

Environmental degradation and Nigerian economy

Onodugo Ifeanyi Chris

Department of Public Administration and Local Government University of Nigeria Nsukka.

Abstract

In Nigeria, like many developing nations, the resultant environmental problems are legion: aggravated soil erosion, flood disasters, salinization or alkalisiation, and the desertification due to the effects of shifting agriculture on fragile soils, forest clearing in erosion prone and flood prone areas, bush burning, animal over-grazing and poor construction and maintenance of roads and irrigation system; pollution of water, air and land due to improper disposal of domestic and industrial wastes; pollution through oil spillage; pollution from noise; proliferation of slums in urban areas, unsanitary and unsafe housing; congestion of traffic and houses in urban areas and lack of open spaces for active outdoor recreation. All these affect human well-being (the most affected groups are women and children) especially the health and socio-economic well-being of the people of Nigeria in particular and in the world as a whole. Therefore, this paper highlights the dimensions, nature and characteristics of these phenomena. And further examines the implications of the environmental degradation on the health and socio-economic well-being of the people of the Nigeria.

Keywords: Environmental degradation, Nigerian economy, aggravated soil erosion, flood disasters, salinization, alkalisiation

Introduction

The term "environment" is better appreciated as perceived. Thus, the term defies a universally acknowledged method of description or definition. For instance, environment has been conceived as a system within which living organisms interact with the physical elements (Sada, 1988) ^[13, 16]. This means that, environment can be conceived as the condition, circumstances and influences of organisms (Strahler and Strahler, 1977) ^[17]. In addition, the environment is made of a number of spheres which include the hydrosphere, atmosphere, lithosphere and biosphere. Within these spheres are a number of interrelated activities in operation. Consequently, the environment is perceived in this work as the general surrounding where a number of interrelated activities take place within the environmental system and between man and the environment. Man's relationship with his environment has always changed with time, depending on his understanding and knowledge of the physical environment. However, the natural environment is generally endowed with variable quantity and quality of resources within the space (Simmons, 1981) ^[18]. Thus, man has come to regard his environment as a depot housing his needs and is therefore always seeking for ways of extracting these resources within it. The pattern of the relationships can be discussed in three phases of age (Jimoh, 2000) ^[6, 12]. These phases are the Palaeolithic, Neolithic and the Modern Ages. The Palaeolithic era marked the era of environmental determinism, where the environment essentially provided for man. In essence, man depended on what the environment provided. This relationship is due to the low level of man's technological development as the degree of man's impact on the environment was minimal. The Neolithic era was the Iron Age when equipment were fabricated with metals. This was due to some remarkable improvements in man's technological development. Thus there was a marked interaction between man and his environment. Also, man tended to develop some options of

need outside what the environment offered and proceeded to develop ways of accomplishing such set objectives.

Finally, the modern age marks the jet age when man decides on what to do within and outside his environmental setting. Indeed, this period epitomizes a number of destructions inflicted on the environment, many of which were done inadvertently.

From the perspective of physical and cultural landscapes, the physical or natural environment indicated that the environment is in its natural state and the features of the physical environment include rivers and water bodies, trees, hills/mountains, mineral resources such as iron ore, gold, manganese, diamond, silver, columbite and petroleum, among others. The cultural landscape, on the other hand, denoted that an interaction has taken place between man and his environment. Such activities that are human-based include agriculture, mining operations, sinking of boreholes, wells, tree-felling, construction of bridges, houses, road networks and railway, among others (Robinson, 1976) ^[15]. Thus, every organism sees the environment as a resource store which he can conveniently fall back on for all his needs (Faniran and Ojo, 1981). However, efforts made by man to harness these environment-based resources have translated into environmental degradation. By this second component of the environment, it is clear that due to growth in human population, the desire for a better condition of living has ensued. In meeting this drive, the earth's natural plant and animal life have been replaced with economically more productive species. This development is certainly in conflict with the natural conditions. One of such conflicts is the emergence of environmental degradation, which is the subject of discussion in this work.

Essentially, environmental degradation relates to the depreciation in the qualities and quantities of vegetation, soil air and water resources, among others. However, miller, (1989) ^[9] puts environmental degradation more succinctly to

mean a downward trend in the environmental resources such that their level of use in the human societies equally decreases at an increasing rate.

The Effects of Environmental Degradation

The effects of the major environmental problems on both health and productivity are:

Water pollution and water scarcity

As per the estimation of UN, more than two million deaths and billions of illnesses a year are attributable to water pollution. Water scarcity compounds these health problems. Productivity is affected by the costs of providing safe water, by constraints on economic activity caused by water shortages, and by the adverse effects of water pollution and shortages on other environmental resources such as, declining fisheries and aquifer depletion leading to irreversible compaction.

Air pollution

As per the estimation of UN, urban air pollution is responsible for 300,000—700,000 deaths annually and creates chronic health problems for many more people. Restrictions on vehicles and industrial activity during critical periods affect productivity, as does the effect of acid rain on forests and water bodies.

Solid and hazardous wastes

Diseases are spread by uncollected garbage and blocked drains; the health risks from hazardous wastes are typically more localized, but often acute. Wastes affect productivity through the pollution of groundwater resources.

Soil degradation

Depleted soils increase the risks of malnutrition for farmers. Productivity losses on tropical soils are estimated to be in the range of 0.5-1.5 per cent of GNP, while secondary productivity losses are due to siltation of reservoirs, transportation channels and other hydrologic investments.

Deforestation

Death and disease can result from the localized flooding caused by deforestation. Loss of sustainable logging potential and of erosion prevention, watershed stability and carbon sequestration provided by forests are among the productivity impacts of deforestation.

Loss of biodiversity

The extinction of plant and animal species will potentially affect the development of new drugs; it will reduce ecosystem adaptability and lead to the loss of genetic resources.

Atmospheric changes

Ozone depletion is responsible for perhaps 300,000 additional cases of skin cancer a year and 1.7 million cases of cataracts. Global warming may lead to increase in the risk of climatic natural disasters. Productivity impacts may include sea-rise damage to coastal investments, regional changes in agricultural productivity and disruption of the marine food chain.

Recommendations

The responses to any problem of any nature depend on the perceptions of the problem. Thus, the following steps can be adopted with a view to ameliorating the conditions of the degraded areas in Nigeria.

Application of Land Suitability Classification Technique

This relates to classifying land areas into specific use for which they are best suited. In essence, parcels of land can only be subjected to uses for which they best suited. By this, indiscriminate problems can be minimized.

Creating environmental Awareness

The existence of environmental degradation has warranted a number of discussions among both the elite and the non-elite classes. Thus, there is the need to explore the possibilities of reaching out to people that really matter with a view to finding solutions to the problems. Such effort may assume the form of public enlightenment campaigns, lectures, and distribution of pamphlets, posters and workshops.

Legal Policy Frameworks

This effort falls within the jurisdiction of the government of the day. By this, it is expected that policy statements or guidelines are made available to all and sundry as to what constitutes an offence when an area is being degraded, whether knowingly or inadvertently. There should also be appropriate punishments for offenders in such documents.

The Adoption of Environmental Education

Environmental education relates to a proper manner in which the environmental system should be interacted with. Essentially, environmental education spells out the expected environmental reactions vis-à-vis the human interactions. Against this backdrop therefore, individuals should avail themselves the opportunity of clear understanding of what the concept of “environmental education” entails. Further, to perpetuate the adoption of environmental education, the concept should be adopted in schools’ curricula, especially from primary to tertiary levels of education in Nigeria.

The overall impact of these suggestions towards maintaining and sustaining a healthy environment worthy of human habitation.

Conclusion

The impact of environmental disasters can be devastating on the social, economic, and environmental systems of a country or region as well as the global ecosystem. Environmental disasters do not recognise man-made borders, and threaten the legacy left to future generations of a clean and supportive environment. Because of the interdependency of earth ecosystems international co-operation is paramount to prevent, and when disaster strikes, respond to relieve quickly and effectively the effects of environmental disasters. Thus, Governments, International organizations and communities must work together – at all levels – to lessen the risks associated with environmental degradation and its contributing factors, such as climate change, and ensure that vulnerable people are prepared to survive and adapt. At the same time,

companies, organizations and individuals must also ensure that their work is environmentally friendly and sustainable.

References

1. Adeniran JR. The Study of Flood Hazards in Nigeria. An Unpublished Seminar Paper, Department of Geography, University of Ilorin, 1993.
2. Adeyemi I. The Role of Education in National Development. Leading Issues in General Studies, Humanities and Social Sciences, Ilorin: University of Ilorin, Nigeria, 2002.
3. Barrow CJ. Developing the Environmental Problems and Management. England: Longman Group Ltd, 1995.
4. Faniran A, Ojo O. Man's Physical Environment: An Intermediate Physical Geography. London: Heinemann Educational Books Ltd, 1980.
5. Jimoh HI. Individual Rainfall Events and Sediment Generation on Different Surface in Ilorin, Nigeria. A Ph.D. thesis submitted to the Department of Geography, University of Ilorin, Nigeria, 1997.
6. Jimoh HI. Man-Environment Interactions. In Jimoh, H.I. and I.P. Ifabiyi (eds.) Contemporary Issues in Environmental Studies. Ilorin: Haytee Press and Publishing Company, 2000.
7. Jimoh HI. Environmental Abuse and Management Techniques in Nigeria. Leading Issues in General Studies, Humanities and Social Sciences, Ilorin. University of Ilorin, Nigeria, 2002, 216-223.
8. Jimoh HI. The Techniques in Soil Erosion Studies. In Jimoh HI. (ed.) Techniques in Environmental Studies. Ilorin: Nathadex Publishers, 2003.
9. Mille GT. Resources Conservation and Management. London: Wadsworth Publishing Company, 1989.
10. NEST. Nigeria's Threatened Environment: a National Profile. Nigeria: A NEST Publication, 1991.
11. Odum EP. Ecology and Our Life Support System. Sunderland: Sinauer, 1983.
12. Olawepo RA. Environmental Pollutions and Management Techniques. In Jimoh HI, Ifabiyi IP. (eds.) Contemporary Issues in Environmental Studies. Ilorin: Haytee Press and Publishing Company, 2000.
13. Okafor FC. Rural Development and Environmental Degradation versus Protection. "In Sada, P. O. and F. O. Odemerho, (eds.) Environmental Issues and Management in Nigeria's Development. Nigeria: Evans Brothers (Publishers) Plc, 1988, 150-163.
14. Rodney W. How Europe Underdeveloped Africa. London: Love and Makomson, 1978.
15. Robinson H. *Economic Geography*. Plymouth: M. and E. Ltd, 1976.
16. Sada PO. Development and Environment: A Contemporary Framework for Environmental Management. In Sada PO, Odemerho FO. (eds.) Environmental Issues and Management in Nigeria's Development. Ibadan: Evans Brothers Publishers Ltd. 1988.
17. Strahler AN, Strahler AH. Geography and Man's Environment. London: John Wiley and Sons Ltd, 1977.
18. Simmons IG. The Ecology of Natural Resources. London: ELBS Edward Arnold Ltd, 1981.