



Climate Change: Effects on Sustainable Livelihoods - Environmental Education and Awareness

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Abstract:

This paper discus about the present context of Environment, climate change and its effects mean while giving awareness to this current topic. Environmental education is a central aspect of the process of change towards sustainable development. It is time we realized that the environment is not just a factor in this game, but a game in itself; a game in which we are all players and on which our future existence depends. Environmental problems such as climate change jeopardize our prosperity and our economic development. We all contribute to environmental problems and, as a result, we can only solve them on the basis of cooperative action. Environmental education, like education for sustainable development, is based on building awareness and identification with personal living environments. It is therefore not merely the conveyance of knowledge, but a process of learning about the concept of political action.

Environmental education is a process that aims at the development of environmentally literate citizens those who can compete in global economy those who have the skills and knowledge and inclinations to make well informed choices concerning the Environment, and those who exercise the rights and responsibilities of the members of a community environmental knowledge contributes to a understanding and appreciation of the society technology and productivity and conservation of natural and cultural resources of their own environment. We need the school children to share and develop the motivation from school about various environmental issues which are the challenges of today and prepare them for the future.

Key Words: Sustainable, Awareness, Inclinations, Productivity, Appreciation.

1. Introduction:

It is our foremost duty to
conserve our environmental

resources. The ultimate goal of
environmental education whether
it is formal or non-formal is to
create awareness among the



citizens of a country. It emphasizes the basic aim of environmental education as, "To develop a world population that is aware of and concerned about the environment, its associated problems, so that the population will have the knowledge, skill, attitudes, motivation and commitment to work individually and collectively towards the solutions of current problems and prevention of new ones" . Global concern regarding the steadily deteriorating state of the environment has emphasized the need for environmental education. Obviously a powerful vehicle bringing about change, a Panacea of all evils and a potent weapon for prevention plays a central role in the society.

India, a country with the seventh largest landmass in the world, is a land of ancient traditions. With over a billion people and at least 17 major languages, the diversity of India in terms of culture and biological wealth is enormous. In spite of rapidly changing lifestyles, the traditions of living in harmony with nature and of environmentally

sound practices underpin the lives of most people. It is against this backdrop that the country's EE strategy has been evolved. The Constitution of India explicitly makes environmental conservation a duty. The Central Government and all states within India now have a Ministry or Department of Environment. Education departments recognize EE as an essential part of education. The law courts of the country have been sympathetic to environmental causes. India has a very large number of very active NGOs who are involved in a variety of activities from policy analysis to school programs; from participatory natural resources management to activism. India continues to be rich in its biodiversity. Agricultural revolution has ensured that food-grain production has not just kept pace with the population increase, but has rather grown faster. With better nutrition and health care, the life expectancy has gone up by almost 3 times since the independence. The per capita



income has grown almost 45 times during this period.

The pursuit of sustainable development and environmental conservation policies, objectives and targets requires the public to be sufficiently sensitized about the multiple dimensions of environment and development. Awareness and understanding of environmental issues provide the basis and rationale for commitment and meaningful action towards environmentally sound and sustainable development. Environmental education is increasingly a prominent part of primary, secondary and tertiary education in Asia and the Pacific. The formal education sector plays a vital role in environmental education and awareness by exposing the younger generation to the information, issues, analyses and interpretations on environment and development.

2. Objectives:

1. To understand environmental education and its importance.

2. To understand the causes for environmental hazards and pollution.
3. To understand the need for remedial ways to protect the environment in daily life and its application.
4. To acquire knowledge of environmental issues and policies in India.
5. To acquire knowledge about the different methods of teaching in environmental Education.

3. Methodology:

Secondary information on the status of environmental education and awareness concept was obtained from government documents, reports and available literature. The nature of the investigation was quantitative and qualitative.

4. Environmental information and awareness:

Environmental monitoring by government agencies and institutions in many countries has focused on certain environmental concerns, such as the quality of air, water and other natural resources.



Monitored data are transformed into information that shows environmental trends and effectiveness of past mitigation measure which are vital for environmental management. This information is also utilized in the state of environment reports; NGOs and community-based organizations also play a significant role in collecting and disseminating information to the community and to all spheres of government. Recognition is growing that many environmental issues and challenges are common to more than one country in the region and that countries and communities can learn from each other in their responses to similar situations and problems.

5. Formal Environmental Education and awareness:

Though formal education is the mandate of the Ministry of Human Resource Development (MHRD), the Ministry of Environment & Forests has been interacting with the MHRD, NCERT, and 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. The major initiatives taken by the Ministry in this direction recently are mentioned below:

6. Environment Education in School System:

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.

7. Non-formal Environment Education and Awareness:

Environmental Education, Awareness and Training plays a significant role in encouraging and enhancing people's participation in activities aimed at conservation, protection and management of the environment, essential for achieving sustainable development. The Ministry, therefore, accords priority for the promotion of non-formal environment education and creation of awareness among all sections of the society through diverse activities using traditional and modern media of communication. Some of the major

activities undertaken in this regard are as follows:

8. National Environment Awareness Campaign (NEAC):

The NEAC was launched in mid 1986 with the objective of creating environmental awareness at the national level. It is a multi-media campaign which utilizes conventional and non-conventional methods of communication for disseminating environmental messages to a wide range of target groups. Under this campaign, nominal financial assistance is provided to registered NGOs, schools, colleges, universities, research institutions, women and youth organizations, army units, State Government Departments etc. from all over the country for organizing/ conducting awareness raising activities. These activities which include seminars, workshops, training programmes, camps, padyatras, rallies, public meetings, exhibitions, essay/debate/painting/poster competitions, folk dances and songs, street theatre, puppet shows,



preparation and distribution of environmental education resource materials etc., are followed by action like plantation of trees, management of household waste, cleaning of water bodies etc. Eco-clubs (National Green Corps):

The main objectives of this programme are to educate children about their immediate environment and impart knowledge about the eco-systems, their inter-dependence and their need for survival, through visits and demonstrations and to mobilize youngsters by instilling in them the spirit of scientific inquiry into environmental problems and involving them in the efforts of environmental preservation.

Since the modification of the scheme in 1993, more than 10,000 Eco-clubs had been provided grants until 2000-2001 in various parts of the country. Considering that the total number of schools covered was grossly inadequate compared to the total number of schools in the country and keeping in view the potential of this programme in sensitizing the school students. It was decided to intensify this

programme to cover each and every district of the country.

The Government of India provides financial assistance for establishment of Eco clubs @ Rs.1000 per Eco-club, Training of Master Trainers, teacher training and distribution of resource materials.

9. Global Learning and Observations to Benefit the Environment (GLOBE):

The GLOBE is an International Science and Education Programme, which stress on hands-on participatory approach. India joined this programme during the August, 2000. This programme, which unites students, teachers and scientists all over the world, is aimed at school children. The students of GLOBE schools are required to collect data about various basic environmental parameters under the supervision of a GLOBE trained teacher and use it for explaining hypothesis as well as to enhance their scientific understanding of the earth. This data is also used by the scientists in



their research work. The GLOBE also provides an opportunity to the students to interact not only with the GLOBE scientists but also with the students from GLOBE schools in other parts of the world. About 100 schools spread over different parts of the country have already joined this programme. The teachers of these schools have also been trained in various GLOBE protocols. An International training workshop for trainers was successfully organized at New Delhi during January, 2002. The participants at this workshop, which included representatives from Nepal and Thailand besides India, were trained in Basic and Advanced GLOBE Protocols by a training team from GLOBE Headquarters in USA.

10. Environmental Communication and Awareness:

Environmental communication has now emerged as strong complementary practice to environmental education. A broad definition of environmental communication would be, "the

sharing of information, insights and opinions on environmental issues, trends, conditions and solutions using any means of communications, ranging from inter-personal methods to means of mass communication using the modern as well as traditional media". In this sense, environmental educators constantly engage in environmental communication. However, an important distinction is that, while all environmental educators are communicators, not all environmental communicators are necessarily educators.

Mass Awareness:

Despite great efforts to spread environmental awareness by the Ministry through several schemes, it is felt that a large population especially in rural areas is still left out. The best way to reach out to them and make them aware of the environmental problems is through media, particularly the electronic media. "Mass Awareness" has therefore been identified as one of the thrust areas of the Ministry, not only to intensify the efforts already being



made in this direction but also to launch new initiatives. The Doordarshan and few other television channels are proposed to be extensively used for telecasting environment based programmes and infomercials. Professional Media agencies which are hired to assist the Ministry in carrying out the campaign also play a major role. To encourage individual efforts in producing films/ documentaries on environment/ wildlife related themes in the country, the Ministry has sponsored organization of a film festival "Vatavaran ♦ 2001" by Centre for Media Studies, Delhi in April 2002.

Awareness Campaigns:

In India, sustained campaign efforts have also used the method of *yatras* or long marches by groups of people – sometimes stretching across hundreds of kilometers – which attract news media interest, and expose thousands of people in communities along the way to the messages of the campaign. Government agencies also use campaigns to rally public support for specific

environmental issues. Singapore has a well established practice of environmental campaigns like the Clean and Green Week, and its calls to Save Energy and Save Water.

Print Media:

Environmental reporting is now well-established within the region's print media, newspapers and magazines. Investigative journalism on environmental issues has resulted in exposing environmentally damaging plans, policies or practices. Newspaper exposures and subsequent public pressure have forced governments, local authorities, industries and others to change their plans, to tighten laws and regulations, and to abandon certain development projects whose environmental and social costs outweighed any benefits. The Nation newspaper has a recognized tradition of covering groundbreaking environmental stories, and the production of a weekly environmental page, Earth Focus. Producing special publications for children is another important strategy.



Broadcast Media:

The broadcast media, radio and television, in all their variations, have established themselves as the most pervasive and powerful forms of mass media in Asia and the Pacific today. They represent a major channel through which information on environment can be conveyed to the people. Recognizing the need for programmes in the regional language and context, major international media groups have associated with regional and national companies. A wide range of activist groups and media organizations also produce television and radio programmes on environmental issues, using the media as a means to raise awareness.

Community Radio: A Growing Cacophony of Local Voices:

Community radio stations are designed to encourage participation by a large representative sample of the various socioeconomic levels, organizations and minority groups within a community. The stations

facilitate the free flow of information and opinions, encouraging freedom of speech and enhancing dialogue. In recent years, there has been an increase in the number of local or community radio stations usually characterized by their low transmission power and restricted audience.

The Internet and World Wide Web:

Recent years have seen the extremely rapid growth and development of the Internet as an information provider. According to the International Data Corporation, the number of Internet Web users in the Asian and Pacific Region will rise from 6.5 million in March 1998 to 29.3 million by the year 2001. However, large disparities in access and use of the Internet exist across the region and in individual nations. Major constraints remain that hinder the rapid expansion in Internet access in developing countries such as: poor telecommunications (lack of working phone lines); an inability to afford computers; and the higher



cost of providing Internet services. However it is predicted that the Internet will move from a minority to a mass medium, with wide accessibility in a short period of time.

Traditional Media:

For many years, environmental communicators have recognized the value and power of using folklore and traditional media, such as, dance, songs, drama, puppetry and miming, to take environment and development messages to the public. Historically, traditional or folk media have often played a role in the communication and promotion of new ideas, apart from its traditional role of preserving and teaching established values. Today, in spite of advances in the modern forms of mass media, many people still relate more readily and easily to traditional media, which are closer to their local cultures, and are often more interactive and participatory than the regular forms of mass media. Various forms of traditional media are being used or adapted to convey environmental

messages to children, communities and specific target groups.

Media and Citizen Volunteers:

Environmental communication and awareness rising is also taking place through citizen volunteers, through the efforts of the corporate sector, and through law and faith-based approaches. Each of these approaches has wide ranging applications across the region. Mobilizing volunteer action is a time-tested tradition in environmental management and activism. Volunteers may be drawn from different sections of society; some will bring in specialized skills and knowledge; others will provide a donation of labor and time. The system has contributed greatly to increasing public awareness of environmental issues through public relations, monitoring, reporting, and by accommodating public views and opinions. While the vast number of people involved was a positive development, it also posed management difficulties.

Working with the Corporate Sector:



Today, environmental communication initiatives often work closely with the corporate sector. Recognizing that business, commerce and industry are key players in achieving sustainable development and equitable growth, environmental educators have started to form partnerships with socially and environmentally responsible corporations. Increasingly, the corporate sector is initiating environmental awareness, communications and education activities on its own, as part of their community outreach or service programmes. In some cases, large corporations underwrite the cost of environmental communications activities initiated by inter-governmental organizations.

Faith and Law based Approaches:

Public interest environmental litigation is increasingly popular in the region. In this, a group of lawyers or an NGO would initiate legal action for and on behalf of a local community directly affected by a specific

instance of environmental degradation. The strengthening of environmental legislation and the increased awareness on environmental rights has fuelled this process.

11. Conclusion:

It is clear that a new surge of interest, enthusiasm and activity is underway on many fronts to place environmental education, training and communication higher on the public agenda in countries of the region. Although a considerable amount of work has been done and achievements, many challenges remain. As many countries of the region struggle to overcome the social, economic and cultural barriers placed on them by poverty and underdevelopment, and at the same time face up to the new challenges of economic globalization, the priority assigned to environmental issues and conservation is at risk of being overlooked or traded off for more immediate benefits, and for survival needs. The environmental educators and communicators of the region need, therefore, to be vigilant and active to ensure that



government, industry and other key players in the sustainable development arena remain mindful of their international and national commitments to environmental conservation, in addition to ensuring that sufficient investments of resources, time and attention are made to consolidate the achievements.

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