Role of Social Organizers in Assisting Farmer-Managed Irrigation Systems: The Case of the Agricultural Development Bank of Nepal

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BACKGROUND

SINCE ITS INCEPTION the Agricultural Development Bank of Nepal has been actively involved in the development of minor irrigation schemes as a means of increasing food-grain production. However, planned implementation of minor irrigation development began only after 1980/81. Minor irrigation includes community gravity-irrigation schemes within the Small-Farmer Development Project areas and individually owned shallow Nbe wells, rower pumps, etc.

The Agricultural Development Bank of Nepal and CARE/Nepal began joint implementation of community gravity-irrigation schemes in 1983/84 within the Small-Farmer Development Project areas to assist subsistence and marginal farmers to increase their agricultural production. Such schemes are now being implemented outside the Small-Farmer Development Project as well.

While the Agricultural Development Bank of Nepal extends credit and extension services to all farmers, those farmers living below the absolute poverty line (43 percent) require special attention to improve their status. The Small-Farmer Development Project is the main means to achieve this. Many income-generating activities are in progress and community irrigation (both surface and groundwater) is one of the more effective and accepted programs being applied to alleviate rural poverty.

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"SOCIAL ORGANIZER" IN THE AGRICULTURAL DEVELOPMENT BANK OF NEPAL CONTEXT

In the Agricultural Development Bank of Nepal-supported projects no social organizer is hired specifically to assist farmer-managed irrigation schemes. The Small-Fanner Development Project manager and group organizer is deputed by the Agricultural Development Bank of Nepal to act as a catalyst agent in forming groups and in motivating the farmers in their various socioeconomic activities. In the Agricultural Development Bank of Nepal context the group organizer may be seen as the social organizer.

The group is formed according to the Small-Farmer Development Project rules and regulations. The group organizer identifies interested small fanners and motivates them to form groups. Each group elects a group leader, a deputy leader, a secretary, and a treasurer. The group leader chairs group meetings and acts as an intermediary between the Small-Fanner Development Project, other line agencies, and the group. He assists the group to prepare plans and to conduct social actions. The group leader also calls group meetings as and when required. The deputy group leader performs all the above activities in the absence of the group leader. The secretary calls the group meetings, records minutes of meetings, and handles all correspondence.

THE STATUS OF FARMER-MANAGED SCHEMES IN NEPAL

Farmer-managed schemes cover approximately 500,000 hectares (ha) in the *Terai* (plains) and 150,000 ha in the hills. Fanning communities have for long constructed, managed. and maintained irrigation systems in Nepal. Privately constructed irrigation schemes cover a greater area than do publicly constructed ones. Moreover, each year new areas are brought under irrigation through individual and community-based schemes using both surface water and groundwater.

COST-SHARING APPROACHES

A number of governmental, semigovernmental. and private efforts with varying cost-sharing approaches to irrigation development have been tried in Nepal. Each agency has concentrated mainly on developing irrigation facilities through its own organization. Government agencies identify, survey, and design projects and contract out the construction work to the private sector. Once construction is completed farmers within the command area are required to pay fixed

charges for the irrigation services in return for which the Department of Irrigation takes responsibility for maintenance. Farmers' participation in the identification, design, execution, and maintenance of such projects is minimal.

Other government and nongovernment agencies follow different approaches. In projects under the Farm Irrigation and Water Utilization Division (now amalgamated with the Department of Irrigation) grant-in-aid of 75 percent is provided while the farmers contribute 25 percent. The farmers' share may be supplemented by a loan from the Agricultural Development Bank of Nepal.

In projects under the Ministry of Panchayat and Local Development, a lump-sum grant is provided for a particular project. Although the proportion of farmers' participation is not fixed some degree of farmer participation is always required.

The Agricultural Development Bank of Nepal follows several different approaches. For surface-water schemes it provides locally unavailable materials (cement, reinforcement bars, etc.) in the form of grants. This comes to about 50 percent of the total project costs. Of the remaining costs, 30 percent is covered by beneficiary participation and 20 percent through labor contribution. No grants have ever been made available to irrigation projects constructed by individual farmers. For groundwater schemes, no grants have been made except for well-sinking costs not exceeding approximately US$167 (NRs 3,000) for each shallow tube well.

CURRENT IMPLEMENTATION APPROACH

A common approach has been taken by all government and semigovernment agencies, based on two principles:

* Obligatory participation of farmer beneficiaries in identification, design, development, and maintenance.
* The same proportion of grant-in-aid to all projects of a similar nature, irrespective of the implementing agency.

This approach is applied to both group-operated and individually operated surface-water and groundwater schemes.

PARTICIPANTS IN IRRIGATION DEVELOPMENT

Many irrigation schemes have been identified by the Agricultural Development Bank of Nepal at the request of group organizers. The Agricultural Development Bank of Nepal and CARE/Nepal have conducted detailed surveys and have made cost estimates. After discussions with the farmers the proportions of cost sharing, involvement of beneficiaries, and labor contribution have

been finalized. The responsibilities and duties to be carried out by the related organizations are defined as follows:

1. The Beneficiary Farmers: Procurement of materials. management of labor, acquisition of a loan, maintaining records, and assisting in the execution of directives of the technical team.
2. The Small-Farmer Development Project (p u p organizer): Monitoring of work progress, checking of records, coordinating the construction committee with the beneficiary farmers, helping the technical team to implement the scheme and disbursing the approved loan.
3. The Technical Team: The technical team of the Agricultural Development Bank of Nepal and CARE/Nepal bear all technical responsibility including supervision.

The role of social organizers in developing farmer-managed schemes has been limited till now. Only CARE/Nepal has been involved. In this context. the group organizer identifies the project and prepares a request to the public sector (the Department of Irrigation or the Agricultural Development Bank of Nepal) to carry out a survey and to design the project. The scales of total investment, farmer participation, and farmers' labor contribution are finalized in the course of the project preparation. Following evaluation and approval, a contract is signed between the executing agency and the construction committee working on behalf of all beneficiaries, which includes, inter alia, the provisions made in the implementation guidelines and other modalities of operation. It also includes a binding clause requiring beneficiaries to maintain the works and to make regular repairs to the facilities once construction is completed. The technician involved cenifies completion of the construction work and the construction committee hands over the project to the water user's committee.

Farmers' contribution is required from the very beginning of construction work and must be maintained throughout so that the value of the works shall always contain a fanner component, even if actual project costs are ultimately less than the original estimated cost.

An independent organizer is required to identify the project and to mobilize farmers' active participation from the very beginning until project completion. He also helps the farmers to develop the capabilities necessary to take responsibility for the operation and maintenance.

THE ROLE OF SOCIAL ORGANIZERS IN ASSISTING FARMER-MANAGED SCHEMES

At present, the role of social organizer in these projects is limited to the project-implementation stage only. As the resources are entirely under farmer control and require no large bureaucracies there is room to expand the role of the social organizer. More specifically he can contribute in the following areas:

1. Reducing the gap between potential irrigation and actual utilization.
2. Encouraging the farmers to increase production and income by adopting high-value and quick-yielding crops.
3. Accelerating the program of afforestation, restoration of pastures, protection of agricultural land, introduction of soil-conservation measures to prevent soil erosion through runoff, and the control of unrestricted grazing.
4. Discouraging the use of high-capacity pumps which may overdraw groundwater resources.
5. Encouraging farmers to install tube wells in joint ownership so that more land may be irrigated.
6. Identifying measures to conserve the resources and to prevent pollution of surface-water resources and groundwater resources.
7. Mobilizing maximum local resources and the introduction of appropriate technologies.

THE NEED FOR FARMER-MANAGED SCHEMES

The performance of sophisticated public-sector irrigation projects has not satisfied expectations despite heavy investments which amount to US$2,225 to 3,335 (NRs 40,000 to 60,000) per ha. The major problem in the public schemes is the reluctance of farmers to become involved in their operation and maintenance. Fear on the part of farmers with regard to the financial and technical burdens of the sophisticated systems and their lack of involvement in decision making and planning are the major causes for this reticence. Allocation of low budgets for repair and maintenance results in untimely release of water further shattering the confidence in public-sector schemes. Under these circumstances, farmers are not committed to the systems and are unwilling to pay the charges. This in turn results in poor cost recovery.

Farmer-managed schemes, though unsophisticated in nature, cost only approximately US$225 to 670 (NRs 4,000 to 12,000) per ha, and constitute effective organization and water-distribution systems. Since the schemes are farmer-initiated a positive attitude towards the scheme is common. The obligatory investment required of farmers and their labor contribution lead to feelings of ownership towards the schemes. This in turn is reflected in repair and maintenance costs of about US$17 to 61 (NRs 300 to 1,100) per ha as compared to US$111 to 278 (NRs 2,000 to 5,000) per ha in public-sector schemes.

It is evident therefore that farmer-managed schemes have greater management flexibility and farmer involvement in the schemes reflect the opportunity for quick returns on investments.

CONCLUDING REMARKS

Exploitation of natural and public resources by groups of farmers is a difficult affair. There are numerous legal considerations and various state agencies are involved. It is necessary to maintain close contact and frequent exchanges of ideas and views among the concerned agencies to help modify and improve existing provisions. Furthermore, there are considerations of costs and benefits in developing and maintaining irrigation schemes. The requirement that farmers share in the costs makes it necessary that they should have the power to exclude individuals, who do not share in the costs, from sharing in the benefits. Without this provision jointly owned irrigation schemes will be unable to operate. This is where the role of social organizer becomes pertinent in the development of irrigation schemes. He can contribute most in creating institutions of farmers that can effectively carry out the responsibilities of developing and maintaining irrigation schemes.

Taking responsibility for supervision and coordination together with the curbing of corruption is undoubtedly an awkward job for the social organizer in his role as catalyst agent for social development. The most effective means *to* achieve this goal is to involve independent internal or external nongovernment agencies to intervene and to assist the farmers to reach the necessary level of awareness.

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