

TOWARD ADDRESSING CHALLENGES OF ENVIRONMENTAL EDUCATION: A PANACEA FOR SUSTAINABLE DEVELOPMENT IN NIGERIA

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Abstract

Recognizing that no meaningful sustainable development can ever be achieved without the necessary attention to the environment, this review identifies the definitions, aims and objectives of Environmental Education, threats to the environment, and status of Environmental Education in Nigeria. It recommends collaborative efforts between governments, NGOs and other professional associations to address challenges of the environment and Environmental Education.

Introduction

Environmental challenges have been viewed as a critical factor in today's changing world. These have been addressed by various organizations both at the local and international levels. Environment education has been given several definitions, Wushishi (2006) sees Environmental Education as the process of recognizing values and classifying concepts that enable man

to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among them, his culture and his biophysical surroundings. Others see Environment Education as learning how to manage and improve the relationship between human society and the environment in an integrated sustainable way. Muibat et al (2008) sees Environmental Education as a problem-solving technique which is concerned with experience, observations, monitoring and measurement of environmental systems and problems aimed at solving environmental issues. This approach is said to use both scientific and humanist approaches of taking responsibility for the whole system.

Wushishi (2002) observed that the aims of environmental education include:

- ❖ Fostering a clear awareness of and concern about economic, social, political and ecological interdependencies in urban and rural areas
- ❖ Providing every person with opportunities to acquire knowledge, values, attitudes commitments and skills needed to produce and improve the environment.
- ❖ Creating new pattern of behavior of individuals, groups and society as a whole towards the environment.

And UNESCO (UNEP) identified the objectives of Environmental Education as follows:

1. Awareness to help social groups and individual acquire an awareness and sensitivity to the total environment and its allied problems.
2. Knowledge to help solid groups and individuals gain a variety of understanding of the enrolment and its associated problems

3. Attitudes to help social groups and individual acquire a set of values and feeling of concern for the environment.
4. Skills to help social groups and individuals acquire the skill for identifying and solving environmental problems.
5. Participation to provide social groups and individuals skills to be actively involved at all tends of working towards resolution of environmental problems.

The report of Brundtland Commission, *Our Common Future*, of 1989 published by Oxford University Press as Holbrook in 2009 was welcomed by the United Nations General Assembly in its resolution 42/187, which reads thus, *Sustainable Development is defined as development that meets ones needs of the present without compromising the ability of future generations to meet there own needs*. Perhaps not satisfied with the Commission's definition, Barbaza (2000) offers an alternative meaning which is seen as more appropriate for the African context thus, *Sustainable development is the will to follow the national approach to economic administration and the creation of economic policies to manage public matters of efficiently and periodically, and to show respect and progress to endure towards democracy, with full participation of all concerned actors, while taking into account specific local circumstances*. Similarly, Summer (2005) say that sustainable development involves a set of structures and processes that build the civil commons, which is based on values that promote life first, and for most this is but a factor of co-operation rather than competition and a human construct not a national acquiring phenomenon. Okebukola (2009), on the other hand, report that sustainable development means balancing the fulfillment of human needs with the protection of natural environment so that these needs can be met not only on the present but in the indefinite future.

All these definitions are not without criticism depending on the meaning attached to education. In the words of Wasagu

(2009), sustainable development is simply meeting and sustaining the needs of society in the global competition without sacrificing its resources.

Major threats to environment

There are several threats to the environment today, which if not given the required attention, the continuous survival of man on earth may not last long. These threats, which linked to living unattainable lifestyle, are:

1. The quality of the earth atmosphere is being threatened by many of the byproducts of science and technology. Air pollutants, such as SO₂, NO₂ and accumulation of CO₂, are responsible for the all disturbing greenhouse effects and ozone layer depletion condition facing the atmosphere today (Muibat et al, 2008). This has caused disturbing climate changes, such as increase in mean temperatures by 2.4-5.8°C between 2007-2100.
2. Coastal flooding is another serious threat caused by unsustainable development. It is estimated that by the year 2080, the annual number of people at risk from coastal flooding could increase from about 10 million to about 80 million worldwide (Okebukola, 2007).
3. Loss of soil productivity through desertification and it's likes are another serious threat to the environment. It was estimated since 1990s that world farmers are losing an estimated 24 billion tons of top soil from their crop lands annually. The effect of this is already being felt especially in the developing countries in form of contemporary insufficient food production by nations known to feed themselves before the advent of such conditions, e.g. Nigeria.
4. The world fresh water supply depletion is on the increase. This is as a result of the ever-increasing demand for water to

- meet the needs of the growing population. Industries and agricultural development coupled with other regional demand for the resources and its distribution is on the increase (Starr, 1991).
5. Modern technology is one of the major factors responsible for the loss of genetic diversity/biodiversity. This is a serious problem because of the cumulative consequences these losses may have for our ability to develop new sources of food and drugs essential for the survival of mankind. Experts assessed the rate of which species are becoming extinct at 1,000 to 10,000 times higher than the natural rate (Okebukola, 2007).
 6. The disposal of contaminated and hazardous materials both biodegradable and otherwise is posing serious challenge to the environment. Dangerous chemicals such as chlorofluorocarbons (CFCs), fertilizers, pesticides and so on have accumulated underground in water and in air with corresponding threats to human survival.
 7. Deforestation, although only important in the developing countries whose people seriously depend on the forest for their source of fuel for cooking and other practices of peeling the backs of the trees for medicinal purposes, clearing of vast land for agriculture and animal rearing and formation of new settlements all poses a serious threat to the environment.

Status of Environmental Education in Nigeria

The inclusion of Environmental Education started with the 1908 Educational Ordinance (Abdullahi, 1982). Fatubarin (1982) observed that some Environmental Education courses which were formally left exclusively for secondary school levels have been introduced into the primary school curriculum. Okebukola (1992) observed that at secondary school level of education, environmental issues are discussed in biology, chemistry and health sciences. He also reported the

establishment of environmental science units in some universities.

Umzurike (1992) revealed gross inadequacies in the national primary science core-curriculum in achieving the environmental educational goals and objectives. Accordingly, she called for the review of the curriculum package in terms of content, performance objectives and prescribed activities to be able to address the issues.

At secondary school level, Olagunju (1997) revealed some serious deficiencies in the curriculum, hence the need for work on the secondary school curriculum. However, Okebukola (1990) has it that the National Biology curriculum is enriched with several Environmental Education topics, but Naibi and Lawal (1993) reported that the topics are yet taught and learned with examination in mind.

The need for Environmental Education has gone beyond including it in some academic subjects like biology and chemistry. The need for a curriculum conference to address issues regarding Environmental Education is better today so as to adequately cater for the future generations.

Environmental Education and Sustainable Education Development

The critical position of Environmental Education for Sustainable Development needs no emphasis with the declarations of 2005-2014 as the Decade for Education for Sustainable Development. As opined by Okebukola (2007), the United Nations (UN) recognizes that there can be few more pressing and critical goals for the future of the human kind than to ensure steady environment in the quality of life to this and future generations in a way that respects our common heritage, the planet we live on. The link between environment and development was first made in 1980 when the Intellectual Union for the Conservation of Nature published by the World

Conservation Strategy linked it with Sustainable Development. The field of Sustainable Development can be looked into four consistent parts namely, (a) environmental sustainability, (b) economic sustainability, (c) social sustainability, and (d) political sustainability. It is, therefore, clear that environment and environmental education is a key issue for the realization of sustainable development.

This strong linkage was quite appreciated world-wide, which resulted into among other things, the UN Conference on the Human Environment in Stockholm in 1972, which focused on environmental issues where it emphasized the need of the interrelationships between the environment and socio-economic issues of poverty and underdevelopment, the 1992 UN Conference on Environment and Development popularly referred to the Earth Summit and the Johannesburg Summit 2002. In the same line, UN bodies and programmes have emerged, such as the United Nations Environmental Programme (UNEP), the World Wildlife Fund for Nature and the World Conservation Union.

As expected, UN member countries have developed sustainable development strategies in the same direction as the UN systems in order to key into their goals. In Nigeria, for instance, there are federal and state ministries of environment, as deliberate efforts to give the issue of the environment its rightful position with the desire to build a truly sustainable development.

Emergency problems

One serious observed problem is the poor implementation of good and efficient policies of national or international sources. Others are inadequate sensitization of public on the need to pay serious attention on environment so as to give Environmental Education its rightful positions in our schools systems. There is inadequate public enlightenment for the need of protecting, conservation as well as the restoration of the degraded

environment. There is also inadequate enforcement of enabling environmental laws.

Conclusion

No meaningful sustainable development can ever be achieved without the necessary attention to the environment. Therefore, Environmental Education is necessary towards meeting the challenges for sustainable development. The need for collaborative efforts between governments, NGOs and other professional associations having bearing on the environment towards addressing challenges of the Environment and Environmental Education is very desirable.

Recommendations

- ❖ The need for adequate policies specifically the need for national curriculum conference, to address issues of environmental education and putting it in its right place in the curriculum at all levels of education in the country.
- ❖ The need for adequate manpower training on environmental education and provision of special grant or funds possibly through (TetFund) to upgrade the standard of teachers at tertiary institutions.
- ❖ Public mobilization on environmental issues (particularly the evil acts of indiscriminate felling of trees without replacement) through media and development of relevant posters and jingles, etc.
- ❖ Provision of relevant environmental educational textual materials such as textbooks, teacher's guide, journals, etc.
- ❖ NGOs and professional associates need to join efforts with other institutions like schools, religions organization and other social groups for better improvement of their activities that have bearing on the environment..
- ❖ There is need for improved legislation for the protection of the environment.

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