

ECOCLUBS AS A TOOL FOR ENVIRONMENTALLY EFFECTIVE COMMUNITY DEVELOPMENT

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Abstract

Ecoclubs were formed in 12 disadvantaged schools. Teachers, students and parents were sensitised to the benefits of organic farming, recycling and composting through a variety of activities. Students were further motivated through competitions and quizzes, and the opportunity to explain their work to other adults and students at exhibitions and fairs. A few students were selected for LEWS (Learning Earning While Studying) where home farming provides income to go towards higher education costs. Participating schools are now recycling waste and growing organic vegetables and mushrooms to supplement school meals and provide income. The confidence and self-esteem of Ecoclub students has markedly improved, and interest in environmental issues has percolated through into local communities and government. “Children as students” have become “students as resources”.

Introduction and context

The context is Education for Sustainable Development (ESD), a new vision of education, empowering people of all ages to assume responsibility for creating a sustainable future (UNESCO, 2004). Individuals and social groups are motivated and equipped to make informed decisions and create a more sustainable world. IUCN-2004 recognises that education programmes must reflect the importance of living in a sustainable way, and there must be a significant change in attitudes and practices. Similarly, the Convention on Biological Diversity Article 13 *Public education and awareness* highlights the importance of approaching these issues via education.

The increasing and indiscriminate use of chemical fertilisers and pesticides in the Nilgiri Hills of south India is causing land degradation and a decline in soil fertility. Young people are leaving the land for the cities; schools are in decline with reducing rolls, limited resources, and lack of motivation. In addition, poverty and lack of skills in English are holding children back.

Introducing Ecoclubs to the Nilgiris was timely, in that a GREENS biodiversity sanctuary was being proposed. The EARTH Trust, an NGO working with communities in the areas of sustainable health, farming and the environment, provided useful contacts and an umbrella for the new work.

50 enthusiastic, environmentally-concerned and socially-committed students aged 7 to 13 were chosen to form each Ecoclub, supported by 2 teachers. The aim of the Ecoclubs is to develop a green consciousness and social responsibility: through them we promote recycling, composting, organic gardening and efficient use of land (Alexander and Britto, 2002). Ecoclubs are internationally recognised as a powerful tool to change the community through the activities of children.

This paper will describe how students and teachers were motivated; how schools with limited resources have been empowered; and how Ecoclubs have made a tangible difference at grass-roots level.

The beginning

As funds were lacking for all but the very basic costs of transport and maintenance, the project began in a modest way with visits to more than 20 schools in parts of the Nilgiris already identified as being disadvantaged. Long discussions with head teachers and teachers, over a number of visits, were necessary to get buy-in from, in the end, 12 schools. The concepts were unfamiliar and there was much initial suspicion as to our motives. We had to explain the purpose of the project, the principles of organic farming and the expected outcomes in a simple and straightforward way to gain confidence and build the relationship. Ensuring that all the teachers not only participated but were able to voice their doubts and fears was vital.

At the same time, we were building relations with the Ecoclub students by treating them as equal stakeholders and encouraging them to provide solutions to the problems they identified. Messages were reinforced and information given as informally as possible, through games, video shows - one on the Slow Poisoning of India (by pesticides) had a strong impact on students and teachers alike; a 3-day environment leadership course for teachers; hill trekking and a wilderness outing. This was the first time many of the participants had looked at their surroundings from the environmentalist's perspective.

Development of activities

The Shola Forest is one of the Nilgiris most spectacular natural features, consisting of patches of high-altitude (around 2000 metres) stunted evergreen forest separated by undulating grasslands. It is noted for its endangered ecosystem and endemic species. Consequently a Shola Forest Experience Programme (SFEP) was exclusively designed for Ecoclubs members, whereby indigenous forest was contrasted with manmade forest (usually eucalyptus plantation) regarding diversity of species, soil building, and the natural processes through which a forest matures. The key to the success of the SFEP is the way it links the local forest eco-system to a school organic garden - both students and teachers began to understand the principles of organic farming from observing nature.

Following on from awareness raising and exposure events, we began to bring the students and teachers face to face with others working in the field. A number of successful small-scale organic farmers invited the students to their farms; various experts from the FAO and from Natura Organics in Faridabad gave advice to students; and Dr Linda Weiner, an entomologist, trained students and teachers on the identification of pests and the role of natural predators.

Compost making was fundamental to the project and the students found it extremely enjoyable, so much so that a compost competition and a biodynamic quiz attracted many participants. Veverka (1998) says *“learning requires activity on the part of learner and friendly competition stimulates learning. Besides, knowing the usefulness of the knowledge being acquired makes learning more effective. People learn best from hands-on experience”* and compost making is a prime example of that!

Soil health building went on for a period of six months after which students moved on to organic gardening, experimented with mixed cropping and noted the advantages include decreasing pest problems, better usage of land and sunlight. *“Malnutrition begins with the soil. Many nutritionists & physicians now agree that there is really only one disease - malnutrition - that all other diseases derive from. The growth and health of our bodies depend upon the growth and health of plants.”* (Tompkins & Bird 1989). Now twice a week the gardens provide vegetables for the noon meal programme.

The school garden programme must be well adapted to local customs and needs and the specific socio-economic, climate and environment situation (FAO 2004). It reduces school drop-outs due to poverty and enhances the self confidence of the participants.

FAO (2004) also states that it is important to “*Improve school children’s nutrition by supplementing school feeding programmes with variety of fresh micronutrients and protein rich products, and increase children’s knowledge of nutrition, to the benefit of the whole family*”. We therefore began mushroom cultivation at the Panchayat Union Middle School (PUMS) Thenallai, in July 2005, and so far five batches of mushrooms have been cultivated with around 25 bags from each batch. After hands-on training, the process is entirely the responsibility of the students and teachers, and a steering committee monitors the programme. The project merely provides the spawn. Certain students have taken up mushroom cultivation at home, where it is a source of additional income.

The steering committee meets once a month. It is made up of mothers, teachers, head teachers, noon meal organizers, cooks, education staff and selected students. It acts as the bridge between the school and the community. According to Taylor (2004-2005) “*a school garden is a great project that can appeal to an eclectic mix of the community group*”.

The final innovation which must be described is LEWS - *Learning Earning While Studying*). The main aim of the programme is to enable poor rural students, preferably female, to save for their higher education, using their mushroom and organic gardening skills.

Widening the scope

Once organic farming and mushroom cultivation were established, the Ecoclubs were encouraged to share their knowledge with others. They also engaged in public awareness campaigns around the Nilgiris - on litter and use of plastic, for example.

A large exhibition, *SETO 2006* (Science, Environment, Technology and Organic farming) was organised in collaboration with Ahumcaara Organics, Chennai. Two years into the programme, Ecoclub schools were confident enough to share their experience with others. The exhibition created significant impact among government departments and the press gave wide publicity to organic farming. This exhibition also created opportunities to organise linkages between village and town schools and there will be an interchange with the city-based school children of Chennai to help them find their roots and reconnect with nature. “*Bridging the gap*”! *Community awareness cultivates support from peoples, organizations and local business that would like to become involved, donate funds or volunteer their time*” (Taylor 2004-2005)

Active Ecoclub students who were passionate about gardening and who had good communication skills were selected for a five-day intensive hands-on training course, along with Ecoclub teachers and noon meal organizers. The training covered organic and biodynamic farming and how this can be replicated on their own farm and transferred to the community. This was known as the *Organic Ambassador Programme*, and the young ambassadors acted as spokespersons about the organic garden, mushroom cultivation, and waste recycling to their peers and visitors to the schools.

Thenallai school attracted many visitors including the Director General of Agriculture, Bhutan, who came to the Nilgiris with 20 of his agricultural and horticultural extension officers for a one-day workshop. As a result they presented a sum of R 1600 (£20) to the

school for the future development. Less able students in the class communicated in a very effective way and this changed the perception of the teachers.

Last but not least the education coordinator simultaneously started organic rice farming on his own land with traditional rice successfully harvested and brought to the school for an “organic pongal day”. All these kinds of activities boost the confidence of the students and teachers.

Naturally, the programme was not without its problems. Key teaching staff would be transferred mid-project; not every school welcomed the initiative; and there was the perennial problem of funds. Fortunately, as the project developed we were able to attract sponsorship which allowed us to expand our work, pay ourselves, and buy a motorbike for visiting the schools.

The budget, though, is still modest. To date we have spent about R 600,000 (£7500) on the whole programme (that includes the value of sponsorship), and includes pay and travel for two staff for two years of R 425,000 (£5300). A lot can be done with small amounts of money - for example, hill trekking for 100 students and 13 teachers from 10 schools cost R 5400 (£65), and the Shola Experience programme R 2000 (£25) per trip.

Results and plans

It is fantastic to see how the self-confidence of disadvantaged students is enhanced by their new “life skills”. The children are models for their peers, acting more responsibly and transferring ecofriendly technology to their villages. The schools too benefitted from the programme: many visitors were attracted to the school gardens, including overseas visitors, which did a lot to increase the self-esteem of children and teachers, and they won praise from higher officials, the local community and neighboring schools.

The impact on nutrition has been noticeable through the supply of organic food and mushrooms to the noon-meal programme. And the relationships between the students, teachers, cooks, and mothers have been strengthened. The Thenallai school noon meal organiser has offered her land for growing more organic vegetables to support the school meal programme.

For the future we want to strengthen the management of the programmes to make less of a demand on project staff time, as there are other schools who want to set up Ecoclubs. Therefore we shall help teachers to set up steering committees for Ecoclub activities; persuade other noon meal organisers to replicate organic farming around the district and state; and set up a LEWS parents’ association to help to consolidate their children’s mushroom projects.

We shall also continue to build city-rural links - the Ecoclub organic ambassadors will run a workshop for the city children in Chennai.

Conclusions

Ecoclubs make a difference. Ecoclub schools are showcases that influence other schools and local communities and by sharing their experiences they transfer environmentally friendly technology to the communities through a community based organic movement. *There are solutions to the major problems of our time; some of them even simple. But they require a radical shift in our perceptions, our thinking, and our values.*” (Fritjof Capra, 1996)

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