Weir Systems in Northeast Thailand:
A PHILIPPINE PERSPECTIVE

During our trip to the Khon Kaen region in northeast Thailand, we visited 8 irrigation systems: 3 concrete weirs, 4 wooden weirs, and one small reservoir. All three concrete weirs were constructed by the Royal Irrigation Department (RID), with the help of paid labor by the beneficiary farmers. Farmers are then expected to construct the canal network themselves, with no financial assistance from the RID. This division of labor is the basic reason for the low rate of system utilization: farmers have constructed canal networks for only 10% of the 2,000 concrete weirs.

Water users' groups are generally formed after the RID has constructed the weir. In some cases groups were formed without assistance from the government. Under a project known as the Small-Scale Irrigation System (SSIS) project, researchers from University of Khon Kaen are helping the RID develop a new cadre of community organizers (COs) to work with

farmers. The COs are to serve as catalysts in promoting an irrigation association, which is actually organized by village leaders.

Water users' groups in Northeast Thailand are mostly informal in the sense that they are not registered with the government; however, the groups seem quite cohesive in a practical sense. Memberships range from 15 to 200 farmers. Usually there is an elected chairman, although in one system we visited the village headman plays this role.

Membership fees were collected in 3 of the 8 systems we visited. In other cases farmers contribute materials for maintenance, such as wood and bamboo. Cash is, however, needed for equipment rental (e.g., tractors) and food to provide farmers when they are working on maintenance. Labor obligations may be based on a household basis (a certain number of days per family), pro-rated on the basis of landholdings, or based on the location of the family's fields in the system (i.e., upstream farmers are obliged to give more labor).

Fines and other penalties are strictly imposed, but reported incidents of water stealing or being absent from maintenance duties were rare. Officers of the associations who are absent from their duties during scheduled activities are fined at twice the rate of regular members. Financial records are not kept, since liquid funds are kept to a minimum.

COMPARISON WITH THE PHILIPPINES

The poor rate of utilization (10%) of concrete weirs constructed by the RID points to the need for a clear agreement with farmers before construction begins. In the Philippines, the idea of farmer participation took hold only after 1974. Prior to that time, the engineers did the design and construction of the system without the farmers' knowledge. Since then, farmers have been consulted regarding the planning and construction of new or rehabilitated systems.

A special division within the National Irrigation Administration (NIA) has been formed to meet the needs of farmer-agency interaction and water users' organizations. The Institutional Development Department coordinates the work of Irrigation Community Organizers (ICOs). These staff receive special training in both irrigation and community organizing and are assigned to the field for about one year before construction work begins. In new systems, the ICOs may take on management functions temporarily, until the irrigation association has the capacity to take over.

Irrigation Associations in the Philippines are officially registered with the Security and Exchange Commission of the government. A standard set of officers is found in most associations, including the president, vice-president, secretary, treasurer, and an auditor. The tenure of office is usually one year, although some presidents are re-elected for 3-5 years. In spite of the highly structured organization, however, conflicts do occur, especially during the dry season. The overall cohesiveness of the Thai associations we observed compares favorably with the situation in the Philippines.

As in Thailand, farmers in the Philippines contribute both cash and materials for the operation and maintenance of the systems. Fines and penalties are fixed according to the association's by-laws, but are usually not strictly enforced. Associations in pump systems usually prepare a summary of receipts and expenses once each year, which is audited and attested by the auditor and president respectively, and then

presented to the members at a general meeting. A copy of the financial statement is also submitted to the NIA. Unlike the situation in Thailand, farmers are required by law to pay irrigation service fees, either to the association (if the NIA is not involved) and/or to the NIA, to cover the operation and maintenance costs of the system.

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.