

ESD in a developing nation

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The United Nations Environment Programme campaign slogan for World Environment Day 2008 was 'CO₂: Kick the Habit!' The Centre for Environment Education (CEE) was asked by the Ministry of Environment and Forests, Government of India to publicize the campaign in India. At CEE, we asked ourselves the question: "What would such a slogan mean to a person in a village in India who perhaps has never had an electricity connection, and has no running water and no toilet?" Which CO₂-intensive activity was a poor rural Indian family meant to 'kick'? Or take those who live in a city in India. 40 per cent of urban dwellers in India live in slums with no real access to energy-intensive amenities. How are they going to kick a habit that they could never afford to have in the first place? It was obvious that a new slogan was required in India. We then decided to replace the word 'kick' with 'pick' and transformed the campaign slogan into 'CO₂: Pick Right', which urges people to consider the need to make developmental choices that are sustainable.

Earlier in 1992, CEE was asked to prepare India's report to the UN Conference on Environment and Development in Rio, Brazil. In that report we emphasized the fact that the real challenge for a country like India was not 'how to get there' but 'how not to'. By this we meant that while the dominant development paradigm was pulling all developing nations towards achieving living standards that emulated the largely unsustainable lifestyles of the Western developed nations, the challenge for these nations really was to break away from a development approach that was merely imitative of the West and to embark on an alternative development pathway by making choices that were indeed different, appropriate and sustainable — to 'pick right'.

Thus while education for sustainable development (ESD) in developed nations may indeed be designed to retool society and lifestyles by kicking several bad habits, in a developing country, ESD needs to focus more on empowering people by making them aware and giving them the ability, knowledge and self confidence to make sustainable choices. Indeed, empowerment through education and awareness has been at the core of CEE's strategy for ESD in India.

CEE's efforts towards education for sustainable development

CEE was set up as a centre of excellence in environment and sustainability education in 1984 as a partnership between the Ministry of Environment and Forests, Government of India and the Nehru Foundation for Development, a non-governmental organization (NGO). Started initially with a focus on the formal educational system, CEE has evolved ESD strategies in several key programme areas, which highlight how ESD in a developing country must encompass a wide variety of educational situations and opportu-

nities, as well as partnerships with a wide variety of groups. The following reports describe the evolution of these programmes, as well as the slow but steady mainstreaming of ESD as a priority in the country.

1. ESD and the school system

The Indian Constitution states that it is the responsibility of every citizen to protect the environment. In response to public interest litigation, the Supreme Court of India has said that if citizens are to fulfil their duty, they must learn about the environment. As a result, in 2003, a Supreme Court judgment made teaching of environmental studies mandatory for all levels of formal education. The school curriculum therefore needed to be reviewed in this context. Between 1999 and 2000, CEE participated in a massive exercise that analysed all school textbooks in over 15 languages in India to identify the topics through which environmental and sustainability concepts could be introduced or strengthened. Over the next five years (2000 to 2005) all textbooks in the country were revised to include environmental education. The next step was to train teachers in environmental education. CEE played a critical role in training master teachers in all states.

Wildlife and eco-clubs have a long history in India and the National Green Corps programme of the Ministry of Environment and Forests supports eco-clubs in schools. Today there are nearly 100,000 schools enrolled in this programme.

CEE and the Ministry of Environment and Forests have launched a nationwide programme called Paryavaran Mitra, or friends of the environment. Through this, we reach out to nearly 200,000 schools with an ESD programme that focuses on energy, waste management, biodiversity and greening, water, culture and heritage. This programme has resulted in an alliance with the state education departments and industry (ArcelorMittal) and connects schools with grassroots level NGOs.

2. ESD in higher education

Colleges and universities can play a very significant part not only in creating a better understanding of sustainability among their students and making their own campuses sustainable, but also in reaching out to those outside college. CEE has involved students in monitoring the environment. This work leads to the ground truthing of environmental data and is a very instructive scientific activity.



Image: CEE

Young graduates act as 'community entrepreneurs'



Image: CEE

CEE launched a major programme to introduce the concepts of waste segregation and recycling

The concept of the Regional Centres of Expertise (RCEs) was launched by the United Nations University, Institute of Advanced Studies as part of the UN Decade of Education for Sustainable Development (DESD). The objective of the RCEs is to mobilize a network of existing formal, non-formal and informal education organizations to engage with the local/regional community on sustainable development issues. CEE facilitates five RCEs in India.

CEE leveraged existing networks to create the RCEs in partnership with universities and other institutions of higher education, and also invited other partners, some old and some new. In Pune, a large city in western India, for example, the RCE that is focused on urban issues has Pune University as a partner, along with institutions involved in this area. The relationship has been mutually beneficial, as the RCE gains from the expertise of the university faculty and provides it with the opportunity to get students engaged in projects that are meaningful and provide hands-on learning. The students have conducted various surveys and focus groups, which have helped them understand issues of urban sustainability. They have also been involved in activities such as helping citizens to conduct participatory budgeting exercises, as well as audits of municipal budgets.

3. ESD and rural development

Traditionally, rural lifestyles in most of Asia were sustainable. But as these rural societies have transformed and developed, the new practices are very often not sustainable. Excessive extraction of underground water resources, unwise use of chemical fertilizers and pesticides and unsustainable animal husbandry practices are just a few of the problems. CEE worked closely with rural higher education institutions and trained young graduates to go out into the villages and act as 'community entrepreneurs'. CEE currently has a handbook on livelihoods for sustainable development. For instance, producing bio-compost and vermicompost can provide sustainable

livelihoods to a few families in each village. Through this programme, CEE promotes agro-forestry, production of cattle feed, roof rainwater harvesting structure, green manuring and mulching, bio-fuel, joint forest management, solar drying and micro enterprises like handicrafts and beekeeping.

Today this work is carried out in several Indian villages and is an important tool of ESD at the grass-roots level.

4. ESD and disaster management

In 2001, the state of Gujarat in western India where CEE is headquartered suffered a major earthquake. Several hundred villages were destroyed and thousands lost their lives. CEE embarked on a major rehabilitation programme, through which more than 1,500 houses were built, along with new schools and village level infrastructure.

But the most significant part of the programme was not so much the creation of physical infrastructure, as the change in the way the people in these villages started to view development. They began to ask fundamental questions related to development. Having seen a crisis, they could better understand the slower but more significant crises of unsustainable behaviour. CEE has since worked in areas affected by the tsunami and earthquakes in Kashmir and launched rehabilitation programmes that include ESD as a major component.

5. Waste management

One of the first things that might strike a foreign visitor to an Indian city is the problem of waste. While most products in traditional society were biodegradable, this



Image: CEE

A major tool for ESD that has emerged in India in recent years is the process of public consultations



Image: CEE

Participation of decision makers in public consultations

is not the case in a modern society. In addition, in most developing countries, the use of new substances is not accompanied by any knowledge of how to dispose of the resulting waste, or any awareness of the impact of improper waste disposal on the environment.

CEE launched a major programme to introduce the concepts of waste segregation and recycling. As a result of these efforts, several housing societies now segregate waste and some compost it. Plastic carry bags are shredded and woven into new products. Office waste paper is collected and used to make handmade paper. CEE runs a major bio-medical waste programme and runs a facility to demonstrate how this can be sustainably and commercially managed.

6. ESD and industries

Historically the word 'environment' is a term that has been viewed with suspicion by industry. Many from this sector felt that protecting the environment could only mean the curtailing of industrial growth. CEE's campaign started with the intention of changing this attitude. The campaign did not use the word 'pollution', but spoke of 'waste recovery'. It emphasized the efficiencies created by saving electricity and other resources through better housekeeping and resource management, as well as the long-term benefits of sustainable practices for industry. CEE's programmes in this area not only involve training industry personnel but also include direct intervention in instituting sustainable practices at the project level.

Training of professionals who can initiate and manage ESD programmes also needs to be a critical component of ESD efforts in a developing country. CEE has partnered with the Gujarat University to establish a Masters programme in climate change. Several projects today also advise industry on their corporate social responsibility activities.

7. ESD and public policy

ESD needs to play a very significant role in policy making. While school and college education will establish the foundation for the

future, daily resource-use decisions need to be made with sustainability in mind. Through a number of initiatives, CEE reaches out to key decision makers in the government at the local, regional and national levels.

A major tool for ESD that has emerged in India in recent years is the process of public consultations. Over the last two years CEE has, on behalf of the Ministry of Environment and Forests, Government of India, conducted major public consultations across India on policy issues relating to coastal zone management, the introduction of the genetically modified eggplant, as well as on a new Green India Mission. Each of these consultations has attracted tremendous public participation and feedback, which has resulted in major modifications in public policy. The success of these consultations is in no small measure due to the importance given to these consultations by the government and the personal involvement of the Minister for Environment and Forests, Shri Jairam Ramesh.

Meeting the challenge

ESD encompasses a wide variety of initiatives that together constitute the overall strategy for sustainability at the local, national and global levels. There are numerous innovative field level approaches, pioneering programmes in the formal and non-formal sectors, and policy initiatives to meet the challenge of sustainability. The initial years of the DESD have catalysed numerous programmes with very significant findings. It is now time to put these together to improve networking and learn from the experience of others. It is time to plan the last few years of the DESD and to create institutional mechanisms that propel this activity beyond the Decade.