

# **Community Based Environmental Education for Sustainable Development: The Case of Bangladesh**

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## **Abstract**

This paper examines the educational response to meeting the challenges of Sustainable Development (SD) through local actions. The development of sustainable local communities in Bangladesh has also been discussed. EE has become an important component of the Comprehensive Village Development Programme (CVDP) for sustainable rural communities. It was found that the programme has contributed much to human resources development through imparting training, organizing capital through share-savings, harnessing local resources through participative planning, enriching entrepreneurial skills by implementing different Income-Generating Activities (IGA) through micro-credit, and on the whole, creating social capital for village development.

The programme has also contributed to poverty alleviation, social security, natural resource management, and establishing social justice in the community. The success of the programme lies in the members' education, people's participation, local level planning, the sense of belonging to the society, discipline, capital accumulation and its judicious investment in diversified productive activities. In the context of CVDP the people's need and environmental issues were addressed through an integrated approach and also the integration of the three pillars of SD—environment and natural resource management, social development and economic development. The paper concludes with an analysis of how the programme has contributed in the Decade for ESD.

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## **Introduction**

A healthy natural environment is the fundamental prerequisite for sustainable human development and human survival. Bangladesh faces the constant challenges of rampant poverty, high population density and an increasing population rate, recurring natural disasters and a dwindling natural resource base. It is one of the poorest countries of the developing world, with a low resource base, a very low land-man ratio, and is threatened by both natural hazards and over-exploitation. The vast majority of the population lives below the poverty line and almost exclusively off the natural resource base, which is why the natural resource bases are under serious threat. Against this backdrop, Environmental Education (EE) planning is vital to foster any hope for survival with dignity and sustainability.

Environmental awareness cannot be addressed adequately through only the formal education system. Awareness must also be created through non-formal and formal education methods, as the national overall literacy rate is still very low. Rural people are in general, articulate and possess a great depth of perception. They have their traditional knowledge and also feel for environmental issues, particularly as these affect their daily lives. But very little formal information reaches the rural population. EE in the rural areas is urgently needed.

In light of the above, the Bangladesh Academy for Rural Development (BARD) has incorporated an EE programme in one of its rural development projects, the Comprehensive Village Development Programme (CVDP). The paper has been designed to discuss the environmental activities conducted by the project.

## **The Project: CVDP**

CVDP is an institutional approach to rural development. The principle of the project is ‘one village, one institution’. The concept of CVDP is that every village will have a single institution that takes up the responsibility of creating a package program for an integrated and total development.

### *Objectives of CVDP*

The general objective of CVDP is to improve the socio-economic and environmental conditions and the quality of life of all the groups of people in the village through a common village based organizational framework. The specific objectives of CVDP are

- To develop a village through the broad-based cooperative institution—the Comprehensive Village Development Cooperative Society (CVDCS)—involving the people of all classes and professions with a view to actively engaging them in socio-economic activities for poverty alleviation, natural resources management and other welfare activities for the rural community.

- To develop common village facilities and make available various social, economic and environmental services at the village level.
- To improve production, traditional knowledge and skills, and the education and social status of women, through appropriate education and training.
- To introduce lifelong learning processes, awareness building, skill development to eradicate illiteracy, ignorance and social stagnation.
- To undertake community-based, natural resource management, primary health care, nutrition and education activities for the improvement of the local environment, and human resource development.
- To use the village institution as the receiving point for all kinds of services and supplies from agencies.
- To mobilize the villagers' own capital through implementing savings programs for production, encouraging investments, and building their collective resources.
- To develop leadership through the expansion of the scope of the villagers' participation in planning, implementation and decision-making.

#### *Implementation Strategies: Peoples' Participation*

The necessity of the participation of the local community in the planning and implementation of rural development projects, is a widely accepted idea. Over the last decade, many governments, development agencies and NGOs have recognized that the "top-down" approach of traditional development strategies has largely failed to reach and benefit the rural poor. Experience reveals that through participatory programs and activities it is possible to mobilize local knowledge and resources for self-reliant development and to also reduce government expenditure on the provision of development assistance to the rural areas. Peoples' participation is also recognized as an essential element in order to implement strategies for sustainable agriculture, since the rural environment can only be protected with the active collaboration of the local population.

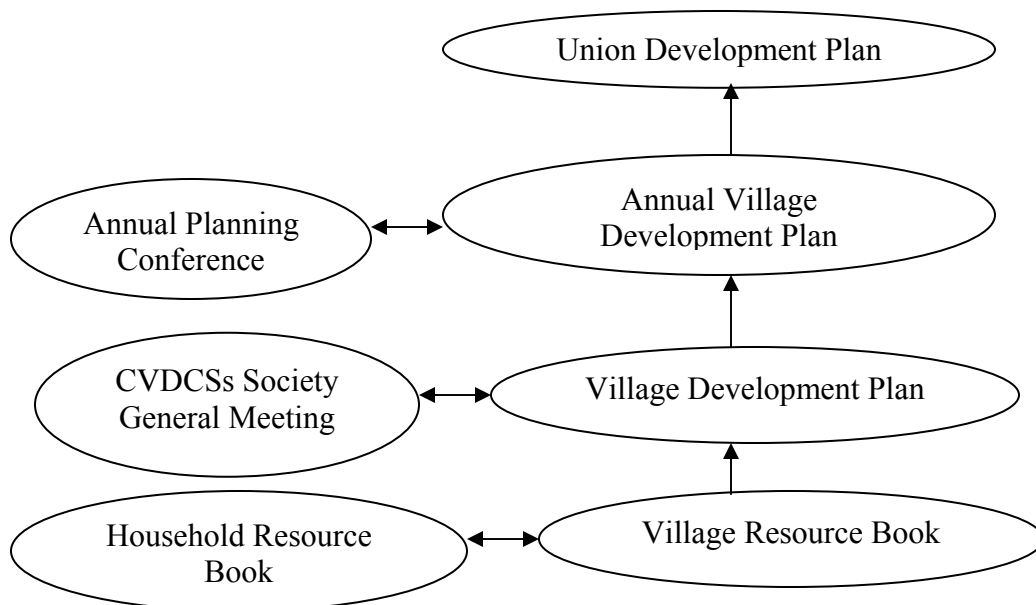
With these factors in mind, BARD has initiated certain steps for SD in rural areas through CVDP, with an aim to secure peoples' participation in sustainable rural development. CVDP takes initiatives and action that is stimulated by the community's own thinking and deliberations, through which they can effectively influence outcomes. It is a development approach that recognizes the need to involve all segments of the rural population (male, female, children) in the design and implementation of these plans.

Within the given institutional framework the following strategies have been adopted to implement the program ●The CVDCS s prepare a household resource book for each household in the village. It contains an inventory of household resources and serves as a guide to identify

the gap between the available household resources and those required for the improvement of the social and economic conditions of the household on the basis of its needs.

- The CVDCSs then prepare a comprehensive village resource book that contains a database of the household resources and facilities. This database then forms the basis of a comprehensive village Annual development plan, (CVADP), formulated by the CVDCS.
- The CVADP is designed to cover two aspects, the economic activities of the group members and the society, and the development of common village facilities and services. The former is known as the Economic Plan and the latter as the Village Development Plan, which includes social and environmental development.
- The member of the society prepare their own Economic Plan, which is consolidated at the society level by CVDCSs. The managing committee of the society also prepares a commercial, environmental and business activity plan for the society. After discussion and approval by the general meeting of the society, the two plans are consolidated into the Society's Annual Economic and Environmental development plan. The Village Development Plan is submitted to the Union Parishad by the CVDCSs for acceptance and consolidation with the Union Plan.
- The Economic Plan is implemented by CVDCSs with credit from banks and other relevant agencies, and with support and other services from the local government institutions at different tiers and Thana level National Building Departments (NBDs) for different activities under the plan. The Planning process of CVDP is depicted in figure-1

**Figure-1: The Planning Process of CVDP**



## **CVDP and EE**

The commission on Education and Communication of IUCN (1999) has defined EE as, “a process in which individuals gain awareness of their environment and acquire and exchange the knowledge, values, skills, experiences and also the determination which will enable them to act individually and collectively to solve present and future environmental problems”.

The General Assembly of the Asian-South Pacific Bureau of Adult Education (ASPBAE) explained EE as “a life-long learning process that involves all of us as learners and educators; is interdisciplinary; integrates the historical, political, social, economic and cultural contexts; covers a wide learning spectrum, from awareness, understanding to action; values indigenous and local knowledge; recognizes the role of both women and men in environmental protection, while contributing to the empowerment of women; is contextualized to the local and global realities, and explores participatory and creative learning methods that are culturally appropriate” (ASPBAE,1996).

So it seems that the concept of EE varies under different conditions and in response to the local situation. EE for SD embodies the elements of knowledge, attitude, skills and an orientation that encourages action to achieve improved environmental health in the cause of sustainable human development.

### *Education*

The World Bank (2003) on education: “for people education opens up a world of opportunities, reduces the burden of disease and poverty and gives a greater voice in society. For nations it opens doors to economic and social prosperity, spurred by a dynamic workforce and well informed citizenry able to complete and cooperate in the global arena”. The literacy rate of all the 40 CVDP villages was 85 per cent in 1999 (Karim et al., 2003), which was higher than the national average. The enrolment of school going children was increased to 99.35 per cent during 1999 because of awareness development by the village society activities through weekly meetings, an annual education development plan and constant motivation. Some societies also established schools through their own financial resources. The society also has adult education programs to educate illiterate elderly people, which helped upgrade their awareness, skill and knowledge.

### *Water and Sanitation*

Access to clean water and poor sanitary disposal of human excreta are among the major problems faced by many households in rural areas of Bangladesh. As a result of contaminated drinking water, people often suffer from gastroenteritis and other water borne diseases, which are very common in the villages. The effect of these diseases together with chronic malnutrition and inadequate health services results in a high infant mortality rate. The CVDP villages are better off in this case: 60.79 per cent of the households use a sanitary toilet (either a waterproof ring

slab or a permanent facility) in 1999 (Karim et al., 2003). In the CVDP areas almost all of the households use tube wells for drinking water.

### *Family Planning and Health Care*

The population of Bangladesh is about 113 million, confined within 14,4000 sq. km., making its population density the highest in the world. Population growth has been identified as perhaps the most serious problem inhibiting sustainable resources. The progress of development and productivity are eroded by the sheer immensity of the population. A very low land/man ratio intensifies the competition for the already very limited land resources. The development workers working in the areas of family planning and health care in the CVDP villages, play an important part by trying to motivate the people to adopt family planning measures. The adoption of family planning measures (both permanent and temporary birth control) has increased significantly in the CVDP villages during 1999, with 84.29 per cent of the villagers using family planning methods.

Infant, child and maternal mortality rates are important indicators of the health and nutritional status of any community. In CVDP areas various attempts especially provisions of EPI, health extension services and the creation of awareness have significantly reduced the infant, child and maternal mortality rates. *Tree Plantation and Homestead Gardening*

Commercial felling of timber for fuel and other uses, together with encroachments for agricultural and settlement purposes, have substantially reduced the area covered by forests. There is a continuous loss of valuable mangrove and natural forests in different parts of the country. Therefore, tree planting has been intensified within the CVDP village area. The villagers under the guidance of the CVDP societies were made aware of the ecological and economic importance of trees, and planted a variety of trees around their homesteads and in fallow lands as well. The numbers of trees planted in the village were 2,47,342 as of June 1999 (Karim et al. 2003).

CVDP members also cultivate their own kitchen gardens. These gardens not only provide them with seasonal vegetables, but also green their surroundings.

### *Poverty Alleviation*

There is a relationship between poverty and environmental stresses; the poor are forced to address short-term needs, even if their actions contribute to the long-term depletion and degradation of the resources. They are also the most vulnerable and least able to cope with environmental changes and the impacts of natural disasters.

As poverty is not a single dimensional problem, there are no short-cuts for alleviation. The CVDP is an experiment in creating an institutional infrastructure to address rural problems related to socio-economic development. It encourages self-management by promoting local leadership and community participation and helps to form collective capital through regular savings deposits. It does not separate the rich from the poor or the men from the women, but the poor and the women get due attention in the process of the implementation of the programme.

The CVDP approach is not exclusively a sectoral poverty alleviation programme: the comprehensiveness of the approach itself places all its vigour and strength in the process of creating a self-sufficient, self-reliant and self-propelling village society.

The CVDP societies have been trying to generate their own capital and reinvest it in the villages so as to create more production and employment opportunities within the communities. These societies implement small scale Income Generating Activities (IGA) in the field of animal husbandry, fisheries, crops, vegetables, etc, which contribute to higher production, employment and income.

The programme emphasizes the production, employment and income generating aspects of development. However, it does not ignore the social services and social security aspects of development. It also unconditionally looks after the health, education, family planning, housing, sanitation, environment, social harmony, and law and order concerns, with due emphasis on evolving a self-sustaining social security system from the grassroots level.

It may be mentioned that the continuous training efforts directed towards different target groups of population in the villages have been contributing to the development of human resources. Thus, this programme does not wait for the villagers to become poor first and then to make efforts for the alleviation of their poverty, nor does it wait for oracles to come and rescue them. Rather, they try to create a condition in the village so that new members are not enrolled in the group of the poor. All the villagers with support from governmental and non-governmental agencies prepare plans and implement programmes so that the situation is not aggravated. The institutional framework developed through this program tries to help the government render its support services easily and with minimum costs for all who need these services and pave the way to evolving a process through which a self-reliant and sustainable village institution can flourish. According to Roy (2003), in the contemporary period, an action research on village development through social capital formation has been successfully run by BARD—the CVDP project.

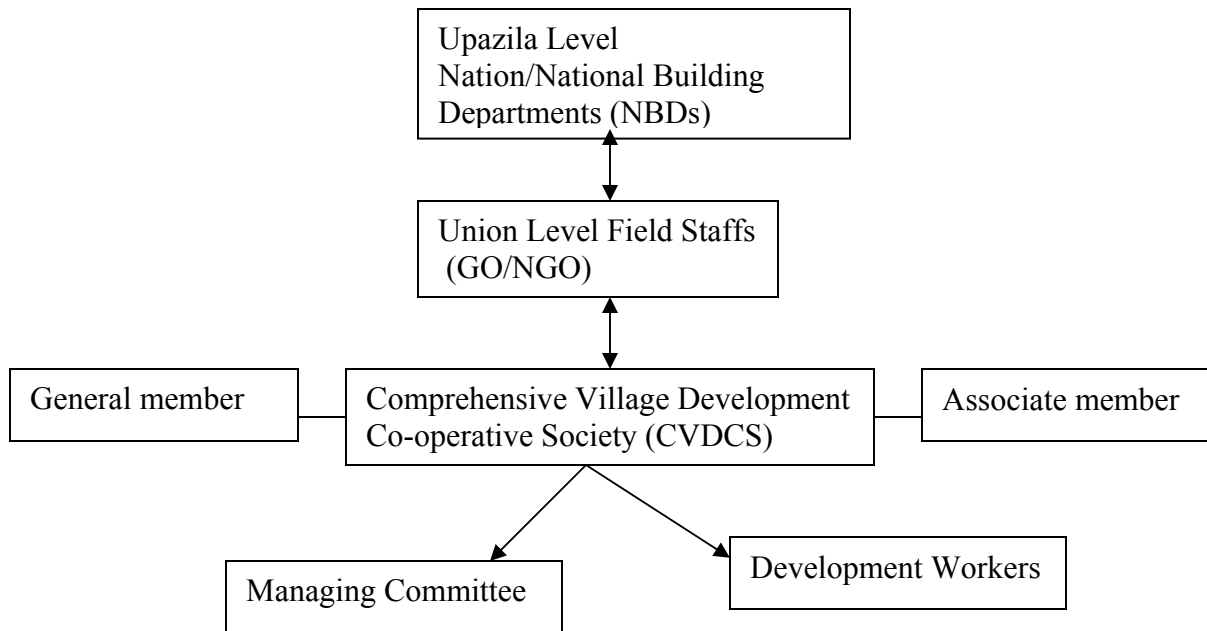
## **The Main Features of CVDP**

### *Linkages with the National Building Departments (NBDs)*

The main approach of the CVDP is ‘*one village, one institution*’.. A committee selected by the general members of the society manages the CVDP. In each of the villages under the program, the CVDCS covers all the villagers—adults and children, male and female.

The CVDCS has established a link with the NBDs for the purpose of developing common facilities—physical, social, and economic, and obtaining support services available at the Upazila. The NBDs find it easy to provide their services through the CVDCSs. In the monthly meeting of the Upazila Parishad (UP), the activities of the CVDCSs have been reviewed. Similarly NGOs can coordinate with CVDCSs for their support services. The coordinated delivery and receiving mechanisms of rendering services to the members are being developed under CVDP, as seen in Fig-2

**Figure-2: Linkages of CVDCS with the NBDs**



### *Planning with the People*

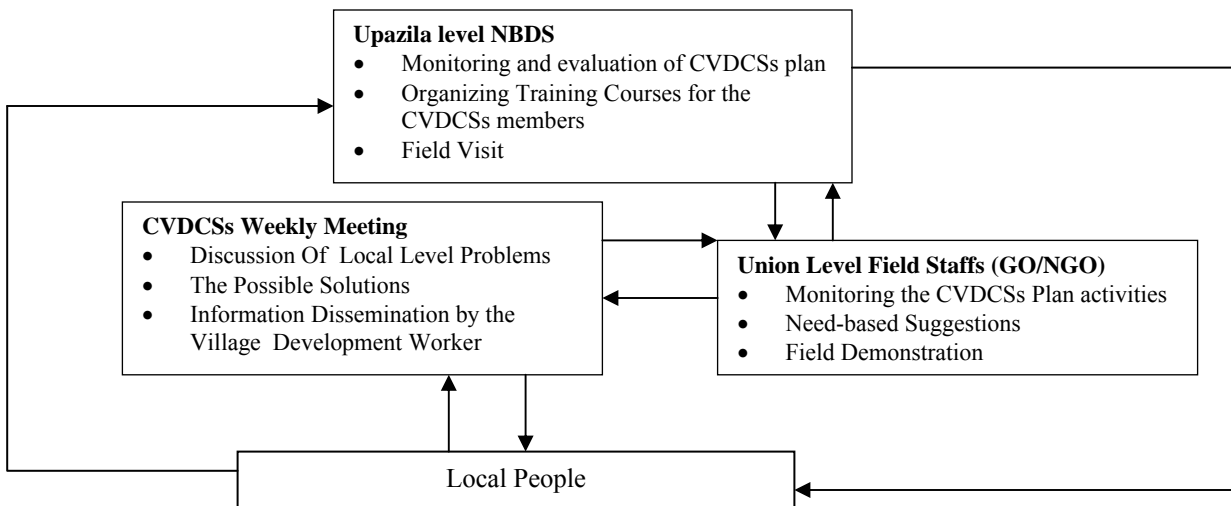
The villagers are active participants in CVDP's decision-making and planning activities. Every year the society prepares a draft plan for both economic and social development based on local resources. This plan is later presented at the annual general meeting of the society where the members participate through discussion on the plan and by making necessary changes. The unique feature of this program is that the representatives of all the CVDCSs meet at the Annual Planning Conference (APC) at Upazila centre, review their activities of the past year and prepare a plan of activities for the next year. Individual societies present their reports at the APC, and after deliberations, individual plans are prepared. This provides an opportunity to exchange views, share experiences, know each other's problems, probable solutions and the progress that has been made by the different societies. The APC gives the society members an opportunity for leadership training and is a source of feedback for the implementers.

### *Human Resource Development*

Community development as a dynamic process needs to equip the rural people with knowledge and skills to strengthen their capacity to be more productive. Information dissemination through skill development training in this regard is very important for the implementation of various development plans. Since its inception in the early 60s, BARD has

given the highest priority to need based training at the local level. BARD firmly believes that community based extension workers can bring a desirable change in the local level development sectors like livestock, fisheries, agriculture, health and nutrition, family planning, environment, education, and various other social aspects. Considering these facts, some component based extension workers, known as Village Development Workers, had been introduced in the CVDP villages.. The Village Development Workers received training according to their fields like pisciculture, livestock development, environmental development, family planning, rural education, health and sanitation etc. These trained development workers are responsible for liaising with the government officials of the NBDs at the UP. They disseminate their acquired knowledge and information in the weekly meetings of the CVDCSs to other members of the society to increase productivity, skills and social awareness in different fields. They work as social mobilisers, trainers, extension agents as well as service providers at the local level. The Technology Transfer Mechanism in CVDP Area is shown in Figure-3

**Fig 3: Technology Transfer Mechanism in the CVDP Area**



### **CVDP as a Sustainable Community Organisation**

i. Since its inception, CVDP has been trying to establish a strong institutional framework at the village level with the active participation of the members of the societies. It has developed a service receiving mechanism through a formal institution where the transparency and the accountability of the management are ensured in various forums like the weekly meetings, the monthly joint meetings and the Annual General Meeting. Attempts have been made to develop members' awareness and education, managerial abilities and leadership skills, and to establish a partnership with the government delivery systems like government NBDs, local government (Upazila and Union) and NGOs that provide services and supplies.

ii. As a result of the above, it has been observed that the CVDCS s have become self-reliant in terms of local level planning, local resources management, development of skilled manpower and dynamic leadership. It has also been observed that the village societies are now able to manage their socio-economic activities properly without any major financial assistance from external sources except the normal advisory services of the government agencies.

iii. The CVDCSs have a trained and committed development worker at the grassroots level that will eventually reduce the risk of extra government expenditure for extension services by different agencies. The existing activities of Government Organisations (GOs) and NGOs can be implemented in a planned and coordinated manner. Moreover, it will reduce the overlapping and duplication of programmes of different agencies at the village level, which will minimize the expenditures, and ultimately contribute to developing internal resources in the government exchequer.

iv. By and large, amalgamations of all segments and activities under one umbrella institution at the grassroots level and its linkage with other horizontal and vertical institutions helps to develop a stronger organizational base, especially in the case of physical and manpower development, compared to any other target group approaches. On the other hand, social capital has been developed in the CVDCSs where the villagers use their traditional values like empathy, unity, family bonds to address the problems in a common manner.

v. CVDP emphasizes the production, employment and income generating aspects of development. But, it does not neglect the other aspects of development like health, education, family planning, housing, sanitation, environment, social harmony, law and order, etc. The CVDCSs weekly meetings systems have increased member's confidence about participating in their organization's various socio-economic programmes.. It helps them develop a self-propelling institution for SD.

## **Conclusion**

While admitting that most of the governments of developing countries are not oblivious to the seriousness of the problem of environmental degradation and poverty, it must be recognized that pragmatism and objectivity are often lacking in tackling these problems. Experiences suggest that only technocratic solutions will not be sufficient to tackle such complex problems. One must admit that peoples' participation as an institutional structure is a stronger alternative than mere governmental poverty alleviation and environmental preservation programmes, as it not only empowers the beneficiary groups but also makes people (groups) responsive to the cost of preservation of the environment and entitles them to the benefits emerging therefrom.

Therefore, CVDP has developed an effective mechanism for integration and coordination of the activities of GOs and NGOs at various levels of the local government. On the whole, it can be said that the CVDP has been fostering an institutional self-help approach that leads the

beneficiaries to sustainable goal oriented development. It has proved its potential to successfully address the present needs of rural development under the framework of cooperatives by linking it with all the NBDs and the local government institutions. The high level of integration of all development efforts of various quarters and the participation of the stakeholders through CVDP are two of the most positive aspects of the programme.

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