



appropriate facilities in order to create very functionally attractive port Harcourt waterfronts for recreation and tourism.

**Key Words:** Socioeconomic, Waterfront, Development, Infrastructure, Importance

## 1. Introduction

This study is concern with area known as Port Harcourt Water side, by which is meant the area of settled low lying land reclaimed from the mud flats and mangrove forests stretching from the higher level (8 to 12m elevation) developed area of the city to the nearby creeks and rivers. It forms part of the huge area of deltaic swamp that surrounds the peninsula upon which the historic city of Port Harcourt was established on slightly higher firm ground. The study outlines a long term, sustainable, urban plan-based solution to the current conflict of interest involving the Rivers State Government and residents of the Port Harcourt Waterfront communities. It is intended to be the preliminary, scoping phase of a more extensive, in-depth , The main phase of the study would go forward from this preliminary study in exploring the planning and implementation of strategic development options aimed at meeting needs both of the government and the existing population, including: Ensuring Re-planning of the Waterfront areas facilitates accommodation of existing and new residential and economic activities in appropriate locations and well-ordered arrangements with good access and necessary infrastructure and services. Planned resettlement of existing communities or upgrading and rehabilitation of existing settlements to provide well-located, affordable housing for the existing population to modern standards of amenity with security of tenure, a healthy environment and access to basic services, Exploring new land use and land use

zoning changes that could contribute to increases in land values as a means of financing redevelopment that adequately compensates and takes some account of existing perceived traditional land rights and the rights of sub-tenants of long standing & those paying rent to a landlord.4. Strategic planning to examine opportunities for development, including infill and land reclamation whilst securing necessary protection of the existing natural environment from development (including mangroves which are important both as a natural habitat and as a protection against flooding risk, which is likely to increase in the future with climate change)

The old Port Harcourt city centre is still the attractive commercial, trading and administrative centre of the expanding metropolis. It is a high level peninsular jutting out into the mangrove swamps along the Bonny River and fringed with low level mud flats. Over the years these low lying areas by the waterside have been reclaimed both formally and informally .This study is concerned with the waterside areas communities

These are mainly residential areas developed both formally and informally on the waterside by reclamation below the four meter contour line in need of urgent regeneration measures. Major industrial, commercial land port related developments with well-engineered filling along with some lower level quality filling for residential layouts such as Borokiri are part of the formal planned reclamation schemes. In between these formal developments many informal residential developments have taken place with minimum filling to raise levels just above tidal water level. Every bit of reclaimed land has been built on for occupation and little thought given for provision of access and none for other than residential use. Although the quality of individual investments is often of reasonable quality, the ground on which they are built and the amenity-free manner of their layout at unacceptably high densities renders them a public health

and environmental hazard. Physically they are subject to flooding and will increasingly be so with rising sea levels associated with climate change predictions. These informal developments have grown due to their convenient closeness to the city centre and formal commercial riverside developments and the employment and social service opportunities available there.

## **2. The Context of the Study**

Waterfronts have evolved over the years to mean different things in different countries of the world, but there is a consensus among scholars that waterfronts are focal points in many cities, and are playing significant role in the social, political and economic life of the communities where they are found and developed. Besides, intensive local and international trade as well as diverse commercial and water-based transportation activities is often prevalent in most waterfronts. Today, that a great number of urban residents are often crowded into blighted or slum areas of the cities is no more news, what is perhaps news is the percentage of these urban residents that are often accommodated in the shanties of the various cities waterfronts especially Cities in developing nations like Nigeria., Considers waterfront development as very important because they stimulate modern development in the city. In other words, waterfront redevelopment has been regarded as a means to increase the economic vitality of localities, create new public spaces, and increase access to valued cultural and natural amenities.

(According to Blank, 1996) waterfronts redevelopment projects can be grouped into six main categories, namely: commercial waterfronts; cultural, educational and environmental waterfronts; historic waterfronts; recreational waterfronts; working waterfronts; and residential waterfronts. But fundamentally, waterfronts redevelopment are often focused on achieving the

following; “to improve public access; to revitalize and improve the image of the city; to achieve economic regeneration; to provide facilities and services for local people; and to underpin the improvement of the physical environment. In some cases, the underlying forces that shape waterfront revitalization are the economic and political intentions of planners and developers” It must be appreciated that the concern which planners, policy-makers, urban studies researchers and the general public have shown about the state, issues and problems of the urban environment especially on slums has culminated into the diversity of actions and responses now available in the literature of urban geography and planning. In Nigeria, the main approach has been outright demolition of these slums and waterfronts, after forced eviction and forced relocation with the early experiences of slum demolition in Nigeria dating back to the 1920s. For instance, the Lagos Executive Development Board (LEDB) carried out slum demolition in response to the bubonic plague that broke out at the time. This was followed by the pre-independence demolition which resulted in the celebrated Isale - Eko clearance to give the visiting Queen of England a pleasing view of the area. The Maroko demolition was a rather unsuccessful attempt by the military government to address the housing problems

Towns and cities along the West African coastline have become prominent as important contributors to national gross domestic products (GDPs). The latter is derived from coastal activities such as oil and gas, shipping, fishing, tourism and commerce. The attractiveness of the coastline is resulting in population concentrations along the coastline, with a rate of urbanization slightly higher than the interiors. As a result, many capitals and major towns are coastal. At the same time, this geographical space is undergoing annual coastal retreats of between 1-2 metres. This level of coastal erosion has devastating effects and induces the loss of infrastructure such as buildings rail, bridges, roads etc. It also threatens populations, who can no longer live close to

the coastline. The projected rise in sea levels due to climate change further exacerbates these risks.

property owners in the area, architects, landscape architects, resort managers, tourists, visitors, industry practitioners, policy makers and other stakeholders in determining appropriate facilities in order to create very functionally attractive Port Harcourt waterfronts for recreation and tourism.

Port Harcourt, the capital of Rivers state is the predominant coastal city in Nigeria's South

South region. This study is based on the squatter settlements located mainly by the waterside areas in old Port Harcourt. The old Port Harcourt city centre remains the same attractive commercial, trading and administrative centre of the expanding metropolis. According to Theis A. (2009), it is a high level peninsular jutting out into the mangrove swamps along the Bonny River and fringed with low-lying areas by the waterside which have been reclaimed both formally and informally over the years. The communities that live along the coastal areas of Port Harcourt are of natural beauty, commercial potential and desirability with high value real estate with great interchangeably called "waterfront" or "waterside", but while waterfront is a global name for areas that have high investment potential, waterside on the other hand is a term which captures the occupants' marginal character and peripheral location literally and socio-economically. For example, Elechi beach waterside, Ibadan waterside, Nembe waterside etc.

Most of the waterside areas have developed informally and currently occupied by established

Communities living, in many cases, at very high densities (Theis et al, 2009) A major contributing factor to the growth of these communities is their closeness to the city

centre and formal commercial riverside developments and the employment and social service opportunities available there.

These unacceptable high densities, their haphazard manner of development and lack of

Adequate sanitation make them prone to environmental and health hazards. On the basis of water and sanitation alone, and most likely according to the other criteria, the Port Harcourt Waterfront

settlement inhabitants are clearly defined as slum dwellers by the UN definition. In terms of topography, these areas are subject to erosion and will increasingly be so with rising sea levels

associated with climate change predictions. These communities can then be summarized as having the following characteristics which justify their choice for this study. They surround the city centre peninsular and are located along low-lying reclaimed land, with buildings sitting at water level or less than 1 meter above it. Their major sources of income are fishing and informal income generating opportunities and very few of them are civil servants. There exists a high degree of social cohesion, with many communities which allows for close and long-standing kinship ties and heritage. There was community participation in the areas of land reclamation by using Mud and sand filling, creating access, sinking boreholes, providing electricity and other basic services. The settlements are characterized by a lack of basic and social infrastructure as well as absence of vehicular access in many parts of the waterside areas.

This is a big challenge in the provision of basic urban services such as access to emergency service vehicles and for solid waste removal and disposal.

According to Aprioku (2005), the question of land ownership is controversial as the Rivers

state government claims ownership of the Waterfront areas as haven been set aside for the development of the metropolis under the Land Use Decree of 1978. However, the residents have a contrary opinion, with many of their families have resided in these communities over several generations. With the government attempting to implement the Greater Port Harcourt City Master plan which allocated higher end commercial and tourism land use to the area, persistent conflicts between the residents of these waterside communities and the government over this issue has resulted in attempted evictions and violent confrontations.

### **3. Research Methodology :**

The research exercise is an empirical study that required the collection of data on socio-economic characteristics, environmental conditions and the effect of these on the health seeking behaviour and status of the residents of the study area. Seven (7) coastal communities were randomly selected from the 49 identified squatter settlements in the Port Harcourt Metropolis. They are Elechi beach, Bundu, Captain Amangala, Emenike, Marine Base, Eastern Bye-pass and Creek Road. The sample frame and size were determined based on the average Household size of 6.0 in Port Harcourt,

The data upon which this study is based were generated from empirical investigations by the researchers. This was however complemented with secondary archival data. The primary data were sourced through the use of scheduled interviews, personal observations and the administration of structured questionnaire to generate data on the respondents' demographic profile, their perception, experience and exposure to the good and the bad sides of waterfront



dwelling. The target population for the questionnaire survey who were randomly sampled was mainly those living or doing business in the waterfronts selected for the study. During a pilot survey to ascertain the number and locations of the waterfronts, about 49 were identified as earlier revealed. For this particular study, these 49 waterfronts were grouped into seven (7) zones in which about 25 questionnaires were distributed in each zone. The questionnaire was structured into five sections ranging from socio-economic background of the people, awareness of the government policy on waterfronts redevelopments, constraints and implications, as well as proffering suggestions of possible urban planning and management imperatives. In all, a total of 150 completed and retrieved questionnaires were analyzed for the study out of the 175 that were served to the people based on 25 questionnaires per zone. Besides conducting interviews with selected stakeholders, also found to be very useful for the study were existing published literature and gazette information as sources of secondary data relevant to the study area and the objective set out to achieve. Others include relevant accurate and up-to date base maps.



#### **4. Findings and Discussions:**

Presentation of research findings covered the major issues examined as well as across the seven communities selected for study. These include the household dynamics regarding socio economic conditions, environmental and housing conditions and the health profile of the inhabitants.

#### **Socio - economic and environmental profile and conditions of Port Harcourt Waterfronts**

In an attempt to describe what the waterfronts in Port Harcourt look like, Aprioku, (2005) said: “Come to any of the waterfronts in Port Harcourt, the elements of modern living are absent. The houses are made mostly of corrugated iron sheets and timber. A few are normal block houses,

but they are invariably so tightly spaced together that even commercial motorcycles find it difficult to gain access. Vehicle owners in the settlements park their vehicles along the major roads and trek to their homes down in the hovels. When there is high tide from the mighty Bonny River coming in from the Atlantic high seas, the water from the adjoining waterways comes into homes. You can imagine what people who live here go through when it rains as it frequently does in Port Harcourt. There are no toilets in homes in some of them such as Bundu Waterfront. People answer the call of nature by either going close to the edge of the salty seawater or packaging their excrements in plastic bags and throwing them into the water”, a former Commissioner for Information in Rivers State, in an article in The SUN newspaper on Sunday, September 13, 2009, aptly captured the stigma the waterfront settlements leave like a diabetic scar their dwellers: “There is an awful stench that hangs in the air, and those who spend some time there carry this odour around town, giving off a whiff of decay.” It is further observed that “Apart from sanitation, the most distinguishing attribute of the Port Harcourt waterfronts is the total lack of security and the reign of the laws of the jungle put in place by underworld mafia lords who made themselves immune to the laws of the land. For years, the state law enforcement agencies were unable to take control of crime in these settlements. Women are regularly molested. Hardly does a day pass without people being murdered. There is an unwritten law which forbids victims of crime to report to the police. Those who break the law will pay with their lives or those of their dear ones. In fact, some gang chiefs have erected permanent outposts where sentries are stationed to watch out for the presence of law enforcement agents. “There are landlords who rule by the gun. There are gunrunners who feel free and fear no laws. There are drug dealers who fear no NDLEA operatives; there are gangs that decide the fate of the rest of society. There are hired killers who laze about with sharp knives and tout for jobs; there are

freelance killers waiting for any odd job. Of course, there are sundry criminals (they are legion) who serve as recruits for political thuggery, oil bunkering foot soldiers, chieftaincy tussle warriors, militants, prostitution, etc.”. The conditions highlighted by different persons at different times paints the picture of waterfronts which has made it a target of demolition in order to redevelop the area by various administration, most especially during the tenure of Chief Celestine Omehia and Governor Rotimi Amaechi. For instance, when former Governor Celestine Omehia assumed power and decided to tackle criminality head-on, he determined that to achieve this, the waterfronts had to go. He approached President Umaru Yar’Adua and painted the grim picture of the challenge the waterfronts posed to security, development and social wellbeing of the people. Though his tenure could not see his dream for the urban renewal of Port Harcourt, his successor took it up to implement same policy

### **Water front development opportunities**

In the regeneration of the Waterfront area, It is important to look at land development opportunities and redevelopment issues within the context of a careful consideration of both demand and supply side constraints, the broader human and physical development priorities of the city, and the current planning policy context. We argue in this report that neither wholesale demolition nor wholesale retention of the informal Waterfront settlements is viable when looked at in the context of the longer term planning issues facing the city

Tackled correctly, the Waterfront Area offers a tremendous potential to restore the fast fading image of the Port Harcourt Garden City concept. A strategic urban regeneration plan, carried out across the Waterfront in a systematic and sequential manner, will not only enable Rivers State Government to realize the broader objectives of the 2009 Greater Port Harcourt

Master Plan. It is essential to the effective implementation of that plan. A revitalized Waterfront is also essential to the broader regeneration of the Old City and to the image that Port Harcourt presents to the world as a modern 21st century city. Subject to a proper financial and technical appraisal, a policy of large scale reclamation of new Waterfront areas on 'infill' locations close to the city centre can offer multiple advantages

### **Sustainable development**

Not least, such policy can be used as a lever for major investment in the sustainability of the Waterfront Area. Large scale reclamation of mangrove areas immediately adjacent to the Old City offers the opportunity of providing long term protection against flood and the uncertainties of climate change and rising sea levels. The remaining mangrove areas can become protected natural areas –maintaining a balance between traditional wetlands economic activities, providing a fudge for local flora and fauna and offering the possibility of 'eco-tourism' and the controlled development of 'eco lodges'. Port Harcourt could establish itself at the international forefront of sustainable mangrove development in the face of the twin pressures of urban expansion and climate change, with a proposed new research institute to monitor the impacts of change in the Niger River Delta

### **Urban planning and development:**

Development control is a pressing issue. Informal land reclamation and settlement is extending the area of unplanned development into the mangrove and creating an ever-larger population of settlers living in substandard conditions. Ongoing informal development threatens destruction of the natural mangrove habitat which is an important natural asset that provides a refuge for wildlife and a source of rich local biodiversity. The mangroves provide a natural barrier against

surge flooding, the dangers of which are likely to grow over time with predicted climate change and rising sea levels.

## **5. Conclusions and Recommendations**

The main thrust of this work has been to investigate the possible interface between the Socio-economic attributes, human environmental factors and household health outcomes and their importance to the socio economic development in the state in seven low income informal squatter settlements in Port Harcourt Nigeria.

It is discovered in this study that the socio-economic attributes of the households and their affecting environmental factors tend to be consequences of the specific health issues observed in the six locations studied in Port Harcourt, Nigeria. The common diseases in the communities which are basically sanitation environmentally driven are cholera, diarrhoea, malaria, respiratory and skin diseases arising possibly from poor environmental conditions and lack of safe water and other sanitation sources in the study area. It is important to note that the communities share common environmental and socio-economic background and unexpectedly environmental health status, in which case the problem is not space specific but rather generic. The relationships are very much displayed in the various chi-square tests results in the text. The study calls for a potent and community driven urban renewal efforts, first to improve on the existing air spaces around buildings and by and large to provide access and locations to facilities that could make life better for the hitherto almost neglected people of the informal squatter waterfront settlements in Port Harcourt in Nigeria. This exercise if carried out will also facilitate the issuance of land tenure documents for the inhabitants. This work also provides a good working threshold for the

government and non- government agencies who may wish to intercede or collaborate with the people in the study area for a meaningful development agenda.

In conclusion, it must be stated that continues urban planning and redevelopment are inevitable if a modern and livable city is desired. Unfortunately the economic, social and environmental profile of Port Harcourt waterfronts is such that presents living conditions there as dehumanizing and unacceptable. A better housing policy needs to be planned and implemented. The government owes it to its people to provide a livable environment such that access to basic amenities is available, while also taking into consideration the various issues and problems encountered by waterfronts dwellers so as to make necessary provisions and adjustments. To ensure success of the demolition policy, the welfare of the people should take precedent over getting rid of miscreants. The former should be the goal and the latter an added benefit or part of the objectives. This is premised on the fact that “watershed” settlement in Port Harcourt is intricately linked to the culture of the Niger Delta, where many communities are geographically situated on the banks of rivers and creeks to support artisanal fishing, and as the main routes for transportation to many other communities. The redevelopment of these waterfronts promised by the government should be such that can blend the „transferred waterside“ lifestyle of these waterfronts residents to an urban setting and lifestyle amenable to global best practices and opportunities in a modern and sustainable city of Port Harcourt.

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