Environment Education

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***ABSTRACT*: Environmental degradation is a result of the dynamic inter play of socio-economic, institutional and technological activities. Environmental changes may be driven by many factors including economic growth, population growth, urbanization, intensification of agriculture, rising energy use and transportation. Concern for nature and natural resources is not new for India. There is much need to provide environmental education.**

***Keywords*: environmental degradation, natural resources, environmental education.**

Introduction

Poverty still remains a problem at the root of several environmental problems. Population explosion, poverty and urbanisation are some of the social factors responsible for environmental degradation. To a large extent, environmental degradation is the result of market failure, that is, the non-existent or poorly functioning markets for environmental goods and services. Environment (Protection) Act, 1986 is the key legislation governing environment management. Other important legislations in the area include the Forest (Conservation) Act, 1980 and the Wildlife (Protection) Act, 1972. The weakness of the existing system lies in the enforcement capabilities of environmental institutions, both at the centre and the state.

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 Environmental Education 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. But the environment in India faces several challenges too. With poverty and low literacy levels, over 650,000 primary schools and rapidly increasing population, the development and environmental challenges are enormous. India has made considerable strides in slowing down its population growth. But with all efforts, India's annual population increase is equal to the population of Australia. With about 16 per cent of the world population and a little over 2 per cent of its land, there is already enormous pressure on our resources. But while the population increase puts pressure on resources, the pressure of 'development' is perhaps even greater.

Thus there are many challenges for environmental educators in India. Apart from the obvious ones of helping strengthen environmental management and conservation, one of the important ones is to bring about awareness of the need that the country develops in less wasteful ways than is the current paradigm. EE is one of the tools that can help India a chieve this goal. There are considerable initiatives in EE in India today. There are also several challenges. Some of these are:

1. The challenge, in a large and diverse country, to find the right blend between centralized and de- centralized efforts and approaches
2. The challenge of reaching out to large numbers cost-effectively
3. The challenge of making environmental considerations relevant and meaningful to various groups
4. The challenge of putting EE on the agenda of educational decision makers
5. The challenge of putting sustainable development concerns high on the agenda of policy makers, and
6. Finding and developing human and financial resources for EE.

Protection of the Environment: A Tradition in India

Concern for nature and natural resources is not new for India. Respecting nature and living in harmony with it have long been parts of the Indian civilization. Launching the World Conservation Strategy in India, Prime Minister Indira Gandhi reminded the audience that *"the interest in conservation is the rediscovery of a truth well known to our sages. The Indian tradition teaches us that all forms of life: animal and plant are so closely linked that disturbance in one gives rise to imbalance in the other."* (Indira Gandhi,World Conservation Strategy for India, March 1988). The Indian tradition emphasizes living in harmony with nature.The Bishnois, for example, followers of a Rajput saint,Jambeshwar Maharaj, who lived towards the end of the fifteenth century, emphasize vegetarianism, non-violence, protection of trees and respect for all living things. In 1730, 363 Bishnois of Khejadli village, mostly women and old men, laid down their lives in an effort to protect trees being cut on the orders of the King of Jodhpur. Sacred groves are a unique tradition that has been responsible for islands of biodiversity in various parts of the country. Ashoka's pillar edict, dating back to 272-232 BC, proclaims protection for plants and animals.

Adding to the challenge are the threats of climate change, biodiversity loss and land degradation - concerns which though global in nature, are at the same time of central concern to India's economic and social well being. Thus sustainability poses to be a major challenge to India, requiring amongst other steps, new ways of governing the country's environmental resources.

India's waste lands account for 63.85 million hectares which constitutes 20.16% of the country's geographical area (ICAR and NAAS, 2010). Nearly 43 million hectares of the wastelands are in the reclaimable category, coming as they are cover lands that have lost out on 'productivity' due to biotic or climatic factors. In case adverse climatic and biotic factors faced by agro- ecosystems are not addressed by policies and governance mechanisms, it is likely that the reclaimable category of wastelands, will expand in area with passage of time. With intense rural and urban demographic pressures and unsustainable consumerism, it is likely that the area under wastelands will increase, unless corrective measures are undertaken. In other words, land degradation, agro-biodiversity erosion, depletion of forests. And GHG emissions (emanating from fossil fuel combustion) are matters of concern for national environmental governance as much as they are for the UNCCD, UNFCCC, and the CBD. While at the global levels, the three conventions work independently, at the national level, their concerns need to be integrated into the country's planning and development processes.

Strategies to Maximize Effectiveness and Impact

Recognizing that to fulfil its mandate as a national institution, it would have to develop EE program to address a wide variety of sectors, the thrust areas of Centre for Environmental Education's program include (1) EE through schools, (2) EE through higher education, (3) EE through mass media, (4) EE through experiencing nature, (5) EE through interpretation, (6) EE for environment and development, (7) EE for industry, (8) EE for natural resource management, (8) EE in the urban context, (9) training, and (10) networking. Given the challenges of India's diversity and numbers, CEE's activities and initiatives have been rooted in and guided by certain basic strategies so as to enhance the reach and impact of its programs. These include:

1. People are key:

CEE is built on the belief that ultimately, an organization is as good as the people it is made up of, and that people will give their best when they have the freedom to work and dream.

2. Adaptability: Given the geographical, cultural, social and economic diversity in India, flexibility is an essential basic in the design of programs and materials. Adequate flexibility is built into CEE's educational programs and materials to allow necessary adaptations

3. *Partnerships:* Recognizing that to be effective in a country of the size and diversity of India partnerships are essential, such relationships to utilize complementary strengths of other organizations are built to avoid duplication of effort and to achieve synergy. The importance of involving concerned GOs and NGOs in strategic partnerships is recognized. One example of such a partnership is the school cluster programs. To this end CEE developed a model of close partnerships between the local schools, local NGOs.,State Departments of Education across the country.

4. Multiplier effect: A multiplier effect is built into the design of strategies, in order to achieve maximum reach and impact. For example, in order to capitalize on the reach of mainstream newspapers and magazines, CEE runs environmental news and features service which feeds into the mainstream papers.

5. Making use of existing opportunities: The stress is on using opportunities for education and communication wherever they exist. For example, CEE's interpretive programs at natural and cultural heritage sites and at facilities take advantage of the fact that millions of people visit natural and cultural heritage sites.

6. Use of media and technology: CEE's programs aim to use appropriate technology and media to meet the objectives of EE in any particular situation. The importance of using latest technological developments to leapfrog and achieve a wide reach is recognized.

7. Facilitating networking: In order to facilitate networking, CEE brings out a number of tools including directories, newsletters, bibliographies etc.

8. Not re-inventing the wheel: CEE tries to ensure that its programs do not start from scratch, but rather, that they build on the experiences and learning of other groups. For example Nature Scope India is an adaptation of the American teacher magazine, NatureScope, brought out under an understanding with the National Wildlife Federation, USA.

9. Regional presence: CEE tries to have a presence at key locations, to ensure the reach of the Center's activities to all parts of the country and beyond. CEE, over the years, has set up several regional cells and field offices

10. International experience: Undertaking international collaborations is seen as a way of enhancing the quality, depth and range of programs. Such collaborative efforts include partnerships with agencies, like National Wildlife Federation, USA, State University of New York, US National Park Service, World Resources Institute, USA, Field Studies Council, UK, and International Television Trust for the Environment (TVE), UK and UNESCO-UNEP. CEE is one of the subject matter focal points on EE and training of the South Asia Co-operative Environment Program (SACEP).

11. Identifying key entry points: While CEE's mandate is to reach out across a wide range of target audiences, CEE has strategically selected from within these groups in order to achieve maximum reach and impact. In the case of school programs, it was decided to concentrate on the middle school level, since the barriers to entry to this level are the least, while the possible impact of intervention is very high.

12. Development of EE professionals: Capacity building in order to develop a cadre of professionals to improve the quality of EE, and its contribution to environmental conservation and sustainable development, is seen as a key activity. Capacity building in order to develop a cadre of professionals to improve the quality of EE, and its contribution to environmental conservation and sustainable development, is seen as a key activity.

13. Non-exclusive organizational structure: The organization structure encourages initiative, autonomy, and inter-disciplinary approaches. The conscious effort is to develop different ways of doing things, according to interests, opportunities and expertise.
14. In-house infra-structural support: CEE has built up expertise/facilities, e.g., studios, workshops, printing, editorial services, design services etc., to ensure innovation, research and development (R&D), quality control and excellence.

CONCLUSION

Increased attention to environmental measures will improve efficiency and productivity. For sustainable development, there is much need to protect our environment. Environmental education must be implemented to keep environment safe, and clean.

References

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