

ENVIRONMENTAL ADULT EDUCATION: A VERITABLE TOOL FOR SUSTAINABLE MANAGEMENT OF ENVIRONMENT IN NIGERIA

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Abstract

There is urgency to deal with environmental problems in order to save our planet and leave our children with a livable world. This calls for the education of adults in environmental issues, because they are the actors and people who exert greater influence on the environment. The central idea in this article is on the need to enlighten adults through environmental adult education. This article is not intended to open a new page on the over-flogged issue of sustainable development. Its aim is rather to expose real dangers of neglecting adults whose decisions and actions shape the environment in the programme of global environmental education.

Introduction

Environmental issue has been a global concern in recent years. Many local and international conferences, workshops and seminars have been held on the need to improve environmental qualities and manage earth's resources sustainably. The United Nations Conference on Environment and Development (UNCED) tagged -Earth Summit or Rio '92, came out with strong recommendations in which emphasis was placed on environmental education. However much has not been achieved in this regard. Most of the Policy statements on environmental education are still unimplemented. Despite the fact that environmental education was declared a global assignment, there are many gaps and inconsistencies in its realization. Apel and Camozzi (1996) state that in many developing countries the availability of environmental education (EE) exists only on paper. They further stated that adult environmental education is applied as a rule only in projects that are financed from abroad and therefore very strongly influenced in content and method by donor countries.

Apart from few programmes of environmental education on radio and television in Nigeria, environmental adult education is a strange concept. The idea of EE in Nigeria is geared towards the school populace from primary school to the University. While this idea is commendable, its benefit is futuristic, because presently, these groups of Nigerians have little or no impact on the environment. It is the adults that immediately need environmental education, so that they would leave environmental resources that would be sustained by future generations.

Eheazu (2004) states that adults constitute the majority in the production process and they are closer to the environment than the children. Therefore, environmental adult education is a vital tool if we are to maintain environmental quality. Generally, most adults in Nigeria live environmentally incompatible life styles. The quest for wealth and development has blind-folded many to its attendant environmental problems. Resources are produced for survival under ecologically destructive conditions. Although the extent of damage to humans and environment are not recorded in any statistics, its massive detrimental effects can be seen on valleys, waterways, plants, air, traditionally operated farming, fishing and settlement in Nigeria. Majority of the local population are getting poorer while environmentally related diseases affect urban dwellers. Environmental adult education would encourage people to lead more modest life and more environmentally compatible life style. Environment and development should be unified. The more adults make from the environment today, the less their children would make from it if the environment were not sustainably managed.

Presently, it is the decisions and actions of adults that shape the environment. Adults are the farmers, sawyers, Oil company workers, Politicians and Policy makers, Fishermen and nomads, market women and artisans, Engineers and Technicians. They are even the war-mongers. These people need environmental education to develop environmentally sustainable behaviors, skills, practices and even technologies.

Clarification of Basic Concepts

Many people associate environmental education with a narrow idea of environmental protection involving only the conservation of species and nature preserves (Apel and Camozzi, 1996). In Nigeria, many people equate environmental education (EE) with environmental sanitation. All

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these are misconceptions or parochial view of environmental education. EE goes beyond sanitation, protection or conservation. Inyang Abia and Untoren (1995) view EE as a process of recognizing values and clarifying concepts as a means of developing knowledge, attitudes and skills necessary to comprehend and value the interrelatedness of man with his culture and biophysical environment. Similarly, Martin as cited by Inyang-Abia and Umoren (1995) defines EE as education that helps people to understand the forces that determine human behaviour in relation to the environment, whether this is the natural or the man-made environments of agriculture, towns and cities.

EE is education that persuades people to accept measures that will improve the quality of the environment through the alteration of environment - unfriendly knowledge, habits, attitudes, skills, beliefs and technology. It is education that promotes harmonious relationship between human beings and their natural and man-made environment.

Nzeneri (1996) defines an adult as one who is physically and psychologically mature and is socially, economically and politically responsible. An adult is expected to have the right to participate as a responsible homemaker, worker and member of a society. He has the ability to contribute sound and logical ideals in group or community discussions. He is capable of gaining employment, picking a job and earning a living. Age notwithstanding, anybody who performs the responsibility which the society considers the duty of an adult is an adult. This makes the demarcation between childhood and adulthood to be cumbersome.

Nzeneri (2002) explains the concept of environmental adult education to be education that is concerned with communal area management using indigenous resources. It enables adults to manage their own culture, scientific, educational and technological resources and to channel them towards their desired development. It assists individuals and groups to handle localized environmental problems in holistic way. It is the education, which identifies the impacts of adults on the environment and how they can improve the quality of the environment. It involves learning activities, which occur outside formal learning institutions. In other words, it goes beyond implanting supposedly objective scientific information into the heads of learners and making them to recite environmental facts. Apel and Camozzi (1996) state that the philosophy, method and processes of environmental adult education are based on learning through action. Participants are given the opportunity to re-interpret afresh, and even learn to change the environment out of the actual experiential context.

Sustainable development as a concept is both philosophical and economic- oriented. It is a global movement, which places the future generation on equal pedestal with the present generation in terms of equity in the access to environmental resources. Noibi and Lawal as cited by Uche (1995) see sustainable development as a strategy that manages the physical assets, natural and human resources as well as available funds in a manner that ensures increasing wealth and health for both the present and future generation. Its purpose is not to midwife resources for future generation, rather it focuses on the need to meet the need of present generation, and through judicious use of environmental resources, the future generation will not be impoverished.

Unsustainable Adults' Activities In The Environment

Ignorance, greediness poverty, extravagance and carefree attitude are some of the factors that promote environmental - incompatible life styles among Nigerians. Individually, many people are wasteful in the use of resources. Government does not set good example either.

Land utilization system in Nigeria is not sensitive to ecological balance. Forests are cleared on a large scale and at a fast rate for agricultural and construction purposes. Encyclopedia Americana (1995) states that the thick forest in Nigeria is deceptive since the detritus from the trees and undergrowth provide the food for these same plants. If the forests are cleared, regular crops are difficult if not impossible to raise. Once forests have been cleared in Nigeria, they can only be used for farming for a few years after which the soil becomes exhausted and it is abandoned. New forest will be cleared for the same purpose. Deforestation is a big and serious problem. Fuel wood gathering, clearing of large area for ranching, commercial logging for tropical hardwood and bush burning are some other ways by which adults tamper with ecological balance. Some of these activities are avoidable or better still can be unified with the environment. Massive irrigation in the Northern part of Nigeria presents environmental problem. Apel and Camozzi (1996) state that massive irrigation results in soil salinity and chronic infertility. While there may be increased food production presently, the fact is that, it would be an unsustainable prosperity, as the negative effects of irrigation would lead

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to ecological collapse. Human activities have made the eastern part of Nigeria to be prone to land slide and erosion.

Unsustainable extraction of minerals is another problem. Nigeria is blessed with minerals deposits - solid minerals of different kinds, crude oil and gas and even raw materials from agriculture. These resources are used without any protective and precautionary measures. No effort is made for land restoration once it has been tampered with. Apel and Camozzi (1996) state that extraction of raw materials under cost pressure has resulted in devastating environmental damage in developing countries.

Most of our agricultural practices in Nigeria are not environment- friendly. Uncontrolled use of pesticides and fertilizers destroy the environment. A state of over fishing now exists in our rivers, creeks and lakes. Because of the pathetic state of the situation, fishermen now use fishing nets with smaller net mesh sizes and other destructive techniques like the use of chemical to catch fish. Soper (1998) states that heavy fishing produces a population of many young small individuals because fish are caught as soon as they reach a catch able size. Many of the tiny fish ought to have been left to grow in size, but for economic situation. Hunters are not known for selective hunting in Nigeria. They kill any animal that comes their ways no matter how small or rare. These actions are leading to the loss of biodiversity.

In this technological - driven world, developing countries like Nigeria often take over obsolete production equipment that is not environment- friendly. Although these installations are inexpensive, they are ecologically destructive. Nigeria, the biggest market economy in Africa due to her population is vastly becoming a dumping site for junk from developed countries. Equipment, electronic gadgets, cars etc. that would have cost lots of money to dispose off in Europe are shipped to Nigeria for use. These technologies pack-up within months or few years, and later they constitute nuisances to Nigeria environment.

Another earth -destroying life-style of Nigerian adults has to do with 'waste'. Many adults seem to be wasteful in their ways of life. We waste food and agricultural resources, we waste water and energy; we are wasteful in spending and above all, we waste our natural endowment - creative thinking or talent. When food and other agricultural resources are wasted, more will be produced. The effect is that more chemicals go into the environment and more forests are cleared. The throw- away mentality makes the production of new items to be economically viable, thereby stressing the earth resources. Nigerian Government is also involved in this wasteful act. For example, apart from the ecological destructive nature of gas flaring which is the feature of Oil exploration in Nigeria, it is also a waste. Tomlinson (2001) lamented at the wastage of natural resources in Nigeria. Fie stated that the amount of gas Nigeria burns everyday could generate electricity to the whole of Sub- Saharan Africa. Corruption and economic sabotage also have devastating effects on Nigeria environment. The more money is stolen the more resources are exploited for economic recovery.

Population explosion is another serious problem. Many adults still see procreation as gift from God as well as future investment. Uncontrolled population growth has serious environmental implications. It overstresses the resources of the environment couple with large-scale clearance of land for building, construction or farming. Adelakun (2002) states that the estimated population of Nigeria is 126,000,000 with 5.57 birth rate per woman. As population increases, so also is the possibility of environmental degradation. Rinmak (2002), equally asserts that population growth goes hand-in -hand with increased pollution and environmental decay.

There is more garbage on our streets and open spaces more than ever before. We often leave environment unsightly. Public toilets are often left messy shortly after their opening for the publics. Pollution of land, air and water is taking place as if a film has been speeded up. The adults mostly create these problems and to revert it, they need to be informed.

Rationale for Environmental Adult Education

Generally, the purpose of environmental adult education centers on improving quality of the environment through the efforts of individuals, groups and society at large. It aims at liberating adults and by extension young children from the shackles of ignorance, poverty, and poor health resulting from environmental degradation. It focuses on how to develop enquiring minds and creative thinking in adults on how to produce more in our farms and factories without disrupting environmental equilibrium. It is needed to develop in adults, an ethical awareness of all forms of life with which

Adelakun, Kayode and Ihiegbulem, V. N. (Mrs.) humans share this planet, respect all life cycles and impose limits on human exploitation of other forms of life. Adult needs to be informed of their life-styles that are not environment —friendly.

Ezeaku (2001) states that the aim of environmental adult education is to press home to the

generality of the public the extremely disastrous consequences of their disregard for environmental status. Adults serve as the prime movers in the society; their education in environmental issue will go a long way in averting imminent ecological disasters. International Council on Adult Education (ICAE) (1993) states that it is necessary to promote knowledge, policies, methods and practices in areas of informal and non-formal environmental education for all age groups. Information about people's wisdom and memory in relation to environmental matters needs to be circulated among adults, therefore, it will make adults to get informed and stay informed about appropriate initiatives and technologies in relation to the use of natural resources. For adults to be committed to the principles of environmental management, they need to be sensitized or enlightened. This is the focal point of environmental adult education.

One World (1996) states that the aim is to ensure that the poor (among adults) are no longer forced to safeguard their future social and economic well being with a large number of children but that other survival and forms of social security are made available to them through enlightenment campaigns. Environmental adult education is a necessity if Nigeria is to transit from high birth rate to low birth rate. Through environmental adult education, a better quality of life is created when adults live environmentally compatible like style and consciously restrict their consumptive and wasteful habits.

The essence of environmental adult education can be summed up from the idea of Uche (1995) when he states that education as an instrument of systematic change is fundamental if we are to successfully adjust or modify man's conception about nature, adjust his attitudes to the environment and make him perceive the essence of moderation in his various activities on the environment. The catalyst for effecting change in the misconception of man's superiority over other living and nonliving things is education. Thus environmental adult education is needed to foster attitudinal change and participation in programmes initiated towards the solutions to the ecological crises. Gwena (1992)

, cited by Inyang - Abia and Umoren observed that with proper education, it is possible to become aware of and be knowledgeable about environmental issues and the problem they pose. He further stated that the effect would result in always wanting to take responsive actions about such problems.

Environmental adult education takes care of the present and the future. Adults are currently more involved in creating environmental problems than children. Hence they can provide immediate solution to ecological problems. EAE makes adults and people in general to understand the complexities and fragility of the environment, and the need for individuals and governments to pursue their economic activities in such a way that is in congruence to maintaining environmental health.

Environmental Adult Education-for Who?

Who should benefit from EAE? The answer is all human beings. The fact that it is tagged environmental adult education does not mean it is limited to a particular age group. Every individual in or out of school, young or old, literate or illiterate need EAE. Goles cited by Nzeneri (1996) compressed these groups into two:

1. Those who had formal education no matter the level.
2. Those who have not had any formal education.

These individuals may be in the rural or urban centers. Anybody who lives or works in an environment is involved in its maintenance. The fact that someone is lettered does not make him to be environmentally literate. Many of the local and global environmental problems are created by literate people and promoted by illiterates. The categories of people include housewives and women in purdah, nomads, migrant fishermen, hunters, religious leaders, engineers, breeders, teachers, artisans and other professionals, drivers, market women, traders, school leavers, disc jockeys, manufacturers, farmers, sawyers, politicians and other decision makers, warlords, civil servants, and other white-collar workers. The list is by no means exhausted. These groups form the bulk of Nigeria population whose activities degrade the environment. They however, need environmental adult education *since* they are no longer benefiting from the regular classroom education.

Various methods could be used to get the message across. However, for illiterate target group, the method should not be too informational or technical. The method should aim at transforming individuals and the society rather than transferring technical fact (Nzeneri, 1996). Environmental issues can be dramatized on radio, television, and civic centers. It could be through music, posters, talk shows, Art/historical exhibitions, handbills and pictorial illustrations, radio and television jingles, conferences, workshops and seminars, discussions and debating, panel of experts may be invited to discuss with a group of adults on environmental matters. Extension services in agriculture may be expanded to include environmental issues. Well-articulated articles on environment in newspaper, magazines, journals etc. could serve the literate audience. A combination of these methods may be used to educate adults.

Who Provides EAE and Through What Method?

It is not possible to send all adults back to classrooms to learn environmental education. However, they can learn through non-formal means. The slogan of “each one teach-one” can also be applied to EAE. By extension, those who have knowledge in environmental issues should teach others. EAE could be provided in places of worship (churches or mosques). There are various sections of the holy books that promote environmental education. Some these sections even highlight the penalties for those ‘ruining’ the earth. However, religious leaders mostly preach prosperity through exploitation of resources and completely ignore environmental restoration. Religious leaders can organize “green crusade” or better still, they can “green their sermon” when preaching to the audience.

Trade union through their educational programmes can also organize environmental adult education for workers. Field (1993), states that trade union education has also focused increasingly on environmental issues. The trade union congress has organized educational programme around its pamphlet. “Greening the workplace”. In occupational safety and health programmes, environmental issues can be integrated in work places.

Mass media both print and electronic, offer another opportunity for adult to be environmentally educated. Field (1993) states that broadcasting agencies have achieved a great deal in raising public awareness on environmental issue, and encouraging public debate. Some television and radio stations have made environmental issues their regular programmes in Nigeria. While many newspapers have columnists for environmental issues at least once in a week.

Politicians and policy makers can also serve as providers of EAE. People can be educated through green or ecological politics. Their decisions, laws and policies can go a long way in raising the level of awareness of people in environmental matters. Other groups that can provide EAE include environmental non-governmental organizations, governments at local, state and federal levels, youth movements, Recreational and tourism experts, extension officers and so.

Barriers to a Wider Acceptance of Environmental Adult Education

Environmental issues are seen as luxury in Nigeria since majority live below the poverty line, hence, people mostly think of sustenance. Government ambivalence and inconsistent standard is another problem. It is one thing for government to formulate good policies; it is another thing to show commitment and sincerity of purpose.

While government mostly pay lip service to environmental education matters, nongovernmental organizations are spearheading the course, however, these institutions do not have sufficient means to reach the public on a wider scale. Also, economic and infrastructural difficulties exist in both rural and urban areas. Particularly noticeable are the deficiencies in the area of communication and access to information. Many households do not have television or radio most especially in the rural areas. Poor rural electrification system and erratic power supply are impediments for educational programme on radio and television.

There are very few experts in the field of environmental education. Hence many of those who are involved in non-formal environmental education have limited knowledge of the distinct learning needs of adults and how this knowledge can be integrated into the environmental field. Old habits die hard in Nigeria. We find it hard to change our core traditional practices, even though it is glaring that they are detrimental. On environmental issue, many who believe in the maintenance of status quo would see environmental adult education as a manifestation of idleness.

Recommendations

To avert imminent ecological disaster in Nigeria, certain practices and views need to be

changed. This is where education of adults is of paramount importance. Based on this fact, the following are recommended:

- 1 There should be collaboration among Ministry of Education, information and environment on the need to get people informed on environmental issues.
- 2 The moribund department of adult and non-formal education in various states Ministry of Education should be revitalized and be made to function in the area of environmental adult education.
- 3 Environmental issue should be incorporated into the programme of National orientation agency.
- 4 Even though religion and state are separate entities, there are many places of worship and adherents than schools, therefore government should be interested in schools of theology, seminary and Arabic school and ensure that elements of environmental education as found in their holy books are incorporated in their curricular.
- 5 The government should encourage environmental non-governmental organizations that disseminate information about the state of the environment financially.
- 6 Broadcast media should do more in the area of awareness creation about the environment.
- 7 Green politics should be allowed to thrive by politicians, and ecological friendly policies and laws should be formulated.
- 8 Vocational training and skill acquisition centers should incorporate environmental issue in their training programmes.
- 9 Media practitioners should ensure that media become educational instrument for the preservation and conservation of natural resources by presenting plurality of views, reliable and conceptualized information.

Conclusion

The responsibility of sustainable management of the environment rest on informed publics. Education of adults who are closer to the environment is a necessity in Nigeria. This will help them in adjusting or modifying their attitudes and skills to be environment - friendly and makes them to see the need to be moderate in habit. To educate adults in a predominantly environmental- illiterate society is not an easy task. All friends of the environment must be involved-governments, labour unions, religious organizations, non-governmental organizations, and the rest. Knowledgeable individuals can also assist with the idea of each one-teach-one. We would not only be helping ourselves, but the environment and future generation, if we promote environment-conscious people through environmental adult education.

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