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Urbanization and Physical Development

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Introduction

Urbanization is a continuous, universal and inevitable process of physical development. Since 1950, urbanization has become a worldwide phenomenon (UN-Habitat, 2010; 2011, UNDESA, 2014; 2015). The demographic and spatial attributes of the worldhave held most academician fascinated because of urbanization (Sebego and Gwebu 2013). Rapid growth of world population and its agglomeration in cities and towns around the world is affecting the phase of the world (UN-Habitat, 2001). Considering the increasing world population, Idowu and Olaniyan (2009) admitted the changing phases of urban settlements, as most semi-urban areas and medium-sized towns have been turned into full urban town. Conversely, urbanization has a huge effect on physical development; which in turns translated into stressful urban dynamics, with rapid development of informal households. The state of physical environment, particularly, in urban centres is a major source of global concern, as the increasing demand for basic utilities can be traced to the high urban population. In an attempt to create a liveable environment, modification of urban land, in terms of physical development, becomes the order of the day. This chapter is divided into five sections. The dawn of an urban world was discussed in the first section, urbanization in Africa in the second section; the concept of physical development and urban growth, the third; physical planning and development: panacea to urban sprawl, the fouth; and sustainable physical development, the fifth

The Dawn of an Urban World

The industrial revolution of the late 18th Century is the causeof the current phase of world globalization and urbanization (UN-Habitat,

2001). The growth of the world population since the turn of the 19th century and particularly after World War II has been unparalleled in the history of the world. With the increased population, the phases of urban settlements have also changed, because most of semi-urban areas and medium-sized towns have been turned into full urban town (Idowu and Olaniyan, 2009). With just under half of world population living in cities, the world is already urbanized. The most rural societies on earth is interwoven into a global network of cities as such urbanization is an inevitable outcome of all developmental processes (UN-Habitat 2001).

The world's urban areas are now home to almost half of humankind. Kofi Annan, the former General Secretary of the United Nation, in 2001, addinitted that the world has entered into the period of urban millennium, which is a period with a remarkable difference in innovations, for an irresistible urban growth. This is the period where urban opportunity and prosperity are key factors for the increasing rate of demographic transition going on in the world. Other reports have shown interest in the demographic transition and city agglomeration in the 21st century (UN-Habitat, 2011; UNEDSA, 2014).

Reports by WHO-UN-Habitat (2010) and UNDESA (2014) maintained that the overall shifting in agriculture-based economy to mass industry, technology and service oriental economy is caused by urbanization. The rapid increase in population of urban residents causes the reduction in transaction costs, as well as facilitate a viable economy on the spending, made on public infrastructure and promotes the generation and diffusion of knowledge development, which have fuelled economic growth. Urbanization became more rapid as globalization spreads industry and technology to all corners of the world (WHO-UN-Habitat 2010; Sabego and Gwebu, 2013). UN-Habitat (2001) revealed cities agglomeration after 19th and 20th century. It noted how the collective population of the world cities grew from less than 30 million to 3 billion, from one in thirty of the earth inhabitants to every other person on earth. In the 21st century, cities have become host to a huge population of people. The reports show that 19 cities are with 10 million or more people; 22 cities with 5-10 million people; 370 cities with 1-5 million people; 433 cities with half a million to one million people. However, urban and city agglomeration will continue to increase, beyond the half of this century. As this century advances, the United Nations, in 2010, projected that there will be more cities and increase in numbers of mega cities across the world. The UN-Habitat (2010) observed that there were 1,551 cities in the world in the year 2010. It was projected to about 2000 by 2030 and expected to increase beyond, in 2050. About 43 cities with the population between 5 and 10 million were noticed by the UN in 2014; the growths of such status of cities are expected to increase to 63 by 2030. The United Nations, in 2011, estimated the existing mega-cities as 28 in the world; the projection of urban agglomeration of mega-cities are expected to increase to 40 mega-cities by 2030 (Moir et al, 2014).

Having considered all changes befalling the world in the 21st century, with the projection made concerning the world in 2050; about 2.5 billion people are projected to be added by 2050, with 90% of the increase concentrated in Asia and Africa. Howbeit, India, China and Nigeria have been identified to account for about 37% of the projected growth of the world's population between 2014 - 2050 (UNDESA, 2014). Considering the worldpopulation in 2015, United Nations' Department of Economic and Social Affairs - Population Division, World Population Prospects (UNDESA) (2015), revealed that the world population had reached 73 billion as at the mid of 2015 (Table 2.1). UNDESA (2015) admitted that the population of the world will increase beyond 1 billion in the next 15 years: by 2030, population is expected to rise to 8.5 billion, 9.7 billion by 2050 and 11.2 billion by 2100.

Table 2.1: Projected Population of the World and Major Areas, 2015, 2030, 2050 and 2100.

Major Areas	Population (Millions)			
	2015	2030	2050	2100
World	7,349	8,501	9,725	11,21
Africa	1,186	1,679	2,478	4,387
Europe	4,393	4,923	5,267	4,889
Latin America and the Caribbean	738	734	707	646
Northern America	634	721	784	721
Oceania	358	396	433	500
Source: United Nations Department of (2015)	39	47	57	71
(2015)	Economic and	Social Affa	Irs-UND	ESA

Urbanization in African

UN-Habitat, UNDESA and World Bank are the most frequently cited sources of urban population statistics in relation to demographic change in Africa (Potts, 2012). The study of Potts (2012) about Africa, documented that the region will experience high population growth and rapid urbanization by 2050. Urbanization in the Third World particularly in Africa, exhibits a number of important contracts, if compared with the system of urbanization in the Western World (Pacione, 2005). According to Pacione (2005), Africa was the least urbanized of the continents, yet it exhibits the greatest variety of urban forms. The diversity in its urban form is stemmed from the distinctive indigenous urban traditions, particularly in North and West Africa, and from the urban imprints of the colonial powers (Dual City Concept). With the recent reports, Africa and Asia have been projected to rapidly experience high trends and intensify urbanization; countries like China, India, South Africa, Egypt and Nigeria have been identified for an intense and rapid urban agglomeration.

UNDESA (2014) acknowledged Nigeria, in line with countries like India and China, accounting for about 37% of the world population by 2050. UNDESA (2015) stressed the implications of higher rate of population in Africa, as it will be more than half of the global population growth by 2050, with Nigeria taken the lead. As stated, out of 2.4 billion populations to be added to world population by 2015 - 2050, about 1.3 billion will be from Africa. This implies that the demographic expansion of African cities, particularly Nigeria isa great concern to researchers (UN-Habitat, 2010). Rakodi and Nkurunzia (2007) opined that globalization of economic, political and cultural components of cities has greatly changed faces of cities in African, with negative inffluence on the well-being of people, provision of utilities, accessibility to housing, social services, development of the slum and sprawl settlement, and urban policy development. Mabogunje (1984) argued that, urbanization in Africa is not a product of economic development, but one of the negative consequences of failed development policies, particularly the disarticulation of rural economies that fuel rural-urban migration, a situation referenced as 'backwash urbanization' (Cities Alliance, 2006).

Nigeria is one of the most rapidly urbanizing countries in the tropical Africa (Olorunfemi, 1979). In Nigeria, the growth of the urban population has been on the increase predating the period of the country's independence in 1960. The process of urbanization has been attributed to changes in the socio-political, economic improvement and demographic transformation (Olorunfemi, 1979). Based on the influence of the colonial administration in the history of urbanization in Nigeria Olorunfemi (1979) revealed the several stages in the process of physical development in Nigeria and the influence of colonial administration on urbanization in different parts of the country.

Concept of Physical Development and Urban Growth

Physical development is a process of urban growth and universal phemonimalthat occurs all over the world. Physical development is the act of carryingout of building, engineering, mining or other operations in, on, over or under land or the making of any material or substantial change in the use of any building or land. Physical development entails carrying out of any operation on or any modification to land, by mankind, in an attempt to create a liveable and comfortable environment. Purposefully, physical development brings about an improvement in wellbeing of individuals, with other benefits. For instance, at the community level, physical development covers land that has been put in some form of use, ranging from a building in an outdoor open space, as against land which has not been touched and is covered with 'bush'. Physical development manifests itself in the form of human activities or land uses in towns and cities,

Demographic change is the most prevailing factor that determines the spatial transformation in any region of the world. Other factors observed to be responsible include the social, economic and political activities, which have led to the competition for land for various uses. Best (1970) Barredo et al. (2004) and Laraba and Shola (2013) admitted the strong correlation between demographic transformation and urban agglomeration pattern, establishing the assertion on the factors influencing physical development and urban growth. Dutta (2012) tremendous immigration as factors augmenting physical development, which in turn promote urban expansion. Ogunsanya (2002)

acknowledged the influence of transportation on physical development and admitted that transportation or accessibility is a maker and breaker of cities, paving the way for services, commercial and industrial activities, as well as residential, recreational projects and other land uses. Demographic change and urbanization are important to determining physical development and urban transformation. This will serve as broad based information on the process of transformation of cities, providing an in-depth knowledge on the variations of factors responsible for physical development to promoting a healthy living environment. According to Obateru (2004), a fundamental factor of physical planning is that its organizational and administrative machinery should be sustainable, based on the principle of co-coordinating the goals and the resources of those concerns with the use and development of land.

Physical Planning and Development: Panacea of Urban Sprawl

The Nigerian Institute of Town Planners (NITP), in their quest to provide a meaning to physical planning, admitted that it is a spatial ordering of land uses, both in the urban and rural area for the purpose of creating functionally efficient and aesthetically pleasing physical environment for living, working, circulation and recreation (Obateru, 2004). Kebble (1969) definition of physical or urban and regional planning: as the art and science of ordering the use of land and the character and sitting of buildings and communication routes so as to secure the maximum practicable degree of economy convenience and beauty. Considering planning, as a complete process, it requires all aspects and implications of the physical development of land, which if taken into account and fitted into a pattern, devised with the object of making a region or a community as a whole in an effective and within limit, self-contained organism (Kebble 1969). Obateru (2004) admitted that the spatial arrangement or organization involves two processes: locating or siting land uses on functional and mutual basis and allocating the land uses. This is the pre-occupation of physical planning at all levels (national, state, regional, urban and local). Conversely, the relationship between physical development and urban sprawl cannot be overemphasized.

Urban sprawl is one of the most discussed and debated spatial processes facing cities across the world. In seminars, debates, conferences, and symposiums, urban sprawl, extensively has been discussed. The

argument has been whether urban sprawl is an evil scourge upon the land, or different pattern of development, that is neither good nor bad, or an expression of a phenomenon, which is as a result of urbanization and physical development (Frank et al., 2000). Urban sprawl is a term characterized to be popular, complex and surrounded by controversy (Torrens, 2008; Liu and Jiang, 2011). The development refers to as unplanned and uncontrolled physical development, resulting to poorly and much unplanned urbanization (Noor and Rosni, 2013).

It is a kind of development characterized as formlessness scattered, leap frog nature, low-density housing and increase reliance on transportation and communication facilities. It poses serious threat to infrastructure planning and implementation, and environmental resources. The causes of urban sprawl have remained a serious debated issue. Several authors, including Frank et al., (2000) have written on the causes of sprawl. Most of these authors concluded that, urban sprawl cannot be attributed to just a single cause; but the causes are obviously interrelated (Frenkel and Ashenazi, 2008; Down.1999). Nevertheless, Tofowomo (2008), Olujimi (2009), Besussi (2010) and Future Cape Town (2013) admitted that the causes of urban sprawl are largely due to rapid urbanization and growing population on environments that are unprepared for such changes. In addition, Frank, et al. (2000) highlighted rent gradient, demographic changes, growing affluence economics of land assembly, transportation cost, mortgage interest deduction and land use regulations, as few of the factors promoting urban sprawl. Furthermore, Siedentop (2005) identified the driving force to be the result of high demand for urban land and the specific regulation patterns that govern the land ownership, use and distribution. On a broad perspective, physical planning and development, as influenced by urbanization is the main cause of urban sprawl.

Sustainable Physical Development

Ogu and Adeniji (1998) presented a comprehensive report on sustainable physical development in Nigeria. The report, among others addresses: and management of sustainable development and sustainability, financing administrative and legal framework and future challenges. It was admitted that most literature on sustainable development hardly

mentioned or emphasized on cities as part of its focus; it therefore, advocates for the need of sustainable urban or physical development. Essentially, sustainable development seeks the articulation and incorporation of environmental and human needs in the pursuit of economic growth and development objectives. The report of UNCHS (1996) provides the main criteria for judging sustainable development and by implication, in physical development issues: quality of life of inhabitants; the scale of non-renewable resources use and the extent it is being reduced by recycling and re-use; the scale and nature of renewable resource use and of non-reuseable wastes emanating from consumption activities as well as the impact of the wastes on environmental health and ecological system.

In literature, concern for sustainable physical or city development has received poor attention from different scholars (Ogu and Adeniji, 1998). Ogu and Adeniji (1998) exhibited their dislike, asserting that cities are parasitic on their environment, hence, makes cities unsustainable. The criticisms were based on the unsustainable dependency of the urban hinterland; non-desirability and non-attainability of total urban selfreliance; and non-comfortability in using the term "sustainable cities". The skepticism is hinged on the assumption that sustainable city implies that "each city has to meet the resources need of the population and other enterprises located there from its immediate environment" which is not in support of the primary objectives of sustainable development. For sustainable urban development to be incorporated, the conception must not be in isolation of surrounding of the hinterland, but on the physical changes that occur within cities. The key issues relevant to sustainable physical development as documented by Johnson (1993) are: promotion of adequate shelter; improvement of human settlements management; promotion of sustainable land use planning management; promotion of integrated provision of environmental infrastructure; promotion of sustainable energy and transport system in human settlements; promotion of settlement planning and management in disaster-prone areas; promotion of sustainable construction industry activities; and promotion of human resources development and capacity-building for settlement development. The sustainable physical development implies that development activities in the physical environment take into consideration crucial issues of continuity and sustenance that are the

main focus of sustainability. This implies that concept, any development processes, including physical development that ignores neither sustainability neitherhas positive influence nor meaningful impact on the people and the environment.

Conclusion

With just under half of the world population living in cities, the world is already urbanized. This testified to the assertion that urbanization is inevitable with the current state of the world population and rate of city agglomeration in the 19th and 20th century. Attentions has been drawn to urbanization in Africa, assumed as the least urbanized region, but dearly exhibiting the greatest variety of urban forms. Conversely, Nigeria was spotted to experience an intense urban agglomeration by 2050 and beyond. The concept and process of physical development and urban growth is a universal phenomenon as people carried out modifications on land in an attempt to create a liveable and comfortable environment. The rate of physical development has been seen as the panacea for the uncoordinated and the formless spatial outlook of cities, which simply referred to as urban sprawl: indicating that the relationship between physical development and urban sprawl cannot be overemphasized, Concern for sustainable physical or city development has received poor attention from different scholars; most literature on sustainable development hardly mentioned or emphasized cities as part of its agenda. On the advocacy to incorporate physical development, its conception must not be in isolation of surrounding of the hinterland.

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