

**REVIEW ARTICLE**

**Education for Sustainable Development: A Global Agenda for the 21<sup>st</sup> Century**

**Fekede Tuli\***

*Abstract*

*It is beyond the shadow of doubt that the environment is endangering the very survival of the human being and the living thing in general by showing its various manifestation and adverse facets in the form of extremity of climatic condition and others because of our (human) action to the environment. In response to this, there is a growing body of literature which argues that the problem should be approached with education. Therefore, this review paper describes briefly the environmental problem, sustainable development and the role that education play in combating the environmental problem by linking education with sustainable development.*

**INTRODUCTION**

Driven by technological advances and new innovations strong economic growth experienced over the past 100 years has been accompanied by gains in material welfare in the world. This economic growth is based on classic economic concept that air and water are free resources and that land and minerals are infinite (Sjostedt, 1993). The consequences of this kind of development directly or indirectly threaten the world with environmental pollution and scarcity of natural resource which inturn affect the health and stability of the human kind. These problems have grown from local to regional to international and global problems and became issues of developed and developing countries.

Because of environmental problems (climate change, airborne toxins, pollution of air and water, solid waste management, global warming, loss of biodiversity, ozone depletion, resource depletion, acid rain etc), for which the human action is the major agent, the environment become endangering the very survival of the human being and the living things by showing its various manifestation and adverse facets in the form of extremity of climatic condition and others. Even though, there is a variation in nature, magnitude and complexity of the problem all countries of the world would be exposed to these problems because of the transboundary

---

\* *Department of Pedagogy, Jimma University Jimma, Ethiopia*  
E-mail:gemedafe@yhoo.com

nature of the problems. These problems become exacerbated and gain the attention of United Nations and International Community so that ways to the solutions of the problems will be designed.

Although there is no one single root regarding the development of environmental concern (UNESCO, 1988), the environmental movement strongly began in the late 1960's, the time that the worldwide public faced serious difficulties to imagine the future of society, with the great concern about the rapid growth of world population and the disruption of the environment by the progress of industrialization in the world (Nakayama, 2006). This led to the first United Nations conference held in Stockholm in 1972 on Human Environment with the attendance of 113 nations, UN agencies and non governmental organizations. The Stockholm conference discussed the various aspects of environmental problems, adopted the declaration on human environment and approved a wide ranging action plan (UNESCO, 1988) and saw the role of education to be that of promoting new perceptions to guide the new patterns of behavior between man and environment and between man and man (UNESCO, 1977). The original concept of sustainable development has a long rooted history discussed at the Stockholm Conference on Human Environment held in 1972 (Nakayama, 2006). However, it was not until 1987, after the report of the World Commission on Environment and Development, that sustainable development gained world attention (Chan Lean Heng, 2006).

### **SUSTAINABLE DEVELOPMENT**

A concern for sustainability arose as numbers of people realized that the degradation of the environment would

seriously undermine our ability to ensure expanding prosperity and economic justice (Richard, Clugston and Calder, 1990). The most frequently cited definition of sustainability came from the report of the World Commission on Environment and Development, in its description of new directions for "our common future." Sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). Sustainable development (SD) has three components: environment, society and economy that are intertwined and not separate (Mckeown, 2002). Therefore, achieving sustainable development will require balancing environmental, societal, and economic considerations in the pursuit of development and an improved quality of life. Failure to address any one of these makes it impossible to address the others. A health society needs healthy environment to have clean air, food and resource for survival. To this end, it is better to think about sustainability from any of these three perspectives.

The 1992 Earth Summit marked the beginning of an unprecedented effort to understand and work toward achieving 'sustainable development', addressing human needs holistically by integrating environmental, economic and social goals (Cheriyen, 2005). The World Summit on Sustainable Development (WSSD) held in Johannesburg (2002) re-emphasized the vital role of education, not only in building awareness of the need for sustainable development, but in fostering the necessary changes to bring it about at all levels. As a continuation of this the UN launched the UN Decade of Education for Sustainable Development which lasts from 2005-2014 (UNESCO, 2005a).

**Environment**

- protect and enhance
- efficient use of resources
- efficient use of energy

**Economy**

- sustainable
- innovative
- productive
- high levels of employment

**Society**

- justice
- social inclusion
- sustainable communities
- personal well-being

Adopted from Website accessed at <http://www.dfes.gov.uk/>

**ROLE OF EDUCATION**

It is widely agreed that education is the most effective means that society possesses for confronting the challenges of the present and future. It will also shape the world of tomorrow. Progress increasingly depends upon the product of the educated mind, research, invention, innovation and adaptation (UNESCO, 1997). It is also stated in Ethiopian Education and Training Policy (1994) as a very important factor to human development. Lockheed and Verspoor (1991) assert that education is a corner stone of social and economic development.

Education serves society in a variety of ways. The goal of education is to make people wiser, more knowledgeable, better informed, ethically responsible, identify harmful practice and replace them by useful ones, strengthen individuals and societies problem solving capacity, realize their full potential and participate meaningfully in society and capable of

continuing to learn. According to UNESCO (1997:16)

*Education serve the society by providing a critically reflection on the world especially it's failing and injustice and by promoting a greater consciousness awareness, exploring new visions and concepts and inventing new techniques and tools. It is also a means for disseminating knowledge and developing skills for bringing about desired changes in behaviors, values and life styles and for promoting public support for the continuing and fundamental changes that will be required if humanity is to alter its course, leaving the familiar path that is leading towards growing difficulties and possible catastrophe, and starting the uphill climb towards sustainability. Education, in short, is humanity's best hope and*

*most effective means in the quest to achieve sustainable development.*

It is also the most effective means in the quest to achieve sustainable development. Having such abilities and qualities, which is gained from education, would help to cope with the world's problems. With a great understanding of the function that education has to the society and to the nation as whole, the world is striving to deliver education to every child.

### **Education for Sustainable Development**

According to UNESCO (2002) Education for sustainable development emphasizes a holistic, interdisciplinary approach to develop the knowledge and skills as well as changes in values, behavior, and lifestyles and empower everyone, young and old, to make decisions and act in culturally appropriate and locally relevant ways to redress the problems that threaten our common future. Education for sustainable development (ESD) is a dynamic concept that utilizes all aspects of public awareness, education and training to create or enhance an understanding of the linkages among the issues of sustainable development. It addresses learning skills, perspectives, and values that guide and motivate people to seek sustainable livelihoods, participate in a democratic society, and live in a sustainable manner. ESD also involves studying local and, when appropriate, global issues. It gives opportunity for every person to benefit from educational opportunities and to learn the lifestyles, behaviors and values necessary to create a sustainable future. It is a vision of education that seeks to balance human and economic well being with the earth's natural resources. This vision of education helps students to better understand the world in which they live, addressing the

complexity and interconnectedness of problems such as poverty, wasteful consumption, environmental degradation, urban decay, population growth, gender inequality, health, conflict and the violation of human rights that threaten our future and also seeks to empower people to assume responsibility for creating a sustainable future.

### **CONCLUSION**

In the 21<sup>st</sup> century we are inheriting systems of industrial and technological growth that are simultaneously destroying or depleting much of nature and endangering human and non-human species, while offering the highest material standard of living and rate of consumption ever known. These modern systems of industrial and technological development must be re-imagined and re-created in ways that no longer rely on non-renewable natural resources, use of natural resources at non-sustainable rates, or cause harm to people or the natural world, at the present or in the future.

It is recognized that Environment problems cannot be resolved by looking at only technological solution. Thus, in order to resolve the problems society must turn his face to education and act in a new way. The path to development should be approached with a great awareness and understanding of our action to the Environment. To this end, education is considered to be crucial for sustainable development (McKeown, 2002) and improvement of the capacity of the people and address Environment and development issues in any country, developed or developing. It also plays a significant role in changing the behavior of people towards their environment. To accomplish this task, it should be related with the environment. Rush, Wharfe, Collins and Thomas (1999) underlined that the "Fundamental to the development of

EE has been the relationship between education and environment"(p.22). Furthermore, Sterling (1996), in Rush et al. (1999), discussed the relationship and the need for the reorientation of education if education for sustainability is to succeed. He also underlined, "Education is proclaimed at a high level as the key to more sustainable society, and yet it daily plays a part in reproducing an unsustainable society. If it is to fulfill its potential as an agent of change towards a more sustainable society, sufficient attention must be given to education as the subject of change itself" (p.20).

The UN has been working to provide a new approach for current practice in Education which leads toward more sustainable future. This new approach attempts to move beyond education in and about the environment to focus on equipping students with the necessary skills to be able to take positive action to address a range of sustainability issues. Governments, countries or nations must take international obligations in the field of the environment, and its concerns to consider the provision of education for sustainable development (ESD) in all sectors of formal and informal education.

The educational system of any country, developed or developing, must be headed into the 21st century to bring social transformation that will be equitable with the demand of the time and involves both students and institutions in reflecting on how they currently live and work. It must also assist peoples or learners in making informed decisions and creating ways to work towards a more sustainable world in this changing and challenging world.

## REFERENCE

- Chan Lean Heng, (2006). **Re-orienting Teacher Education for Socially Sustainable Development.** Paper presented at UNESCO Expert Meeting on Education for Sustainable Development: Re-orienting Education to Address Sustainability held from May 1 – 3. Bangkok. Thailand.
- Cheriyian, G. (2005) **Education for Life, Through Life, Throughout Life.** People's Reporter. Mumbai, India.
- Lockheed E. Marlaine and Verspoor M. Adriaan (1991) **Improving Primary Education In Developing Countries.** World Bank. Washington DC.
- McKeown, R. (2002). **Education for Sustainable Development Toolkit.** Retrieved August 8, 2008 from web site: <http://www.esdtoolkit.org>
- Nakayama, S. (2006). **Redefining the General Concept of Education for Sustainable Development on Environment and Economic Perspectives.** Paper presented at UNESCO Expert Meeting on Education for Sustainable Development: Re-orienting Education to Address Sustainability held from May 1 – 3. Bangkok. Thailand
- Richard M. Clugston and Wynn Calder. (1999). **Critical Dimensions of Sustainability in Higher Education.** Peter Lang. Washington, D.C.
- Rush, et al. (1999). **Towards a set of principles for effective environmental education: Strategies, programmes, and their evaluation.** Retrieved September 10, 2008 from web site: [http://www.adobe.com/rdrmessage\\_CP DFO4\\_ENU](http://www.adobe.com/rdrmessage_CP DFO4_ENU)
- Sjostedt, G. (1993). **International Environmental Negotiation.** London. Sage Publication.

TGE, Transitional Government of Ethiopia.  
(1994). **Education and Training  
Policy**. Addis Ababa. Ethiopia.

UNESCO. (1988) **Environmental  
Education: a Process for Pre-Service  
Teacher Training Curriculum  
Development**. EES 26, ED-88/ws/40.  
UNESCO.

\_\_\_\_\_ (1997). **Educating for  
Sustainable Future: A Tran  
disciplinary Vision For Concerted  
Action**.EPD-97/CONF.401/  
.UNESCO.

\_\_\_\_\_ (2002) **Education for  
Sustainability from Rio to  
Johannesburg: Lessons  
Learnt from a decade of  
commitment**. UNESCO. Paris.

\_\_\_\_\_ (2005a). **United Nations  
Decade of Education for  
Sustainable Development  
2005-2014, International  
Implementation Scheme**.  
UNESCO, Paris, France.

UNESCO-UNEP.(1977).

**Intergovernmental Conference  
on Environmental Education**.  
UNESCO. PARIS.

The World Commission on Environment  
and Development (1987). **Our  
Common Future**.

Oxford: Oxford University Press.