CAPACITY BUILDING IN WATERSHED DEVELOPMENT : LESSONS FROM THE FIELD[1]

Authors
Yugandhar Mandavkar[2] and J M Gandhi[3]

SYNOPSIS

Importance of effectively involving the village community has been recognised as an important factor contributing to ensure success. Experiences all over the world suggest that success of a project often determined by the quality of participation of the community during and after the project period. Community participation and involvement are generally believed – both by implementers and planners – to be difficult to achieve, and therefore, not adequately addressed.

Experience shows that organisation and involvement of community, although complex in nature, are not difficult to achieve if approached systematically. Experiences of Voluntary Organisations (VOs) indicate that the communities have not only ably shouldered the responsibilities of maintaining and managing the resources created, but have gone beyond to undertake further development initiatives on their own. A series of small steps and use of variety of tools could be used to enhance the participation of community in four main stages of a watershed project, namely, Pre-Planning; Planning; Physical Implementation; and Post-implementation management (Gandhi, J M and Yugandhar Mandavkar, 2001).

It is possible to design the capacity building inputs appropriate to these four stages using a systematic approach based on the logic of Kolb's Adult Learning Cycle. Based on the experiences of three projects of MSSM and GRASP during the recent years, the authors have proposed a generalised framework for capacity building that could be adopted to any participatory watershed development project. This framework dwells upon the inter-linkages of four major components of initial design; opportunity to practise; feedback and learning loop; and reinforcement. Effective capacity building would happen and sustain if the mechanisms used are institutionalised by the implementing agencies into a system. It would no only enhance the participation of community, but also increase the quality of participation.

This paper presents the capacity enhancement approach and the corresponding observations from three medium scale natural resources development and management projects in districts Jalna and Buldhana in this decade. The paper also draws observations from other projects implemented over a period of time in different parts of the country.

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[2] Executive Secretary and CEO, Grass Roots Action for Social Participation (GRASP), V-18, New Shrya Nagar, Aurangabad – 431 005 (E-mail : grasp_agd@sancharnet.in)

[3] Secretary, Marathwada Sheti Sahayya Mandal, 5-14-42, Adalat Road, Aurangabad – 431 005 (E-mail : mssmabad@sancharnet.in)

1. People's Participation and Project Cycle

Project cycle comprises of three main stages, namely, planning; implementation; and monitoring. Involvement of people in any or all of the stages activity is a broad definition of participation[4]. It always results in increased stake holding and feeling of ownership, which invariably results in improved quality of the process (way in which the project was managed) and the output (project works or activities).

Based on their experience of many watershed projects, the authors had proposed simple four-stage methodology to involve the community in the project. These four stages were awareness building and participatory planning; community organisation; involving community in routine work; and conflict management. The authors also proposed a set of basic tools and techniques for community involvement in watershed management projects (Gandhi, J M and Yugandhar Mandavkar; 2001), as summarised below.

Table 1 : Suitable tools and techniques for involving community

Stage of the Project	Field	Aspect	Methods and Tools
Pre-planning	Technical	Awareness building	Audio-visuals, PRA
	Techno-economic	Problem Analysis	LFA
Planning	Technical	Identifying options	Exposure visit
	Socio-economic	Evaluating the desirability of options	Group work, village meeting
Physical Implementation	Techno-economic	Preparing (individual) implementation plan	Net planning
	Managerial	Operational plan	Group work
		Quality control	Supervision by team
		Measurement and payment	By interdependent teams
Project Implementation	Institutional	Sharing work-related responsibilities	Forming Task-teams and committees
		Conflict resolution	Institutional mechanism
		Creating development fund	Management system

It was observed that these tools and techniques could be used more effectively if they are interwoven in a systematic framework addressing the temporal and spatial needs of capacity building of the local community on one hand and the project requirements on the

[4] The term "participation" is used here in holistic sense and as distinct from numerical contribution. Of late, tendency to measure participation in terms of *shramadan* or local contribution is on the rise among some programme administrators. It often leads to setting numerical targets on ritualistic *shramadan*, which invariably results in manipulation of schedule of rates or records.

other. The capacity building needs could be assessed, irrespective of the project context, in terms of adult learning or experiential learning stages of the community. In the projects[5] used as a basis for this paper, the interventions were based on the premises of adult learning cycle postulate by Kolb and Ray (see Annexure 1).

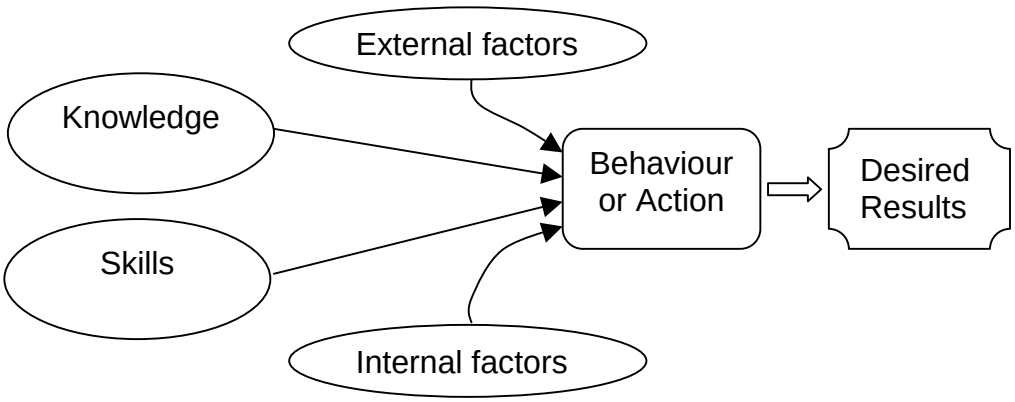
2. Capacity Building

In the context of watershed development projects, capacity building is looked at as a comprehensive approach towards environmental regeneration, economic development, and social empowerment. Capacity building was looked beyond conducting of training events and was expected to encompass the following two aspects:

- Human resource development, the process of preparing individuals with the understanding, skills and knowledge and experiential learning that enables them to function effectively (individually and as a group).
- Organisational development, the detailing out of management structures, processes and procedures, systems, not only within an organisation but also the management of relationships between the different organisations.

2.1 Concept of capacity

Capacities are described in terms of a set of knowledge and skills, and an ability to use them in a given project context. This set of knowledge and skills gets continuously upgraded, sometimes subconsciously, thus enhancing capacities of the individual.



Capacity building is expected to bring in new knowledge and skills or refine and enrich existing knowledge and skills. It is expected that the concerned stakeholders (community members, community organisations, project staff and implementing organisation) use these increased knowledge and skills to attain the desired results, which in turn are strongly linked to involvement of the community in the different stages of project cycle.

[5] Three main interventions referred to in this paper include Integrated Pest Management Programme (IPM) of MSSM in district Jalna supported partly by Swiss Agency for Development Cooperation and partly by Centre for World Solidarity (2001-05); GRASP's work on Capacity Building of Stakeholders in Aquifer Water Management Pilot (AWMP) in District Buldhana under Jalswarajya Project of Government of Maharashtra; and MSSM's work as Resource Support Organisation in NABARD-supported Holistic Watershed Development (NHWDP) in district Buldhana (2007-10).

Refinement of knowledge and skills is an adult learning phenomenon based on structured experimentation and analysis of observations or experience. It was based on this premise, the capacity building inputs were designed in the three projects.

2.2 Factors of Effectiveness

Three factors were found to be important in determining the effectiveness of an activity. These are:

- The quality of skills and knowledge of the implementers
- An efficient method of implementation
- Existence of circumstances conducive for applying that method

The first two fall in the domain of capacity building strategy, whereas the third is a part of the operating environment. The latter is more or less given, and the project implementer has a little scope to influence in a short period of time. A good implementer is expected to bring the three together to achieve the desired result.

For example, in Integrated Pest Management (IPM) programme of MSSM, the farmers and youth were given the initial training at the beginning of the season of crop cultivation in the month of June. Each youth, playing the role of the scout, was linked to a group of farmers adopting IPM, who would monitor the presence of insects in their farms at a fixed interval. Field level handholding support to the youth was mobilised through experienced scientists from the agricultural university and the state Agriculture Department.

Likewise, while introducing a new concept of groundwater to the community and their organisations in the Aquifer Water Management Pilot (AWMP) in 18 villages of Taluka Sindkehd Raja in District Buldhana, GRASP held extensive orientation programme and dialogue on hydrologic cycle and geological formations of the area and their implications for holding and handling water.

The above factors could be moulded for the benefit of the project provided the process of capacity building is carefully considered while planning the strategy, which could be based on the framework presented below.

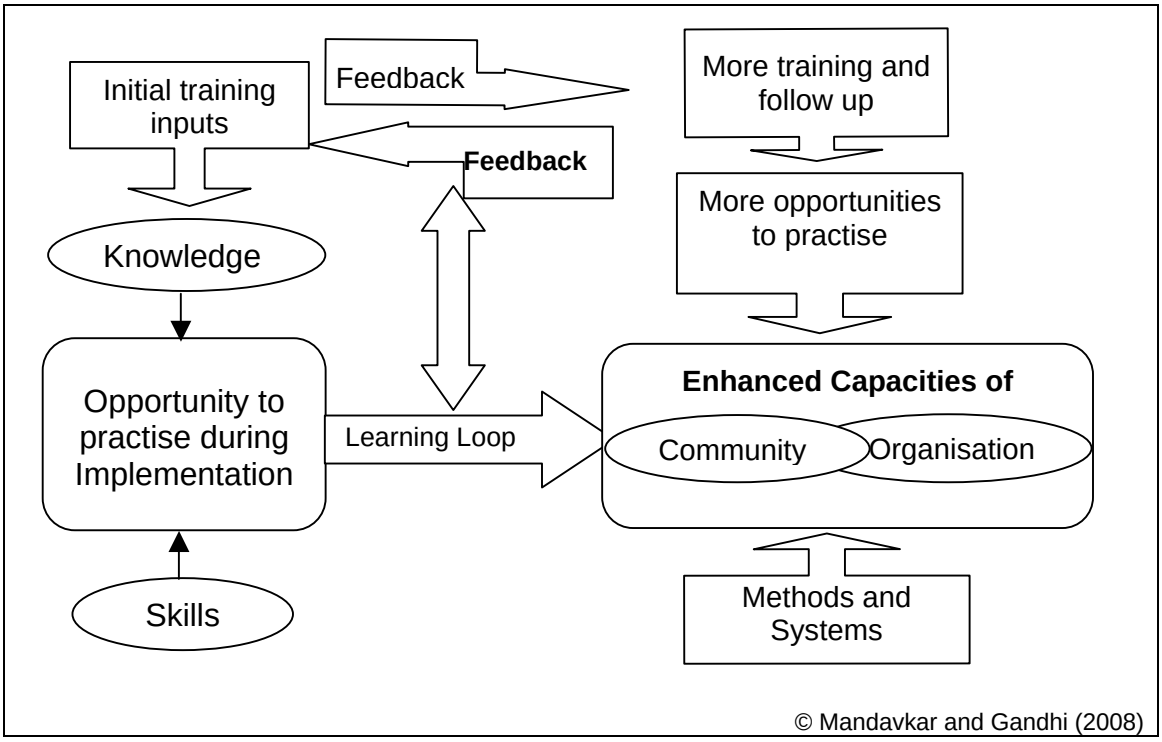
2.3 Capacity Building Process

A training event or an awareness programme is usually the beginning point in capacity building process, which leads to progressive enhancement of capacities if followed up systematically. The follow up could simply be in terms of getting feedback on if and how the participants are using the knowledge and skills imparted during the initial training event. The follow up could be planned as per the contextual requirements of the activity implementation and in line with the pertinent capacity building objective (expected outcome). It could also include analysing the experience of activity implementation with the participants (analytical review). Depending on the need, additional knowledge and skills (of higher order, and not the repeat of the earlier one) could be provided.

For example, MSSM organised the training programme for youth volunteers in net planning, and immediately followed up with the net planning exercise in two villages under NHWDP. A team of senior engineers were available during the exercise to ensure that the youth volunteers carry out the net planning correctly and to provide any on-the-spot guidance to overcome any difficulties. Similar approach was adopted by GRASP in AWMP while planning for groundwater recharge measures in Buldhana.

3. Capacity Building Framework

Enhancement of skills and knowledge has to be concerned equally with the initial inputs on new skills and knowledge and the learning loop for their continuous enhancement. It is therefore imperative that the capacities of concerned stakeholders improve consistently and continuously through the project period, resulting in improving quality of results. In view of the above observations, the capacity building process was remodelled as follows.



Basic to the planning and implementation of inputs for progressive capacity enhancement is the feedback. The study looked if feedback was integral to the Capacity Building Strategy of the partner or project, or if it was accidental. The study also looked at the use of the feedback and the mechanisms of feedback in the projects.

Effective utilisation of capacity also depends on opportunities to practise (such as MSSM conducting training programme on agriculture immediately prior to the crop season), as well as methods or systems that enforce or ensure the good practice (such as GRASP insisting on writing the proceeding book at the end of each meeting before taking the signatures of the members and reading of the same before concluding the meeting). Such practices should be carried out as routine rather than on event basis.

4. Systems and Institutionalisation

Capacitated participation may be easier to achieve in a sporadic manner or in some stages, but difficult to sustain throughout the project, unless institutionalised. Two practical methods, as adopted during the implementation of the above projects include defining monitoring indicators and reinforcement.

4.1 Monitoring indicators : Generally, project s define the monitoring indicators of capacity building in terms of inputs, such as number of training programmes conducted or number of participants attended. The accountants and clerks are often interested in monitoring the amount spent on such events. However, the monitoring of outputs and outcomes are seldom carried out. The projects under the study focussed especially on the outcomes of the capacity building efforts, such as number of improved practices adopted, increase in crop yields or water availability. These projects also identified a few process indicators, such as whether a group meeting was organised in dalit habitation before conducting a larger meeting or if women spoke in a particular meeting.

4.2 Reinforcement : Once a particular set of knowledge and skills are applied using a method, and it was effective in giving desirable results, it is useful to ensure that such practice continued. Reinforcement is an instrument used to encourage the participants to continue to apply the pertinent knowledge and skills using an appropriate method. It is akin to inculcating good habits. Recognition and acknowledgement of good practices was found to be an effective mechanism of reinforcement in the projects.

5. Inferences

Framework for capacity building, based on the past experience as described above, highlights few important lessons for wider application in community based natural resources development and management projects. The preliminary inferences, based on the foregoing discussions, point at the following:

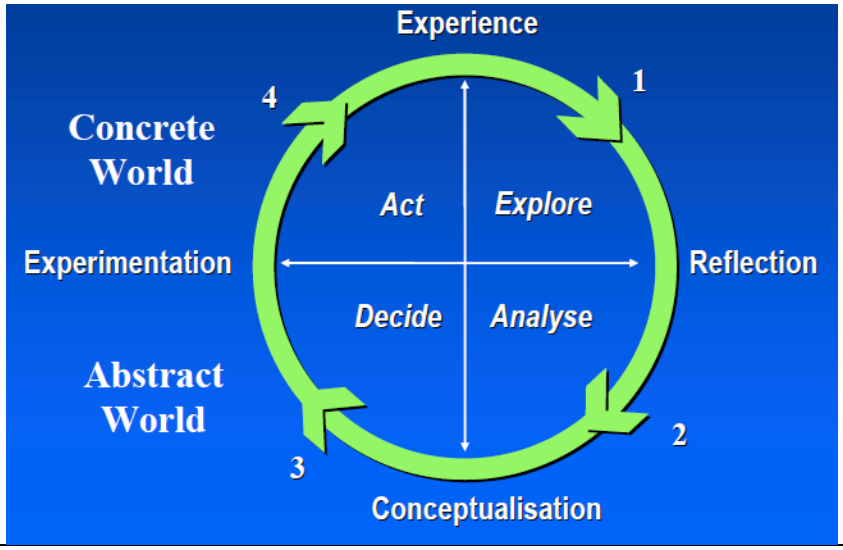
- Capacity building of local people is essential to increase their participation in any development programme. The capacity building measures could be based on the temporal and spatial requirements of the project and community.
- Experiential learning cycle could be used as a basis of designing appropriate capacity building interventions in a development project. Thus opportunity to practise must be provided immediately after the initial training input.
- Feedback loop plays an important role in refining the subsequent steps in capacity building process. Feedback should not be accidental but it must be designed.
- Effectiveness of a project depends on the quality of skills and knowledge of the implementers; an efficient method of implementation; and existence of circumstances conducive for applying that method. A good implementer brings in all these elements during implementation.
- Developing appropriate monitoring indicators and reinforcement could effectively institutionalise good practices.

Annexure 1

Adult Learning cycle

David A. Kolb (with Roger Fry) created his famous model out of four elements: concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations. He represented these in the famous experiential learning circle.

Kolb's Learning Cycle



Kolb and Fry (1975) argue that the learning cycle can begin at any one of the four points - and that it should really be approached as a continuous spiral. However, it is suggested that the learning process often begins with a person carrying out a particular action and then seeing the effect of the action in this situation. Following this, the second step is to understand these effects in the particular instance so that if the same action was taken in the same circumstances it would be possible to anticipate what would follow from the action. In this pattern the third step would be understanding the general principle under which the particular instance falls.

When the general principle is understood, the last step, according to Kolb and Ray is its application through action in a new circumstance within the range of generalization. In some representations of experiential learning these steps, (or ones like them), are sometimes represented as a circular movement. In reality, if learning has taken place the process could be seen as a spiral. The action is taking place in a different set of circumstances and the learner is now able to anticipate the possible effects of the action.

Two aspects can be seen as especially noteworthy: the use of concrete, 'here-and-now' experience to test ideas; and use of feedback to change practices and theories. These two aspects had been central to the interventions studied by the authors in the two projects.