

## Assessment of Socio-Economic Impacts of Squatter Settlements of Bundu and Nembe Waterside Communities in Port Harcourt Municipality

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### ABSTRACT

Squatter settlements have impacted on the social and economic dimensions of the urban environment. This aim of the study is the assessment of the socio-economic impacts of selected squatter settlements within the Port Harcourt municipality. The objectives are identifying the causes of squatter settlements growth within the Port Harcourt municipality; assess and examine the social and economic impacts of the residents of the squatter settlements; and suggest possible solutions to the challenges posed by such settlements in the municipality. The study adopted purposive and simple random sampling techniques and key informant method for collection of data. Two waterfront communities namely: Bundu and Nembe Waterside communities were chosen for the study. A total of 150 respondents (75 respondents each) were interviewed from the selected communities in the study area. The study found that the major causes of squatter settlements formation and growth are low income of residents, cheap house rent and unoccupied marginal lands in the waterfront areas in the municipality. The study also discovered that the social and economic impacts of squatter settlements on the residents are criminal, thuggery and urban gang activities, pollution, lack of drainages and access roads, lack of basic neighbourhood infrastructure and services, substandard housing conditions and 93.2% of them earn between ₦18,000 and ₦48,999 monthly showing low economic status. However, to improve the quality of life within the Bundu and Nembe Waterside communities, the study recommended that proper landuse management and planning should be carried out to manage, control and direct urban growth and development, the declaration of the communities as improvement areas for urban renewal programme and using collaborative planning approach to carry out the planning and management of the communities to improve the residents quality of life and environment.

**KEYWORDS:** Socio-economic Impacts, Squatter Settlements Formation and Growth, Waterfront Communities and Urban Planning

### Introduction

It is identified that between one-third and two-thirds of urban population in developing countries are living in shanties and squatter settlements which are built by the occupants. These settlements lack the access to essential basic urban facilities and services such as health, school, water, electricity, paved road, sewage and drainage, waste removal, and open space for recreation (Fellman, Getis, Getis & Malinowski, 2005; Wasantha, 2015). Some of the cities that patronize these characteristics are in developing countries. These cities and countries include Dar es Salaam (Tanzania), Alexandria (Egypt), Mexico City (Mexico), Nairobi (Kenya), Mumbai (India), Karachi (Pakistan), Bangkok (Thailand) and Lagos (Nigeria) (Fellmann *et al.*, 2005). Port Harcourt municipality share these experiences

of some these developing countries and their cities of squatter settlement development forming informal housing conditions.

One of the greatest challenges facing the residents of Port Harcourt municipality that has prompted the development of squatter settlements is affordable housing deficiency. There is considerable gap between supply and demand which has found expression in the exponential cost of rented dwellings, slum development, squatter settlements creation and substandard housing conditions in some parts of the municipality. Port Harcourt municipality as any promising urban centre, the history of squatter settlements originated in the 1970s, after the end of the Nigerian Civil War (1967-1970). The reason for the growth of squatter settlements is that the high cost of urban land in the city which is

# “Assessment of Socio-Economic Impacts of Squatter Settlements of Bundu and Nembe Waterside Communities in Port Harcourt Municipality”

obviously beyond the reach of the urban poor (Ibeakuzie & Jaja, 2003 cit. Wokekoro & Owei, 2014). Squatter settlements are generally said to be contiguous settlements where the inhabitants are characterized as having inadequate housing and basic services. They are often not recognized and addressed by the public authorities as an integral part of the city (United Nations Human Settlements Programme (UN-Habitat), 2003a).

In Port Harcourt municipality squatter settlements have become a prominent social and economic phenomenon. These communities and developments portray informal housing conditions lacking access to public facilities and services to improve the quality of life of the inhabitants of these settlements. The lack of these basic public facilities and services such as potable water, sewage, refuse disposal, roads and electricity supply are either erratic or non-existent which has affected their social and economic conditions. This study is focus on the squatter settlements which are located in waterfront areas of the municipality and assess the socio-economic impacts of these developments on the residents of Bundu and Nembe waterfront communities in the municipality to improve on their living conditions.

## Statement of the Problem

There is acute shortage of housing in cities of most developing countries especially for low income earners. A large proportion of the population is characterized by poverty and is consequently unable to afford their own homes due to a number of reasons, including lack of access to affordable land for development and high cost of building materials. In an attempt by urban dwellers to meet their housing needs have led to the development of slums and squatter settlements.

Port Harcourt municipality is generally regarded as a primate city in Rivers State. This situation has encouraged rural-urban and urban-urban migration from other settlements in the state and Nigeria being the capital city of oil and gas industries. The influx of people to the municipality has created urban problems such as the creation of squatter settlements in the municipality. Studies have shown that quality of life in these squatter communities is generally poor (Wokekoro & Owei, 2014). The study focuses on two waterfront communities that have been identified as squatter settlements (Bundu and Nembe Waterside communities). These communities are lacking basic urban infrastructural facilities and services that will make life worthwhile. There are problems of human congestion, overcrowding, public health and sanitation issues, and poverty which have affected the social and economic conditions of the dwellers of these communities. This study is to assess these conditions and suggest workable and appropriate mechanisms to improve the quality of life of these communities in the study area.

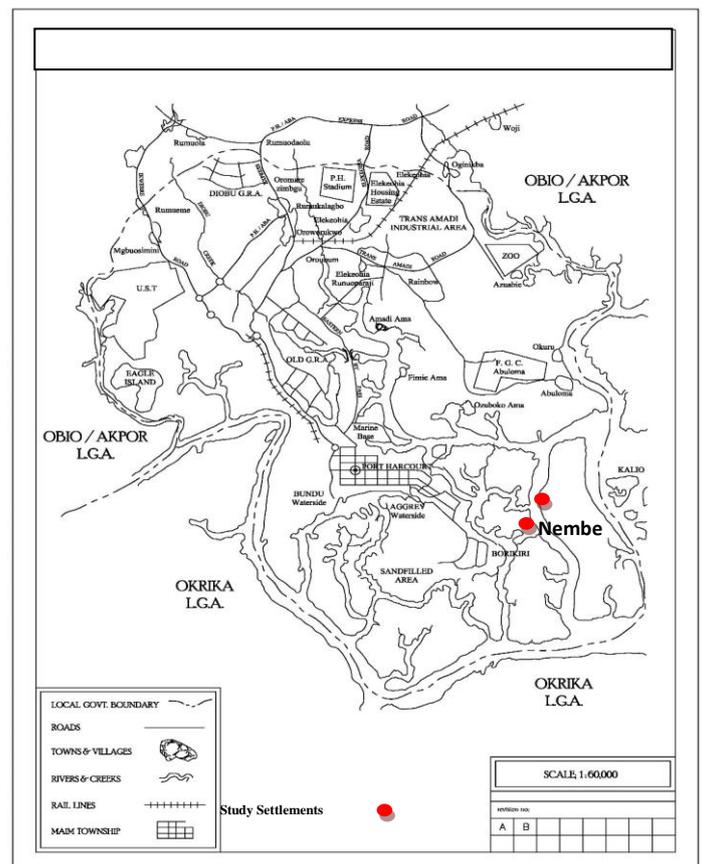
## Aim and Objectives of the Study

The aim of this study is to assess the social and economic impacts of selected squatter settlements within the Port Harcourt municipality. The objectives of the study are:

- I. Identify the causes of squatter settlements growth within the Port Harcourt municipality;
- II. Assess and examine the social and economic impacts of the residents of the squatter settlements; and
- III. Suggest possible solutions to the challenges posed by such settlements in the municipality.

## Scope of the Study

The geographical scope of the study covers two (2) waterfront communities in Port Harcourt municipality (see Fig. 1). These communities are located close to one of the planned neighbourhoods (PH Township) of the municipality. Other parameters measured include causes of squatter settlements growth, the social and economic impacts of these settlements on the people living there and possible suggestions to improve the situation.



**Fig. 1:** Map of Port Harcourt Municipality showing the Study Area

**Source:** Surveyor General Office, Port Harcourt, 2018

## Literature Review

### Squatter Settlement: An Overview

The squatter settlement question is not new and insignificant to urban development; it is at its very heart. Urban growth in

## “Assessment of Socio-Economic Impacts of Squatter Settlements of Bundu and Nembe Waterside Communities in Port Harcourt Municipality”

recent time is common in developing countries in which large amount of human populations are moving from rural to urban areas at a very fast pace (Fellmann *et al.*, 2005). According to UN-Habitat (2003a), some 923,986,000 people, or 32% of the world's total urban population, live in squatter settlement; some 43% of the urban population of all developing regions combined live in squatter settlement; some 78% of the urban population in the least developed countries live in squatter settlement; some 6% of the urban population in developed regions live in squatter settlement-like conditions. The total number of squatter settlement dwellers in the world increased by about 36% during the 1990s, and in the next 30 years the global number of squatter settlement dwellers will increase to about two billion if no concerted action to address the challenge of squatter settlement.

In both spatial and demographic terms, the world is becoming more urbanized. This process now affects many developing countries especially in Asia, Africa and Latin America. The rate of urban growth in many countries in the South continues to be high, and invariably leads to a serious degradation of living conditions for majority of city dwellers. The figures quoted in the UN study speak for themselves: depending on the level of poverty in each country, between two and four city dwellers out of five live in squatter settlement, with significant consequences for their own lives and the lives of coming generations, precarious conditions for them, uncertainty for their offspring.

According to United Nations Economic Commission for Europe (UNECE) (2009), defined squatter settlement as settlements established by people who have illegally occupied an area of land and built their houses on it, usually through self-help processes. The UN-Habitat (2003a) defines squatter settlements as a contiguous settlement where the inhabitants are characterized as having inadequate housing and basic infrastructural facilities and services. Squatter settlements are nonconventional housing that is constructed by urban poor, low-income earners and or rural migrants without legal authority from the government and having no legal backing of the ownership of the land build upon (Hartshorn, 1992).

These definitions describe the characteristics and conditions of squatter settlements respective of the country or city. The Cities Alliance Action Plan (1999) and UN-Habitat (2003b), also portrayed such settlements as neglected areas or sections of the city where the living conditions are poor in appearance and quality recording high density, squalid tenements, unrecognized right of occupancy and urban sprawling, deteriorated, hazardous, insanitary or lacking in standard conveniences.

### Causes of Squatter Settlements

According to Gebegehu (2016), there are several conditions and factors that contribute to the creation of squatter settlements in urban societies. Some of these factors include the followings:

- I. High building standards of legal houses or buildings;
- II. Delayed responses and procedural problems of legal provision;
- III. High housing rents in the city centre;
- IV. Less government attention the control and manage open spaces in urban areas;
- V. Limited capacity to enforce building codes, standards and regulations and illegal construction of houses;
- VI. Lack of comprehensive legal response to squatting problems; and
- VII. Land speculators activities to bank land for high profit market

These factors have all contribute to the emergence and proliferation of squatter settlements in urban areas or cities. They also encourage urban sprawl and unplanned conditions within the urban areas. Other factors that cause squatters are economic (number of homelessness), politics as a way of protest by some socialists and advocates in the society, religion and class segregation of the populace by the elites and political class in the society (Birdman, 2017). The growth of squatter settlements have undergone several phases of development over time, from disorganized cardboard shacks to organized and well-established settlements. It is a result of the poor people's inability to pay rent or purchase houses as well as governments ineffective and inadequate housing policy (Hartshorn, 1992).

### Social and Economic Impacts of Squatter Settlements

Squatter settlements have both social and economic impacts on the urban environment. Taylor (2012) opined that some of the social impacts of squatters are theft of public services and nonstandard behaviour of the residents. There are issues of theft of electricity and water supply as they don't pay for these services. There are no proper road constructions and waste disposal techniques as wastes are dump indiscriminately on the environment. There is exhibition of deviant character such as violence and gangsterism, drug abuse and high crime rate. There are no drainages which encourages flooding and erosion activities. There is high birth rate as sex is seen as part of recreation because of lack of open spaces for recreation. This leads to overcrowding and public health issues of spread of diseases and sicknesses.

Some of the economic impacts of squatters are high rate of unemployment in the area. This affects the revenue base of the local authority and encourages crime and increases insecurity in the environment. Taxes and rates are not paid because of high level of informal sector that cannot by capture by the authority. This causes ineffectiveness of governance for the authority to plan and provide adequately essential basic urban facilities and services. This promotes inequality and segregation in the urban area as government attention to the people living there are not considered government priority (Essay UK, 2013).

“Assessment of Socio-Economic Impacts of Squatter Settlements of Bundu and Nembe Waterside Communities in Port Harcourt Municipality”

**Methodology**

The population of the study communities from the 1991 population result was 87,654 and projected to 2018 is 273,173 at 4.32% growth rate in urban areas in Nigeria (World Bank, 2016 cit. Trading Economics, 2018). In order to obtain relevant information and data on the assessment of socio-economic impacts of squatter settlements of Bundu and Nembe waterfront communities in Port Harcourt municipality. The study adopted various data collection, handling and analytical methods. The study employed the purposive sample technique and key informant method for data collection. These methods were used to collect both primary and secondary data. The primary data were obtained from the residents of the studied communities, government officials and experts through interviews, physical observations and photographs to characterise the socio-economic impacts of squatter settlements on the residents in the study area. The first stage, the study purposely selected two (2) waterfront communities (Bundu and Nembe waterfront communities) for the study. The second stage, the study purposively select 150 respondents (household heads) from the two communities for sampling (that is 75 respondents each from the communities). Simple random sampling technique was randomly to select the 150 respondents from the two communities choosing for the study for interview (see Table 1). Furthermore, key informant method was used to interview staff of the Rivers State Ministries of Housing and Physical Planning and Urban Development, and other professionals/experts in the built environment such as Architects, Town Planners and Estate Valuers to seek their opinions about the subject matter. Secondary data were collected from government Ministries, Departments and Agencies (MDAs) to profile the communities as regard to the quality of buildings, environment and socio-economic lives.

**Table 1: Questionnaire Distribution in the Study Area**

S/N	Sampled Communities	No. of Questionnaires
1	Bundu	75
2	Nembe Waterside	75
	<b>Total</b>	<b>150</b>

Source: Researcher’s Field Survey, 2018

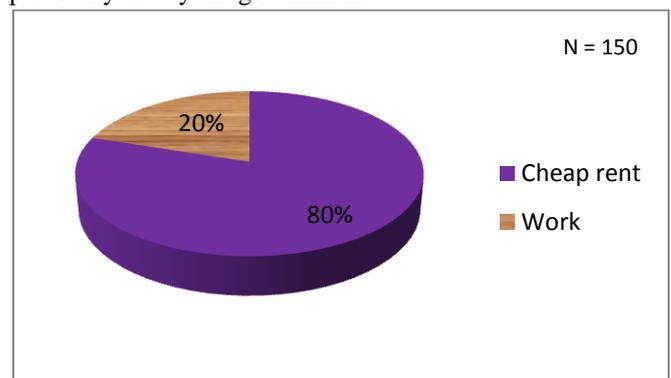
**Results and Findings**

**Causes of Squatter Settlements in Port Harcourt Municipality**

There are many factors responsible for the formation of squatter settlements in the Port Harcourt municipality. From the survey carried out, it was observed that the major causes responsible for squatter settlements formation such as in Bundu and Nembe Waterside settlements as recorded is the socioeconomic status (income level) of dwellers of the communities and cheap house rent rate are the major factors

that promote the formation of squatters in the study area. The study observed that the low rent rate that is demanded per room and per month on the squatter settlements is also the reasons why people choose to live in settlements. It was recorded that 50.6% of the respondents pays ₦3,000 per room monthly, 24.5% pays ₦3,500 per room monthly while 12.7% and 12% pays ₦2,500 and ₦4,000 per room monthly respectively. This is attested as 80% of the respondents say the reason for living in the settlements are low rent rate and 20% of the respondents give reason of work (see Fig. 2 & Table 2).

Another cause observed that promote squatter formation in the study area is rural-urban migration in search for greener pasture, job opportunities and better living conditions. Though, natural population growth is another contributing factor to the process of squatter settlement formation as the number of person per habitable space is high. However, some of the respondents opined that availability of open space also contribute to the formation of the squatter settlements in the area which attracts people to erect structures on them because they are seen as free land in the study area as the land is not put to any use by the government.



**Fig. 2: Reasons for Living in the Community**

Source: Researchers’ Field Survey, 2018

**Table 2: Rent of Room Per Month**

S/N	Rent Paid (₦)	Nembe		Bundu		Total	%
		No	%	No	%		
1	4000 per month	3	4	15	20	18	12
2	3500 per month	27	36	10	13.3	37	24.5
3	3000 per month	37	49.3	39	52	76	50.6
4	2500 per month	8	10.7	11	14.7	19	12.7
	<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>	<b>100</b>

Source: Researchers’ Field Survey, 2018

**Growth of Squatter Settlements in Port Harcourt Municipality**

It was discovered from the findings that there is no active polices put in place in managing and controlling the

“Assessment of Socio-Economic Impacts of Squatter Settlements of Bundu and Nembe Waterside Communities in Port Harcourt Municipality”

development of squatter settlements in the municipality by the state and municipal government in recent times. Though, the only conscious policy and intervention efforts made so far that is close in managing and regulating the growth of squatter settlements in the municipality is in 2003, when the state government pronounce urban renewal programme for waterfront settlements in the municipality which was not successful because of ethnic and political rivalries between indigenous communities and political ideologies. The failure of successive administration has neglected the plight of the poor for a very long time, which has made the poor to look for cheap accommodation where available hence, the failure of governments in the Port Harcourt has led to the formation of squatters. One of the disturbing features of rapid urbanization in the city is because of neglect of proper landuse management and planning in the municipality which has gradually and incrementally increased the growth and formation of squatter settlements in the study area. The further rapid developments of these squatter settlements have consequently led to increase in urban poverty in the municipality (see Fig. 3).

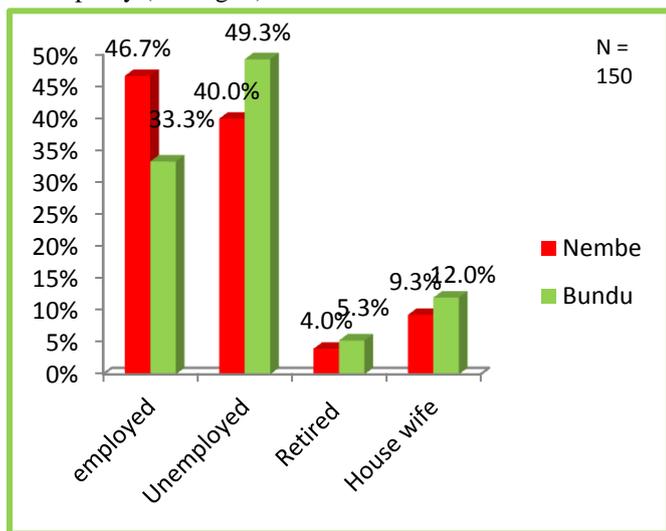


Fig. 3: Employment Status of Respondents  
Source: Researchers’ Field Survey, 2018

**Social and Economic Impacts of Squatter Environment on the Residents in the Municipality**

**Social Impacts**

However, from the data analysis from the survey, it was discovered that the formation of squatter settlements have affected the residents in of the settlements in different ways. One aspect of squatter settlements impacts is on the social dimension of the environment. Some of the impacts observed from the respondents and physical observation include security and safety issues as some residents have experienced criminal, thuggery and urban gang (cultism) activities. Other effects observed include poor environmental conditions from noise, pollution, lack of drainages and access roads (see Table 3). Thus, lack of planning and provision of basic neighbourhood infrastructure and services are absent such as

public power supply, public open spaces, public water supply and refuse disposal services. However, from the study the housing condition seems deplorable with overcrowded from the household size (see Table 4 & Fig. 4). It was observed that the settlements are on marginal lands which are expensive for construction of durable structures and not suitable for residential development. Most buildings are constructed with substandard materials and lacking basic sanitary facilities and amenities. It was observed that the settlements are located on marginal lands (see Fig. 5).

**Table 3: Environmental Condition**

S/N	Environme- ntal Condition	Nembe		Bundu	
		Yes	No	Yes	No
1	Noisy	68 (90.7%)	7 (9.3%)	75 (100%)	0
2	Pollution	60 (80%)	15 (20%)	75 (100%)	0
3	Drainage Available	0	75 (100%)	0	75 (100%)
4	Access Road	0	75 (100%)	0	75 (100%)

Source: Researchers’ Field Survey, 2018

**Table 4: Number of Persons Per One Room**

S/N	Number of persons in a room	Nembe		Bundu	
		No.	%	No.	%
1	1 person	8	10.7	10	13.3
2	2 persons	10	13.3	8	10.7
3	3 persons	15	20	20	26.6
4	4 persons	20	26.7	8	10.7
5	5 persons	12	16	12	16
6	6 person	3	4	11	14.6
7	7 persons	4	5.3	8	10.7
8	8+ persons	3	4	6	8

Source: Researchers’ Field Survey, 2018



Fig. 4: Cluster of Buildings without Access Road in Nembe Waterside Community

Source: Researchers’ Field Survey, 2018



**Fig. 5:** Substandard Housing Development on Marginal Land in Bundu Community

**Source:** Researcher’s Field Survey, 2018

### Economic Impacts

In the survey, it was discovered that squatter settlements portrays poor economic conditions of the residents and these conditions have impacted on the lives of the residents. It was observed in Tables 5 and 6 that the occupation of the respondents and their income levels suggested they fall within the low-income earning group in the society. The study revealed that most of the residents are in the informal sector of the economy which cannot be accounted for in the GDP of the municipality such as business/contract, trading, farming/fishing, sand mining, artisans and other job activities and this reflects their monthly income per household in the study area. The study show that 93.2% of the respondents earn between ₦18, 000 and ₦48,999 which is slightly above the minimum wage of ₦18,000 (\$51) per month and the average household size of 6 persons living in urban areas in Nigeria by NPC.

**Table 5:** Occupational Status of Respondents

S/N	Occupation	Nembe		Bundu		Total	
		No	%	No	%	No	%
1	Teaching, Nursing, Security, Agency (Police, Navy, Airforce)	10	13.3	11	14.7	21	14
2	Law, medical, engineering	6	8	4	5.3	10	6.6
3	Business/Contract	10	13.3	6	8	16	10.6
4	Trading	18	24	24	32	42	28
5	Farming/Fishing	9	12	2	2.7	14	9.3
6	Sand mining	0	0	4	5.3	4	2.6
7	Artisans	4	5.3	10	13.3	14	9.3
8	Civil service	12	16	7	9.3	19	12.6
9	Others	6	8	7	9.3	13	8.6
	<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>	<b>100</b>

**Source:** Researchers’ Field Survey, 2018

**Table 6:** Monthly Income of Households

S/N	Monthly Income	Nembe		Bundu		Total	
		No	%	No	%	No	%
1	Less than ₦18,000	23	30.7	9	12	32	21.3
2	₦18,000 – ₦28,999	22	29.3	19	25.3	41	27.3
3	₦29,000 – ₦38,999	23	30.7	24	32	47	31.3
4	₦39,000 – ₦48,999	4	5.3	16	21.3	20	13.3
5	₦49,000 – ₦58,999	2	2.7	6	8	8	5.3
6	₦59,000 – ₦68,999	1	1.3	1	13.3	2	1.3
7	₦69,000 and above	0	0	0	0	0	0
	<b>Total</b>	<b>75</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>150</b>	<b>100</b>

**Source:** Researchers’ Field Survey, 2018

### Conclusion

Continuous urban planning and redevelopment are necessary if a modern and livable city is desired. Unfortunately, the Bundu and Nembe Waterside communities are squatter settlements and the economic, social and environmental conditions of these communities present poor living conditions. There is need to emphasize on sustainable housing policy in the municipality that gear towards urban renewal programme in the study area which will involve planning, redevelopment and upgrading of the environment of the study area to provide the residents access to basic urban facilities and services, quality housing and living environment to improve the quality of life in the communities dwellers and the urban landscape.

### Recommendations

- I. There should be proper landuse management and planning in the municipality that will halt squatter settlements formation and control and manage urban growth and development in the study area;
- II. The government should declare the study area an improvement area to design and implement urban renewal programme in the communities to address the social, economic and environmental challenges being observed faced by the residents of the study area to improve the housing conditions and neighbourhood quality;
- III. The urban renewal strategy should include provision of affordable housing and resettlement options for the essential clearance of those portions of the area in order to make way for essential infrastructural facilities and services such as public water supply, access roads, educational and health facilities,

## “Assessment of Socio-Economic Impacts of Squatter Settlements of Bundu and Nembe Waterside Communities in Port Harcourt Municipality”

drainage facilities, and proper sewage and domestic wastes disposal in the study area;

- IV. Government should give legal titles to the squatters to legalize the tenure of the residents; and
- V. Sustainable planning approach should be employed in the planning of the communities through collaborative planning approach to involve all stakeholders in the planning process to achieve credibility and sustainability in the system.

12. United Nations Human Settlements Programme (UN-Habitat) (2003a). *Challenge of Slums: Global Report on Human Settlements*. Nairobi, Kenya: UN-Habitat.
13. United Nations Human Settlements Programme (UN-Habitat). (2003b). *Slums of the World, the Face of Urban Poverty in the New Millennium*. Nairobi, Kenya: UN-Habitat.
14. Wasantha, S. (2015). Quality of Life Study on Slum Dwellers (With Special Reference to Sri Lanka). *International Journal of Scientific Research and Innovative Technology (IJSRIT)*, 2(3), 36-65.
15. Wokekoro, E. & Owei, O.B. (2014). An Assessment of Residential Quality of Life in the Informal Settlements in Port Harcourt. *Journal of Humanities and Social Science*, 19(3), 11-26.

### References

1. Birdman, H. (2017). *What are the Causes of Squatter Settlements?* Retrieved 12<sup>th</sup> September, 2018 from <https://classroom.synonym.com/what-are-the-causes-of-squatter-settlements?>
2. Cities Alliance (1999). *Cities Without Slums Action Plan*. Retrieved 18<sup>th</sup> September, 2018 from <https://www.citiesalliance.org/cws-action-plan>
3. Essays, UK (November, 2013). *Factors to Contribute the Squatter Settlement Economics Essay*. Retrieved 18<sup>th</sup> September, 2013 from <https://www.ukessays.com/essays/economics/factors-to-contribute-the-squatters-settlement-economics-essay.php?vref=1>
4. Fellman, J.D. Getis A., Getis, J. & Malinowski, J.E. (2005). *Human Geography: Landscapes of Human Activities*. Eighth Edition, New York, USA: McGraw Hill Inc., pp. 432-434.
5. Gebegehu, K.F. (2016). Causes, Consequences and Policy Implications of Squatter Settlement in Gondar Town in Case of Kebele 18. *Innovare Journal of Social Sciences*, 14(2), 5-8.
6. Government of Rivers State (2018). *Map of Port Harcourt Municipality*. Port Harcourt, Rivers State, Nigeria: Surveyor General Office.
7. Hartshorn, T.A. (1992). *Interpreting the City: An Urban Geography*. Second Edition, New York, USA: John Wiley and Sons Inc.
8. National Population Commission (NPC). (1991). *1991 Population Census Report of Nigeria*. Lagos, Nigeria: Federal Government Press.
9. Taylor, G. (2012, September 9). Chronic Squatting – Is It Really the Bane of Human Civilization. *The Sunday Gleaner*, p. D12.
10. Trading Economics (2018). *Nigeria – Population Growth (Annual %)*. Retrieved 24<sup>th</sup> August, 2018 from [https://tradingeconomics.com/nigeria/urban-population-growth-\(annual%\)-in-nigeria](https://tradingeconomics.com/nigeria/urban-population-growth-(annual%)-in-nigeria)
11. United Nations Economic Commission for Europe (UNECE) (2009). *Self-Made Cities in Search of Sustainable Solutions for Informal Settlements in the United Nations Economic Commission for Europe Region*. New York and Geneva: UNECE, pp. 19 – 20.