

Environmental Education and Sustainable Development in Nigeria: Breaking the Missing Link

BY

Jackson Onome Robinson

Department of General Studies

Federal Polytechnic Nasarawa, Nigeria

robinjakks@yahoo.co.uk

Abstract

This paper directs attention to the relationship between environmental education and sustainable national development. We argue that environment and development are intertwined and therefore must be systematically integrated into educational activities to produce environmentally accountable and responsible citizens and policies in the collective bid to achieve sustainable development.

Key Terms: Environment, Environmental Problems, Environmental Education and Sustainable Development

1. Introduction

A major contradiction of the 21st century is the exceptional economic growth and technological advancement which, while benefiting many people have unleashed inexorable social and environmental impact on humanity (Sumuani, Y; 2006). In the bid to survive man is rapidly exposing the planet earth to the grave threat of climatic changes which poses problems to food, energy, politics and ecology security and together constitutes constraints to sustainable development (Wole, O; 2009). The planet is also at the edge of massive wave of specie extinction. Allan Schnaibers' criticism of the central focus of the global capitalist production system in the work of T. Schaefer succinctly captures this contradiction:

“ Global capitalist system creates a tread mill of production because of its inherent need to build ever expanding profit: This tread mill necessitates creating an increasing demand for products obtaining natural resources at minimal cost and manufacturing products as quickly, as cheaply as possible no matter the long term environmental consequences” (Richard, T. S, 2005).

Nigeria is not excluded from the environmental consequences arising from anthropogenic variables as self evident in the degradation of the ecosystems, loss of bio-diversity and decrease in agricultural produce. The Eastward rapid encroachment of the desert in Northern Nigeria poses threat to sustainable livelihood: and for the Niger Delta people it is ‘hell on earth’, as cumulative

practice of environmental degradation arising from pollution of land, air and water characteristic of oil exploration in Nigeria has made the region a flash point of conflict in the agitation for environmental justice and resource control (Agbu; T, 2005, Saka; L, H. A. Salau, Ali; A. A., 2007). Erosion and life consuming flood has become a reoccurring decimal in the unfolding dynamics of environmental problems in Southern Eastern Nigeria. The 2012 floods that ravaged nearly 25 states with untold economic, social and political consequences clearly debunk the notion that Nigeria is insulated from such environmental problems.

It is against this backdrop that this paper seeks to examine the role environmental education can play as an integral part of the holistic processes of reversing the degradation trend specifically correcting the lapses in the present state of environmental education and setting the environment on the part of recovery. In this context, development is conceived as key factor linking education with the environment. Thus, environmental education and training are central to raising intensive awareness on the long term adverse impact of environmental degradation and unchecked development (UNCED, 1992).

2. Review of Related Literature

Research indicates that most developing countries including Nigeria have long established laws and formal institutional structures to address their serious environmental problem (Bell, T. 2002). In Nigeria, the laws and institutions are notably; Water Ways Act (1915); Public Health Act (Amended 1958); Forest Ordinance (1937); Petroleum Drilling and production Regulation Act (1969); Navigable water Act (1968); Minerals Act (1969); Associated Gas reinjection Decree (1979); Federal Environmental protection Agency Act (1989); Natural Resource Conservation Council (1989); Land Use Decree (now Act 1978); Environmental Impact Assessment Act (EIA 1992); Federal Ministry of Environment Act (1999); Oil Spill Detection and Response Agency (NOSDR 2006).

Research also clearly shows that Nigeria is a signatory to international agreement and conventions as follows: Vienna Convention (1994); The Bonn Convention (1979); Convention on Biological Diversity (1992); Basel Convention on the Control of Trans-boundary movement of Hazardous Waste and their Disposal (1987); World Heritage Convention (1978); United Nations Framework Convention on Climatic Change (1992); International Union for the Conservation of Nature and Natural Resources (IUCN Guideline 1996); Convention on the Conservation of Migratory Species of World Animals (1979) and World Convention on International Trade in Endangered Specie of Fauna and Flora (1973).

Despite the proliferation of these legal and regulatory arrangements environmental degradation has exacerbated (Dikko, L. 2004). Though institutional and legal framework may be well intended, enforcement is largely ineffective and this ineffective enforcement is in part a direct product of the nature and character of the Nigerian state (Okaba, B. 2004). More importantly, ineffective enforcement and strategy failure stem from the poor public and civic consciousness of the cross cutting implications of the environment on socio-economic development which environmental education is poised to redress.

3. Constraints in Developing Awareness on Environmental Issues

Several factors account for the low public awareness and poor civic consciousness of environmental issues in Nigeria. Among them are poor understanding and education on environmental issues and lack of information. Although they may feel vaguely uneasy, most people do not care unless directly affected.

Furthermore, there is a dearth of information on environmental problems in the country. Studies done are unavailable to the public; and very little effort is undertaken to make easily available the full facts of our environment. This is because it involves sometimes costly measures and controversial political decisions (Adelagan, 2006:1)

Environmental intervention agencies and institutions often function under serious resource constraints, in most cases leading to limited response toward environmental complaints. Or where it occurs, the response suffers from inadequacy and or slowness. Moreover, being unfamiliar with environmental education information, legislation and environmental impacts of human activities, most people are unlikely to show spontaneous efforts or demand for environmental protection and enhancement. In Nigeria where poverty rate is on the increase the desire to satisfy basic social needs could very well override environmental consideration. Two statements by the influential Brundtland Commission reflect most clearly the relationship between poverty and the environment thus:

‘poverty is a major cause and effect of global environmental problems: many part of the world are caught in vicious downward spiral: poor people are forced to overuse environmental resources to survive from day to day, and the impoverishment of the environment further impoverishes them, making their survival difficult and uncertain’ (WCED, 1987:3)

Thus, the level and pace of socio-economic development has significant implication and influence on the political will and the efficacy with which institutional regime and developed and applied to environment protection and conservation (Sani, 1998)

4. Environmental Education: Objectives and Present State in Nigeria

Protecting the integrity of the environment requires answers predicated on wide dissemination of relevant knowledge, innovative techniques and responsible practices. With the increasing complexity of environmental issues, education in Nigeria should focus on instilling environmental responsibility and accountability, beginning from the primary, to secondary and tertiary level. Environmental education is as an effective instrument for creating consciousness of ecological balance that development need not necessarily degrade the natural environment.

Environmental education holds that sustainable development is possible and warns against indiscriminate development that disregards ecological balance. It aims at creating a future society where people are aware of their civic responsibilities and are ready to play useful roles as producers and citizen’s conscious of their environmental impact (ICSE, 2000). Generally these objectives if attained will produce the following output:

- Awareness and sensibility to the environment, its importance and challenges
- Knowledge and understanding of the environment and its challenges
- Values and attitude of concern for the environment and motivation to improve and maintain environmental quality for the purpose of survival.

- Skills to identify and help resolve environment issues (usually survival issues)
- Participation in activities that lead to resolution of environmental problems

The guiding principles for environmental education are given below (United States Environmental Protection Agency (USEPA, 1996) :

- Environmental Education should consider the environment in totality, natural and man made, ecological, political, economic, technological, social, legislative, and cultural and aesthetics.
- Be continuous, lifelong process both in school and out of school.
- Emphasize active participation in presenting and resolving environmental problems.
- Examine major environmental issues from a world point of view, while paying adequate regard to regional differences
- Focus on current and future environmental situations
- Examine all development and growth from and environment perspective.
- Promote the value and necessity of local, national and international co-operation in solution to environmental problems.

The Nigerian education system is hinged on an integrated curriculum of general education with balanced growth of students through developing basic skills and inculcating healthy long life attitude and moral values that are critical to the maintenance of the Nigerian nation. Environmental education at the primary level reflects an infusion of several subjects, which centers on the social, cultural and biophysical environment with the aim of achieving a balanced and harmonious relationship between not only human being and nature but among the various ethnic nationalities.

However, the secondary school syllabus contains no specific subject on environmental education except with sketchy mention in Geography, social studies and Agricultural science.

At the tertiary level, the syllabus incorporates to a certain extent environmental related topics and contents. However, some of the courses offered are not compulsory and most are thought towards the end of the course period. This weakness underscores many undergraduate students' minimal exposure and environmental awareness and responsibility. Therefore, a more organized and Comprehensive plan has to be articulated to improve the contents of environmental aspect in the syllabus through the integration of ethics and values.

Environmental education can also be executed in non formal ways, for example by raising public awareness through campaign and published materials by non governmental organizations (NGOs). Environmental NGOs apart from distributing information on the environment should be more action oriented in opposition to developmental projects that affect environmentally sensitive areas.

Effectiveness of formal environmental engineering education has to be enhanced in university under graduated to equip our future national human resources with knowledge of comprehensive environmental issues and enable the drawing up of legislation based on sound understanding of basic environmental principles. The undergraduate as future decision makers could help conserve the environment through policies and actions. Hence environmental courses should be effectively integrated into the mainstream curriculum. All under graduates especially engineering students, irrespective of their discipline need to be exposed to sufficiently broad based environmental related courses in addition to more specific areas of environmental studies. It is crucial that engineering

students realize the importance of environmental consideration in the construction, design and operation stage. The curriculum should develop and coordinate a multi-disciplinary, cross-sectoral program to include education in natural resources, including public education to better understand how eco-systems are connected across the physical environment (Sumiani, 2003). Only then can we apply environmental resources use that foster sustainable national development.

5. Conclusion and Recommendations

Relentless efforts are required to address current environmental problems and steer Nigeria towards sustainable development. To achieve sustainability, national environmental education strategies should be comprehensive, integrated and large scale. The present national education strategy has to be re-examined and improved with the education curriculum formulated for maximum environmental understanding and knowledge. Education for sustainability needs to entrench in our educational system, with schools and higher learning institutions as centers for developing sustainable society skills. Since development and environment are intertwined they must be integrated into educational activities to ensure the educational system produce environmentally responsible citizens to enhance sustainable development.

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