**FARMER PARTICIPATION IN INDIA: A Philippine View**

We visited the Hemavathi command area in Karnataka state, India, where a *warabandi* (rotational) water distribution procedure is being introduced. The schedule of turns is written on a board conspicuously placed near the turnout gate. The irrigation engineers prepared the water schedule for each farmer. They did not consult farmers in the design of the canal system, or in the planning for the water schedule. In the Philippines, by contrast, farmers are the ones who formulate the water allocation schedule with the assistance of an NIA engineer.

Water users were grouped at three levels: block committees of 3-5 members at the lowest level, outlet committees, and distributary committees. Each group has an elected leader who serves as a liaison with the government agencies, resolves conflicts, and coordinates the activities of the members. Unlike the situation in the Philippines, no training is provided to these committees.

Less than 50% of operation costs can be met from the revenue collected in irrigation fees. Water rates per acre of paddy, regardless of the season, are US$ 2.10 for government systems but US$ 7.40 in private systems. The collection rates range from 50-70%. The fees are collected by the Revenue Department.

In the Philippines, collection rates range from 40-60% in national systems and 70-85% for communal systems. The water rates are US$ 6.70 per acre in diversion systems during the wet season and US$ 10.00 per acre during the dry season. For pump systems the rates are considerably higher: US$ 16.90 (wet season) and US$ 18.50 (dry season). The fees are collected either by the NIA or by the irrigation association.

The *warabandi* schedule introduced on a pilot basis in the Hemavathi command did not last long. After the first year, farmers did not follow it, and planted high water use crops such as paddy and sugarcane, instead of *jowar* (sorghum), *ragi* (millet), and cotton. Upstream farmers controlled the water supply, resulting in shortages for downstream farmers.

Ireneo C. Agulto, Dept. of Agricultural Engineering, College of Engineering, Central Luzon State University, Munoz, Nueva Ecija, PHILIPPINES and Eduardo G. Marzan, Jr. College of Agriculture, Central Luzon State University, Munoz, Nueva Ecija, PHILIPPINES.

---

**The Philippine Approach to FMIS Development: A NEPAL Perspective**

[Mr. D.N. Tiwari, from Nepal, reports on his PDI visit to the Philippines in April 1988, where he attended a NIA seminar on "Farmer Participation in Irrigation Development: The Philippines Experience" and visited several communal irrigation systems. This report draws comparisons with the situation in Nepal.]

**THE NIA APPROACH**

The seminar outlined the participatory approach that has been used by the National Irrigation Administration (NIA) in the Philippines for more than a decade. The topics covered included an overview of the NIA's organizational pattern and a review of the evolving policies relating to irrigation development. The process whereby the NIA helps farmers establish an "Irrigators' Association" was discussed, not only in terms of the field implementation, but also the
financial incentives to the agency in promoting this type of decentralized management, and the institutionalization of the approach into the NIA bureaucracy.

Questions raised by participants at the seminar included the following:

> What were the forces pushing the NIA to launch the participatory approach?
> What is the division of responsibility between the Irrigators' Associations and the NIA?
> What is the role of individual farmers in the Association's decision making, and what is the influence of landlords?
> How does the NIA select the irrigation systems for rehabilitation and improvement; how useful are the estimates of "internal rate of return" and benefit/cost ratios?
> How willing are the farmers to organize and take greater responsibility for irrigation management?
> What incentives are given to the association leaders?
> How are disputes resolved?
> What are the criteria for evaluating the success of the irrigators' associations?
> What kind of monitoring and evaluation does the NIA conduct?

Several factors emerged from the seminar discussion as key elements in the NIA's success with the participatory approach. One factor was the corporate nature of the NIA itself, that it was able to incorporate change, partly through amendments to its charter. A second factor was the legal framework recognizing the irrigator associations, which were then given control over irrigation management and fee collection. At the same time, the increase in irrigation service fee collection rates under the participatory approach convinced the skeptics. Other important elements of the NIA approach include the use of catalysts (community organizers), in-service training of NIA staff, and an overall "re-orientation" of the agency.

COMMUNAL IRRIGATION SYSTEMS

The communal irrigation systems we visited had fairly simple physical infrastructure, such as masonry weirs with gated canals, some lining along portions of the canals, division boxes, and gated outlets. The sizes of the command areas ranged from 15 to 155 hectares; membership in the association ranged from 46 to 143.

In addition to the association leaders, there is also a water tender who is paid a wage (by the association) and is responsible for water distribution, minor repairs, and informing farmers in the event of any emergency. Selection of association members each year is done by consensus, and not by formal vote.

Most farmers cannot subsist on their agricultural income alone. While farmers claimed they need about 2 ha of land to maintain an average size family, the average land holding size is between 0.5 to 1.0 ha.

A LOOK AT NEPAL

In view of Nepal's projected irrigated area of 854,000 ha by the year 2000, the Philippine experience with the participatory approach is relevant to the following issues:

> How to assist both small and large FMISs which are facing increasingly scarce resources and supplies of construction materials, due to forest and land degradation?
> How to plan, design, and implement foreign invested projects so that water management problems and recurrent costs can be minimized?
The nature and degree of farmers' participation in Nepal differs sharply from the Philippine case. So also does the subsidy picture: while substantial capital costs of irrigation improvements in the Philippines are paid by the irrigator associations (through long-term amortization), in Nepal the capital costs are mostly subsidized by the government. Other features which differ in Nepal are the absence of a legal framework for farmer associations, lack of catalysts, and lack of staff training.

At the same time, the political set up, topography, socio-cultural pattern and history of government assistance in irrigation development are entirely different. Due to these differences, one cannot point to any direct application of the Philippine approach in Nepal. Instead, one must look for relevance at the more general level of the process through which NIA has been successful in: 1) assisting communal systems without disturbing their traditional organization, while 2) reducing the O&M burden to the government. The question becomes how best to fit a participatory process into the political, bureaucratic, and socio-cultural patterns found in Nepal. Several suggestions emerge:

> Government officials need to become more responsive to farmers and their organizations. Some decentralization of responsibility within the agencies could help render those agencies more accountable to farmers. Agency officials need training and incentives, as well as better monitoring and evaluation of their performance.

> The separate responsibilities of farmers and government agencies need to be clearly defined. A policy requiring farmers to bear some construction burden, as well as O&M costs, needs to be worked out.

> A legal basis for granting and securing water rights, and for farmer organizations to take minor construction contracts needs to be formulated.

> Catalysts (community organizers) should be trained and hired according to standard rules and regulations. [Editor's note: some pilot work using catalysts has recently begun in Nepal.]

> Greater flexibility is needed in foreign funded projects to allow for adaptation to local needs. Mechanisms for using local resources and farmers' know-how can result in more sustainable improvements.

[Based on a report prepared by D.N. Tiwari, IIMI, P.O. Box 3975, Kathmandu, NEPAL.]

Federations in Northern Thailand

The authors of this report had the opportunity to conduct a pilot study to Chiang Mai province in June 1988, under the IIMI-UNDP program of professional development interchange. The purposes of the visit were (1) to study the inter-system federations linking systems within a single river basin, and (2) to study the interaction between the government and farmers belonging to People's Irrigation Systems (PISs) in the area.

The characteristics of PISs in the Chiang Mai area are the following: Each PIS has its own weir to divert water from a river or stream, and then to a canal network and farmers' fields. A PIS is not necessarily located in one village, but may include several villages, or only part of a village. Each PIS is managed by the farmers themselves, who establish an organization of water users.