# An Experience of Rural Based Grass Root NGOs in Irrigation Management

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#### Introduction

During a visit to Lamjung district for assessing the institutional capability of local NGOs/User groups, a group of surveyors happened to visit a farmers' managed Mashar irrigation system in Bhalayakharka Village Development Committee.

The command area of this irrigation system is 10 ha of land owned by 40 farm households. The land was unirrigated before 1964. As the population pressure increased, the local people realized the need of increasing food production in order to feed their families. The local people organized themselves and explored the irrigation potential from Chhi Khola. They formed a user group and developed the community irrigation system (contributing one month's labor for construction of the irrigation system from each household) in 1964. The system was developed from the steep slope of the hills. Each household also contributed 12-15/days for repair and maintenance every year. The unreliability of the system made the farmers realize that the system should be permanent and they requested the concerning line agency for financial help. In 1972, the community received Rs.4000 in a grant to repair the system. The beneficiary community again requested the line agency for additional financial resources to make the system permanent. In 1988, they become successful in developing the linkage with irrigation line of credit project implemented in the district.

The irrigation line of credit project approved Rs.400,000 for the permanent improvement of the system. The construction work was assigned to a contractor undermining the importance of the local community. The community thought that if they could obtain a petty contract from the contractor they could mobilize local resources and generate some savings for the operation and maintenance of the system. Accordingly they approached the contractor, obtained a petty contract worth Rs.90,000 from the contractor and were able to save Rs.30,000. The amount thus saved has been deposited in the bank. The community has used it for repair and maintenance work. In this way, they are (as of June 1992) operating their system efficiently. This is one example which demonstrates the capability of the local institution/NGOs. There are other similar cases to cite. Such cases imply that the user managed irrigation projects could be sustainable in the long run.

### **Approach in Irrigation Management**

Management of community controlled water implies making efficient use and best distribution of available water resources. Successful operation of the irrigation system requires sound management and mobilization of local resources. This can be achieved through the participatory approach

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in the community. In the past, the tendency was to divert the technical and financial inputs to agency managed irrigation system and the experiences indicate that the system developed and the managed by the external agency failed to develop the mutual trust and feeling of ownership among the beneficiaries of the system. Thus the question of sustainability of such irrigation system remains open to query. Keeping in view the above situation, a new modality of the participatory approach integrating the technical and financial know-how of the external agencies and traditional functioning style of the community has to emerge for sound management of the community irrigation system. This approach can be implemented creating the local institutions/NGOs as intermediaries.

### **Grass Root Participation in Irrigation System**

An organized effort, through a collective approach outside the government is the basis of community involvement in promotion and development of a community irrigation system. Thousands of local indigenous NGOs have been operating informally since time immemorial in Nepal. Many of them are operating small irrigation systems. It is estimated that there are about 17,000 such systems in Nepal.

Past experiences indicate that such informal indigenous NGOs have managed the community irrigation program with dedication and faith from individuals and the community. These local institutions have been more successful in managing the community development work even in inaccessible areas. Remoteness and harsh topography have induced the local people to work together in order to cater to their common needs. These type of self-evolved institutions are functioning very actively and are generating their own resources for operation and maintenance by creating awareness among the beneficiaries whereas agency persuaded local institutions are more dependable on outside agencies even for repair and maintenance of the community work. Bhoteodar Community Irrigation System of Lamjung district managed by the hill food program is a good example which shows that the community did not have interest in maintaining the system because the community was not involved in all steps of development process e.g. alignment, survey, construction etc. Whereas the community managed irrigation systems, constructed by the community and financed by the external agency, are functioning very effectively in terms of management of water sharing, operation and maintenance.

## Managerial Capability of Local Institutions/NGOs

The recent study of local institutions involved in irrigation system in Lamjung district<sup>2</sup> highlights the managerial capability of the local users' group and NGOs. The findings are very much relevant in this workshop on the role of non-government organizations in irrigation development and management.

<sup>2</sup> Users' Group Management Assessment Study, SAPPROS/Foundation, Nepal, July 1992.

All together 37 community irrigation systems developed in the district were surveyed and the capability of the local institutions in various aspects assessed. Some of them are as follows:

#### Capability in Planning

Most of the user groups/NGO are capable of identifying and prioritizing their needs. They are also capable of assessing the potential of resources, and developing the plans according to their felt needs.

#### Capability in Implementation

The local institutions/NGOs are efficient in implementing the irrigation project. In the case of self-evolved institutions/NGOs, they are implementing the irrigation projects much better than the agency persuaded system.

### Capability in Monitoring

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Most of the institutions/local NGOs maintain a record of both financial and other transactions of the project that they undertake. However the transparency system between the donor and beneficiaries is virtually non existent.

### Capability In Organization and Management

Organization and management part of the local institutions/NGOs are relatively poor. Lack of working guidelines (such as a manual) and proper training hamper the management capacity of the committee member. The summary of the findings of the community managed irrigation system shows the capability of local institutions in various activities are as follows:

Table 1<sup>3</sup>

S.N.	Activities	Capability in Percent
1	Planning and project identification	81.91%
2	Implementation of project	87.37%

Users' Group Management Assessment Study, SAPPROS/Foundation, Nepal, July 1992.

### **Empowerment**

The main thrust of decentralized planning lies in (i) encouraging people's participation at grass root level planning, implementation, monitoring and evaluation of development projects, (ii) empowering the beneficiaries through delegation of authority for decision making at the local level. The Decentralization Act also intends to empower the local institutions to carry out the community development projects. Very often these local institutions are not involved in any planning based on their own priorities but rather, they are forced to accept the model proposed by the external agencies even though such models do not suit the local condition. This functioning modality has made the irrigation management system more complicated. A new modality has to be introduced involving the local people in all aspects of a irrigation system (i.e. alignment to water sharing) and making the donors/agencies a catalyst for serving the technical and financial inputs required for the implementation of irrigation system.

### Strengths and Weaknesses of Local Institutions/NGOs

Local institutions involved in irrigation management system have demonstrated better prospects for management of local resources. The irrigation system developed and managed by the self-evolved institution is functioning very actively in terms of (i) local resource mobilization, (ii) development of ownership feeling, (iii) effective co-operation, (iv) creation of local leadership. These positive aspects are contributing in one way or the other, towards the betterment of irrigation management. The sustainability of the local institutions are also largely dependent upon effective implementation from the people themselves.

#### Weaknesses

The local institutions/NGOs engaged in community irrigation system have not served the community as envisaged. The major factors responsible for this is as follows:

- a) fully dependent on external assistance,
- b) lack of savings generation for repair and maintenance of the system,
- c) over-involvement of agency and frequent intervention in the construction phase,
- d) lack of ownership feeling in the irrigation system,
- e) selfish leadership among the ex-office chairman in the local institution, and
- f) vested interest.

### Future Role of Local Institutions/NGOs

In the changed political context the recent enactment of District Development Committee and Village Development Committees Act has recognized local institutions/NGOs as vehicles for carrying

out development activities. Thus the role of NGOs for development of the country in general and rural development in particular becomes vital. Under the environment of decentralization and liberalization, community development activities require the development of a range of institutions through which the community can choose how to make their own investments and the government can choose how best to deploy the resources that it has to support local endeavor. The NGOs established by the local user groups can match the local felt needs with that of outside resources and operate the management process by being the intermediaries.

### **Suggested Strategy**

It is widely accepted and recognized that development work has to be initiated at grass root level through people's participation while developing their own institutions. Organization of local institutions is not an end in itself but only a means towards effective local participation and they can articulate the local needs and design the appropriate technique through a bottom-up process. The experiments of community level irrigation systems implemented over the last three decades show that grass root institutions with participatory approach are urgently needed for community managed irrigation programs. It should be realized that unless these institutions are given authority and appropriate recognition they are not likely to motivate the people and enhance their participation (whether physical, moral and financial) required to achieve their goal. The future strategy of community irrigation management system should focus on the following issues.

The community should be empowered to carry out community level irrigation projects from alignment through to the construction phase. The prevailing tendering and bidding system for construction of community irrigation projects should be eliminated thus empowering the users to carry out projects either themselves or as per their decision. The funding agencies should provide financial and technical back-up. This approach will promote the community involvement in irrigation management system.

The cost sharing system introduced in community irrigation programs has been useful for creating the sense of ownership of the irrigation project and also helped motivate them to accept the responsibility of maintenance and supervision. The cost sharing arrangement should be made uniform among the various agencies irrespective of any public or private sector.

Labor is the only available resource which has not been used effectively and the system has not been developed to save labor resource at the time of need through a conversion mechanism that converts labor into capital resource. It is proposed to implement this strategy distributing labor certificates to the labor contributors making entitlement of the resource generated through this process. The proposed scheme will generate the savings from labor resources and enhance or promote the labor contribution in the community irrigation system. The provision of resource generation in the construction phase of irrigation will equip the local institution with resources and also the accumulated resource can be used in repair and maintenance work of the irrigation system. The sustainability of the local institution largely depends upon the availability of local resources. The conversion of labor into capital resources will boost the community irrigation management system effectively. The labor certificate scheme is already implemented in drinking water projects of Ghyalchowk and Bhumlichowk Village Development Committee of Gorkha district. The details of labor mobilization and certificate scheme is in Annex 1.

The implementation strategy adopted by the local institutions/NGOs varies in irrigation management system. The strategy adopted by some local institutions are in right direction whereas achieve-

ment of some others are not encouraging. The variation in all activities of community irrigation prevail in irrigation management system. It seems necessary to introduce the working guidelines and procedure of irrigation program to minimize the problems encountered by local institutions. In this connection, it is necessary to prepare the simple and understandable irrigation management manual covering all aspects of community irrigation project (planning, implementation, decision making process, financial and resource management, record keeping sharing of water, repair and maintenance, monitoring and evaluation process, savings generation for repair work etc.) and provide the manual to local institution/NGO before implementing the community irrigation system. The proposed manual is expected to be instrumental in capitalizing the strengths of local institutions/NGOs in rural development effort by minimizing the problems encountered and weaknesses inherent in such institutions.

The other probable key issues are possibilities of channelizing the technical and financial resources to local level institutions/NGO. Mobilization of technical resources may not be problem but financial resource mobilization will require substantial change in financial regulation. It is suggested that an intermediary agency be created in order to channelize the financial resources.