
Response to Urbanization and Problems: The Role of Physical Planning

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ABSTRACT

Urbanization is seen as a potential and as a problem in this society because of its positive and negative on the economy but cannot be done away with. Urbanization which is seen as the process by which large numbers of people became permanently concentrated in relatively small areas forming cities are also carrying out their activities as well. This will surely take place for development to continue because this is a yardstick that measure the progress of a city. The methodology used to conduct this study is the secondary source of data and analysis which suffice that the work is based on theoretical concept of analysis. This work has started with the introductory part which formed the background of the study followed by response to urbanization and perspective, after which the benefit that comes from urbanization comes in, the problems that urbanization generated and the role of physical planning. The end part of the work is conclusion and recommendation for remedying the situation.

INTRODUCTION

Urbanization is the process by which large numbers of people became permanently concentrated in relatively small areas forming cities and carrying out their activities. This is through the movement of people from the rural to urban places along or from urban to urban due to disparity in development and has come with concomitant changes in life style including values, attitudes and behaviours making it more complex (Oyesiku 2010).

The evolution of urbanization and its origin dated back the 18th century. It begins with the rural settlement of the Mesopotamia and

the Egypt which of course is agricultural in nature. The scenario of urbanization is said to be different in developed and developing countries. Ebenezer Howard was overwhelmed by the emergence of urbanization that he introduced the 'Garden City concept' according to (Aquilar 2008). Carney in another way states the factors that contributed to urbanization in the developed countries as the surplus agricultural produced followed by industrialization and employment opportunities, provisions of better infrastructures, creation of social organization of towns and cities, historical factors

such as discovery of minerals in commercial quantity, cheap labour force and improved human capital development.

Annez, and Buckley (2013) observed that the factors of growth of the developing countries is another way round beginning with government institutions, availability of employment opportunities, better infrastructures and social services provision, industrialization, surplus agricultural production, cheap labour force and historical factors. Among the stages of the factors of urbanization in the developed countries, it gave them opportunity to bear with the situation unlike the developing countries that made it problematic and inadequate management options to overcome the scenario.

In the developed countries, the growth of the population stabilizes with high rate of urbanization at the mid-Nineteenth century while getting higher in the developing countries with gradual rate of urbanization. This process has facilitated demographic changes and complex situations in the urban areas. The rural areas are deprived of every benefit as supply center of raw materials just to make things work for the urban centers and by implication, the urban areas become permanently parasitic in class of dependency (Jiang, Malea and Karem 2015). This can be the reasons why rural-urban migration is the case in

developing countries and urban- rural migration in the developed. There is now a drastically reduction in labour force in the rural areas which has created problems for the urban center. And as Greene and Pick (2004) will say that in this case, urbanization will continue to emerge with the problems of overcrowding, unemployment, inadequate housing, and infrastructure, squatter settlement, high crime rate, distortion in the ecosystem and insecurity in land tenure ship especially in the informal settlements due to the push factor that move the people away and the pull factors in the urban areas that attracts population. In the real sense, urbanization is becoming a serious problem that cannot easily be overcome without pro and post planning measures.

URBANIZATION AND GENERAL PERSPECTIVE

Pattern and Trends in Urbanization

The major causes of urbanization are rural urban migration which is due to pull and push factors from the urban and rural areas respectively and also urban-urban migration as Goudie (2006) may put it. Natural increase in population is another cause which is as a result of better living condition, high birth rate and low death rate. The major reasons for the movement of the population are the pull and the push factors coming to cities due to agglomeration of

industries and seeking for employment opportunities (Knox, and Linda 2012). The general pattern and trends in the growth rates in the has produce a noticeable steady but gradual increase in the proportion of the population living in several urban centers and cities (Oyesiku 2010)

As of 1650, the world population estimate is about 500million, shift to 1.1billion in two centuries. In 1950, it is 2.5billion with world population growth rate slowing down later to rise and keeps rising to 3.02 billion in 1960, 4.5 billion in 1980 and 6.25 billion in 2000. It is observed that from 1650 and 1850 as in Tab.1, the population doubled but 40 years between 1950 and 1900, the population also double which means the rapid growth is not constant throughout the years and is not the same in all the

regions of the world but with decline in mortality rate. The two changes that are observed are the increasing rate of urbanization and number and sizes of cities. Knowing this is very important so that we can be at alert of circumstances beforehand though it is already a pressing issue.

Again, Knox (2012) stated that the importance of the differential rate of growth and that of the population is the significance of urban centers absorbing the population. Developed countries such as Europe, America, Oceanic and many more are experiencing high rate of urbanization in the 1950s and by 2000, it becomes 80%. The issue is that developing countries are now experiencing much faster urban growth than the more developed. See Tab.1, 2 & 3.

Table 1: Observed and Projected World population (000s)

World			More Developed Countries		Less developed countries	
Year	Total Population	Urban population %	Total population	Urban population	Total population	Urban population
1650	500,000	-	-	-	-	-
1750	-	-	-	-	-	-
1850	1,100,000	-	-	-	-	-
1950	2,529,312	29.1	812,425	53.8	1,717,887	16.9
1760	3,019,376	34.1	944,851	60.5	2,074,525	22.1
1970	3,697,918	37.2	1,049,373	66.6	2,648,645	25.5
1980	4,450,210	39.8	1,136,406	70.2	3,313,804	29.3
1990	5,292,178	42.7	1,205,193	72.7	4,086,985	33.9
1995	5,765,861	44.5	1,234,567	73.8	4,531,294	36.5
2000	6,251,055	46.6	1,262,482	74.8	4,988,573	39.5
2010	7,190,763	52.0	1,307,469	76.8	5,883,294	46.4
2020	8,062,274	57.7	1,340,064	78.4	6,722,211	53.5

Source: Keyfitz and Flieger 1990, UN, 2009

Note: Division of the World as used in the Tables

More Developed Regions: Northern America, Japan Europe, Australia, New Zealand and (all of former) Union of Soviet of socialist Republics- USSR

Less Developed Regions: Africa, Latin America, Asia (with the exception of Japan Asian part of the USSR) Melanesia, Micronesia and Polynesia, Oceanic: Australia New Zealand, Melanesia Micronesia and Polynesia

Table 2: World total population by regions 1950-2020 (in 000s)

Year	Africa	Asia	Europe	Latin America	North America	Oceanic
1950	227,075	1,404,552	547,023	165,365	172,075	13,047
1960	281,076	1,666,801	425,070	217,649	198,663	15,782
1970	362,788	2,011,102	460,132	285,127	226,480	19,329
1980	481,034	2,582,836	484,437	361,756	251,808	22,794
1990	647,518	3,108,476	497,741	448,096	275,880	26,476
1995	752,626	3,404,078	503,156	493,802	285,895	28,304
2000	872,234	3,697,849	508,569	539,697	294,830	30,139
2010	1,148,497	4,226,018	513,637	630,855	311,555	33,787
2020	1,441,285	4,680,433	513,811	719,032	319,032	37,349

Source: Keyfitz and Flieger 1990, UN, 2009

Table 1, 2 & 3 may help understand the strength, trend and pattern of population and urbanization in the World and the regions in particular.

The Process of Urbanization

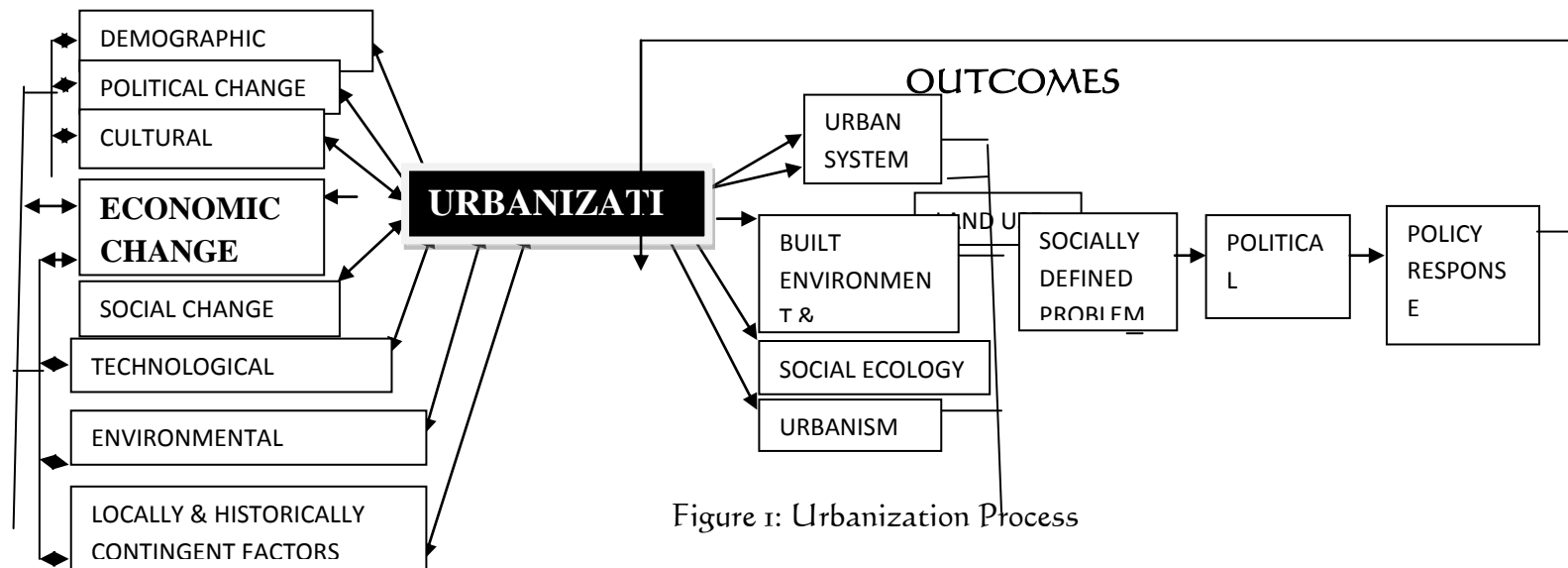
The movement of the people from place to place is with a concomitant changes in life style of the people including values, attitudes and behaviours. It is however one of the indicators of socio-economic transformation in which most societies have passed through as a result of industrialization and economic development. The urbanization is not

just the mere concentration of population at a place, it should be taken as a phenomenon driven by series of interrelated processes of change comprising of demographic, political, cultural, technological and social changes which in turn resulted in changes in the urban land use system, social ecology (social and demographic composition of Neighborhoods), built environment and urbanism (particularly ways of life typically of urban settings). The changes become these social organizations that are consequent upon population concentration having

their peculiar social and political problems that in turn affect the urbanization process itself (Barney 2015). The issue of urbanization and economic development and change is a process as demonstrated by Fig.1 known as urbanization process.

The most important aspect here is that urbanization varies from country to country and regions to regions with transformation in terms of the demographic composition. It is

this transformation process that enables cities to expand with the growth in industrial set up for economic development. The expansion includes the physical system that provides the urban inhabitants with necessary services, infrastructures and support. Urbanization however, has been experiencing growth in all sectors of the urban system of the developed world.



Unlike the developed countries, the rapidity of urbanization out space industrialization rather than the reversed of the developing and then accompanied by high rate of urban population growth due to natural increased as a result of improved standard of living and high fertility rate.

Urbanization in the developing countries is partially as a result of industrialization and economic development which started with the establishment of government institution. Development is through urbanization and modernization because there has been an assumption that more urbanization would bring about wealth, economic development and modernization in which cities grew in response to industrialization in the developing countries. It is likely that the developing countries will catch up with the developed and even

advance them in terms of the faster rate of urbanization being experienced.

The Scenario in Nigeria

Locally, Nigeria among the African countries has the highest population with about 88,992,220 persons by the 1991 population census. It has 2.8% natural increase per year more than other countries except Saotome and Principe (3.4%), Chad (3.4%) and Congo Democratic Republic (3.2%) per year (Umoh 2001). The country is also among the leased to be urbanized with 36.2% in 1999. It however exposed the transformation process by moving from predominantly rural background to pockets of urban areas. The urbanization process in Nigeria has move from principally agricultural activity to nonagricultural with no regard to the agricultural sector which is the major sources of food and raw material.

Table 3: World regional urban population (as % of total) by regions 1950-2020

Year	Africa	Asia	Europe	Latin America	North America	Oceanic
1950	14.5	16.4	56.3	41.5	63.9	61.3
1760	18.3	21.5	60.9	49.3	69.9	66.3
1970	22.9	23.9	66.6	57.3	73.8	70.8
1980	28.0	26.6	70.3	65.4	73.9	71.4
1990	34.5	29.9	73.1	72.3	74.3	70.8
1995	37.9	32.2	74.6	75.0	74.6	70.7
2000	41.3	35.0	76.0	77.2	75.0	70.9
2010	48.1	41.9	78.8	80.6	76.1	72.0
2020	54.6	49.4	81.2	83.5	77.2	73.9

Source: Keyfitz and Flieger 1990, UN, 2009

Benefits of Urbanization

Urbanization goes with prosperity and growth of a settlement. Urbanization is a sign of economic development and better standard of living. This is an indication that a town is progressing positively or retrogressing. The boost in agriculture brought about the need for market and storage facilities which in turn give birth to establishment of industries and services that will compliment the industries set up through supply of man power and in turn employment. The establishment of industries also goes along supporting infrastructures for service efficiency and this is the reasons why it does command employment opportunities, rise in income and Gross Domestic Product (GDP). Again, population is a resource in terms of productivity when the capital man power development is high especially in specialization which also leads to technology. Nigeria is the giant of Africa and can defend itself in terms of war due to the advantage of the population growth and productivity. There is also an advantage in the physical growth of the settlement in terms of infrastructures expansion on the town space such as housing, health, education, power and water supply. Others are roads expansion and rail services in favour of the city.

Planning Implications of Migration

There are three factors that are considered as causes of urbanization among which are push, pull and natural increased. Population growth and urbanization rate is rapid in developing countries than in the developed countries as of present. Rapid urbanization should go along with rapid provision of infrastructures, facilities, utilities and services such as roads, land, housing, water, electricity, schools and health services. Urban conflicts are greatest where urbanization is greatest and when the problems are not solved, there is usually social unrest and environmental pollution. African countries now are undergoing an unprecedented urban growth due to migration and natural increase. The slower the rate of urbanization, the easier it is to deal with the problems and vice versa. This type of growth is called informal hyper growth. Such economy do solely depended more on the informal sector hence wide spread of poverty, informal settlement and housing, environmental problems, public health problems and deteriorating standard of living and squatter settlement. Chronic poverty which is a social problem is a wicked problem as many may said. Migration will ever continuous as long as there is in balance between rural and urban areas. Are we expecting a drop in the growth rate by 2025 as predicted that

there will be a drop below 4% in sub-saharan Africa.

Robert, Christopher and Rick (2002) stated that the result of urbanization in North Carolina is the loss of the forestland (Governor's Task Force on Forest Sustainability 1996). Rapid urbanization did not only compromises or destroys forest ecosystems but also alters the uses and perceived values of the forests. As urbanization increases, our forest ownerships are becoming more fragmented and smaller. Urbanization is the most prominent and permanent cause of wildlife habitat loss and degradation across the world. Road building accompanies urbanization but the political platform of promising to build a four-lane road within 20 minutes of every resident as proposed by some leaders cause more problems as is against the ecological principles which is an opponent of the development enthusiasts that is why the million acres initiative is to set aside "green" land and landowners to set aside land in perpetual conservation easements. working forest easements, is enlisting forest owners by purchasing development rights on qualifying ownerships purchase as riparian forests to be transferred to state ownership as game lands.

Championing Sustainable Master Planning in developing Asian cities for future, called for an emerging trend to reduce the dominance of

multi-lane streets and private vehicles. It is also envision by designing comprehensive master plans that incorporate place making studies, building orientation to reduce solar impact, detailed transportation and circulation analysis to encourage the inclusion of local hubs. In relation to this, high ratio public spaces were created with extensive trees plant covers to ensure ample room for recreation.

Central to the development of each phase of a city called BSD in Indonesia, comprehensive supporting facilities for inhabitants was established. These facilities are selected with lifestyle synergy in mind. They include global university campuses, hospital districts, enterprise zones, residential villages, and retail and entertainment recreational areas. Include in the concepts is the walk ability concept such as creating easy access on foot or bicycle for short journeys, to local nodes comprising schools, local retail shops and services, which are connected to other hubs via public transport.

Global Land Tool Network (GLTN) (2012) observed that changes in populations and associated socioeconomic factors drive the intensity, extent, and stages of urban development. Urbanization reduces biodiversity and changes the balance of ecosystem functions in streams by altering the hydrologic regime (timing

and magnitude of flows), physical habitat, and the physicochemical stream environment (e.g., nutrients and pollutants).

The development stage of a city is driven by socioeconomic processes that can affect stream ecosystems. Cities in high-income countries urbanize in relatively predictable cycles that are often divided into 4 stages: urbanization, suburbanization, dis-urbanization, and re-urbanization. The urbanization and suburbanization phases generally are characterized by positive population growth rates and creation of infrastructure, whereas dis-urbanization and re-urbanization are characterized by negative growth rates and increasing need for infrastructure maintenance.

The Consequences of Urbanization

Movement from one place to the other is as a result of dissatisfaction with the place of original domain such as the decreased in income as a result of fall in agricultural produce in the rural employment sector, disparity in the distribution of national cake among the rural and urban elite has discourage the rural populace in leaving their environment for greener pasture. One place decreased for another to increase and is this uncontrolled increased in the urban set up that resulted in the numerous problems being faced. In the urban

areas, there are employment opportunities, better educational and health facilities and improved infrastructures, facilities, utilities and services such as power and water supply are lacking in the urban areas and so this has created a scenario such as push and pulls factors within the system that is hardly controlled. Urbanization is a complex process because of the categories of people involved unlike the rural set up and because of this; social problems come up causing threat to peace. Once more go back to the urbanization process in page 11 and see the social vices such as theft, burglary, stealing, juvenile delinquency, prostitution, rape and other urban crimes too numerous to mention.

Waste disposal is on the increased within our cities due to the advancement in technology including that lead to pollution, the heat system within the developed areas are problems that causes global warming and climate change. Waste disposal problem is a threat to human existence as is on the increase degrading the environment. There is always unemployment, underemployment, and poverty which is more chronic than that in the rural areas. The chronic sense of it is that many are homeless, and squatters as well as lacking food to eat in the urban areas which has not reach that level in the rural areas. Informal settlement and housing is a major characteristic of the

urban set up in which slums and derelict features are seen with stress of facilities, utilities and services.

The Role of Physical Planning

Nearly 4000 people participated in the first week of the City Changer Dialogues on www.worldurbanforum.org/, several interesting discussions was made focusing on **Seven Basic Principles of Urban Planning**: Plan in advance; Plan at scale; Plan in phases; Plan for social integration; Plan for density; Plan for connectivity; Plan for energy efficiency and risk prevention. Most participants endorsed the seven principles, but noted that some elements specific to the context will need to be added or adapted, and cities in developing and developed countries will give varying importance to different elements. Additional elements relevant for many cities include planning for economic development, and place-making. Experiences from Canada, Kenya, Nigeria, Pakistan, Peru and United States were shared. For the developing and developed world, a strong ethical basis for planning and a rights-based approach is to hold the key in addition to the seven principles outlined.

Physical planning is central to environmental control and protection using density of development. There is a need for careful analysis of the norms, values and beliefs of the society along with the emerging

problems so as to carry out physical planning measures. According to Azam (2011), there is need for understanding the system so that strategic planning is adopted. Strategic planning refer to the plan that recognize every stakeholder from the government, community and individual level playing their roles in the decision making process and development, breaking down programmes into schedules and assigning responsibilities to stakeholders. Development plans are required for development control for example the master plan, regional plan, local plan and subject plans can be prepared for carrying out development in the area. Setting a framework for carrying out planning proposals cannot stand on its own without the role of the statutory bodies such as the commission at federal level, board at state level and local planning authority at Local level. This will help in the coordination of the prepared packages. Development control enforcement is 24/7 (24) hours. Poverty has led to the use of inferior goods that increase the volume of waste generated unattended to in the area. High rate of deforestation is associated with poverty because the consumption of firewood is high in the low income zone than in the high income zone. Green planning is important in this case for sustainability and cannot be overemphasized. The focus should be

on Urban Policies, Legislation and institutions as urbanization creates a dynamic mosaic of human technologies, economic activities, and social development that need care.

Carissa (2015) said that the provision of adequate water is often recognized as the next global challenge in Indonesia while Jakarta relies primarily on the use of wells. Some Cities has the potential to attain almost complete water independence and net zero potable water waste via the use of water management systems and extensive greening. Filtering and treating wastewater for reuse in sanitation, road cleaning and irrigation has been highly effective.

The built environment is a massive consumer of energy and the addressed of these challenges is through the provision of reliable public transport, pedestrian sidewalks and bicycle lanes that offer cost-effective alternatives to the private vehicles. Energy efficient buildings are oriented to avoid East and West elevations with reflective roof surfaces that will help minimize solar impact and reduce the urban heat island effect. Such measures also channel local wind effectively for pedestrian comfort during the day along with shade from tree-lined streets. However, creativity in design generates natural ventilation in multi-storey buildings.

CONCLUSION

The X-ray of urbanization has been made theoretically through utilizing ideas from expert contributors in the field and has observed that Urbanization is not recent. That it involved movement from place to place, increased in number of people and structures, concentration of people at a place and the activities of the people all in the space. This has encouraged development, growth of cities, industries, specialization and technology as well as distortion and change in the ecology, social problems and environmental degradation. To this, certain recommendations are made.

RECOMMENDATIONS

Having study examined urbanization and its processes; it is worthy to make recommendations and a policy framework:

1. The Nigerian urban and Regional Planning Law decree 88 of 1992 should be implemented with the statutory bodies in order such as the Federal commission, the state board and the local government planning Authorities
2. There should be the strategic Planning paradigm that will enable every Stakeholder to participate in the planning and development process breaking

responsibilities to be taken on piece meal through bottom up approach right from the grass root level.

3. There should be proper governance mechanism in place with decentralization and share of responsibilities to stakeholders.
4. Development control should be adequately enforced with adequate data bank using GIS and or LIS.
5. There should be balance in the provision of Infrastructures, facilities, utilities and services among the rural areas and the urban areas and no longer trickle-down approach to planning.

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