

Environmental Education

Albert Horo

DESSH, Regional Institute of Education, Ajmer, Rajasthan, India

Abstract: Environmental problems are basically concerned with an understanding of the environmental mechanism which includes the people. The environment issues are being studied by ever increasing number of disciplines, institutions and individuals. Environment Education is in one sense an integrating discipline bringing together teaching in science, social science, mathematics, to name a few. At the same time it is a perspective – a way of looking at things of analyzing and evaluating. It has during the past decades that an awareness of the need for a harmonious relationship with nature as becomes concretized. While Science has been responsible for the larger extent of damage done to ecology, abetted to a great degree by men's innate avarice, it is nonetheless science itself that has pointed out the damages inflicted on Nature and man's ecosystem in all these centuries of exploitation. Environment Education has finally come home to stay as a permanent component of the school curriculum.

Keywords: Environment, Disaster Management, Curriculum, Conservation.

The environment crisis is an outward manifestation of a crisis of mind and spiritthe crisis is concerned with the kind of creature we are and what we must become in order to survive.

Lynton K. Coldwell

I. INTRODUCTION

The foundation of this understanding within the school system and curriculum are one of the indispensable structures and frameworks through which the section of school going children can be reached and addressed. After the *Tbilisi Conference* (1977) call for consciousness of the environmental problems and understanding about the interrelationships between environment and human beings was recognized. Environment has been an area of great concern to our society and on the other hand Education is an active process with a positive approach. Education makes an individual sensitive to own surroundings and enables to relish values in life and inculcate in a catholicity of outlook. Environmental factors shape the individuals development. Education thus means much more than giving mere instruction. It brings out the capabilities and potentialities of the child and channelises them mere towards a higher and nobler life. Everyday a group add to the already, overcrowded number. Perhaps this has never been so much attention on a single focus.

However, the inquiry has been from different angles and of course not always for the betterment of environment or for the society per se. Different aspects of deploring environment real or imaginary, has become a source for bargaining funds, importing or demounting technologies or even for accusing other states. As a result, new breeds of eco-diplomats have

cropped up. We as viewers and readers already have preconceptions of the nature of environmental education. Many are those who are mainly some effort in this direction. What we are battling is, however, a truculent, intransigent enemy- ourselves. The processes of rampant technology, changing mode of land use, irrational consumerism, and indifference toward destruction of nature have been long cultivated, so that the education process must indeed depend upon more than good intentions.

Environmental Education ("EE") refers to organized efforts to teach about how natural environments function and, particularly, how human beings can manage their behavior and ecosystems in order to live sustainably. 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

Environmental education has been considered an additional or elective subject in much of traditional K-12 curriculum. At the elementary school level, environmental education can take the form of science enrichment curriculum, natural history field trips, community service projects, and participation in outdoor science schools. In secondary school, environmental curriculum can be a focused subject within the sciences or is a part of student interest groups or clubs. At the undergraduate and graduate level, it can be considered its own field within education, environmental studies, environmental science and policy, ecology, or human/cultural ecology programs.

"Environmental education is to teach the facts about the environment. It can teach people our relationship to other parts of nature...."

www.eubios.info/biodict.htm

"Environmental education refers to organized efforts to teach about how natural environments function and, particularly, how human beings can manage their behavior and ecosystems in order to live sustainably....."

en.wikipedia.org/wiki/Environmental_education

According to the International Union for the Conservation of Nature (IUCN 1971), environmental education (EE) is:

"... the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among men, his culture and his biophysical surroundings. EE also entails practice in decision-making and self-formulation of a code of behavior about issues concerning environmental quality."

The 1977 Tbilisi Conference, which followed soon after the launch of the United Nations Environmental Programme (UNEP), is known to have spearheaded clarification on the nature of environmental education. This conference resulted in a declaration which listed seven directive principles for environmental education (EE) programmes. Such as---

- EE is a lifelong educational process that occurs at all levels of education.
- EE is about the interactions which occur in the natural, the built and social environment. It should lead to the understanding of how human interactions and political processes, together with the nature of socio-economic issues and the effect of these on environmental degradation or enhancement
- EE is for developing attitudes and value systems which lead to socio-economic improvement through positive social interactions and the maintenance and improvement of the natural and built environment.
- EE aims to develop an individual's understanding, skills and the feelings of empowerment that are necessary for both positive behaviour towards the biophysical and social environment in everyday living, and for active participation in group efforts to find the optimal solutions for environmental problems.
- EE requires a holistic and preferably interdisciplinary approach to teaching with opportunities for diverse learning experiences, but with particular emphasis on direct experiential learning in natural, built and social environments.

Environmental education is therefore not only the concern of natural scientists, but draws from the tools and resources of a wide range of disciplines in order to demonstrate the root of current problems and suggest ways in which learners could either prevent or remedy these.

It can hardly be gains aid that environment influences ones education and environment can be described as follows-

- Education creates the urge for a clean environment
- It inculcates in the young minds the basic principles of sanitation and hygiene.
- It helps pupil and students appreciate the need for conservation of our multifaceted heritage.
- It teaches newer and environmentally safe technologies.

II. PHILOSOPHY AND OBJECTIVES OF ENVIRONMENTAL EDUCATION

It is vital to effectively educate man regarding his relationship to the total environment, the relationship which is based on the mutuality of respect rather than on superior-sub-ordinate relationship. Hence major of environmental education should be to help individual acquire-

- A class understanding that man is an inseparable part of the biosphere which consists of man and his built in environment, the existing biophysical environment, and the sustenance of the ecological balance.
- A broad understanding of the biophysical environment and its importance to human race.
- A fundamental understanding of the nature of environmental problems confronting man, how these problems may be slurred, the basic responsibility of the society and government to work, for solving such problems.
- Development of environmental ethics which will motivate people to participate in decision making process and to demand for a protection of the environment so as to advance human welfare and dignity.

These goals are derived from the philosophy of environmental education which assets that man is an integral part of the ecosystem from which he cannot maintain a separate existence. Within this system, the man's culture, values, his organization, scientific and technological knowledge, and social arrangement are elements through which man interacts with the biological environment. Man uses and exploits resources available in biosphere towards his immediate gain. An understanding of the use and exploitation of such resources by man is essential.

In addition, a strong understanding of the impact of man-made components on the impact of man-made components on the functioning of the biophysical environment is necessary. Such an understanding can be sustained through an educational process which highlights the scientific and technological explanations of the factors which cause pollution; kind of pollution, and law including pollution control policies and programmes, natural resource management, techniques, and what remedies are available for them to fight for protecting the environment. It is through the educational process that man's attitude towards environment is to be shaped. Hence, the environmental education should aim to-

- Provide factual information to students which will lead to the understanding of the intricate system of ecological balance, and man's place in it.
- Develop a concern and respect for the environment
- Inform people as to how they can play an effective role in protecting the environment by demarking changes in laws and enforcement system.

In other words the crucial aim of environmental education is the development of behavior which is in accordance with environmental needs. This mean is to transfer knowledge and experience into everyone's life. Therefore EE should be related to the problems as they exist in the pupils, immediate living environment. On the one hand it is finding concrete solutions to problems and on the other hand, at providing for

the participation of the teachers and pupils in a practice-orientated teaching and learning process. (Habrigh 1981)

III. WHY ENVIRONMENTAL EDUCATION

It is difficult to find a newspaper today that doesn't have at least one story on environmental problems. When I saw yesterday's paper including with social issues such as, Allahabad a hub of sex – tests! , Aarushi episode, Md. Asif faces drug charge in Dubai..., being a geographer an eye catching title which I found on front sheet was Sai's (a so called perennial river formerly originating from Hardoi and merging into the Gomati in Jounpur, U.P) wait for a saviour continues.... If we will ask to any people how will you feel when there is no existence of the mightiest holy river Ganga? See, a stretch and an abstract pain on his or her face. 'Radio Mirchi' is imparting an imparting role to generate awareness among the people striking on human minds and heart with the help of advertisement. Ultimately if we are panic about the changes of nature then what about our responsibility? In school days our teacher taught us that 'Resources are unequally distributed on the globe and most of the resources are non- renewable or limited in amount'. Even the resources which are renewable (flow and fund), their quantity and quality are fluctuating according to irrational use by humans. Resources are vital for human survival as well as for maintaining the quality of life. It was believed that resources are free gift of nature. As a result, human beings used them indiscriminately and this led to the following problems--

- Depletion of resources for satisfying the greed of few individuals.
- Accumulation of resources in few hands, which, in turn divided the society into two segments i.e. haves and have not or rich and poor.
- Indiscriminate exploitation of resources has led to global ecological crises such as, global warming, ozone depletion, environmental pollution, and land degradation.

IV. WHAT IMPART IN ENVIRONMENMENT EDUCATION

Environmental Education is a process of recognising values and clarifying concepts in order to develop skills and added tools necessary to understand and appreciate the inter-relationship among man, his culture and his bio-physical surrounding. It creates an overall perspective, which acknowledges the fact that natural environment and man-made environment are interdependent. It should consider the environment in its totality and should be a continuous lifelong process beginning at the pre-school level and continuing through all stages. It should be inter-disciplinary and examine major environmental issues from local, national and international points of view. It should utilize various educational approaches to teach and learn about and from the environment with stress on practical activities and first-hand

experience. It is through this process of education that people can be sensitized about the environmental issues.

Ministry of Human Resource Development (MHRD), the Ministry of Environment & Forests has been interacting with the MHRD, NCERT, State Departments of Education etc. to ensure that environmental components are adequately covered at the school levels by infusion into the school curricula at various levels. Though there are several courses on environmental sciences at present in the formal system, there are no structured courses available outside the formal system for people who desire to learn about environmental issues. The Ministry has taken an initiative in this regard and it presently working out a frame work for environmental appreciation courses in consultation with IGNOU. Realising that the industry Managers and leaders need to be sensitized towards environmental issues and concepts of Environmental Management so that they can play an important role in introducing environmentally sound practices in their operations, the Ministry has taken an initiative to introduce/enhance environmental concepts in the Business/Management Education. A committee comprising representatives from Management Institutions, AICTE, UGC, Industry and MoEF is already looking into various aspects like course content and syllabi of the existing courses so that gaps could be identified and suggestion could be given for enhancing/introducing the environmental content where necessary.

V.HOW ENVIRONMENT EDUCATION SHOULD BE IMPARTED

A major source of hope is our youth. One can hope that they will respond in coming generations to transform technological impact and assorted other ills, achieving ultimately a reasonably balance between MAN and NATURE. The inheritance of teeming cities, polluted air and water, refuse-filled streets, giant dome of garbage, open mouth of slums, deforestation, soil erosion, and so on, must be improved, and education will made a necessary contribution. One of the critical audiences, where these seeds can be sown is children, those who represent our forthcoming generation and would take over this planet from us. As we well aware the school system and curriculum are one of the fundamental structure and frameworks within which the segment of school going children can be reached and addressed.

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international points of view. It should utilize various educational approaches to teach and learn about and from the environment with stress on practical activities and first-hand experience. It is through this process of education that people can be sensitized about the environmental issues. Seriously it has become a challenge for us to familiar with our environmental issues and contributing collectively for improving our quality of life. This can only be possible through imparting both formal and informal environment education to each of us young and old and transcending classes of people.

Under this project, which was initiated in 1999, an exercise to strengthen environment education in the formal school curriculum has been undertaken. During the first phase of this project, a comprehensive study was conducted to assess the status of infusion of environment content in the school curriculum in the country and to assess the effectiveness of classroom teaching. The study was conducted in all the States/UTs of the country and textbooks of all the classes from standards I to XII were analyzed. Based on the findings of the study, the textbooks in Science, Social Science and Languages of middle school level in eight States (100 schools in each State) are being modified to strengthen the infusion of environmental concepts. The modified textbooks would be used for one academic session (2002-2003) in the selected schools of the selected States on pilot basis. The concerned teachers of the selected schools would also be trained to effectively teach the modified textbooks. The States participating in this project are Andhra Pradesh, Assam, Goa, Jammu & Kashmir, Maharashtra, Orissa, Punjab and Uttaranchal. Depending upon the success of the pilot implementation, the revised curriculum may be taken up in the remaining schools. The findings of the Phase I study are also being shared with the States/UTs which are not participating in this project so that they can also environmentalise their textbooks.

VI. ENVIRONMENT EDUCATION AS AN INDEPENDENT SUBJECT

UNESCO has an interdisciplinary approach to environmental education (EE), whereby EE embraces all disciplines, and covers all levels and types of education including life-long learning. It is planned and implemented through several programmes and Sectors within the organization.

UNESCO's approach to EE favours enhancement of critical thinking, problem-solving and effective decision-making skills as well as teaching individuals to make informed and responsible decisions. For this reason, it is essential to foster links between EE in the formal curriculum and projects in non-formal education. Projects such as the establishment of environmental clubs in schools, greening of school-yards, environmental awards, journalistic activities and others, are essential to sensitize young people to their immediate environment as well as many other complex issues. The environment is an integral part of science and technology

education. Thus, the Section for Science and Technology Education works on concrete societal issues related to the environment, health and development, focusing on formal and non formal EE in secondary as well as technical & vocational education, and collaborates with other divisions and Sectors of UNESCO which focus on other levels of education. Activities are also developed in collaboration with relevant IGOs, NGOs and governmental organizations.

Many environmental activities and nature-loving educationist in India have been quite vocal critics of a cross-curricular approach to imparting environmental education in school. They are of the view that teaching of environment as part of other subjects does not necessarily stimulate the same curiosity about environment. If thought as a part of other subjects, environment no longer remains the focus. Rather, it becomes an ill- focused component of the subject concerned. Beside these, teachers of various specialized subjects are not trained to impart environment education.

VII. EFFORTS OF GOVERNMENT OF INDIA

After the Tbilisi Conference many countries have started looking into the imparting of EE to their citizens. The judgment of the Supreme Court is one such end. After the tsunami, formation of NIDM is also one such step towards EE. Ministry of Human Resource Development, Government of India in its Tenth Five Year Plan emphasized the need for integrating disaster management in the existing education system in India. In addition, the government of India launched a set of nation-wide disaster risk mitigation initiatives that addresses larger aspects of development in order to safeguard the developmental gains. One of the important initiatives includes disaster management in the curriculum of school and professional education has been recommended to the Boards. Empowering the younger generation on the preventive aspects, the types of services to be rendered in a disaster situation and the need for humane approach form part of the curriculum.

In a first ever attempt by any educational institution in the country, the Central Board of Secondary Education (CBSE) has integrated a short course on Disaster Management in the school curriculum. With nearly 85 per cent of the land area prone to disasters, it is high time the younger generation is prepared to combat disasters

VIII. CONSTRAINTS

The main purpose of introducing environmental study is based on an assumption that the environmental education in the school and colleges can make a substantial contribution to the generations can involve themselves in the process of conservation and management of the rapidly degrading quality of natural environment, which is indispensable for the material, spiritual, and aesthetic well being of people. On the contrary, there are scholars, who question the assumption that

imparting of environment education in schools and colleges will help to improve the environmental health of planet Earth.

“Children are especially vulnerable to the threats posed by natural hazards. At the same time, they can be powerful agents of change, provided they are well armed with knowledge about how to prepare in advance, how to act on warnings and how to reduce at home and in their communities. It is essential, therefore, to make disaster-risk education a component of national school curricula, and to ensure that children understand how natural hazards interact with the environment”

Mr Kofi Annan’s message

International Day for Disaster Reduction

IX. CONCLUSION

Man’s relation with nature is symbiotic. In certain ways he enjoys a chemistry with his environment that not only inspires him but also imbues him with a harmony of mind and heart, actually that owes much which must people close to Nature have experienced ever so often

The role of schools in the community is very important and it would be befitting to call schools as cradles of the society. Children are a dynamic and powerful force of change and are supporters in creating awareness in the community. They can contribute in a unique manner with energy and vision to find local solutions. School children should be encouraged to take up tasks which make them realize their importance as necessary stakeholders in the change process

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