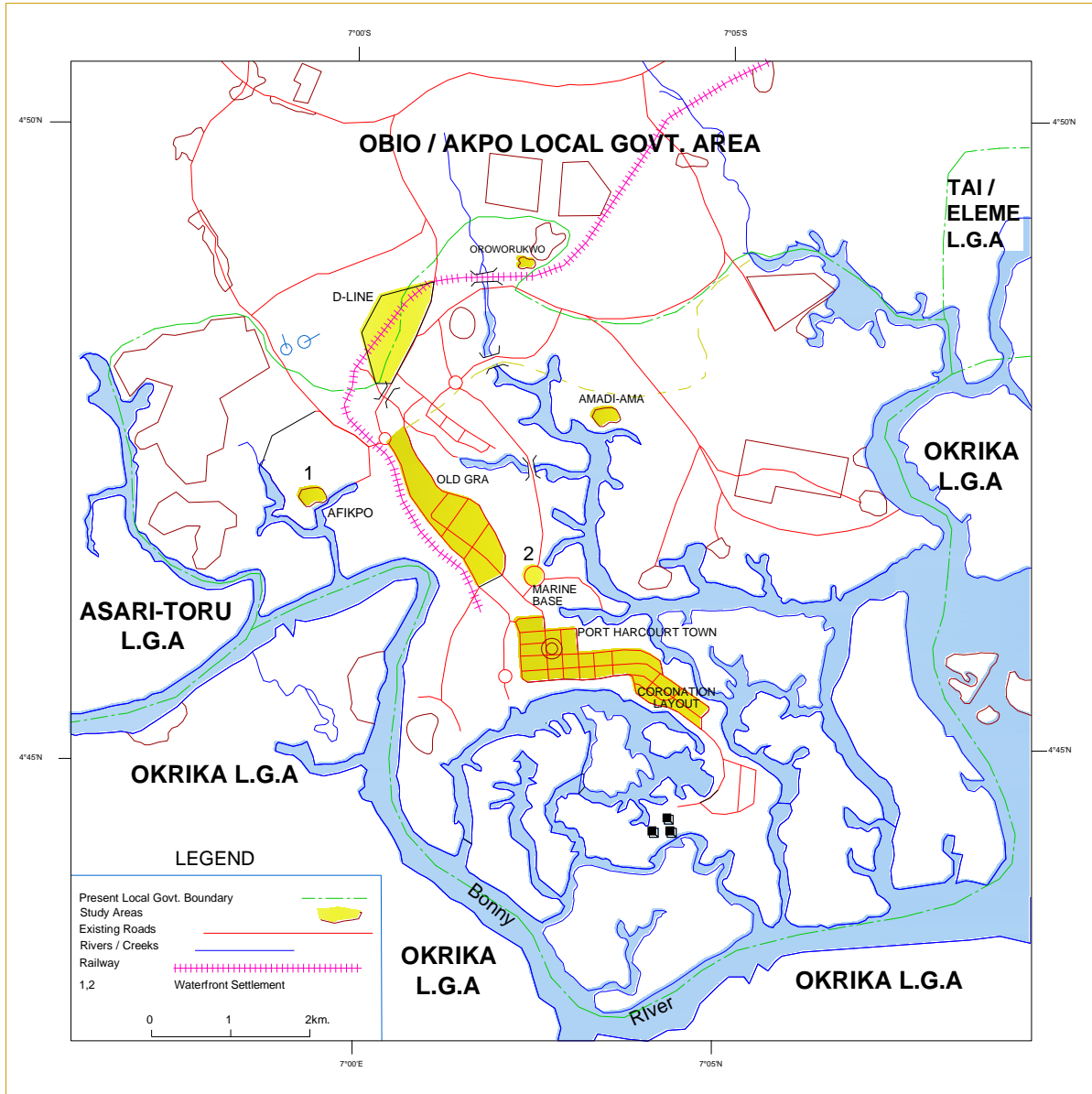

Figure 1: Port Harcourt Municipality Showing the Study Area

REVIEW OF RELEVANT LITERATURE

The meaning of the phrase "urban quality of life" differs a good deal as it is variously used but, in general, it is intended to refer to either the conditions of the environment in which people live (air and water pollution, or poor housing, for example), or to some attribute of people themselves (such as health or educational achievement) (Pacione, 2003). Lotfi and Solaimani (2009) stated that a number of researchers have reviewedliterature on Quality of Life (QOL) and there is general agreement that a meaningful definition of QOL must recognize that there are two linked dimensions to the concept, namely a psychological one and an environmental one.),

There are two sets of indicators for measuring quality of life with which most of the researchers are agreed. The first set comprises objective indicators which refer to the objective and visible aspects of urban life and are defined by different elements, for example the number of hospitals in a city, unemployment rate, the volume of crime and the area of urban green spaces. The second set comprises subjective indicators which try to measure and quantify the citizens' satisfaction with those objective attributes(Lotfi and Solaimani,2009). QOL is concerned with people's welfare. It is defined as something that makes life better. (Discoli*et. al., 2006).* A number of domains of QOL (well-being) have been identified in the international quality of life literature. For example, University of Oklahoma School of Social Work (*www.gdrc.org*) identifies the following: Family and Friends;

Work;
Neighbourhood/Shelter;
Community;
Health;
Education; and
Spiritual.
Each domain contributes to one's overall assessment of the QOL as a whole. The focus here is on the residential environment or what is referred to above as Neighbourhood/Shelter. Various researchers have addressed this dimension.

Research on Residential Quality of Life
Giannais (1996) used a structural approach to hedonic equilibrium model to obtain a quality of life ranking of six cities in Southern Ontario, Canada namely: Guelph, Kitchener, London, Sarnia, St. Catharine, and Windsor and found that residential quality of life is a function of housing and neighbourhood characteristics (number of rooms, age of the house, crime rate, air quality, and mean annual temperature). The model was estimated using census tract data for the six cities. The study revealed that each of the six cities provides a different QOL distribution to its residents.
Pacione (2003) reported that in urban social geography, considerable effort has been directed to assessing the quality of different residential environments. Pacione*(2003)* in his paper explains the social geographicalapproach to research into QOL and urban environmental quality. A five-dimensional model for QOLresearch is presented, and a number of key conceptual and methodological issues wereexamined. Two case studies were employed to illustrate the application of the five-dimensional social geographical perspective in a real world context. The first case study

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of social geographical research in the field of QOL studies is selected to illustrate the use of objective territorial social indicators to examine differential QOL in the city of Glasgow. In his research, particular attention was focused on conditions at the disadvantaged end of the quality of life spectrum.

A combination of statistical and cartographic analysis was employed to identify the nature, intensity and incidence of multiple deprivations in the city. A set of 64 indicators relating to demographic, social, economic and residential conditions was extracted from the national census for each of the 5374 output areas in Glasgow. The data set was subjected first to univariate analysis to examine the distributions of individual social indicators across the city.

An R-type principal components analysis was used to explore the weave of linkages among the individual distributions, and to provide a conceptually and statistically rigorous composite measure of multiple deprivations. The study indicates that principal components were readily identified as indicators of multiple deprivations. Calculation of component scores provided a measure of deprivation for each of the 5,374 census output areas in the city. Mapping these scores revealed the spatial expression of multiple deprivations in Glasgow. This research identified the nature, intensity and incidence of multiple deprivations within the city. In addition, identification of the major loci of deprivation provided a basis for subsequent detailed analyses of particular problems and problem areas. The results also provided a basis for critical assessment of policies aimed at alleviating conditions of disadvantage, as well as a framework for future policy formulation.

The second example of the urban social geography approach to quality of life illustrates the use of subjective social indicators to gauge gender-differentiated fear of crime at the local level within Glasgow. His research was designed to gauge the nature and extent of fear of crime among male and female residents of a deprived social housing estate on the edge of Glasgow, and to identify the geography of fear within the area.

The research employed an interview procedure to determine the relative importance of crime as a social problem on the estate. For both males and females crime was regarded as the second most serious problem in the area. Related social problems were identified in references to the general unfriendliness of the locality and bad relations between residents and the police. Assault and burglary were the most prevalent crimes reported. Investigation of the fear of crime revealed clear gender-based differences. For most young males the high risk of assault was an accepted part of their lifestyle and living environment. Respondents accepted that they are 'fair game' and an automatic target for local gangs. The relative physical weakness of young females fostered a fear of assault and in particular sexual assault. These perceptions of risk conditioned the daily activity patterns of people living on the estate.

Detailed information was also sought on respondents' cognitive maps of fear in order to identify specific danger areas within the estate. Further, analysis of the characteristics of these dangerous spaces can contribute to the design of policies aimed at reducing fear of crime in the locality. Camfield (2005) conducted a study on how different people characterize quality of life in 24 rural, peri-urban and urban sites in Bangladesh, Ethiopia, Thailand and Peru and found out that the basic ingredients of a good life are very similar, such as having a partner, a family (and a support network

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that extends beyond it), a good home, a pleasant environment and enough money or other resources to meet the daily needs of the family. Camfield (2005) also reported that the main priorities for people from Bangladesh are maintaining family harmony, getting salaried employment, and being educated, while for people in Ethiopia they are having your own home, enough to eat and drink and being respected by your neighhbours. Camfield also added that the greatest differences are not between people from different countries but between men and women of different ages whose different identities or experiences cause them to value different things. For example, in Thailand, the older generation wanted to be healthy and able to attend the temple, while the young men wanted good jobs and motorbikes.

Hall, *et.al.*(2008) considered valuation of amenities in urban neighborhoods and satisfaction with both those neighborhoods and life in general. First, rents were used to estimate neighborhood amenities price in San Jose, which explained 39 percent of the standardized variation in rents. Some districts ranked very high in housing characteristics but poorly in neighborhood amenities, while others ranked poorly in housing characteristics but high in neighborhood amenities, suggesting that policy measures might reduce inequality in urban areas through improving neighborhood amenities.

Second, the paper explored differences in the valuation of amenities by calculating prices in different urban areas. In more sparsely populated urban areas, distance to national parks was less important, but distance to primary roads became more important. Finally, housing and safety satisfaction represented the key components of life satisfaction.

Coker, *et al.* (2007) carried out a survey of housing quality and neighbourhood environments in Ibadan City, Nigeria. The study evaluated the housing infrastructure and identified those areas where there was a likelihood of future incidences of disease and epidemics. Based on existing demographic and land use characteristics, the city could be divided into high, medium and low-density zones. Penalty scoring, rather than positive scoring, was used to assess the conditions and quality of houses and the neighbourhood environment in each of the zones. Houses in the high-density area had the worst property and environmental characteristics followed by houses in the medium-density area. Based on housing condition alone, approximately half of all the dwellings surveyed (n = 172) in the three zones were categorised as either substandard or unfit for human habitation. Based on neighbourhood environment, none of the high and medium-density housing areas and only one of the low density areas attained the good-scoring grade. This is attributed in part to the many residents who are polygamists. The houses are overcrowded with perhaps up to eight persons per room and to tenant abuse by internal conversion to increase the occupancy rate. More than half of the houses surveyed have at least or more major defect. Recommendations include government directed infrastructure improvements; a regeneration-drive by private investors with possible displacement of residents from the high-density zone to new towns; a vigorous programme of housing and health education; enhanced collaboration between stakeholders to develop enforceable standards for existing housing stock and future builds.

Salau (1986) examines the variations in the quality of life at the relatively neglected inter-urban scale in a developing nation. Based on a sample survey of 3,800 heads of households in Nigeria cities ranked into three categories: large, medium and small, the study found that level of living is

related to city size, with the residents of large cities having a higher quality of life than those in the medium and small cities.

Guhathakurta and Sadalla (ND) stated that the contributions of water supply to the quality of life sector are straightforward. They reported that when the gap between demand and supply for water increases, there is a corresponding decrease in perceived quality of life. Alternatively, a decrease in the demand-supply gap for water improves quality of life perception.

Akpan, Obisung, and Asuquo (2012) carried out a study of aircraft noise and quality of life of residents living around Port-Harcourt international airport, South - South Nigeria. 1552 out of 1800 questionnaires representing 86 percent of the total which bordered on aircraft noise annoyance and disturbances were received, collated and analysed. There was a very high correlation between noise annoyance and the daily disturbances from the aircraft noise on people which included fatigue, lack of concentration, headache, night sleep, relaxation and communication disturbances. The number of highly annoyed people which cut across the youth, middle age and adults increased as the day- night sound levels of the aircraft noise increased. These findings show clearly that the quality of life of people living around Port Harcourt International airport has greatly been impaired by noise from aircraft.

According to Gaibie and Davids (2009) Quality of life, while a subject of interest and relevance to all countries, is of particular interest in a country such as South Africa where, up until 14 years ago opportunities and resources were allocated to citizens on the basis of their racial classification. According to them in modern-day South Africa a democratically elected government strives to redress inequalities and prejudices of the past in the attempt to provide all South Africans with a better life. Just how far has South Africa progressed in achieving this goal, however? Their study measured the quality of life of South Africans in attempt to ascertain which factors are determining what make South Africans happy and who those happy and satisfied South Africans are. Data from a nationally-representative survey of a sample of 3321 adult respondents was used. The survey, the South African Social Attitudes Survey (SASAS), is an on-going, annual survey measuring the South African public's attitudes, beliefs, behavior patterns and values in relation to democracy and governance, social identity, service delivery, among other subjects. Households were selected from a master sampling frame and respondents randomly selected within those households. Data was analysed by cross-tabulating happiness, life satisfaction and optimism with seven predictor variables, namely, race, gender, age, geotype, education level, economic status, satisfaction with basic governmental services, and fear of crime. The second part of the analysis was employing a series of linear regressions. The main findings were that: life satisfaction and happiness levels fell along the same lines as previous research on quality of life in South Africa, namely that being white and having a higher income than most tended to mean a high quality of life, and that, while black Africans still held much hope and optimism for the future, their quality of life appears to be determined by their current life circumstances.

Extensive Literature search revealed that residential QOL at various neighbourhood levels in Port Harcourt is not available as research in this area is under- researched and not documented.

RESEARCH METHOD

The target population is composed of household members residing in the neighbourhoods of the Old Port Harcourt Township. This study adopted the stratified multistage sampling technique (Kish, 1965). The sampling stages are given below:

Stage 1: Selection of neighbourhoods/communities from the Old Port Harcourt Township (see selected communities in Table 1.

Stage 2: Listing of buildings and households from the selected neighbourhood/communities

Stage 3: Selection of households to be studied from the chosen Neighbourhoods/communities; and

Stage 4: Selection of household respondents in the households to be studied, preferably heads of households, since they are usually the most knowledgeable about residential attributes

To achieve a representative sample of households in each neighbourhood, Yamane (1967) formula (given below) was applied.

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

Where **n** is the sample size, N is the population size, and **e** is the level of precision (here set at 10%).

Following determination of the sample size, the systematic sampling method (Kish, 1965) was used to select the households to be questioned from the ordered list of population elements).

Table 1: Sampling Details

Name of Stratum	Name of Neighbourhood/ Community	Total No. of Buildings	Total of No. Households (N)	Sample Size *
Old Port Harcourt Township	Coronation Layout	489	2,184	96
	Port Harcourt Main Township	1,496	3,422	97
Total		**1,985**	**5,606**	**193**

*Using the Taro Yamane Formula @ 10% Level of Precision

This study adopted a passive-observational research design. Passive-observational research design pertains to studies where there has been no prior "treatmemt", intervention, or manipulation of subjects. The data was collected through a household questionnaire and utilized univariate analysis. This study formed one index –Neighbourhood Satisfaction Index (NSI), using subjective neighbourhood attributes.

RESULTS AND DISCUSSION

This section presents results of analyses carried out in the course of the study. One hundred and seventy (193) household questionnaires were administered and 193 retrieved, i.e. a response rate of 100%. Analysis was therefore based 193 households in the Old Port Harcourt Township.

Satisfaction with Neighbourhood Attributes

Table 2 displays residents' satisfaction with selected neighbourhood attributes in the two component neighbourhoods of the old Port Harcourt Township. Table 2 showed that over tirty percent (35.0% in old Port Harcourt Township and 39.6% Coronation Layout) of the residents in the two neighbourhoods were dissatisfied with government provision of amenities such as elementary schools, hospitals/clinics, police stations and shopping facilities. Few residents (21.6%) in old Port Harcourt Township were dissatisfied with the condition of streets while 40.7% in Coronation Layout were dissatisfied. The dissatisfaction was as a result of poor condition of the Streets in Coronation Layout.

Table two further revealed that more than a quarter of the residents in old Port Harcourt Township(29.9%) and Coronation Layout (43.8%) were dissatisfied with neighbourhood cleanliness. Table 2 further revealed that over twenty percent of the respondents were fairly satisfied with the social interaction in their neighbourhoods. The table also revealed that a quarter of the residents were dissatisfied in terms of social interaction in Coronation Layout. The study showed that over fifty percent of residents in the two neighbourhoods were satisfied with the safety of lives and property in their neighbourhoods.

Table 2 also revealed that a large percentage of residents in old Port Harcourt Township (39.1%) and CoronationLayout (54.2%) were dissatisfied with electricity supply. The dissatisfaction was as a result of the unbearable problem of noise pollution and this was mainly from private generators widely used for electricity generation as a result of irregularity in electricity supply from the Power Holding Company of Nigeria (PHCN). This is the reality in the municipality and requires concerted intervention by government to ameliorate the situation. The incessant power cuts have increased noise pollution in our neighbourhoods and this also poses health risks as a result of the noise and air pollution. This shows that electricity supply is a major problem in the city of Port Harcourt and the country in general. Government should intensify effort to the increase electricity supply. Over thirty percent of the residents in the two neighbourhoods were fairly satisfied with their neighbourhoods in general as shown in table 2.

Table 2: Satisfaction with Selected Neighbourhood Attributes of the Neighbourhoods

Neighbourhood Attributes	P.H. Main Town		Coronation Layout	
	NO.	%	NO.	%
On the whole, how satisfied are you with government provision of amenities.. I mean elementary schools, hospitals/clinics, police stations, and shopping facilities?				
1. Very Dissatisfied	11	11.3	30	31.3
2. Rather Dissatisfied	23	23.7	8	8.3
3. Neither Satisfied Nor Dissatisfied	35	36.1	18	18.8
4. Fairly Satisfied	15	15.5	18	18.8
5. Very Satisfied	13	13.4	17	17.7
6. Missing Data	0	0	5	5.1
Total	**97**	**100**	**96**	**100**
How satisfied are you with the condition of the streets in this neighbourhood				
1. Very Dissatisfied	4	4.1	16	16.7
2. Rather Dissatisfied	17	17.5	23	24.0
3. Neither Satisfied Nor Dissatisfied	39	40.2	27	28.1
4. Fairly Satisfied	19	19.6	20	20.8
5. Very Satisfied	18	18.6	10	10.4
6. Missing Data	0	0	0	0
Total	**97**	**100**	**96**	**100**

How satisfied are you with the cleanliness of this neighborhood?				
1. Very Dissatisfied	11	11.3	23	24.0
2. Rather Dissatisfied	18	18.6	19	19.8
3. Neither Satisfied Nor Dissatisfied	26	26.8	26	27.1
4. Fairly Satisfied	24	24.7	23	24.0
5. Very Satisfied	18	18.6	5	5.2
6. Missing Data	0	0	0	0
Total	**97**	**100**	**96**	**100**

What about the level of social interaction in this neighborhood				
1. Very Dissatisfied	3	3.1	14	14.6
2. Rather Dissatisfied	6	6.2	11	11.5
3. Neither Satisfied Nor Dissatisfied	20	20.6	30	31.3
4. Fairly Satisfied	38	39.2	20	20.8
5. Very Satisfied	30	30.9	21	21.9
6. Missing Data	0	0	0	0
Total	**97**	**100**	**94**	**100**

And now, I would like to ask about safety. How satisfied are you with the level of safety of property and lives in this neighborhood?				
1. Very Dissatisfied	4	4.1	18	18.8
2. Rather Dissatisfied	19	19.6	10	10.4
3. Neither Satisfied Nor Dissatisfied	24	24.7	17	17.7
4. Fairly Satisfied	23	23.7	33	34.4
5. Very Satisfied	27	27.8	18	18.8
6. Missing Data	0	0	0	0
Total	**97**	**100**	**94**	**100**

How satisfied are you with the electricity supply in this neighborhood?

1. Very Dissatisfied	14	14.4	31	32.3
2. Rather Dissatisfied	24	24.7	21	21.9
3. Neither Satisfied Nor Dissatisfied	24	24.7	33	34.4
4. Fairly Satisfied	25	25.8	9	9.4
5. Very Satisfied	10	10.3	2	2.1
6. Missing Data	0	0	0	0
Total	**97**	**100**	**96**	**100**

On the whole, how satisfied are you with your Neighbourhood?

1. Very Dissatisfied	13	13.4	17	17.7
2. Rather Dissatisfied	4	4.1	7	7.3
3. Neither Satisfied Nor Dissatisfied	29	29.9	18	18.8
4. Fairly Satisfied	36	37.1	36	37.5
5. Very Satisfied	12	12.4	14	14.6
6. Missing Data	3	3.1	4	4.2
Total	**97**	**100**	**96**	**100**

(Source: Author's Field Survey, 2011)

Sanitation Attributes

Table 3 displays the results of sanitation attributes. The water closet was found mostly in the in old Port Harcourt Township (82.5%) and Coronation Layout(74.0%)(See Table3). The second predominant type of toilet found in two areas is the pit toilet. Approximately 50% of household garbage collection and disposal was by private arrangement in old Port Harcourt Township while in Coronation Layout it is 53.1%. In Coronation Layout garbage was tipped into drainsand on the road (See Plate 1).The study revealed that garbage was found in the neighbourhood in the two neighbourhoods. This shows that the neighbourhoods are not very clean, so government should intensify effort in its monthly environmental sanitation programme. Waste collection and disposal was also by private refuse vendors using locally fabricated metal carts in the two neighbourhoods.

The dumping of refuse into creeks, drains and roads is a major cause of water pollution, flooding and insanitary environment.

The study also revealed that some of the available drains were blocked particularly in Coronation Layout.The blocked drains have become breeding grounds for mosquitoes and subsequently affect the health of residents.This is a critical issue as it can contribute to flooding during the rainy season and it is also a health challenge. Educating the masses on waste management and good sense of environmental management will tackle the problem of insanitary environment to a great extent. Control of development and proper planning will also contribute to tackling the problem.

The main source of water supply was the borehole.Table 3 showed that most residents purchased water from owners of private borehole (51.5% in old Port Harcourt Township and 52.1% in Coronatio Layout). The provision of water in the city by the government is minimal. It is a primary responsibillity of government to provide this basic service for it citizenry.Table 3 revealed that most residents were dissatified with water supply (48.4% in old Port Harcourt Township and 49% in Coronation Layout). The dissatisfaction may be as a result of buying water which take a substantial portion of household income. This is a critical issue and shows that government provision of this basic and important service is virtually nonexistent. This is in line with findings from previous studies. Wokekoro and Owei (2006) also established that the main source of water supply was the private borehole in Port Harcourt. This shows that the water supply situation has not improved in the city. In order to ensure public health and safety there must be adequate supply of water. It is unlikely that Target 10 of the Millennium Development Goal (MDG) 7 will be achieved by the year 2015. MDG 7 urged governments and policy makers to "halve the proportion of people without access to safe drinking water and basic sanitation by 2015". It also implies that the primary goal of successive National Housing Policies which is to ensure that all Nigerians own or have access to decent, safe and sanitary housing accommodation of affordable cost with secure tenure has not been achieved. These conditions were also observed by Ogionwo (1979) and Izeogu (1989), which shows that sanitary condition, has not improved.

Plate 4.3: A Drain Blocked with Waste and on the Street at Coronation Layout.
(Source: Author's Field Survey, 2011)

Table 3: Sanitation Attributes

	P.H. Main Town		Coronation Layout	
	N	**%**	**N**	**%**
Method of sewage (human waste) disposal ie type of toilet				
1 Water closet	80	82.5	71	74.0
2 Pit latrine	13	13.4	17	17.7
3. Pail I bucket	0	0	0	0.0
4. Bush	0	0	5	5.2
5. Pier waterside	0	0	3	3.1
6. No Toilet	0	0	0	0
7. Missing Data	4	4.1	0	0
Total	**97**	**100**	**96**	**100**

House Hold Refuse Disposal

1. Collected by Government Agency	28	28.0	0	0
2.Collected by Private Arrangement	47	48.5	51	53.1
3.Buried	0	0	3	3.1
4.Dumped anywhere in the open	6	6.2	5	5.2
5 Burnt	3	3.1	0	0
6. Dumped in collection point.	3	3.1	26	27.1
7. Others specify	10	10.3	11	11.5
8. Missing Data	0	0	0	0
Total	**76**	**100**	**94**	**100**

Condition of Drains

1. Drains Blocked	39	40.2	55	57.3
2. Drains Flowing	12	12.4	38	39.6
3. No Drains	40	41.2	3	3.1
4. Missing Data	6	6.2	0	0
Total	**07**	**100**	**94**	**100**

Potable Water Supply

Pipe borne water from public mains.	12	12.4	6	6.3
Pipe borne water from borehole.	32	33.0	35	36.5
Well.	0	0	0	0
Buy from borehole.	50	51.5	50	52.1
Missing data.	3	3.1	5	5.2
Total	**97**	**100**	**96**	**100**

Satisfaction with Water Supply				
Very Dissatisfied	26	26.8	35	36.5
Rather Dissatisfied	21	21.6	12	12.5
Neither Satisfied Nor Dissatisfied	13	13.4	17	17.7
Fairly satisfied	23	23.7	22	22.9
Very satisfied	11	11.3	10	10.4
Missing Data	3	3.1	2	2.1
Total	**97**	**100**	**96**	**100**

(Source: Author's Field Survey, 2011)

Neighbourhood Satisfaction Index

The neighbourhood satisfaction index showed that most residents (62.9%) in old Port Harcourt Townshipwere moderately satisfied with their neighbourhood while 81.3% of the residents were moderately satisfied in Coronation Layout. However, only 3.1% of the residents were highly satisfied in old Port Harcourt Townshipwhile 7.3% in Coronation Layout were highly satisfied. (See table 4).

Table 4: Neighbourhood Satisfaction Index.

Quality	P.H. Main Town		Coronation Layout	
	N	%	N	%
Low (1)	4	4.1	4	4.2
Medium (2)	61	62.9	78	81.3
High (3)	29	29.9	7	7.3
Missing	3	3.1	7	7.3
Total	**97**	**100**	**96**	**100**

(Source: Author's Field Survey, 2011)

Perceived Residential Quality of Life

Table 5 captures the perception of residential quality of life in the study area with most of the respondents reporting a negative quality. Specifically, 45.5% of the residents in old Port Harcourt Townshipand 26.0% in Coronation Layout were unhappy with their neighbourhood conditions while very few (7.2% in old Port Harcourt Townshipand 3.1% in Coronation Layout) were delighted with the quality of their residential environment.

The study shows that most residents believed that employment, provision of basic amenities and good housing will improve their residential quality of life. Suggestions of residents on what will improve housing conditions in the neighbourhoods and the city were that the government should

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force landlords to renovate their houses, building of low cost housing estate and provision of basic amenities.

Table 5: Perceived Residential Quality of Life

	Oroworukwo		Amadi - Ama	
Residential Quality of Life as a whole	N	%	N	%
1.Terrible	15	15.5	25	26.0
2.Unhappy	44	45.5	25	26.0
3.Mostly dissatisfied	11	11.3	5	5.2
4.Mixed	3	3.1	19	19.8
5.Mostly satisfied	3	3.1	2	2.1
6.Pleased	14	14 .4	17	17.1
7.Delighted	7	7.2	3	3.1
8.Missing data	0	0	0	0
Total	**76**	**100**	**94**	**100**

(Source: Authors' Field Survey, 2011)

CONCLUSION

In this study residents satisfaction with the residential quality of life in the indigenous areas in Port Harcourt municipality was examined. The paper examined one aspect of the residential environment namely: the neighbourhood. Based on the study most residents across the two neighbourhoods were dissatisfied with maintenance of streets, safety of lives and properties, residential planning, provision of basic amenities, hospitals/clinics, fire stations, police stations, waste collection and disposal. The study further reveals that most residents were dissatisfied with public schools, and shopping facilities.

The study concludes that most residents were dissatisfied with their residential conditions such as electricity supply, water supply and waste collection and disposal. The study further revealed that 45.5% of the residents in old Port Harcourt Townshipand 26.0% in Coronation Layoutwere unhappy with their residential quality of life. A key conclusion of the study was that the improvement of neighbourhood residential conditions as perceived by the residents was important in raising residential quality of life, and that in the provision of public infrastructure and services, the perceptions and preferences of the beneficiaries/target population must be seriously taken into account to achieve user satisfaction. The study has shown that some respondents were not satisfied with their neighbourhood conditions. To achieve adequate provision of infrastructure and amenities government should take advantage of funds available in the National Urban Development Bank, assistance from international development agencies and through private-public-partnership (PPP) arrangements.

REFERENCES

Akpan, A. O., Obisung, E. O. and Asuquo, U. E. (2012) "Aircraft Noise and the Quality of Life of Community Residents around Port Harcourt International Airport, South SouthNigeria."*Journal of Environment and Earth Science*, 2 (5) 8-12

Andrews, F. M. (1980). Subjective Social Indicators, Objective Social Indicators, and Social Accounting Systems. Survey Research Centre, The University of Michigan, Ann Arbor, USA.

Camfield, L. (2005). Researching Quality of Life in Developing Countries.*ESRC News Letter* Vol. 3 No.1.*www.welldev.org.uk* Accessed 21/3/2009

Coker, A.O, Awokola, O.S., Olomolaiye, P. O., and Booth, C. A. (2007). Challenges of urban Housing Quality and its Associations with Neighbourhood Environments: insights and experiences of Ibadan City,Nigeria.*Chartered Institute of Environmental Health www.cieh.org* Accessed 16/ 7/ 09

Discoli, Rosenfeld, Juan,s., Martini, Barbero, Ferreyro,andDicroce (2006)." Urban Integration and Disintegration Forces: The habitants/Users Perception in an Urban life Quality Model for the Surroundings of LaPlata, Buenos Aires, Argentina."A paper presented at the 42nd International Society of City and Regional Planners (IsoCARP) Congress, 2006.

Gaibie, F. and Davids, Y. D. (2009) " Quality of Life Among South Africans." A Paper Presented at the IX ISQOLS Conference on Quality of Life Florence Italy 19-23, July

Giannias, D. A (1996).Quality of Life in Southern Ontario. Department of Economics,University of Crete, Athens Greece. *www.findarticles.com* Accessed 15/5/11

Guhathakurta, S. And Sadalla, E. (ND) Modeling the Impact of Environment on Quality of Life. Accessed 11/7/2008.

Hall,L.J. , Madrigal,R. and Robalino, J.(2008). ″Quality of Life in Urban Neighborhoods in Costa Rica″, Inter-American Development Bank, Latin American Research Network, Research Network Working Paper www.iadb.org/res/publications/pubfiles#R-563. *Accessed 16/ 7/ 09*

Jongudomkarn, D. and Camfield, L.(2005). "Exploring The Quality of Life ofPeople in North Eastern And southern Thailand" *WeD Working Paper*11*www.welldev.org.uk*Accessed 16/ 7/ 09

Kish, L. (1965). *Survey Sampling*. John Willey and Sons Inc. New York.643pp.

Lotfi, S. and Solaimani, k.(2009). "An assessment of Urban Quality of Life by Using Analytic Hierarchy Process Approach(Case study: Comparative Study of Quality of Life in the North of Iran)" *Journal of Social Sciences* 5(2):123-133.

Marans, R. W. (!979). The Determinants of Neighbourhood Quality: An Analysis of the 1976 Annual Housing Survey. A Report Prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Melnick,D., McNeely, J. , Navarro,Y.K., Schmidt-Traub, G. and Sears, R. R.(2005).*Environment and Human Wellbeing: a Practical Strategy.* UN Millenium Project. Earthscan, London. 133pp.

Obinna, V.C., Owei, O. B. and Mark, E.O.(2010). "Informal Settlements of Port Harcourt and Potentials For Planned City Expansion." *Environmental Research Journal* Vol.4, No. 3, pp 222-228.

Ogionwo, W. (1979). *A Social Survey of Port Harcourt.* Heinemann Educational Books (Nig.) Ltd, Enugu. 273 Pp.

Pacione, M. (2003). "Urban Environmental Quality and Human Wellbeing—A Social Geographical Perspective." *Landscape and Urban Planning 65.* pp.19–30.

Salau, A. T. (1986). "Quality of life and city size: An exploratory study of Nige*ria."Social Indicators Research* Vol.18, No.2 pp.193-203

Senecal,G.(2002)."Urban Spaces and Quality of Life: Moving Beyond Normative Approaches'' *http://policyresearch.Gc.Ca/page.Asp?Pagenm=vsnl-art-06*Accessed 18/12/2002

Ugwuorah, A. N. (2002). The Relevance of the Urban and Regional Law (Decree. 88 of 1992) to Environmental Management in Port Harcourt Metropolis." Unpublished M. Phil. Thesis, Department of Environmental Management, Institute of Geosciences and Space Technology, RSUST , Port Harcourt.

UNHSP(2008). *The State of African Cities, A framework For Addressing Urban Challenges in Africa.*UN Habitat. Nairobi, Kenya. 206pp.

WHO-IASSID WORK PLAN (2000). Quality of Life its Conceptualization Measurements and Application. .A Consensus Document. The Special Interest Research Group on Quality of Life. The International Association for the Scientific Study of Intellectual Disabilities. www.beachcenter.org/boards/fullpublications Accessed 11/7/2008.

Wokekoro, E. and Owei, O.B.(2006). "Environmental Indicators of Derelict Housing in Nigerian Cities case Study of Port Harcourt, Rivers State." A Paper Presented at the International Conference on Infrastructure Development and the Environment (ICIDEN), Abuja Nigeria. September 10 – 15, 2006.

Yamane, T. (1967). *Statistics, an Introductory Analysis* 2nd ed., Harper and Row, New York. 919pp