



# Samvardhan

## *An Experiment in Education for Sustainable Development*

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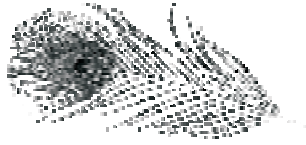
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## **Occasional Paper Series**

This Series is an attempt to present the thinking behind, experiences of and learnings from CEE's programmes and projects. The papers in this Series also mark important milestones in the developments in the field of Environmental Education (EE) and Education for Sustainable Development (ESD).

The papers in this Series were written and presented by colleagues at various seminars, conferences, publications, etc. The papers are reprinted in the same format in which they were presented. Thus, they represent the context and thinking of the time when they were written or presented.



## **Samvardhan**

### ***An Experiment in Education for Sustainable Development***

In 1998 an experiment in education for sustainable development was initiated in rural higher education institutes in the state of Gujarat in India. The project was called Samvardhan, a Gujarati word which means 'to nurture'. It was designed to nurture young minds as well as natural resources. The project was designed and implemented by the Centre for Environment Education, a national institute engaged in developing programs and material to increase environmental awareness so as to promote the conservation of natural and cultural resources, a better quality of life, and to support sustainable development.

### **Genesis**

In November 1991, the Supreme Court of India ruled that environmental education should be made an integral part of formal education at all levels. Independent of this ruling, educators were questioning the relevance of higher education as it had evolved in India. In a country where 70 percent of the population is rural, the content of higher education by and large, has little connection with real life experiences or requirements of most students, or with the challenges they face.

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During the independence movement, Mahatma Gandhi had developed a blueprint of Nai Taleem, or a new education system for independent India, which sought to make a connection between education and social, ecological and economic realities. Nai Taleem evoked the ideal of village development based on self-reliance, dignity of labour and education rooted in the realities of village life. The focus was on building not just a sound economy but also a sound society.

In a small way, Gandhian educationists have attempted to promote this idea. It has been implemented in Gandhi's native state of Gujarat, where rural higher education institutions (RHEIs) called Gram Vidyapeeth (rural colleges) were set up. Today 19 such institutions exist in different parts of the state. The goal of these RHEIs is to develop a cadre of young men and women with technical and management skills and leadership qualities, who will work at the grassroots level for rural development. The curricula of these colleges are therefore vastly different from those of mainstream higher education institutions. They provide a mix of theoretical and practical training based on a variety of need-based community projects. The subjects offered include Agriculture, Animal Husbandry, Extension, Home Management, Forestry and Gandhian Thought. The degrees awarded are Bachelor and Master of Rural Studies (BRS and MRS).

Nearly 700 students graduate every year from Gujarat's rural colleges, of which 60 to 70 percent join non-government and government organizations that are directly or indirectly involved in rural development and education. Several RHEIs also offer teacher training programs. Some of the graduates fulfill the need for qualified teachers at rural schools.

## **Sundarvan Programmes**

In the context of the Supreme Court ruling, the post-Rio consensus on the importance of Environmental Education, and the perceived dissonance in the Indian higher education system, CEE organized a workshop for the faculty of Gujarat's rural colleges in 1995. The objective was to discuss how CEE could work with these

institutions that were already working on rural development to help bring about a shift in focus towards ecological sustainability and sustainable development.

The approach of the RHEIs is to combine classroom education with service and development extension activities. However, the teachers admitted that the model did not work too well as the students were used to linear thinking and because the teachers did not have the skills to guide them towards looking at the complexities of issues, problems or solutions. They unanimously expressed the need to introduce an environmental perspective within their curriculum, and to adopt innovative and participatory teaching-learning approaches and methods. They felt this would enable them to help their students develop into qualified, knowledgeable and environmentally sensitive and responsible individuals. The workshop participants concluded that if the knowledge and skills learnt have a sustainability perspective, the students would introduce the same perspective in their work in rural development after graduation be it in government departments, NGOs or the cooperative sector.

From this emanated the concept and structure of the Samvardhan project. This three-year project started in 1998, in collaboration with the Field Studies Council (UK). The project was funded by UK's National Lottery Charities Board.

## **Objectives of the Project**

In order to develop a cadre of young people who would actively participate in, facilitate and guide a process of sustainable development, the specific objectives of the project were to:

- Increase the knowledge base of the students and alumni of Gujarat's Rural Higher Education Institutes about sustainable management of rural natural resources;
- Enhance their skills to use this knowledge in their work as rural development facilitators during their studies and after graduation; and
- Build the capacity of the teachers and management of the RHEIs so that they could continue to improve the knowledge base and

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skills of their students.

The project sought to achieve the above objectives through:

- Training and development of RHEI teachers, students and alumni;
- Development of learning resources which could be used by the students for increasing their own abilities and for enhancing the opportunities for members of rural households (men, women, youth and children) to manage natural resources equitably, productively and sustainably;
- Bringing in information about technologies, practices and experiences from other countries as well as other parts of India, to help tackle specific issues of productivity enhancement, prevention of degradation and restoration of degraded resources;
- Introducing relevant knowledge and experiences from other countries as well as from other parts of India about how rural people learn, adapt and adopt new ways of doing things; and
- Involving students in raising the awareness of the rural people about their environment, local conservation issues and their future in the context of ecological sustainability of their area.

## **Selection of RHEIs**

Three RHEIs were selected in ecologically diverse areas with varied resources, diverse economic activities, economic status and diverse social composition. The primary reason for such selection was to help test and evolve a model for student involvement and action in varied situations and locales.

The three RHEIs were:

1. Lokseva Mahavidyalaya-Lokbharti, Sanosara. Established in 1953, this is the oldest Gram Vidyapeeth. It is located in the drought-prone Saurashtra region of Gujarat. This coeducational college offers a variety of programmes such as Bachelors in Rural Studies (BRS), Masters in Rural Studies (MRS), Graduate Basic Teachers Training Course (GBTC), Primary Teachers Course (PTC) and Panchayati Raj (local self governance) Training. Guided by the major economic activities of the region , the

the three RHEIs to guide and support the teachers.

3. Five teachers were identified at each RHEI. These 15 teachers received training to improve their teaching skills as well as subject-specific training to enable them to participate meaningfully in redesigning the curriculum at their respective institutions and to teach the new curriculum more effectively.
4. Each of the three RHEIs adopted 5 villages in their vicinity and identified 100 families to work with in each village. The total reach of the project thus extended to 1500 rural families.
5. Forty RHEI alumni working in government and non-government rural development agencies in or near the adopted villages were identified and involved in training events as resource persons and participants, and in information sharing about the project.
6. Two teachers from each of the remaining 16 RHEIs in Gujarat were involved in the process at certain crucial points and events to facilitate replication of the methodology and easier acceptance of the model.

## **Capacity Building of the RHEI Faculty**

Through a series of well-planned, intensive training programs, field visits, exposure tours, and participatory exercises spread out over the three years, the capacity of the RHEI teachers was built in the following areas:

- Training and development of RHEI teachers, students and alumni;
- Subject content of the new curriculum which they helped design;
- New teaching-learning and communication methods and techniques; and
- Skills and abilities to enable them to transform their “rural development” program to a “sustainable development” program.

A critical dimension of faculty capacity building was the reorientation of the extension component of the curriculum in which students were required to undertake development activities in the adopted villages. In order to introduce an ecological thinking

public toilets in villages or slums. Samvardhan provided an opportunity for students to learn how to plan meaningful activities for each day. They organized an energy fair on the first day, activities related to water conservation the next, conservation of forest resources on the third day, and so on. They considered how to involve different groups within the community, including the local government, in the various events. They learned about resource mobilization not just financial, but also how they could partner with various agencies like the Gujarat Energy Development Agency to provide their mobile exhibition for the energy fair, or how they could tap into their network of alumni for different kinds of help.

## **Action Projects**

Mandatory student projects in the nearby villages are an important part of the Samvardhan curriculum. These projects are intended to help students gain experience and understanding of rural needs and realities. They also help strengthen the extension activities of the RHEIs and thus contribute to improving the image of RHEIs and their relevance among the village communities.

In the past, student activities were very basic. For example, students would try to introduce technologies or practices developed by the government agricultural extension departments, such as a new variety of seeds, chemical fertilizers and pesticides, or some farm equipment. The attitude of the students and the faculty towards the village community was one of superiority, and this attitude was reinforced when the “ignorant beneficiaries” failed to adopt what was recommended.

The Samvardhan project brought about an important shift in approach to these projects, which in turn resulted in a change of attitude. The students now view the villages as live laboratories. They are required first to learn from the community about their practices, traditions, knowledge, and reasons for certain actions or decisions. Through various activities such as field visits, participatory rural appraisal, and mapping of the village resources, students are required to analyze and understand the situation before implementing their project ideas.

established through this project. Each centre is stocked with recordings of lectures delivered by experts on various topics at any of the three institutions. The attempt has been to make access to these resource centres free to all students and faculty of the RHEI, not just those involved in the Samvardhan project, and also the community, who look up to and use these as information-cum-learning centres.

## **Role of Alumni**

The attempt to involve alumni added a useful dimension to the project by initiating or two-way flow of sharing and learning. Many of the alumni were invited as resource persons at various training and other events. While the alumni brought practitioners' experiences, perspectives and suggestions to the academic program, in return they were exposed to new ideas and practices during their interaction with the students, the project team and resource persons. The alumni also provided students with opportunities for internships and job placements at the organizations where they worked. As a result of this interaction the RHEIs have begun to value the alumni as an important resource that they can freely draw upon.

## **Conclusion**

The Samvardhan project faced several major challenges. First, the RHEIs typically suffer from weak infrastructure facilities and inadequate financial resources, which made it more difficult for all participants to conduct the project smoothly. In addition, Gujarat has 22 RHEIs for nearly 18,000 villages, and in some states of Gujarat, RHEIs are non-existent. Thus the demands on these institutions, and the needs of those communities they attempt to serve, are tremendous.

Second, the transition from conventional to interdisciplinary thinking that education for sustainability requires was both difficult and time consuming for all involved. The faculty, students and villagers around the RHEIs are very familiar with standard extension activities, as well as the knowledge and skills required to

implement conventional "development" projects. But integrating the sustainability perspective along with its requisite activities proved very challenging. In the process of infusing environment and development perspectives into the curriculum, for example, faculty and project team members developed various participatory "self-learning" methods and approaches. While these new approaches were appreciated by students and teachers alike, practicing and internalizing them required a lot of time and effort. Even the CEE core team found these transitions in thinking and practice to be difficult. An evaluation of the project conducted towards its end showed that teachers believe the most important contribution of Samvardhan is that it provided the necessary conditions for both students and teachers to think laterally. It appears that project efforts to instill sustainability thinking and action were to some extent successful.

Third, developing the necessary knowledge and skills within individual project leaders was a major challenge. Typically those who are subject experts do not possess strong environmental understanding and those who have environmental understanding do not have other subject expertise or orientation. To overcome these limitations the project team worked very hard and to prepare themselves both in terms of skills and knowledge base. It would have been easier, for example, to develop environment or ESD as an independent subject and start teaching that at the institutions. But the Samvardhan approach was to infuse and integrate environment and development perspectives into existing subjects. This was a greater challenge for CEE and participating faculty, but more creative and rewarding in the end.

The most appreciated component of the curriculum, according to students, teachers and the village community, was the re-orientation of community projects. Both teachers and students felt that this provided the vital link between classroom learning and its relevance and application in real life situations. The community's satisfaction with the projects is reflected in the number of new activities which they have enthusiastically adopted, such as organic farming, the use of pheromone traps, roof-water harvesting, and the building and maintenance of

check dams.

The Samvardhan project successfully used the opportunities provided by the autonomous rural higher education institutions in Gujarat to develop a model of education for sustainable development. The experience of one RHEI, which is affiliated with the North Gujarat University (NGU), has led to a policy decision that a similar curriculum will be adopted by NGU's eight other affiliated RHEIs.

## **Centre for Environment Education**

Centre for Environment Education (CEE) is a national institute established in 1984. It is engaged in developing programmes and material to increase awareness and concern, leading to action, regarding the environment and sustainable development. CEE is a Centre of Excellence supported by the Ministry of Environment and Forests, Government of India. CEE has, over the last two decades, explored the emerging models of development to identify and promote those which are contextually sustainable.

## **CEE**

Center for Environment Education

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