

**ENVIRONMENTAL EDUCATION AND SUSTAINABLE DEVELOPMENT**

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**ABSTRACT**

This paper discusses the connection between environmental education and sustainable development. This paper also discusses the objectives, goals, and role of environmental education for sustainable development and as well as the challenges and approaches for attaining sustainable development. Environmental education provides the basic building blocks for the study of natural surroundings, resources, use of natural resources, different environmental issues, preventive measures to solve such issues and sustainable development. In order to sustain the environment, people have to develop knowledge, skills and positive attitudes on how to interact with the environment in a sustainable manner. Sustainable development ultimately depends on awareness and environmental concern of people, and also on their capacities as individual and groups to improve their own lives and to take greater control over their own destinies. Environmental education is contended to be a critical tool for achieving sustainable development. Environmental education holds that sustainable development is possible and warns against indiscriminate development that disregards ecological balance.

**KEYWORDS-** Education, Environmental Education, Sustainable Development

**INTRODUCTION**

“Education is the most powerful weapon you can use to change the world.”

Nelson Mandela

A nation’s future depends on a healthy environment and also on the judicious use of natural resources as well as on the proper use of man power, but in the present scenario, due to anthropogenic activities environmental degradation is in an alarming rate and it results in various environmental issues such as global warming, ozone layer depletion, greenhouse effects, raise in sea

water level, improper monsoon and acid rain. The rapid changes in industry and technology have caused various environmental problems. Natural resources are decreasing due to rapidly increasing population, industrialization and the variation of the consumption habits with each passing day. As environmental problems become more complicated and difficult to manage, there is an expanding requirement for development in community realization of environmental education and policies related to environment (Govindaswamy, 2001).

In order to sustain the environment, people have to develop knowledge, skills and positive attitudes on how to interact with the environment in a sustainable manner. It is important therefore for children to know the environment in its totality so that they can value it, because one cannot value something that one does not know. Knowledge about the environment and skills on how to live in the environment sustainably can be acquired through education which is referred to as environmental education (Kimaryo, 2011).

#### **ENVIRONMENTAL EDUCATION**

In the 1970s, the international community began to explore how education should address pressing environmental and development challenges. An international vision for Environmental education was first described in the Belgrade Charter of 1975, which outlined goals, objectives, principles, and the target audiences for environmental education (UNESCO-UNEP, 1975). These ideas were expanded at the 1977 Intergovernmental Conference on Environmental Education (ICEE) in Tbilisi.

According to the Tbilisi Declaration (UNESCO, 1978), environmental education which is described as training durations enhances people's knowledge about the environmental problems. With environmental education, individuals are grown that have sensitive, conscious and attendees about the environmental issues (Alaydin, Demirel , Altin , & Altin, 2014).

The following set of statements about environmental education is based upon the Tbilisi Report Recommendation 2 (1978) i.e. Environmental Education is:

- A life-long process.
- Inter-disciplinary and holistic in nature and application.
- An approach to education as a whole, rather than a subject.
- Concerns the inter-relationship and interconnectedness between human and natural systems.

Environmental education is a process of developing a world population that is aware of and concerned about the total environment and its associated problems, and which has the knowledge,

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skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones ( Alaydin, Demirel , Altin , & Altin, 2014).

Final report of the Tbilisi conference set out three goals of environmental education, clearly reflecting those identified at Belgrade. They are:

- To foster clear awareness of, and concern about, economic, social, political and ecological inter-dependence in urban and rural areas.
- To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.
- To create new patterns of behaviour of individuals, groups, and society as a whole, towards the environment (The Tbilisi declaration, 1977).

The objectives of environmental education includes

- Awareness to help individuals and social groups acquire an awareness of and sensitivity to the total environment and its allied problems.
- Knowledgeable to help individuals and social groups acquire basic understanding of the total environment, its associated problems and humanity's critically responsible presence and role in it.
- Attitude to help individuals and social groups acquire social values, strong feelings of concern for the environment and the motivation for actively participating in its protection and improvement.
- Skills to help individuals and social groups acquire the skills for solving environmental problems.
- Evaluation ability to help individuals and social groups evaluate environmental measures and education programmes in terms of ecological, political, social, aesthetic and educational factors.
- Participation to help individuals and social groups develop a sense of responsibility and urgency regarding environmental problems to ensure appropriate action to solve these problems (Amuyou, Okon, & Oko, 2013).

Environmental education aims to provide opportunities to engage in exploratory learning in order to develop environmental awareness, knowledge, values, attitudes, and skills needed to make informed and responsible choices that protect human health and the environment (Karimzadegan, 2015).

Environmental education involves learning about the natural systems that sustain life and how those systems are affected by human activity. Environmental education raises public awareness of the environmental consequences of our actions. It considers the environment as a subject for

investigation and includes the development of knowledge about the environment, environmental issues and problems, and the development of appropriate technical and intellectual skills to address environmental problems (Kimaryo, 2011).

### **SUSTAINABLE DEVELOPMENT**

Education has made many valuable contributions to societies and development globally. Quality education should prepare societies to actively participate in global politics and economics, as well as provide people with the skills necessary to make informed decisions and take responsible actions with regard to environment and development. Throughout the world, societies have recognized education as a key component of sustainable development (Reilly, 2008).

Sustainable development is a difficult concept to define; it is also continually evolving, which makes it doubly difficult to define. The origin of the term Sustainable Development lies in the 18th century and was actually used in forestry. In those times, it was only allowed to cut down a certain number of trees so that a long-lasting protection of the tree population was guaranteed. This method ensured a continuous supply of wood without reducing resources for forthcoming generations (Ebner & Baumgartner, 2006).

In 1987, the World Commission on Environment and Development defined Sustainable Development as an ethical concept and has become the major definition of Sustainable development:

“Sustainable Development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This definition contains within it two key concepts:

- The concepts of “needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given and the idea of limitations imposed by the state of technology.
- Social organisation of the environments ability to meet present and future needs (Ebner & Baumgartner, 2006).

Although the original definition by the Brundtland Commission from 1987 does not make such a distinction, sustainable development has later become perceived as a combination of three dimensions or ‘pillars’, namely: The environmental (ecological), economic, and social dimensions. Since the Rio conference in 1992, this tripartite description has constituted the basis for most of the generally accepted definitions of sustainable development in international organizations (Lehtonen,

2004).

#### **PRINCIPLES OF SUSTAINABLE DEVELOPMENT**

The Rio Declaration on Environment and Development fleshes out the definition by listing 18 principles of sustainability.

- People are entitled to a healthy and productive life in harmony with nature.
- Development today must not undermine the development and environment needs of present and future generations.
- Nations have the sovereign right to exploit their own resources, but without causing environmental damage beyond their borders.
- Nations shall develop international laws to provide compensation for damage that activities under their control cause to areas beyond their borders.
- Nations shall use the precautionary approach to protect the environment. Where there are threats of serious or irreversible damage, scientific uncertainty shall not be used to postpone cost-effective measures to prevent environmental degradation.
- In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process, and cannot be considered in isolation from it. Eradicating poverty and reducing disparities in living standards in different parts of the world are essential to achieve sustainable development and meet the needs of the majority of people.
- Nations shall cooperate to conserve, protect and restore the health and integrity of the Earth's ecosystem. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.
- Nations should reduce and eliminate unsustainable patterns of production and consumption, and promote appropriate demographic policies.
- Environmental issues are best handled with the participation of all concerned citizens. Nations shall facilitate and encourage public awareness and participation by making environmental information widely available.
- Nations shall enact effective environmental laws, and develop national law regarding liability for the victims of pollution and other environmental damage. Where they have authority, nations

shall assess the environmental impact of proposed activities that are likely to have a significant adverse impact.

- Nations should cooperate to promote an open international economic system that will lead to economic growth and sustainable development in all countries. Environmental policies should not be used as an unjustifiable means of restricting international trade.
- The polluter should, in principle, bear the cost of pollution.
- Nations shall warn one another of natural disasters or activities that may have harmful transboundary impacts.
- Sustainable development requires better scientific understanding of the problems. Nations should share knowledge and innovative technologies to achieve the goal of sustainability.
- The full participation of women is essential to achieve sustainable development. The creativity, ideals and courage of youth and the knowledge of indigenous people are needed too.
- Nations should recognize and support the identity, culture and interests of indigenous people.
- Warfare is inherently destructive of sustainable development, and Nations shall respect international laws protecting the environment in times of armed conflict, and shall cooperate in their further establishment.
- Peace, development and environmental protection are interdependent and indivisible (McKeown, 2002).

Sustainable development has been promoted since its inception over 20 years ago as an effective means to abate the degradation of human and environmental systems. The United Nations defines sustainable development as a development strategy that focuses on meeting the demands and needs of present-day citizens without compromising the future's ability to meet theirs (Sauve, 1996).

#### **ENVIRONMENTAL EDUCATION AS AN ESSENTIAL COMPONENT FOR SUSTAINABLE DEVELOPMENT**

For the past one decade much effort was expended in the global level to achieve sustainable development. In spite of conducting more number of conferences, seminars and world summits towards the protection of environment, the present world is environmentally less sustainable than in the previous days. The reason is very predictable that there is lack of skilled and aware citizens about proper use of natural and human resources. The citizens must be empowered with essential knowledge and information. The awareness among the public can be achieved through environmental education (Borojevic, Petrovic, & Vuk, 2014).

Environmental education has been identified as an essential component for sustainable development worldwide. It plays a vital role in successful sustainable development. Environmental education puts students in direct contact with nature in order to develop love for all life forms. It also provides students with the knowledge, skills, and experiences essential to become successful community leaders, as well as making intelligent decisions pertaining to the management of their natural resources, because throughout the world, natural resources are increasingly under greater human pressures, and increased environmental education is viewed as an important strategy to protect these resources (Reilly, 2008).

Environmental education goes through various stages of formal and non-formal education. Environmental education is not limited to ecology or to the study of natural sciences. Learning about living organisms, their habitat and how they interact with each other and with the environment in which they live, is an important part of environmental education, but is not all (Sabo, 2011).

There is no one universal approach on how environmental education can be included in the school curriculum or educational programmes. There are various ways in which this can be implemented. Environmental education can be included into the school curriculum as an independent subject, or it can be treated as a cross-curricular issue permeating the whole curriculum hence integrated into existing subjects, or it can be taught as a theme organized around significant issues and problems. Although the three approaches are different, they can be appropriate for the teaching of environmental education in schools and other educational institutes, but it depends on the contexts in which they are applied and also they both have their strengths and weaknesses (Jackson, 1992).

On the basis of the objectives of environmental education the United Nations conference on environment and development held in Rio in June 1992, stressed the importance of environmental education. Chapter 36 of Agenda 21 states 'there is need to increase people's sensitivity to, and involvement in finding solutions to environment and development problems'. Education give people the environmental and ethical awareness, values and attitudes, skills and behavior needed for sustainable development.

The key educational concepts which flow from these objectives are: awareness, knowledge and understanding; skills; values and attitudes; and, practices and behaviour. From an educational perspective, behavioral change arises from the interaction of learning in each of these areas. Development is about improving the well-being of people. Raising living standards and improving

education, health, and equality of opportunity are all desirable and are essential components of economic development. So that sustainable development must be a pro- active strategy to develop sustainability. Sustainable development requires mobilizing governments, the private sector, and the general public toward sustainable communities (Amuyou, Okon, & Oko, 2013).

By including environmental education in curriculum it may use as an effective instrument for creating consciousness of ecological balance that development need not necessarily degrade the natural environment. Environmental education holds that sustainable development is possible and warns against indiscriminate development that disregards ecological balance. It aims at creating a future society where people are aware of their civic responsibilities and are ready to play useful roles as producers and citizen's conscious of their environmental impact (Robinson, 2013).

Environmental education is a critical tool to counter environmental problems with the goal of protecting and conserving the environment. So, environmental education must look outward to the community. It should involve the individual in an active problem solving process, and it should encourage a sense of responsibility commitment to build a better future with regard to environment sustainability, because environmental sustainability leads to sustainable development.

## **CONCLUSION**

Environmental education should constitute a comprehensive lifelong education, on responsive to changes in a rapidly changing world. It should prepare the individuals for life through an understanding of environmental problems. Environmental education should be started in the family, continued in kindergarten, school, university etc. This is because a real protection of nature will be possible only when the people will change their mentality and will be aware that they live because of nature and not vice versa. Environmental education should be provided for all ages at all levels, and both in formal and informal education. Environmental education give people the environmental and ethical awareness, values and attitudes, skills and behavior needed for sustainable development. We cannot live without environment; even we invent any "tricks". If we take this into account, the environmental problems will be acknowledged and internalized and the effects will be visible. So, it is the need of the hour to propose environmental education with the essential elements of moral philosophy.

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