ENVIRONMENT, POVERTY, AND SUSTAINABLE DEVELOPMENT IN NIGERIAN CITIES

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Perhaps one of the most urgent problems confronting African cities today is how best to plan and manage the environment. Social and economic crises and the crises of governance exacerbate this problem. Urban poverty and relative ignorance further complicate the environmental problems in these centers.

Urbanization accelerated phenomenally in the less developed countries particularly since World War II. In 1950, the less developed regions had an urbanization level of 17%. This rose to 37.1% in 1990, 41.2% in 1995 and is expected to reach 61.2% by the year 2025. Nigeria is not an exception to this trend, with an urbanization level of 10.1% in 1950, it attained an estimated level of 39.3% in 1995 and may reach 61.6% by the year 2025 (N'Dow 1995). The average annual growth rate in the level of urbanization in Nigeria was 5.9% between 1950 and 1955. This rose to 6.3% between 1960 and 1980. It was estimated to have declined by an average of 5.7% between 1980 and 1995 and is projected to 4.9% between 1995 and 2005 (United Nations 1991).

Some cities have had a much faster growth rate at different periods. For example, Lagos was estimated to have experienced a growth rate of 14% per annum in the first decade of independence. This has now slowed down to about 4.5% per annum.

The Institute of Town Planners highlighted the problem of accelerated growth in urbanization in Nigeria. The Institute emphasized that while Nigerian cities are growing at an alarming rate, with adverse consequences to the quality of life, little is being done by the policy-makers on the population at large to ensure a sustainable, sane, and healthy development of the cities (The Guardian January 20, 1997).

Cities and the Environment

Cities have played major roles in human civilization and also function as the focus of a wide variety of economic, social, and cultural opportunities. They are also the milieu of environmental drama. The population of cities exhibits a variety of consumption patterns as between the densely populated neighbourhoods and the low-density areas. These together with the demands placed on natural resources by city-based activities and improper waste disposal all suggest that the major environmental problems of the future will be city problems.

The United Nations Centre for Human Settlement (1995) noted thus: *The city will also be the place, as it already is, where compelling social issues*

such as poverty, homelessness, crime and unemployment will take on a dimension "which is far bigger and more complex than ever seen before.

Hence, effort to improve all aspects of the living environment must be focused on urban areas as that is where most of the world's population will live and work, where most economic activity will be generated and most natural resources consumed.

Sustainable urban developments will therefore, be the most pressing challenge facing humanity in the twenty-first century.

White (1994) also observed that a large part of the solution for sustainable development would need to come from cities because this is where the most damage is taking place and it is there that many improvements can effectively be made. There is more waste to be recycled, more water to be treated, more gains to be made from a shift from private to public transport. It is also in cities that the first efforts should be made to discourage the South from traversing the pathway of the North, which is characterized by an ever-increasing use of energy and other resources.

Perhaps one of the most striking environmental problems of Nigerian cities today relates to land use planning, management, and control. In almost every traditional city, the core area presents a picture of very intensive land-use with buildings crammed together. Often, they lack essential amenities such as motor able access roads, adequate provision of water and electricity. Open spaces for recreational purpose are invariably absent. In such environment, the room occupancy ratio is usually high and together with other elements of environmental degradation, there occur high risks to the health of the inhabitants. It is also unfortunate that in the well-planned cities, land provision for open spaces and recreation in neighbourhoods are subsequently used for housing facilities. It is even more disturbing that in recently developed outskirts of some cities, development had proceeded with complete disregard for any planning rule.

Access roads are haphazard and recreational open spaces are non-existent. It is also a matter of regret that the parcels of land which are ear-marked for open spaces in Abuja (the new capital) are already being used for residential accommodation! Erosion and flooding create much environmental problems in many Nigerian cities. Although they are seasonal, occurring principally during the rainy season, they do create a lot of stress among city dwellers. Flash floods and blocked drainage often occur creating a great deal of problem for mobility within some cities.

Inadequate urban drainage usually results in the occurrence of stagnant pools of water into which wastes and other offensive materials are dumped. Apart from the odour that emanates from such pools of water, blocked drainage channels

have often aggravated extensive flooding sometimes with resultant destruction of lives property. Such occurrences had been witnessed in cities like Ibadan and s. In addition, stagnant pools of water often in open drains constitute ideal ceding ground for mosquitoes, which invariably threaten the health of the people. There is no doubt that more dedicated actions are needed at the local government level to ensure continuous clearing of such stagnant pools of water and to sensitize the inhabitants against unhealthy habits of throwing any type of water into open drains. In some areas, it might be necessary to introduce jingles on the radio and television to educate the local people against the unhealthy habit of using open drains as depot for their wastes, including human feces.

Perhaps one of the most problematic phenomena in Nigerian cities today is that of waste disposal - especially solid waste disposal. Unlike in the more advanced countries where efficient institutions and infrastructures exist to deal with urban wastes, such facilities are still very rudimentary and often inefficient in many Nigerian cities.

There are different categories of waste materials in cities. One of them is solid municipal Bastes, which could comprise of various components such as paper, food wastes, metals, glass, wood, discarded tins, and plastic waste. In some cities, leaves constitute a considerable proportion of domestic wastes. These waste .substances vary from those that are biodegradable and those that are not. Such wastes are often deposited in unsightly heaps along streets and drain in urban centres with no consideration whatsoever for their environmental impact. Even some neighbourhoods m planned and beautiful Abuja are already falling victims of this phenomenon Small or medium open dumps are sometimes seen at the rear of many homes in urban centres. Where there is organized refuse collection, the disposal often takes the form of dumping in open space within or in close proximity to the city. Monthly environmental sanitation was introduced nationwide to deal with the problem of waste littering the streets, but the problem persists. One great challenge has been the need to evacuate the collected wastes after such an exercise. Many local government authorities complain about their inability to purchase or hire vehicle to evacuate collected refuse. Where resources had been pooled in the form of establishing Waste Management Boards in some of the large cities, inefficiency, corruption, and at times political issues have frustrated the delivery of effective services to the population. The recent case of refurbishment of the vehicles for waste disposal¹ in Ibadan City succinctly reveals how dishonesty among officials can frustrate delivery of services to the population at large. Some local government authorities may need the assistance of State Governments in providing funds for the repair of their waste disposal vehicles.

Even when the waste is dumped either at a recognized collection centre;

disposal often takes the form of periodic burning without environmental precautions. No doubt, degraded substances often percolate through the soil and can contaminate the ground water on which many urban dwellers depend. The hazard of this phenomenon to the health of the urban population is obvious.

Overall, there is a general lack of functional sewage system in cities and urban centres. Raw sewage is often discharged, unprocessed into lakes, estuaries, lagoons, and coastal waters. Although modern buildings use concrete septic tanks,

nevertheless, there is still the risk that the surrounding soils and the shallow subsurface groundwater could be contaminated by microbial actions because of the porous nature of their walls.

Industrial wastes constitute another major pollutant of the urban environment. Such wastes often contain some of the most toxic and persistent substances such as synthetic materials, dyestuffs, and heavy metals. Others may be chemical wastes such as organic acids, water from battery manufacture, alcohol, fats, oils of vegetable and animal origins, materials containing ammonia, phosphates, nitrates, and the like. Industrial solid waste could include cartons, boxes, crates, building materials, woods, and cellulose materials.

In many cities, most industries discharge raw, untreated, and highly toxic liquid effluent into gutters, drains, stream, channels, lagoons, and the like. It was for example found that:

... a majority of industries either treat their waste minimally or do not treat it at all.

Survey of 223 industries from various parts of the country indicated that their liquid and solid wastes are disposed untreated or improperly treated.

He also found that the lead level in water in Ibadan City ranged between 1.4 and 10.7 milligram per liter - which exceeds the World Health Organization (WHO) limits. (The Guardian, Thursday June 19, 1997, p. 3).

Industrial solid wastes are often dumped within the premises of the establishments while gaseous emissions and particulate matters are freely discharged into the air. Monitoring vital ecological factors along major streams, which flow through industrial areas in urban centres, or sampling the air in the vicinity of plants reveal the extent of industrial pollution in Nigerian cities.

That sustainable development is undermined by these pollutants is shown by the fact that they render surface and underground water systems unsafe for human, agricultural, and recreational uses; destroy biotic life; poison the natural ecosystems; and pose a threat to human life.

Apart from pollution from waste materials, air pollution constitutes an-

other form of environmental problems in cities. The use of imported used vehicles, some of which often become rickety and produce considerable fume from their exhausts, became prevalent with the current economic hardship in Nigeria. Presently there is no regulation regarding the emission of fume from vehicles and thus no deterrent to the use of such vehicles exists.

Another problem is noise pollution. No regulation exists on this and it seems that the "Nigerian" culture is indifferent to it. However, it might be desirable to introduce some regulations particularly where loud speakers are used to disturb the peace of others either in the process of advertising or unsolicited entertainment.

Urban Poverty and the Environment

Poverty and unemployment are two twin problems in the socio-economic environment of Nigerian cities and urban centres and they have deepened within the last three decades. Poverty had been variously defined in the literature. However, there is currently no single index of poverty that is universally acceptable. While some talk of poverty in quantitative terms (e.g., in terms of calorie intake per day or in terms of a given level of income), others discuss it in qualitative terms (i.e., in terms of the inability of certain people in the society to attain a given economic, cultural, social or other level). Defining poverty in terms of income in a society like Nigeria is however grossly inadequate since the economy is not completely monetized. Similarly, there is a problem in assessing/ascertaining the calorie intake need of the poor vis-a-vis the rich. Of course, the qualitative definition lacks precision.

Some scholars have discussed poverty in absolute and others in relative terms. Sen (1985) saw absolute poverty as the lack of some basic opportunities of material well being and the failure to attain a certain minimum capability. This minimum however varies from one society to another and from time to time. Townsend (1962) and Rein (1970) took the view that poverty is relative. They argued that it is necessary to understand the level of living of the rich since it is their living condition that is critical to the definition of inequality. Olowu et al., (1995) distinguished between primary and secondary poverty. While the former results from the inability of the income to meet the basic needs of the physical requirements of a family, the latter results from mismanagement of an income, which should otherwise be sufficient. They also distinguish poverty from deprivation. The latter they claim occurs as a result of poor governance - where the rulers fail to provide necessary opportunities including facilities and employment opportunities, which would eliminate poverty. To them, poverty could be due to the fact that the individual is lazy or mismanages resources. They assert that in Nigeria, poverty due to deprivation is more prevalent. Urban poverty in Nigeria became endemic in the past three decades due to rural-urban migration, the impact of the decline of

the national economy and the continued breakdown of infrastructures in cities and urban centres. According to the World Bank (1996), Nigeria presents the paradox of being a rich country but, the people are poor (viz., per capita income in 1996 was around the same level as in 1970). However, over US \$200 billion was earned from the exploitation of the country's oil resources between 1970 and 1996. Nigeria is rich in land, people, oil and natural gas resources. Nigerian could have been poised for a promising future if more of this wealth had been channeled to the development of its people and to the productive use of its land and other resources. How Nigeria now addresses its economic and social problems will not only determine her fate, it would also have a major impact on the success or failure of her Sub-region.

According to a study, "the proportion of the population in poverty in Nigeria fell from 43% in 1985 to 34% in 1992." thus, while the proportion dropped sharply, the number of poor changed little. The study further noted that "the small decline of the number in poverty masks the different trends for the urban and rural areas - urban poverty increased and rural poverty declined" (World Bank 1996). In another study, it was noted that:

A large number of people in Nigeria's urban areas do not have enough income to meet their needs. About 21% of the urban population - 85 million people -was estimated to be living below the poverty line in 1992/93. Of these, about 1.1 million were classified severely poor. Their cash income is insufficient to cover minimal standards of food, water, fuel, shelter, medical care and schooling. The urban poor live in areas with bad environmental conditions and the highest deficit of basic services. They suffer more than other groups from the breakdown of urban infrastructure, especially in terms of poor health and accessibility to income generating activities of the poor are mostly in the informal sector (World Bank December 1995, p. 10).

Poverty has important environmental dimensions. The linkages are two-way. Poverty affects, the environment. But environment also affects poverty. Without improving environmental management, development will be undermined. Similarly, without accelerated development, the environment will continue to degrade. The major challenge is to make development environmentally sustainable.

During the colonial period, the tempo of rural-urban migration could be regarded as having occurred in trickles compared with what took place from the years immediately preceding political independence in 1960 and in the subsequent three decades. Pre-independence rural-urban migration was in response to employment prospects in white and blue-collar jobs in the cities, in the multi-national trading companies, and the railways. Those with little education went into the private sector as artisans or traders. During this period, a network of town associations existed and was able to support migrants in the towns until they could find their own feet. The extended family bond was still strong enough to provide

temporary support for the rural migrant. The coming of political independence and the euphoria of the oil boom period accelerated rural-urban migration.

The adoption of an import-substitution industrialization policy as the strategy for development during this period resulted in the location of industries in cities, particularly the port-cities. While several new jobs were created, nevertheless, they were capital intensive and were unable to cope with the demand of job seekers.

In an economy that was heavily dependent on the export of crude petroleum, the vicissitudes of this sector found expression in the ability or otherwise of the other sectors of the economy to prosper. From the early 1970s, the industrial sector was having difficulties in obtaining foreign exchange to fund its imported inputs. The downturn in the economy led to the introduction of the structural adjustment programme in 1986. The increase in fuel price by more than 30% in 1994 further compounded the problems of the poor since that action has had ramifications throughout the economy. Life became harsher for everyone, especially the poor.

Although a number of institutions were established, - the National Directorate of Employment, the People's Bank, Community Bank, they have not been able to meet the enormous demands of the population. The series of retrenchments in the public and private sectors of the economy have further aggravated the situation. Both open and disguised unemployment continues to grow. Even the middle income people continue to drop to the lower income level progressively. On the other hand, the traditional social support from extended family has tended to weaken. It is significant to add that where poverty among a larger segment of the city population is allowed to co-exist with highly sophisticated life-style as we now have in Nigerian cities, the social environment is tending towards dis- equilibrium. Urgent action is needed to alleviate poverty among the masses. Failure to effectively ameliorate the suffering of the masses is a potential source of civil discontent and social and environmental disorder. Also by addressing the issue of poverty effectively, its negative impact on the urban environment and sustainable development would be ameliorated. By and large, a number of programmes including the Family Support Economic Advancement Programme (FEAP) are being put in place to fight poverty. This should however not be seen as programmes for the rural areas alone as a sizeable urban poverty exists in our cities and urban areas.

The budget for FEAP was N4.3 billion in 1997. It was initiated especially to empower the rural populace to achieve economic prosperity through the establishment of cottage industries. The programme is laudable if properly implemented and if its objectives are achieved because it would result in the establishment of industries in rural areas. We should not lose sight of the problem of sustainability

of infrastructures especially access roads, electricity, and water supply, which are crucial. Rural income will improve and rural-urban migration will decline if the Scheme takes off. This would reduce the pressure on the urban environment.

However, for the programme to succeed and achieve its objective of grassroots development, there is need to incorporate an articulated training programme for the beneficiaries of the Scheme before loan disbursement begins so as to avoid the problems associated with past schemes. The training package should also be complemented by project counseling and monitoring services to ensure the survival and growth of the industries.

As the population of the cities increase, the housing stock has failed to keep pace particularly as a result of the increasing cost of house construction. Although a series of housing projects were initiated at both state and federal levels since the 70s, the achievements have fallen far below the needs of the population. In many cases, house targeted at the low-income group ended up being acquired by people in higher income levels, hi effect, many of the poor in the urban centers have to live generally in overcrowded, poorly served, and environmentally degraded neighbourhoods.

The problems of homelessness and unemployment were highlighted recently by the clearing of illegal structures under Lagos bridges. Such structures had become the home and work place of several thousands among the Lagos population. A trader who had a kiosk under one of the bridges commented thus:

My life has been ruined. Host drinks worth more than N25, 000 and I am confused With my husband for long unemployed and four children, three in school, how am I going to cope and keep my family together? Those bulldozers set me back many years and two weeks after I am still confused (The Guardian, Thursday May 30, 1996, p. 11).

According to the World Bank (1996) within the next three decades, population growth, migration, and settlement will dramatically change the face of sub-Saharan Africa of which Nigeria is a part. It is under these circumstances that Nigeria must make her transition to environmentally sustainable development. The study identified six major environmental challenges as follows;

1. Achieving food security;
2. Facilitating demographic transition to more stable population level;
3. Influencing migration to achieve a better distribution of population;
4. Making urbanization sustainable;
5. Managing energy, water, and other natural resources in an integrated and sustainable manner;
6. Speeding development of modern education, information and communication system (World Bank 1996, p 3).

Poverty, population, and environment constitute extremely important issues in the social and economic development of Nigeria. Continued high level of

poverty and high population growth rate will severely affect the fragile and increasingly deplete natural resource base. The increase in population densities as people migrate, especially to the cities in search of employment has brought about a great stress on the infrastructural resource base and the environment. It is hoped that every effort would be made with regards to the various issues discussed to ensure an environmentally sustainable development in Nigerian cities.

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