

Gram Nidhi: A Community Based Eco Entrepreneurship Initiative towards Education for Sustainable Development: A Case from Gujarat, India

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Abstract

The Centre for Environment Education (CEE) has been working for the last 16 years on model programmes in villages around the Hingolghadh Sanctuary, Jasdan Taluka, Rajkot district to demonstrate approaches to sustainable development in environmentally fragile rural areas. In these villages the latent potential of local youth and women has been fostered by establishing village level institutions called Paryavaran Vikas Mandals (PVM) currently with a membership of 350 engaged in savings and credit. Having been exposed to aspects of education for sustainability, communication and managerial skills through CEE, the PVM's principle espouses credit backed by ecologically healthy initiatives and enabling their implementation. These conditions gave rise to an eco entrepreneurship initiative called *Gram Nidhi* (currently being implemented at a pilot level in 5 villages around the sanctuary)

The approach rests on an innovative financing scheme wherein a principal, the Eco-Enterprise Fund, (EEF) generates the means to working capital investments for eco-enterprises channelled through Parvayaran Vikas Mandals at commercially sustainable interest rates along with adequate capacity building and information servicing support so as to promote sustainable livelihoods. An eco-enterprise produces goods and services that are economically efficient and viable, ecologically sustainable and socially acceptable, using local resources and appropriate technology. Eco-enterprise options spring from indigenous creativity in response to local needs and possibilities aiming to directly improve quality of lives.

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Introduction:

Community Based Initiatives with multi-stranded objectives and fast-changing priorities can sustain for longer periods. The cohesiveness of the initiative in integrating multiple objectives without losing track of ground realities is vital for its success. These factors and commitment to sustain at local and regional levels has enabled demonstration of several unique approaches to sustainable development in environmentally fragile rural areas. The Rural Programmes Group of the centre has been working for close to 16 years in villages around the Hingolghadh Sanctuary Jasdan taluka, Rajkot district to demonstrate approaches to sustainable development in environmentally fragile rural areas. This paper addresses one such approach being piloted in 5 villages.

Brief Analysis of Location: The Hingolghadh sanctuary is a contiguous block bisected by a paved road and surrounded by 6 villages with an area of roughly 15 sq. km, divided nearly equally between agricultural fields and degraded common pasturelands on a rolling terrain. The region is subject to recurring periods of sustained drought with lack of vegetation and water conservation structures. The human population is roughly 7500 and mostly small ruminant livestock.

Water intensive cash crops such as cotton are widely grown requiring pesticides and fertilizers escalating input cost. Livelihood patterns, dependent upon the agricultural biodiversity, have shifted to monoculture of cash crops requiring high inputs of chemical fertilizers and pesticides. The drought prone nature and lack of holistic watershed development results in mining of underground water, overall degradation of natural resources like degrading forest area, pasturelands and erosion of biodiversity.

The large population comprising of Other Backward Castes are much poorer compared to other regions of Gujarat facing extreme shortage of all types of resources and poor endowment of fixed and working capital for inputs in small quantity. Further, qualitative and quantitative limitations of having access to outdated technologies, lead to low level of productivity and high cost, resulting in considerable loss of time, interruption and lack of continuity in production processes. Dependence on moneylenders of marginal communities continues for meeting emergent credit requirements and is more pronounced.

From Eco Development to Community Based Institutions: CEE has designed and implemented environmental education and eco-development programmes for communities living in proximity of such habitats since 1988. It has also contributed actively to the understanding and practice of participatory management of protected areas. Beginning with educational and technology-related services, the HEDPro initiative gradually moved into the realm of building organizational capacity in the communities, as a basis for sustainable local development. This gave rise to Village Level Institutions in these villages (that have acquired an identity called PVMs - *Paryavaran Vikas Mandal* translated as Natural Resources Management Development Group) of local youth and women, significantly engaged in savings and credit backed by ecologically healthy initiatives.

CEE's work in this area built up a reservoir of good will amongst local community and the governance for a demand that the area needs longer-term support directed towards building community's natural resource assets. The Paryavaran Vikas Mandals with the help of local partners in the project area have the distinction of receiving the first set of bank loans and schemes in the whole Saurashtra region (Western Gujarat) and not defaulting in the last 8 years. Activities undertaken in active partnership with CEE by the local partners are:

- Village level Water Conservation Structures, Afforestation, organising fodder collection and distribution for drought relief and cattle care camps with Animal Husbandry Department
- Observing Environmental Days and Events and organising Farmer Forums, Workshops, educational events and exposure visits to educational institutions/organizations for improved farming practices
- Demonstrating solar energy equipment, kitchen gardens, handpump maintenance training and distribution of repair kits, organizing painting, elocution, singing and talent contests in schools, livestock and health surveys and setting up and managing rural library services

Representing village self governance through village elections and helping strengthen natural resources with community involvement.

Example of a small farmer from *Amrapur* village: *Somabhai Kuvra*, grew water intensive cotton crop like most others in water scarce Jasdan area with high input of chemical pesticides/fertilizers on his 4 acres land and found the productivity and returns gradually deteriorating. With guidance from CEE field staff he shifted cultivation to a mix of custard apple, vegetables and fodder crops introducing water conserving structures including a wind pump. By the third year his production and income increased sustaining his livelihood. The idea of Eco Entrepreneurship is derived from some such examples.

Several PVMs have registered as Trusts effectively creating community based organizations for natural resources management. Much of the activities depend upon institutional capacity that was built over a period of time. The need was felt for an approach to make use of existing institutional mechanisms to finance working capital and explore more favourable market options in the service of nature giving rise to eco entrepreneurship.

The Eco Entrepreneurship approach in its pilot project addresses 5 villages around the sanctuary and rests on an innovative financing scheme wherein a principal (Eco-Enterprise Fund - EEF) generates the means to working capital investments for eco-enterprises. The funds are channelled through the primary partner "NARMADA Trust" a local NGO formed by inspired PVM members of Lalavadar village registered under the Societies Registration Act. An eco-enterprise produces goods and services that are economically efficient and viable, ecologically sustainable and socially acceptable using local resources and appropriate technology from substantially modified market mechanisms that account for full-cost pricing and social impacts. Eco-enterprise options spring from indigenous creativity in response to local needs and possibilities aiming directly to improve the quality of their lives. They derive maximum leverage from local cultural and natural environment, by drawing upon existing managerial and technical skills and developing a cadre with social sensitivity and environmental concern providing a basis for extending them.

Step 1: Setting up Systems. The fund will be a one-time grant managed by an Eco-Enterprises Investment Committee (EIC) that will oversee its operations. The break up of the fund comprises of

- Eco Enterprise Fund (EEF)
- Technical Assistance Fund (TAF) for Capacity Building and Information Servicing

The contribution of the Paryavaran Vikas Mandals to the EEF adds to the EEF. The EEF will generate the means to working capital investments for eco-enterprises in 5 villages channelled through the EIC. The Eco enterprise Investment Committee comprise of members of CEE, the primary partner, NARMADA Trust and participating PVMs with officials of local bank, NGOs and Government officials as ex-officio members with advisory role. This phase will involve formal agreements of partnership with Primary partner, PVMs and other EIC members, Standard Operating Procedures for use of funds and smooth functioning. Capacity Building, Information Services and Production Support Services will be a cross-cutting feature throughout the project cycle.

Step 2: Selection of Eco-enterprises. Preference is given to Eco-Enterprises that are unable to secure financing from conventional sources due to their small size, innovative nature of business and/or financial risks involved. A launch workshop to help PVMs prepare the framework for idea formulation, planning and implementation following which proposals will be submitted to CEE for preliminary assessment to groom it for environmental impacts and cost benefit. The EIC will then grant approval to eco enterprises preferably 15 after rigorous screening employing sound environmental practices, provide financial benefits to community and strict standards for biodiversity conservation, sustainable use and community involvement. The areas studied for venture capital initiatives are:

- Sustainable and alternative agriculture
- Horticulture, agro-forestry and herbal farming
- Agro-processing
- Sustainable forestry and non-timber forest products
- Eco-friendly cottage industry

Step 3: Implementation. The portfolio of ventures will work in partnership with EIC and use market principles to achieve conservation goals. Preliminary venture specific training modules will give clear cut implementation project cycle guidelines to entrepreneurs. The EIC committee will administer venture capital (in instalments) and monitor activities with continuous technical assistance and capacity building. A formal mid-term monitoring and evaluation workshop will provide interim support and checks and balances for fund flow.

Effective documentation will disseminate the learning and experience at a regional level and reports distributed to wider audience.

Replication: At the local implementation level the project will continue to operate in 5 villages of Jasdan block even after the project period while knowledge generation and policy related activities will extend well beyond geographical domain of Jasdan block. The joint initiative will take lead in networking with agencies working in the area and will extend outputs of its work to agencies and communities in Saurashtra and other regions where issues are compellingly common and need joint action. In the same vein, CEE will contribute to and draw upon

experiences and platforms in national or international forums. *Gram Nidhi* has a strong orientation to replication in similar socio-ecological conditions. The tools of this replication will range from research, policy reform, documentation and dissemination. Mechanisms and opportunities to mainstream lessons and best practices arising from the programme will be sought out all levels.

Sustainability: The scheme has an inbuilt process of organizational and financial sustainability. The primary partner is groomed to provide long-term stewardship to the activities. The project as a whole rests on financial sustainability due to its market based operating principle. The repayments to the capital and interest earned by the Trust will continue to be a revolving fund for future operations. The success of the programme will help leverage funds from other sources viz., Government Agencies and Financial Institutions. Representation of financial institutions and local government in the Committee will help ensure this. Leveraging funds from other sources will be a key aspect of the programme.

In Conclusion: Sustainable development of a region is inherently linked to the ability of its communities to generate livelihoods on a sustainable basis. Ecological niches are better able to achieve stability if their human populations and communities achieve sustainability in their livelihoods. This is particularly true for those ecological areas that are fragile and are witnessing degradation or transformation due to human pressure. Given the fragile and highly stressed nature of Jasdan's ecology CEE's *Gram Nidhi* intervention in Jasdan seeks to: a) improve the use and efficiency of existing resources; b) develop alternate resources; c) create systems for sustainable management and d) create awareness and abilities amongst partners to act for sustainability.

Since rural communities traditionally have no access to micro-credit, with greater needs for training and technical assistance, in order to be able to meet the credit needs of eco-enterprise with reduced operating costs, increased revenue, reduce risks and organizational adaptation CEE seeks to achieve this through support services and information flow. One of the well-known lessons of livelihood promotion efforts around the world is that while credit is a necessary condition for promoting small and micro-enterprises, it is not a sufficient condition. A variety of other inputs and services are required to complete the package. This includes systematic identification of livelihood possibilities, motivating and training potential rural producers to take up those livelihoods, ensuring the supply of raw materials and inputs, equipment, infrastructure and technology, establishing linkages with marketing channels, and in some cases where needed, seeking changes in regulations and policy, while not all of these may be needed in all cases. Comprehensive livelihood promotion effort needs to be capable of providing these services when needed.

In the area of rural finance of this character in this area this effort is unique. Though similar ideas have been implemented elsewhere the aspects of environmental and ecological sustainability is a unique approach and utilizes an already existing pool of groomed village institutions and developing a cadre of environmental professionals at the rural level. CEE has always experimented with new institutional, technical and communication approaches with rural communities and settings. As an area with its own unique issues, there is new ground to be broken in Jasdan. And there are also innovations that exist elsewhere which can be drawn in, applied or adapted in the area of CEE's concern in Jasdan.