
ENVIRONMENTAL SUSTAINABILITY FOR NATIONAL
DEVELOPMENT: RELEVANT ROLES OF SOCIAL
STUDIES EDUCATORS

Olufunmilayo Iyunade & Afolabi Olubela
Department of Arts & Social Sciences Education, Olabisi
Onabanjo University, Ago-Iwoye, Ogun State

Abstract

Africa suffers from many environmental problems including deforestation, degradation and fragmentation, desertification, loss of soil fertility, a dramatic decline and loss of biodiversity, air and water pollution. This therefore, explained the rationale for the integration of environmental education in Social Studies curriculum at all levels of education. Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture, and his biophysical surroundings. The process of environmental education is all-encompassing and should be reviewed deeply at the affective, cognitive, behavioural and meta-cognitive levels. Hence, the roles of Social studies teachers are very important to encourage the behaviour of students that parallel with the right and good attitude, along with the well and healthy environment, thereby enhancing environmental sustainability.

Keywords: Environmental degradation, Environmental Sustainability, Social Studies teachers, National Development

Introduction

Nigeria has a total land area of 983,213 square Kilometres of which 773,783sq. kilometres are in the savanna zones 75,707sq. kilometres are in the derived savanna zones and 133,717 square kilometres are in the forest zone. The country lies between 4°N and 14°N, and between 3°E and 15°E. Nigeria is located within the tropics and therefore experiences high temperatures throughout the year. The mean for the country is 27°C. Average maximum temperatures vary from 32°C along the coast to 41°C in the far north, while mean minimum figures range from 21°C in the coast to under 13°C in the north. Nigeria has a population of about 150 million impacting on the physical environment through their various activities within an area of about 923,000 square kilometres (Federal Ministry of Environment, 2003). This is coupled with variability in elements of climate such as rainfall and temperature among others, exposes several physical and socio-economic sectors in the country to the impacts of climate change. Nigeria is already experiencing a high population density. The interaction of these millions of Nigerians with their respective environment has left an indelible mark on the landscape. The manifestation of these impacts include; urbanization, deforestation, desertification, overpopulation and all kinds of pollution. These impacts have both negative and positive effects on the natural environment.

The human natural environment has been so degraded that, for many decades now, achieving sustainable and equitable development is one of the major realities and challenges facing the entire human race today. More than one billion people are found to be living in acute poverty, and suffering grossly inadequate access to such resources like education, health services, infrastructure, land, and credit-resources that are required to give them chances for a better life (World Bank, 2008). This environmental degradation occurs in various forms with various adverse effects. Odogbor (2005) enumerated the effects of oil spillages and industrial wastages on the cultural, religious, economic and political life of the people. He then pointed out the serious negative implications these have on the people in all spheres of life of the people in the different communities in Nigeria. No doubt,

humanity's stake in environmental protection is enormous, and environmental values have been grossly neglected (Macionis, 2007). However, environmental problems are global, and it seems that no nation of the world is spared of one challenge or the others, one fact that should be of note is that these problems and challenges vary from country to country and affect differently.

The heart of the problem is that the natural resource base of Africa is being degraded and destroyed at a rate which will soon make food and agricultural production un-sustainable. Poverty, coupled with increasing population pressure, is the biggest single cause of this degradation. The rural poor, the overwhelming majority of Africa's citizens, destroy their environment, not out of ignorance, but simply to survive. Thapa (1999) reported that peasant farmers preoccupied with survival over-crop marginal and because there is no alternative employment and no better technologies they can afford. Pastoralists overstock to improve their chances of surviving the next drought. Sanera (1998) reported that rural dwellers strip trees and shrubs for fuelwood because they need fuel. In the context of the short-term basic needs of an individual, each decision is rational; in the long-run, the effects are disastrous.

Haphazard industrial planning, increased urbanization, poverty and lack of competence of the municipal government are seen as the major reasons for high levels of waste pollution in major African cities (Wallace, 2006). Some of the 'solutions' have been disastrous to the environment, resulting in untreated waste being dumped in places where it can pollute waterways and groundwater. In terms of global warming, Africans contribute only about one metric ton of carbon dioxide per person per year. It is perceived by many climate change experts that food production and security in the northern Sahel region of the country will suffer as semi-arid areas will have more dry periods in the future.

For instance, deforestation, indiscriminate bush burning, landmass clearing for agriculture or urban development and mining activities can all lead to soil erosion, flooding and water pollution. On the other hand, gaseous emission and discharge of effluents from manufacturing industries can cause serious pollution of air and water. Severe soil erosion can impoverish rich land, resulting

in poor agricultural yield while water pollution can negatively affect fish production in our rivers (Addiscott, 2005). This is as a result of liquid waste discharged from neighbouring industrial plants into the river, which change the colour and chemical composition of the river, thereby making it inhabitable for many aquatic organisms. Another challenge in our cities is the problem of solid waste management as most parts of our urban centres are littered with heaps of dirt. Oftentimes, the drainage systems are blocked, resulting in flooding of many access roads. Sources of urban wastes include homes, hotels, restaurants, hospitals, markets, motor-parks, and commuters in moving vehicles also littering with nylon and sweet wrappers, are a common sight in urban streets.

By the year 2025 according to some estimation, the population of the African people will be over a billion. This means that environmental challenges will double or triple. Some literature indicates that Sub-African countries managed to perform more effective economic policies, which influenced the development in the region in general, but GDP growth has stagnated recently and it is obvious that with the stagnation of the economics will cause a decrease in the solution of the ecological challenges. Poverty also is the main factor that influences the development of environmental issues. And it also exists in Sub-Sahara region, despite the region is not that poor in the comparison with other regions in Africa and in spite of the wealth natural resources (DeBlij, Alexander & Fouberg, 2007). In essence, concerted efforts have to be made to curtail the menace of environmental degradation; else this planet may become uncomfortable, or inhabitable in a nearer future. Hence, this study aimed at examining the roles of teachers in achieving environmental sustainability. This study is imperative because, teachers; most especially the Social Studies teachers have responsibilities to teach, guide and encourage the environmental-friendly behaviours of students with the purpose of achieving well and healthy environment, thereby enhancing environmental sustainability

Environmental Education for Sustainable Development
Environmental education (EE) refers to organized efforts to teach about how natural environments function and, particularly, how human beings can manage their behaviour and ecosystems to live sustainably (Muriungi, 2006). The term is often used to imply education within the school system, from primary to post-secondary. However, it is sometimes used more broadly to include all efforts to educate the public and other audiences, including print materials, websites, media campaigns, etc. Related disciplines include outdoor education and experiential education. Environmental education focuses on:

1. Awareness and sensitivity about the environment and environmental challenges
2. Knowledge and understanding the environment and environmental challenges
3. Attitude concern for the environment and help to maintain environmental quality
4. Skills to mitigate environmental problems
5. Participation in exercising existing knowledge and environmental-related programmes.

The aim of environmental education can only be thought of in the context of overall aims of education that has to do with general knowledge and awareness that breeds values, skills and notable changes within human races (Harris, 2006). Environmental education develops in all individuals in the society, the knowledge, and awareness that breed values, skills attitudes and right behaviours to live and active, happy and better quality of life. The need of the hours is to have environmentally conscious citizens, who are concerned for saving the environment from disasters. It might happen only when people are knowledgeable about their environment and associated problems, and are motivated to work for that, this naturally means general change in the attitude and behaviour of the public.

The concept of managing the environment such that it can continue to provide basic needs and services for the present and

future generations is referred to as sustainable environmental management. Environmental management simply refers to man's application of scientific, technical and social knowledge and skills in managing all components of the environment to ensure that the environment is not stressed beyond its productive capacity at any given time. Muriungi (2006) further explained that environmental management is significant on the bases of its purposes as a process of recognizing values and clarifying concepts to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his biophysical surroundings. Environmental management became necessary and more important due to the level of damages done to the natural resources and endangering the life of man and other living species.

Social Studies Educators' Roles in Environmental Sustainability

Social Studies is a discipline which equips an individual with the knowledge, attitude, skills, capacities and capabilities needed to make meaningful living in the context of his peculiar environment, and to solve the problem of world survival. Social studies is concerned mainly with the reciprocal relationship between man and his physical environment. This implies that it deals with how man is influenced by his physical environment, and how man tries to influence his physical environment. On the other hand, it is concerned mainly with man's interactions with his social environment. Social studies therefore, has evolved as a natural characteristic of human beings in their societies in all phases of their development. Certainly, it has never ceased to develop, and consequently, it has been the bearer of humanity's most noble ideas. Harris (2006) emphasized that the Knowledge taught in Social studies is considered essentially for worthwhile living in society. Much of the content of this knowledge is drawn from the realities of the learner's environment. This would enable him to better understand his environment, and consequently function in it more effectively. There are also essential skills to be developed through the teaching of social studies. These skills have been

specified as those of listening, speaking, reading, writing, calculation, and decision-making as well as those of observation, analysis and influence. These are skills, are crucial to his functioning as an active and competent member of the society. The development of critical thinking decision-making abilities and the ability to analyze and solve problems is stressed in social studies. It hoped that a functional citizen is the one who thinks critically about the environment, and finds solutions to the problems that present themselves everyday. It is also agreed that these are skills that could be taught effectively in Social studies (Thapa, 1999)

The way forward

Addiscott (2005) established that environmental sustainability should be promoted by social studies teachers for the development of the countries. Social studies educators would be expected to play the following roles:-

1. Creating environmental awareness: Promoting learners and public awareness of all aspects of their environment is highly required for safe environment. Particular emphasis should be placed on the interactions between environmental elements and human culture, needs and consumption (O'zden, 2008)
2. Providing broad-based basic knowledge and information: Sufficient information should be provided for the learners. Teachers should as enhance students understating about environment for rational decision-making in the context of historical, economic, political, social and technological considerations (Boateng, 2006)
3. Encouraging inculcation of social values and attitude: Teachers should encourage learners and the general public to imbibe social values of cleanliness, sanitation, care, soft spot for life and environment, resourcefulness, This will set the basis for better disposition and interaction with environmental resources (Botzler & Armstrong, 1998).
4. Developing environment-friendly skills in learners: Teachers should developing appropriate skills in the learners, social

groups and individuals to solve natural and man-made environmental disasters to promote quality of life within the environment (Clever, 1997).

5. Fostering students' ability to evaluate their actions and environmental programmes: Educating the public and learners and imparting in them ability to evaluate their attitude to the environment as well as various environmental education programmes for effective actions that guarantee the quality of life (Muller, 2006).
6. Creating sense of environment responsibility: a sense of responsibility and urgency must be built up in learners towards the environment so as to ensure appropriate actions to solve environmental problems (Ojukwu, 2006).
7. Planning and implementing general environmental orientation: An urgent enlightenment programmes must be planned and implemented for students on the dangers of certain human activities and how to properly control erosion, pollutions flooding, refuse and waste disposal and forest depletion (Worsley & Skrzypiec, 1998)

Conclusion

Environmental education involves teaching about values judgments and ability to think clearly about complex problems about the environment. The educational process must emphasize human relationship with his natural and man-made surroundings. It is quite understandable that the environmental problems in Sub-Saharan region are crucial and severe. The knowledge taught in Social Studies is considered essentially for worthwhile living in society. The Knowledge taught in Social Studies is considered essentially for worthwhile living in society. Much of the content of this knowledge is drawn from the realities of the learner's own environment. This would enable him to better understanding his environment, and consequently function in its more effectively.

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