

ENVIRONMENTAL EDUCATION AS A PANACEA FOR ENVIRONMENTAL DEGRADATION AND ABUSE

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Abstract

Our environments have been abused, damaged and made worse through our activities. This degradation of our environments has caused a lot of havoc to human beings. Sometimes we do what we do because we do not have the adequate knowledge of what might be the consequences. The questions now are: why do we degrade our environments? Is it because we do not know that environmental degradation has negative effects? What are the causes of the health challenges that we face in this contemporary time? Why is there an increase in global warming and visibility reduction in the atmosphere? Why has the ozone layer depleted and what can we do to solve these problems? It is an attempt to answer these questions that this paper is written. The paper establishes that lack of knowledge remains the major reason why people degrade and abuse the environment and to put that to a stop, the people should be properly educated. Hence the topic, environmental education as a panacea for environmental degradation and abuse.

Keywords: Environment, Education, Degradation.

Introduction

Every rational human being yearns for good health and health they say is wealth. It is only a healthy person that can think of how to build a house, buy a car, travel abroad, get married or become highly educated. The question now is, if we know that we can achieve all these things only in good health, why then do we play with our environments since we cannot have good health without a healthy environment? What then is environment? Environment is the physical and social surroundings in which human beings, plants and animals live. Environment can also be defined as the natural condition, e.g. land, air and surrounding that encompass all the objects, conditions, etc, that are around and may affect the living and non-living things. According to the Nigerian Federal Environmental Protection Agency (FEPA) Decree of 1988, “environment

includes air, land, water and all animals (human being inclusive) and plants living...[there] and the inter-relationship which exist among them or any of them” (J.O.Igidi, 2005:165). Environment is divided into physical environment, social environment and cultural environment. Physical environment has to do with the things that surround man. Some of these things are man-made while others are God-made (i.e. in their natural form). The man-made part of the physical environment include houses, markets, dams, bridges, etc., while the natural things include land forms, such as uplands and lowlands, climate, vegetation, animal life and water bodies like streams, rivers, ponds, lakes and seas (Chukwuemeka Ukwu, 2004:7).

Social environment is concerned with the social surroundings of man. Man says Aristotle is a social and political animal and as a social animal, he lives in a social environment. He is born in a family. His family is also a member of related families. These related families form a community. This community is part of a larger community. To meet with his goals, he interacts with the different networks of relationships and institutions. All these form the social environment. These institutions include—family, economic, political, social and cultural institutions. Existence in the social environment is made possible through social organizations and social groups (Chukwuemeka Ukwu, 2004:3). According to Liga Igwe Liga (2008:21-22), cultural environment are those things provided by natural environment, which are artificially altered by man, to enable him maximally enjoy the physical environment. They consist of those things made by man on the natural environment. They could be itemized as roads and bridges, canal, dams, sea ports, electrical installations, beaches, hospitals, markets and so on ad infinitum. It is logical to state that man utilizes the materials of the natural environment to manufacture the cultural things for his use.

Man’s cultural environment influences man’s thinking, his general behaviour, funeral rites and marriage ceremonies and practices (Celestina Omabe, 2007:38). The above explanation shows that environment is made up of various aspects such as: political, economic, religious, cultural, social etc. Frankly speaking, every environment has tremendous impacts on its inhabitants. It could be positive or negative (Liga Igwe Liga, 2008:20).

Environmental Education: What is it?

Environmental education is made up of two words: environment and education. We have carried out an inspection of what environment means, now, let us take a look at the meaning of education before explaining environmental education. Education is derived from the Latin words “*educare*” meaning to educate, bring up, instruct, train and “*educere*” meaning to lead out, bring out or draw out. Therefore, education in general terms, is the process of transmitting societal lores, values and desirable attitudes from one generation to another. Education seeks to socialize individuals so as to equip them with the desired mode of behaviour that is in conformity with the way of life of the society in which they live. Education is the process of teaching, training and learning in schools and colleges for the development of knowledge and skills so as to prepare individuals to live happily with themselves and others in the society where they live (General Principles and Methods in Education, P.1). The focus of education is to imbue the individuals with the knowledge, abilities, skills or behaviour to enable them function in their immediate environment and the society at large (General Principles and Methods in Education, P.2).

Therefore, environmental education is an organized efforts to teach how natural environments function, and particularly, how human beings can manage behaviour and ecosystems to live sustainably. It is a multi-disciplinary field integrating disciplines such as biology, chemistry, physics, ecology, earth science, atmospheric science, and mathematics (Wikipedia). For P.K. Uchendu (1997:44), environmental education deals with man’s relationship with his natural and man-made surrounding, which involves the relation of population, pollution, resource allocation and depletion, etc, and urban and rural planning to the total human environment. Environmental education enables people to have good knowledge of their environment and also serves as a tool that can avert ecological crises and enhance the quality of the environment. Environmental education sounds strange to some people, but it is not new. It started as early as 18th century to help man preserve, conserve, enhance and appreciate nature and the natural world. It was Jean-Jacques Rousseau who talked about the need for education that would focus on environment. This he did in one of his books entitled *Emile* which when translated into English means *On Education*. It was after many decades that Louis Agassiz, a Swiss-born naturalist reverberated Rousseau’s philosophy by encouraging students to “study nature and not books”. These two influential scholars contributed immensely to lay the foundation for a tangible environmental education program known as Nature Study, which took

place in the late 19th century and early 20th century (K12 Academics). It was during the United Nations Conference on the Human Environment held in Stockholm, Sweden in 1972 that environmental education gained international recognition. At that Conference, environmental education was declared as a tool to address global environmental problems. The United Nations Education Scientific and Cultural Organization (UNESCO) and United Nations Environment Program (UNEP) created three major declarations that have guided the course of environmental education. These declarations include: Stockholm Declaration, Belgrade Charter and Tbilisi Declarations (K12 Academics).

According to G.V.Gopaland V.V. Anand, the objectives of environmental education is to increase public awareness about environmental issues, explore possible solutions and to lay the foundations for a fully informed and active participation of individual in the protection of environment and the prudent and rational use of natural resources. They also affirmed that environmental education could be thought of as comprising three linked components and these include:

- ✓ Education about the environments (Knowledge).
- ✓ Education for the environment (Values, attitudes and positive actions).
- ✓ Education through the environment (a resource).

P.K. Uchendu (1997:54), argues that environmental education should not be over-looked so that people will be aware of the importance of their participation in preserving and improving the quality of their environment and in desisting from environmental degradation and abuse. He further says that:

It is necessary for man to recognize the importance of his environment. In a place like Nigeria, people have poor environmental behaviour and this should not be allowed to continue. That is why environmental education should be treated with the seriousness it deserves. If environmental abuse is allowed to continue, the effects will affect all, hence everybody should be aware of the ugly effects of environmental abuse or degradation and abuse... This should form an integral part social studies education, but unfortunately the social studies curriculum lacks meaningful emphasis on environmental education. This is regrettable and therefore, efforts should be made to incorporate it in social studies as one of its focal points, for environmental issues cannot be overlooked in a worthwhile social studies curriculum. Environmental issues are so crucial to the well-being of the

society, that children should be acquainted with it right from Kindergarten so that they will be trained to appreciate them and develop favourable environmental behaviour (1997:47-48).

Man and Environmental Degradation

According to General Multilingual Environmental Thesaurus, environmental degradation is a process through which the natural environment is compromised in some way, reducing biological diversity and the general health of the environment. This process can be entirely natural in origin, or it can be accelerated or caused by human activities. Many international organizations recognize environmental degradation as one of the major threats facing the planets, since humans have only been given one earth to work with, and if the environment becomes irreparably compromised, it could mean the end of human existence. Environmental degradation is also the process whereby the quality of natural resources such as air, water, soil and or wildlife is diminished particularly through the introduction of harmful substances into the environment (Environmental Degradation-GEO CAR/Social Studies).

The needs of man are many and to satisfy these needs, man has to advance in technology by engaging in construction and manufacturing. Hence, the great and many numbers of industries, companies and factories. The heavy metals (metal pollutants) and chemical substances used in these industries are hazardous to human health and results in environmental pollution. For J.O. Igidi (2005:166), the pollution of environments results in man's determination to match desire with production through the establishments of various industries and the uncontrollable disposal of effluents. Industrial, commercial, automobile and domestic activities produce wastes of varying quantities and qualities, leading to different environmental problems involving land and water (the disposal of wastes), undesirable levels of street dusts, air and noise pollutants.

Poverty has equally contributed to the degradation of the environment. Many people are poor and as a result of that, they can over-exploit the natural resources in order to survive. Many people engage in deforestation in order to get firewood that they would use to cook food, sell and make money in order to buy food. Some do that in order to get timber for building and other construction works. The problem is that they cut down these trees without planting new ones and that is deforestation without afforestation. Why deforestation is one of the leading

causes of environmental degradation is because it reduces biodiversity, disrupts the water cycle and contributes to climate change (Plant With Purpose). Deforestation also “affects the water cycle, destroys the flora and fauna, leads to an increase in carbon dioxide, thereby increasing global warming”. According to Amanda Macmillan and Jeft Turrentine, global warming occurs when carbon dioxide (CO₂) and other air pollutants collect in the atmosphere and absorb sunlight and solar radiation that have bounced off the earth’s surface. They unveiled that this radiation under normal circumstances would have escaped into space, but these pollutants, which can last for years to centuries in the atmosphere, trap the heat and cause the planet to get hotter. These heat-trapping pollutants specifically carbon dioxide, methane, nitrous oxide, water vapor and synthetic fluorinated gases are known as greenhouse gases and their impact is called the greenhouse effect. J.O. Igidi (2005:178) mentions the following as the major sources of greenhouse gases:

- a. The burning of fossil fuels for energy and transport which produces much carbon dioxide.
- b. The clearing or burning of forests, which reduces carbon dioxide absorption.
- c. Petroleum refining which produces methane as one of the by-products.
- d. Cattleraising also produces methane emissions.
- e. Solid mineral mining also produces methane emission.
- f. Petrochemical industries release CICH₂F.

Bad agricultural and fishing methods and practices can also degrade the environment. Excessive and uncontrollable amounts of chemicals that we use in agriculture like fungicides, herbicides, insecticides, nematiocids and pesticides as disinfectants and weeding agents to eradicate pests that attack crops and weeds that compete with these crops have dangers inherent in their use. The use of fertilizer to improve soil nutrients introduces chemical pollutants into the soil. The excessive use of this fertilizer sinks into underground water. Also the animal wastes generated from slaughter houses, tanners, harvesting of crops by man, and other animal faeces are major agricultural source of chemical pollutants into the soil (J.O. Igidi, 2005:181).

The issue of environmental degradation is quite alarming. As a result of this, the General Assembly organized the United Nations Conference on the Human Environment as a response to growing worldwide concern with

environmental issues. The Conference was held in 1972 and that led to the creation of the United Nations Environment Programme (UNEP) in the same year. The aim of UNEP is to find solutions to various environmental problems. These environmental problems include pollution in the Mediterranean Sea, the threat to aquatic resources posed by human economic activity, deforestation, desertification and drought, the depletion of the Earth's ozone layer by human-produced chemicals and global warming (The Environment by United Nations in Britannica). UNEP was successfully established through the General Assembly, a World Commission on Environment and Development and in 1988 outlined an environmental program to set priorities for the 1990-95 periods. International conferences like United Nations Conference on Environment and Development (The "Earth Summit"), held in Rio de Janeiro in 1992, continued to focus attention on environmental issues. The Earth Summit, which was far larger than any previous inter-governmental global conference, incorporated input from numerous NGOs and produced a Convention on Biological Diversity; a Framework Convention on Climate Change, or Global Warming Convention; the Rio Declaration on Environment and Development (the Rio Declaration); a statement of principles on forests; and a plan for the sustainable development of the Earth's resources into the 21st century (Agenda 21). The Global Warming Convention was amended in 1997 by the Kyoto Protocol and in 2015 by the Paris Agreement on climate change, both of which aimed to limit global average temperature increases through reduction in greenhouse gas emissions (The Environment by United Nations in Britannica).

Environmental Education as a Solution to Environmental Degradation and Abuse

In the National Policy of Education (4th Edition, 2004:9-10), it states that education shall continue to be highly rated in the national development plans because education is the most important instrument of change; any fundamental change in the intellectual and social outlook of any society has to be preceded by an educational revolution. It says further that education and training facilities shall continue to be expanded in response to societal needs and made progressively accessible....As education is an instrument of change, then we should start on time to change positively what is on the minds of the young ones so that they will be aware of what environmental degradation is and the negative

effects of degrading the environment. Most of the things that we do are as a result of lack of knowledge and lack of knowledge is very disastrous. It is through education that one can have full knowledge of his environment, what to do to preserve and protect the environment.

Environmental education will help to teach people about environmental ethics. It is only in schools that formal education takes place and it is only education that will unveil to the people the ethics of the environment. One can neither learn that in the motor park nor on the farm or market. According to Simon Blackburn (2005:116):

The central problem specific to thinking about the environment, is the independent value to place on such things as preservation of species, or protection of the wilderness. Such protection can be supported as a means to ordinary human needs, for instance, when animals are regarded as future sources of medicine or other benefits. But many would want to claim a non-utilitarian, absolute value for the existence of wild things and wild places; it is in their very independence of human lives that their value consists. They put us in our proper place, and failure to appreciate this value is not only an aesthetic failure but one of due humility and reverence, a moral disability. The problem is one of expressing this value, and mobilizing it against utilitarian arguments for developing natural areas and exterminating species more or less at will.

Environmental education imparts ecological knowledge to people. It teaches people how plants and other living creatures interact and connect to their environment. Ecology is a branch of biology that studies abundance, biomass and distribution of organisms in the context of the environment. It encompasses life processes, interactions and adaptations, movement of materials and energy through living communities, successional development of ecosystems; cooperation, competition and predation within and between species; and patterns of biodiversity and its effects on ecosystem processes (Wikipedia). It is only through proper and adequate knowledge of the relationship between living things and their environment that we can avoid great damage to the ecology and then increase capacity for future conservation efforts. It is through environmental education that we can avoid environmental degradation and abuse. This is because environmental education creates environmental awareness on how to preserve and protect the environment. Preservation and protection of environment

will help to improve the quality of lives of human beings. It is only when we comprehend our environmental problems that we can create awareness about those problems and then proffer solutions to them. Being aware of the problems that face our environment will help us in living healthy lifestyles and healthy lifestyles will make us to have respect for nature, but when we fail to do that, we shall face the consequences of not protecting the environment like extinction of wildlife, pollution, acute and chronic diseases, scarcity of food and death of animals due to lack of water which causes hot weather, destruction of ecosystem etc. The question now is, what do we do as the problems of environment have assumed a new dimension recently with the advent of modern technology and industrialization? P.K. Uchendu answers that:

If people, prior to this era were aware of the dangers, that neglects would cause and acted promptly, things would have been different. So it has become necessary to impress on the new generation the importance of the environment. Such education would enable them to understand the need for a good environment for their health and that of future generations. Such knowledge will minimize environmental abuse. It will encourage public awareness in promoting and understanding the linkage between the environment and good health. Such awareness will encourage public participation in environmental control and management. Environmental education will therefore enable the youths to recognize environmental problems and understand their dimensions as well as encourage them as individuals to do something to minimize environmental hazards (1997:54-55).

Conclusion

Environmental education remains one of the best aspects of education that we need in this contemporary period that people abuse and degrade the environments without considering the negative effects. It is through education that we can overcome such challenges. Environmental education should be introduced in the school curriculum from Primary School to University. Following the relevance of preserving, protecting and conserving the environment, it becomes of utmost and paramount importance to study it as one

of the general studies courses in the University. The government should also use the mass media like radio, television and newspaper to educate people on the need to preserve the environment. People should be taught the causes of environmental degradation and how to avoid it. Government should establish Environmental Education Trust Fund (EETF) and Environmental Resources Management Agency (ERMA). With the establishment of these two bodies, environmental degradation would be given the adequate attention that it deserves.

Another one that is important is planting of trees (Afforestation). Anytime that deforestation takes place, afforestation should equally follow it. We should say no to indiscriminate cutting down of trees to avoid increase in global warming. Government should promulgate laws against environmental degradation and fines or sanctions attached to it. This is to deter people from abusing the environment.

Regenerative agriculture will also help a lot since the foci of regenerative agriculture are on topsoil regeneration, increasing biodiversity, improving the water cycle, enhancing ecosystem services, supporting bio-sequestration, increasing resilience to climate change and strengthening the health and vitality of farm soil. We should also learn how to convert waste to wealth and avoid indiscriminate dumping of waste. If these things are done, environmental degradation will be reduced to a bare minimum.

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