



Physical Planning and Urban Development: Empirical evidence from Port Harcourt, Rivers State

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ABSTRACT

The economic importance of the city has remained high; the role of public policy in the urban development process aftermath of the civil war is important. The consequences of poor physical planning include struggles for access to land and conflicts between indigenous urban communities and those who acquire or purchase land for private or public development. The purpose of this study was to examine the impact of physical planning and urban development in Port Harcourt Rivers State. Data were sourced from a questionnaire administered to staff of Federal, State, and Local Government ministries and agencies in charge of physical planning and urban development. Mean and standard deviation was used as data analysis methods, the established significant impact of physical planning and urban development, the study also found that there are challenges in implementing the Rivers State master plan. The study recommends the need for the availability of fund to the planning authorities to work efficiently and effectively, availability of adequate fund provides more vehicles and machinery that can be purchased to control development efficiently and the study reinstates the need to resolve issues of land acquisition are important if control measures are to be carried out in any meaningful way as it is obvious that the government cannot achieve these by-laws.

Keywords: Physical Planning, Urban Development, Empirical Evidence, Port Harcourt

INTRODUCTION

Port Harcourt is the center of Nigeria's oil and gas resources. Ministry of Urban Development & Physical Planning (2013) stated that this reputation is the product of the landscape, skyline, the environment, neatness, and orderliness in the built industry (Igwe, 2019). A contemporary issue of socioeconomic development; urban planning and management have dominated the government's critical platform, acknowledged as city planners and managers. Alnsour (2016) stated that the positive transformation of urban space is the result of sustainable urban planning through institutional frameworks, laws, regulations, plans, and actions (Igwe, 2019).

Traditionally, society has relied on the government to ensure law and order (Tsavdaridou & Metaxas, 2015). However, collaborative governance has shifted the task to third parties (Pierre, 2016). The presence of these actors has made participatory network governance relevant as their involvement in decision-making has become crucial (Marques, 2013). Society is at risk as competing interests are upheld over the general interest in the collaborative arrangement (Stone, 2014). The reduction of collaborative governance to personal interest has led to the loss of confidence in the network.

Igwe (2019) noted that Port Harcourt witnessed the change from a garden city to a slum city as a result of indiscriminate urban development from the 1990s to the 2000s. The random urban development in the city has affected the socio-economic life of the people. Wike (2015), Wokekoro & Owei (2014), and Kio-Lawson & Dekor (2014) argued that the standard development indexes of education; economic activities; greening; health; housing and infrastructural facilities of electricity, road and drainage, water, recreation, and open space lost their bearing. Wang (2012) acknowledged that socio-economic indexes are adversely

affected by the creation of urban sprawl. Oppong (2016) contended that the existence of slums has negative implications for the city and its people. Bailey (2014) opined that a comprehensive evaluation of urban development management to address the negative consequences of indiscriminate development is the way out. This indiscriminate development brings about the expansion of slums, informal settlements, and too much pressure on urban infrastructure.

Igwe (2019) was of the view that the phenomenon of indiscriminate urban development is at a rate that requires research, poor planning, absence of law, lack of implementation of relevant regulations, and poor policy framework lead to corruption, disobedience, and institutional failure in the urban sector (Wike, 2015). Stone (2014) presented the urban setting as having stakeholders who determine the course of events in the urban landscape.

The indiscriminate urban development in the Port Harcourt metropolis consists of irregular developmental activities undertaken by various persons on the urban land. These developments occur in different shapes and types (Wike, 2015). Minimal attention has been directed to addressing the problem of indiscriminate urban development in the Port Harcourt metropolis.

LITERATURE REVIEW

According to Owei, Obinna & Ede (2010) Port Harcourt is one of Nigeria's major sea ports and the centre of the nation's oil and gas industry. It was established in 1912 by the British colonial government because its site met the locational requirements for a rail and a port terminus deep water rear high ground, which shall be connected to the mainland (Anyanwu, 1989). Like many cities in Nigeria, Port Harcourt has recorded rapid growth in population and areal spread. From an estimated population of 500 in 1915, it grew to 30,200 in 1944. By 1963, its population was 179,563 and by 1973 it has reached 231, 532 persons. The Port Harcourt municipality's population was given as 440,399 by the 1991 national census. The 2006 national census show this population is more than a million (Obinna, Owei, and Mark, 2010)

In terms of its physical size, the city grew from 15.54 sq. km in 1914 to a metropolis covering an area of 360 sq. kilometers in the 1980s. Physically the spread has occurred in both a south easterly direction and a northerly direction. To the south, growth was through marshland colonization in squatter settlements locally called waterfronts. Settlements of waterfronts have been demolished by the Rivers State Government and plans are in progress to demolish many more (Owei, Obinna & Ede, 2010).



Figure 1: Picture of demolition of Waterfront slums in Port Harcourt

Source: www.google.com, 2022

Growth has also occurred in a north-westerly and northerly easterly direction through the entrapment of indigenous enclaves of semi-rural and rural communities within the built-up area of the city. The Port Harcourt urban fringe today stretches to Choba, Rumuokoro, Elelewon Rukpoku, and Woji. Much of this growth is unplanned and unregulated (Owei and Ikpoki, 2006). According to Owei Obinna & Ede (2010) as part of its efforts to manage the city's growth, the Rivers State Government 2009 established the Greater Port Harcourt City Development Authority with jurisdiction covering Port Harcourt city and Obio Akpor Local Government Areas (LGA) and parts of eight other local government areas. It covers an area of approximately 1,900 square kilometers (40,000 hectares of land) with a projected population of about two (2) million people.

Urban growth and expansion primarily derive from the large-scale development of settlements that occur outside the formal processes of public land use controls. In the process, increasing informal settlements especially on the urban periphery make it difficult to provide services such as water supply and sanitation; and also such infrastructure as roads, drainage, markets, and open spaces for recreation (Owei, Obinna & Ede, 2010). Yet an efficient system of managing land and providing sustainable infrastructure are important aspects of urban growth management. In Port Harcourt, this is not the case. The kernel of discussion in this paper is an attempt to examine the land factor as it impacts land use.

An attempt in 1977 to create a new Port Harcourt Metropolitan Planning Authority (PHMPA) could not take off. By PHMPA (declaration of planning area order 1977), all the areas within 24 sq km from the liberation square in Port Harcourt were declared as planning areas for town planning. Even after the Edict establishing it was passed, the authority was never given the independence to function and was administratively emasculated by the Ministry of Lands and Housing. Thus, the Port Harcourt Master Plan which had been prepared by the state government was very poorly implemented (Owei, Obinna & Ede, 2010). By the end of its life span, it remained largely an academic document and failed to translate the vision of the new Rives State Administration for Port Harcourt. To its credit, several government residential schemes were developed as site and service schemes. A few housing schemes were also developed for the low income. The total numbers of plots were few compared to the population in need. Moreover, these schemes benefitted mostly senior civil servants and military officers and their cronies in society.



Figure 2: Picture of indiscriminate disposal of waste in Port Harcourt

Source: www.google.com, 2022

Owei, Obinna & Ede (2010) opined that the vast majority of urban dwellers had to fend for themselves. Thus the formal process of land acquisition by individuals remained the principal source of land for people. Much of Port Harcourt's growth is attributable to this process of informal development of land. With a legal and administrative framework for land use planning that was not working, developers took the liberty to carry out their development activities without any controls. Land in the indigenous settlements on the urban periphery was rapidly consumed by growth. As the state government attempted to acquire land, so did resistance by indigenous land owners grow. Even land previously acquired site plans programmed are allocated by the government but the Certificate of Occupancy was quickly repossessed and sold off to prospective developers by the youths in these communities. This made nonsense of the planning of these layouts. The Land Use Act was promulgated by the FGN in March 1978 to simplify and streamline land management and ownership, and to enable the government to control land. Its implementation has been problematic. It has not improved land use planning. Most developers ignore it.

The Rivers State Government enacted the Rivers State Physical Planning (Law No. 6 of 2003). The objective of the law was to provide for the control, planning, and development of land in the state, the establishment and functions of the state Urban and Regional Planning Board, the Local Planning Authority, and other connected purposes. The main factor responsible for the ineffectiveness of this law was that it was never implemented. No effort was made to implement it. The present administration of the state came up with a bold initiative in creating by law the Greater Port Harcourt City Development

Authority (GPGDA) in 2009 (Law No. 2 of 2009). The objective of the GPCDA is to ensure the implementation of a new development plan for the designated Greater Port Harcourt City. As stated earlier, it covers a substantial area. Negotiations are ongoing with local land owners to facilitate the acquisition of land for the development of Phase 1 of the Master Plan. Sec 2 (C) of the GPCD law states thus, "subject to the provisions of this law and other statutes governing same, all lands comprised in the city shall be under the management of the Authority (Owei, Obinna & Ede, 2010). Much of the effort in improving land-use planning has been in the area of enacting legislation. Implementation has been very poor from the time of the creation of the Rivers State to date. Detailed guidelines, for the control of land use, have been lacking.

Physical Planning

According to Owolabi (2019), physical planning involves the reconciliation of land use provision of the right site for the right use, control of development, provision of facilities, services and good preservation, protection and conservation of resources, preserves heritage among others (Oduwaye, 2009). Land use planning is done to identify alternatives for land use and to select and adopt the best land-use options, the main objective of land use planning is to allocate the land uses to meet the economic and social needs of people while safeguarding future resources the world bank 2010. Physical planning carried out today will not only affect a man and the environment of the present generation it goes a long way to affect the future generation, hence there is the need to plan ahead of the present generation.

According to Owolabi (2019) physical planning also known as urban planning, by whatever discipline it may be given, is an emerging paradigm, and it provides a broader view of relationships between the use of space and the consequences of using it in a particular form, it is an important administrative action aimed at sustaining and improving the aesthetic nature of a town.

Physical planning administration is therefore a branch of public policy encompassing various disciplines which seek to Regulate Land Use Efficiently and Ethically, Thus Preventing Land-use Conflict (Owolabi, 2019). Physical planning administration is not a new concept in Nigeria it has started before the involvement of the Colonial master in the country as far back as the 1800s where Local Methods of administration were used. the new thing about physical planning administration in Nigeria is that various approaches have been adopted in solving physical planning issues in the society and Laws have been promulgated to guide its administration the major Nationally adopted law is the 1992 Nigerian urban and regional planning decree 88 of 1992(Owolabi,2019). To accomplish the emerging planning practice exposition of planners was in the town (Owolabi, 2019).

Contemporary Urban Planning Policies and Sustainability

Urban Planning, based on the widespread acceptance of the concept of sustainability has, over the years, sought to incorporate the tenets of sustainable development in various forms. Environmental concerns like global warming and other environmental mishaps have raised awareness worldwide that urban planning, as a planning goal, can promote more sustainable land-use practices (Beatley & Manning, 1997; Vitousek et. al. 1997). Numerous national and city plans incorporate the concept of sustainability at their core and in principle (Berke & Conroy, 2000). Berke and Conroy (2000) outline six principles of sustainable development planning which are summarised below:

- (i) **Harmony with nature:** This principle states that development practices must not disrupt the natural patterns and lifecycles of ecosystems but should rather act to support them. Instead of modifying natural systems, development should mimic natural systems to fit urban life. Activities should preserve natural systems, and air quality, reduce flooding, and promote sustainability.
- (ii) **Livable built environments:** The fit between urban form and people should be enhanced by the creation of desirable spaces that will promote community cohesion and enhance land use access and urban form by promoting a sense of place and preserving physical features that are significant and promote attachment and sense of place for people.

- (iii) Place-based economy: The local economy should function within its limits. Resources should be used no quicker than can be replaced and waste should not be discharged above the assimilable time limits. The built environment should meet local needs and aspirations with infrastructure and housing that promote livability and local economic affairs (Owolabi, 2019).
- (iv) Equity: Land use patterns should incorporate the needs of the poor and should seek to eliminate disadvantages while promoting equitable access to economic and social facilities in a bid to eliminate poverty.
- (v) Polluters pay: Polluters must bear the cost of their actions in consideration of the interests of the public.
- (vi) Regionalism: Communities must consider the impact of their action or development on other communities and must not constitute any form of a nuisance to other communities in the pursuit of their own goals.

In light of these six principles, Berke and Conroy (2000) asked how urban planners incorporate sustainable development. They found that while there is a broad acceptance of the concept of sustainable development, a gap exists as planners struggle to put the principles into practice. They also found that although plans focused on creating a more livable built environment, they lacked a comprehensive approach to guiding development towards sustainability. To this effect, they argued that the importance of the concept of sustainable development is widely accepted, however more work is needed to better align theory and practice.

Brundtland (1987) reported states that urbanization is itself a development process, with urban planning being instrumental to achieving and facilitating sustainability (UNCED, 1992: 45). The challenge of urbanization is effectively managing the process to circumvent a decline in the standard of life of people and promote sustainable land-use practices (Satterthwaite, McGranahan, & Tacoli, 2010). Examples of effective urban planning include the development of smaller urban centres to ameliorate pressures in larger cities. Building self-supported housing and urban amenities by and for the poor, and instituting a more constructive strategy will enhance the grey economy and provide monetary support for basic services like sanitation, water supply, etc. In this view, when adequate controls and planning are effective, urban development will help protect communities from environmental disasters rather than increasing their vulnerability. In Port Harcourt, for example, if sustainability had effectively informed city planning, urban development would have helped avoid environmental disasters, the most common of which is flooding, which has caused enormous economic and social upheaval.

Port Harcourt's Urban Planning and Development

According to Echendu (2019), at least 49.0% of Nigerians live in urban areas today (Oni-Jimoh et al., 2018), including in the rapidly expanding sprawl of Port Harcourt. The human population in Port Harcourt is growing with housing developments being built to cater to the city's growing urban population. Significantly, most of Port Harcourt's development has been criticized for being unplanned and unregulated (Wizor, 2014a). Three decades later, the predicted urban crisis of the Brundtland (1987) report is now a reality for Port Harcourt city where unplanned growth and population increases have led to unprecedented environmental degradation (Uyigüe & Agho, 2007).



Figure 3: Picture of demolition of Waterfront slums in Port Harcourt
Source: www.google.com, 2022

Urban Planning Regulations and Policies

Echendu (2019) noted that urban regulations and policies aim to control and guide urbanization to prevent problems associated with the growth of cities and harness the benefits that come from expansion (Habitat, 2016). This is not the case in Nigeria where the government often fails or is slow to uphold the law and environmental concerns as the country is urbanized (Eneh, 2011). This is apparent in the Ogoniland Clean-up Project which finally commenced in 2017 after many years of environmental damage from at least 2976 oil spills that caused environmental degradation, and negatively impacted people's livelihoods (Collins, 2019). The sluggish pace of the Clean-up Project has been criticized in many quarters (Seun, 2018) and the excitement of the people at the launch of the project has ebbed considerably as nothing significant has yet been done. Indeed, there are doubts the goals of the Clean-up Project will ever be achieved (Orji, 2019).

Development in everyday sectors like housing and infrastructure continue to be taken seriously in developed countries, as well as some other developing countries, that have a clear growth and development pathway (Gurara et.al. 2018). By contrast in Nigeria, these sectors have been almost totally ignored, the fact remains that for sustainability to be achieved, the built environment must come to the forefront of urban planning, given that it is the activities of the built environment that have the most impact on the environment as a whole. For the economic and social aspects of sustainability to be achieved, people must inhabit an environment that will enable them to thrive and be in good health; only then will other goals be realized (Hawkins, 2010).

The importance of land-use planning as an integral process of achieving sustainability is well documented in the literature. For instance, Agenda highlighted land-use planning as a tool to be utilized in preventing urban sprawl, most especially into important farming land and sensitive regions. There is a call for all nations to undertake reviews of the urbanization policies and processes. This will enable an understanding of the impact of growth on the environment and facilitate the application of unique planning styles and approaches, tailor-made to local needs that also consider the features of the growing cities and the available resources (Birch, 2016; Caprotti et al., 2017).

Nigeria's Urban Planning Laws and Policies

Echendu (2019) believed that the planning law used in all the states in Nigeria is the Nigerian Urban and Regional Planning Act (Decree 88 1992). This replaced the British colonial government's 1946 Town Planning Ordinance (Dung-Gwom, 2011). The three tiers of government in Nigeria (federal, state, and local) are all involved in urban planning in different capacities. The federal level is tasked with roles such

as: formulating national policies relating to urban and regional development and planning; devising and implementing the National Physical Development and Regional Plans; providing financial and technical assistance to states in devising and implementing plans; as well as promoting the training and education of planners.

The state government is tasked with formulating its state policy for planning, which has to be within the stipulations of the national policy. The state also prepares and implements its regional, sub-regional, and urban plans as well as subject plans, and provides technical support and assistance to local government in the local government's implementation of local, rural, and subject plans. The local government, which includes a city council, prepares its town plan, rural area plan, local plan, and subject plan. The local government also controls development within its area of jurisdiction.

The Act requires that a National Urban and Regional Planning Commission, made up of members who are professionals with several years of experience in the different fields of urban planning, is constituted at the federal level (Echendu, 2019). The different government ministries and parastatals involved in planning in different capacities each have representatives on this body. This commission is tasked with carrying out the planning functions at the federal level. A state board is constituted which is in charge of state planning activities. A local planning authority is in charge of planning at the local level and its members are all planning professionals.

Before the preparation of the National Plans, the National Commission is obliged to call for contributions from all concerned government and non-governmental establishments and members of the public whose input will be considered in the draft preparation. This is in a bid to achieve integration between all levels of the Physical Development Plans in Nigeria as well as to encourage community participation (Echendu, 2019). The draft plan is presented to the public and objections are welcome and addressed before the final plan is presented to the legislature, which may either approve it in whole or in part or ask for amendments. The approved plan becomes the operative National Physical Development Plan and shall be reviewed every five years to reflect the changing times. The review process follows the same process as the original plan.

In making the regional, sub-regional and urban/master plans, this same procedure is adopted with relevant changes. The making of a town plan, rural plan, local plan, and subject plan must also be in tandem with the state plans. A Development Control Board in charge of all developments within their jurisdiction is established at each level of government. Every developer, both government and private, must submit plans (comprising all relevant information like drawings, designs, and plans) for approval from the relevant control board before any physical construction can commence. There are various grounds for rejecting plans, including if the proposed development will have a major impact on the environment, inhabitants, or existing facilities (Echendu, 2019). A detailed Environment Impact Assessment is to be submitted by any developer wishing to make developments of three hectares of land expanse or recreational and commercial buildings of stipulated sizes, Rivers State, of which Port Harcourt is the capital, has in place the Rivers State Physical Planning act of 2003 as well as the Greater Port-Harcourt City Development Authority (GPHCDA) Law No. 2 of 2009 in place to regulate urban planning in the State (Ede, Owei, & Akarolo, 2011).

The Nigerian Urban and Regional Planning Act (Decree 88 1992) compares to global standards, but the adoption in practice at all levels of government leaves a lot to be desired. Non-compliance to laws and policies has been identified as a problem of the Nigerian urban built environment, one which has led to many environmental problems (Olugbenga & Adekemi, 2014). Citizens are encouraged to contribute but the culture of participation is not deep, and the government itself does not obey its laws. There are cases where Governors themselves decide where to site facilities without recourse to due processes provided by the law (Dung-Gwom, 2011; Osuocha & Njoku, 2012). Citizen non-participation is thus a contributory factor to the problems being experienced in urban planning in Nigeria (Chado et al., 2016).

Urban Planning and Environmental Incidences in Port Harcourt

Echendu (2019) noted that Port Harcourt is experiencing multiple environmental problems, the majority of which link to urban planning (Ibama & Wocha, 2017; Izeogu, 2018). These problems range from oil spills as a result of crude exploration, to air pollution as a result of soot from illegal crude refining (which has seen a massive social media protest calling the government to action), to the annual flooding experienced in several suburbs and the city centre (Akinwale, 2018; Elenwo & Ugwu, 2018; Yomi, 2017). These floods pose the greatest threat as it displaces residents, cause loss of lives, and wreak huge economic losses, and livelihood losses (Oriji, 2015). The flooding has become a yearly occurrence and homes in several suburbs in Port Harcourt are inundated as soon as the rainy season starts, continuing the devastating annual cycle (Edozie, 2018). The incessant urban flooding is a stumbling block to achieving the SDGs, and prevention, mitigation, and preparedness are ways of tackling the flooding problems (Bashir et. al., 2012).



Figure 4: Picture of demolition of Waterfront slums in Port Harcourt
Source: www.google.com, 2022

Several studies have established a relationship between the annual floods and Port Harcourt's urban planning (Echendu, 2019). Ogundele and Jegede (2011) in their research examining the factors that cause the flooding also highlighted the planning issues of poor construction and coordination of drainage systems as the root cause of the problem and called for better land-use planning to control the floods. The impact of floods is more pronounced in low-lying areas due to rapid growth in population, poor governance, and decaying infrastructure. Research has identified the causative factors to be a lack of proper environmental planning, urban management, and collaborations between local communities, NGOs, voluntary groups, and local and international donor organizations towards managing floods (Ibama & Wocha, 2017). Within the realm of professional practice (land use planning and management), it has been recommended that professionals undergo training and re-training programs in related fields (human capacity development) and uphold the ethics of their profession, particularly avoiding corrupt planning practices that can jeopardize lives and properties of the people. Political intervention in land use planning and management has been decried as inimical to sustainable urban planning and is to be avoided to prevent the occurrence of avoidable disasters (Dung-Gwom, 2011).

In another study examining the impact of flooding, vulnerability factors, and disaster risk management by Onwumele (2012), construction on flood plains, excessive rainfall due to climate change, deforestation, and indiscriminate dumping of refuse were also identified as causative factors of flooding in Nigeria. The preparedness of concerned agencies to act during disasters was found by Onwumele (2012) to be grossly inadequate. Funding is an issue and relief efforts take years to kick off and in a lot of cases, fail to kick-off, for example, in 2015, the victims of the 2012 floods in Nigeria were yet to be given houses promised to them by the government (Adekola & Lamond, 2018).



Figure 5: Picture of indiscriminate dumping of refuse in Port Harcourt

Source: www.google.com, 2022

It is a fact that climate change has triggered extreme rainfall which contributes to the flooding menace and has a chain reaction effect (Hettiarachchi, Wasko, & Sharma, 2018). Climate change-induced flooding destroys farmers' harvest, contributing to hunger and jeopardizing the nation's path to sustainable development (Kwari, Paul, & Shekarau, 2015). There have been calls for planning laws to be reviewed to suit today's realities, and for a building code to be adopted and enforced in all states. Co-operation between concerned ministries and sensitization starting from the primary school level is also important (Kwari et al., 2015).

Echendu (2019) noted that flooding has primarily been blamed on increased levels of urbanization, a lack of or inadequate drainage systems, and lax planning laws. This is because increased urbanization has seen a growing proportion of ground surfaces concreted, which means there is no percolation of water, and adequate drains are not in place to take care of the surface runoff (Adeloye & Rustum, 2011). Designing and building a sustainable drainage system (or “suds”) as practiced in the United Kingdom, has been identified as a way of controlling the flooding. The flooding has also been blamed on government agencies charged with city development, with claims they are not doing their job, and a review of the city master plan with sustainable drainage recommended (Elenwo & Efe, 2014). The flooding in Port Harcourt has put lives at risk and residents have experienced extensive damage to properties, as well as loss of livelihoods. There is a strong consensus among academics on the link between planning, or the lack thereof, and flooding in Nigeria.

The Infrastructural Deficit

Insufficient investment in sustainable infrastructure is a constraint to development and growth (Bhattacharya, Oppenheim & Stern, 2015). Flooding has become more frequent and intense than in decades past and is now often occurring in locations previously not at risk. The insufficient infrastructure in Nigerian cities has made the rainy season become a period of worry for residents due to flood risk. Studies have also highlighted that the government is doing little to address these issues as it has not provided the necessary infrastructure (Douglas et al., 2008). In a research study that aimed to evaluate the impact of flooding on socio-economic activities in a Nigerian state, there was evidence of impact on the available infrastructure, and the poor were found to be disproportionately impacted by the flooding disaster (Otomofa, Okafor, & Obienusi, 2015).

Echendu (2019) noted that Nigeria’s flooding is caused by an interrelationship of socio-political factors like governance/ management, and poor infrastructure (Adekola & Lamond, 2018). The country’s growing population has seen an increase in the need for housing leading to the expansion of its old cities and the formation of urban sprawl without the requisite infrastructure (Chiadikobi et.al. 2011). An evaluation of the sustainability of these new developments is required because poor infrastructure is a hallmark of Nigeria’s urban areas and the leading cause of the attendant problems associated with urban sprawl (Innocent, 2013; Lamond et. al., 2015). In addition, heavy rainfall, structural failures, and other anthropogenic factors are flood drivers in Nigeria. Weak institutional frameworks in the management and monitoring of the urban habitat are also an enabler of the flooding problem (Agbola et.al., 2012).

Echendu (2019) noted that even though urban floods have become a worldwide phenomenon, management practices differ among countries and vary on existing technologies, infrastructure, and urban planning levels (Hula & Udoh, 2015). In the case of Port Harcourt city, there is evidence of planning failures in the provision of infrastructure, especially in the fringe areas, and the resultant yearly flooding that occurs. The lack of provision for drainage is one of the main causes of urban flooding in African urban areas. There is a pressing need to address town planning issues and construct drainage systems to combat the floods (Etuonovbe, 2011). Nigeria’s failure to adopt an integrated approach to risk reduction, as is the practice in most countries of the world, does not augur well for her. Many parts of the world integrate spatial planning as a way of reducing flood risks.

For any city, the scale of the risk from extreme weather events is heavily dependent on the quality of existing infrastructure (Echendu, 2019). Most residential areas in poorly governed cities in Africa have no drainage system and rely on natural drainage channels, and it is common for buildings and other infrastructure to be constructed in a manner that obstructs these drainage channels, and which results in flooding (Nabegu, 2014). There is evidence of increased deaths and fatalities from flooding in urban areas, and the poor suffer the most from such events (Douglas et al., 2008). With regards to urban sustainability, when adequate planning and infrastructure are in place, the floods will be controlled and their attendant negative impacts will be eliminated, bringing Nigeria a step closer to achieving its social development goals.

This literature review has shown that poor urban governance and a dearth of infrastructure are the leading causes of flooding disasters. Flooding problem is thus mainly anthropogenic. It stems from human interaction with the environment and is largely a result of poor urban development (Omoboye & Festus, 2014).

RESEARCH METHODOLOGY

The survey research design method for use for this study makes use of both primary and secondary sources of data collection. The target population is the Port Harcourt metropolis which includes the residents, the developers, and the agencies in charge of the Physical Planning Administration in the area. Stratified random sampling was used for this research in selecting the communities based on their population classifications and simple random sampling was then used to select houses where the questionnaires will be administered. The sample size of the study comprised 50 staff of federal, state, and local government from the ministry of urban development and physical planning. In this research data was obtained from questionnaires and was processed with the use of a statistical package for social scientists (SPSS) version 22.0. Using single factor analysis known as the univariate analysis was used. It involves the mean, median, and standard deviation and was further expressed in tables.

ANALYSIS AND DISCUSSION OF FINDINGS

Out of the fifty questionnaires administered, 37 were retrieved; the univariate section is concerned with the presentation of the data for the variables of the study. The data presented herein is continuous and so is assessed using the mean and standard deviation in the assessment of its central tendencies and dispersion. Given the positive statements adopted in the measurement of each variable and the scaling method which ranks from 1 = for strongly disagree to 5 = strongly agree, a mean score of $x > 2.5$ with a relative standard deviation of $s < 2.0$ is adopted as substantial evidence of support or agreement to the indicator.

Table 1: Physical Planning and Urban Development

S/N	Item	SA	A	X	STD
1	Physical planning involves the reconciliation of land use provision of right site for development	23	9	3.44	0.864
2	control of development, provision of facilities, services and goods preservation is the focus of physical planning	31	4	3.81	0.732
3	Land use planning is done to identify alternatives for land use	28	6	3.69	0.741
4	Physical Planning carried out affect environment development	21	11	3.44	0.864
5	Problems of Living and Housing Living Condition, Political Interference, Development of Illegal Structures	25	9	3.64	0.730
6	Developmental Control affect Urban Planning,	19	17	3.53	0.759
7	The Problems of Urban Planning is still a fact of life	20	8	3.19	0.884
8	Physical Planning Administration in Rivers state is faced with diverse challenges	24	10	3.61	0.762
9	All stakeholders within the society should be carried along in physical planning of the state	21	13	3.47	0.873
10	Planners should also protect the integrity and the ethics of the profession.	23	11	3.56	0.786

Table 2: Challenges of Physical Planning and Urban Development

S/N	Item	SA	A	X	STD
1	The role of public policy in the urban development process have challenges	11	19	3.53	0.759
2	This expansion became necessary due to the opportunities	21	7	3.31	0.953
3	The Master Plan of 1975 made ample provisions of basic urban infrastructure and services have challenged by factors.	19	10	3.19	0.941
4	Location of economic activities, and housing development, this led to urban planning	11	23	3.25	0.962
5	Business activities bring atmosphere of controversy and contentions with different values of equity	18	14	3.36	0.964
6	The issues of poor planning control are evidenced in Port Harcourt	21	7	3.31	0.953
7	This activity of street trading is perpetuated by the community members in most cases as they collect tolls	9	20	3.00	0.900
8	Informal economic activity being an umbrella of street trading activities has been a subject of controversy	27	5	3.64	0.730
9	The informal sector is one of the highest offenders in the indiscriminate development of the city	15	15	2.11	1.534
10	They flout urban regulations, with impunity; embark on corrupting the system at the slight opportunity	16	17	3.28	0.955

DISCUSSION OF FINDINGS

The issue of indiscriminate urban expansion is not uncommon not only in Rivers State but in Nigeria at large. It has created haphazard, unplanned, and unapproved development that negatively affected urban planning for cities in Nigeria. Physical planning has been described as a process aimed at achieving orderly physical development with the overall aim of evolving a functional and liveable environment where individual and common goals can be achieved. In urban centres, the essence of land use planning is to ensure that urban activities are organized and developed in physical space with due consideration for the protection of the public interest which include health, safety, convenience, efficiency, energy conservation, environmental quality, social equity, social choice and amenity (Adeagbo, 1998; Nnah et al, 2007). Opong (2016) contended that the existence of slums has negative implications for the city and its people. Bailey (2014) opined that a comprehensive evaluation of urban development management to address the negative consequences of indiscriminate development is the way out. This indiscriminate development brings about the expansion of slums, informal settlements, and too much pressure on urban infrastructure. Emenike and Sampson (2017) contended that the absence of relevant records; poor planning and overcrowding of internal facilities; amenities; and poor quality housing contributed to the lack of sustainable urban development of the city. Adekola, Fischbacher-Smith, Fischbacher-Smith & Adekola (2016) stated that the paucity of research and planning created room for the random development in the city.

CONCLUSION

The economic importance of the city has remained high, because of its position as a port city, one of the only two railway terminals in Southern Nigeria. Onukwugha (2017) argued that it is the largest city in the South-South Region of Nigeria as well as the fastest economically growing city in Nigeria with more than 70 % of all foreign investment in the South-South region situated there because it is well endowed with natural resources and infrastructures like international and domestic airports, seaports, railway terminal, international hotels, and other facilities. Ihueze, Nwosu & Okorundu (2014) agreed that it is one of the cities that grew at a fast rate based on its strategic position on land and sea which led to its

industrialization, rapid expansion, and eventual congestion. The government and its agency cannot solve these problems alone it is a joint responsibility of the entire society to protect and preserve it from degenerating faster than expected. Kundert (2015) contended that change affects society positively and negatively. The negative change resulted in indiscriminate urban development in cities. Wike (2015) posited that the development pervading the city's landscape is against the spirits of relevant town planning laws, urban development regulations, and policies.

RECOMMENDATIONS

- i. There is a need for the availability of funds to the planning authorities to work efficiently and effectively, the availability of adequate funds provides more vehicles and machinery that can be purchased to control development efficiently.
- ii. The ministries and agencies need huge and timely financial support from the state government in a bid to meet the financial requirement of acquisition of up-to-date equipment, recruitment of new staff, capacity building in appropriate disciplines, preparation of master plans, acquisition of office space, and other logistics.
- iii. The findings of the study reinstate the need to resolve issues of land acquisition are important if control measures are to be carried out in any meaningful way as it is obvious that the government cannot achieve these by-laws.
- iv. The city of Port Harcourt needs urgent attention to be given to its physical planning. As laudable as the idea of the new Port Harcourt city is, not much can be achieved without adequately addressing the land question.

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