

# **Resource Mobilization in Nepal**

This short note presents some of the modes and methods of resource mobilization in FMIS in Nepal where more than 60% of the total irrigated area is under farmer managed systems. Resource mobilization modes and methods can be broadly characterized as internal or external.

## **Internal Resource Mobilization**

Resources available to the farming community include labor, cash, materials and natural resources and animal power as well as enterprises run by the system. Such resources are mobilized from within the system.

Labor. The basis of labor mobilization varies among FMIS depending upon size of landholdings, household size, status of the farmers, and water shares. As a general rule, labor mobilization is not voluntary; it is in exchange for the utilization of water. If the user fails to contribute the labor assigned to him, he will be fined or he will be deprived of the irrigation water.

Cash. In lieu of labor, farmers in some FMIS collect cash to hire laborers from outside the system. Money is collected on the basis of land holding size, land quality, or water share. The cash might be used for physical construction, to pay royalty to the forest department to collect branches and logs for diversion weirs, or to pay salary to irrigation officials. Cash is also mobilized from the fines imposed on members of the irrigation system for not fulfilling their obligations.

Forest Products. FMIS usually have temporary structures made out of stones, boulders, tree branches, logs and bamboo. These materials are used for diversion dams, intakes, and check

dams for raising the water level. These materials are used in profuse quantities in large-scale farmer managed irrigation systems of the Tarai.

Bullock Carts. Where the construction materials for the diversion dam is distant from the dam site, bullock carts are mobilized to transport the rocks, bamboo, and branches needed. In large FMIS in the Tarai where very large diversion dams are constructed with materials imported considerable distances, bullock carts are a critical part of resource mobilization.

Water Mills. Constructing water mills along the irrigation canals can help pay for the cost of canal maintenance. In one case, the irrigation organization permitted a private party to use their irrigation water for a water mill. In return, the mill owner would maintain the canal from the intake to the mill site. With the introduction of electric mills, farmers in some irrigation systems are faced with additional maintenance work, since the water mill owners no longer maintain portions of the canal.

Sale of water. By increasing the volume of water in the system, extra water can be sold and resources (both cash and labor) mobilized for system improvement or community development. In one case, funds were raised for improving the community school. Water share transactions may take place among individual share holders as well. Such transactions have little impact on the overall resource mobilization of the system.

Knowledge. Mobilization of the knowledge of village elders is of particular importance in remote FMIS where the elders serve the function of libraries.

## External Resource Mobilization

Resources tapped from outside of the community are an increasingly important component of FMIS dynamics, particularly for rehabilitation and maintenance of the system.

Cash. Mobilization of cash from the national, district, or village panchayat levels, voluntary organizations or from international agencies, is used for improvement or regular maintenance of the system. Chherlung system in Palpa District received a cash grant from the District Panchayat for one-time improvements; farmers in the Satamohane system near Pokhara mobilize resources from the Kaski District Panchayat for regular maintenance. Voluntary organizations give money for specific repairs (e.g., to repair a tunnel) or through regional programs. Government agencies (e.g., FIWUD) provide subsidies for irrigation rehabilitation.

Construction Materials. In addition to forest products, construction materials are mobilized from external organizations for those items which are not available locally. Gabion wire and cement are most common. Food assistance (from Food for Work) is also an important feature during the construction process.

Technical Knowledge. Generally, technical knowledge would be provided by the technical agencies of the government. However, there are also many examples of farmers' exchange of experience from one system to another.

Supervision. Supervision by outside experts of work done by local people is a form of managerial resource mobilization.

Machinery. Bulldozers or excavators are brought into the system for desilting in large FMIS such as Pithuwa, where regular desilting of the canal was needed after each flood, or in Chhatis Mauja for annual desilting.

Credit. The various forms of credit available for irrigation development include the ADB/Small Farmers Development Program, the shallow tube well program under ADB/N and the ADBN/CARE Nepal program. In this last program, ADBN/CARE provide a 50% subsidy with farmers providing the remainder, either through labor or loans.

### **Observations**

The political strength of the irrigation organization is closely linked to its capacity to mobilize external resources. These issues need to be considered in the total political and economic policy of the government. Is the government prepared to take over all farmer managed systems or would it like to provide assistance only when it is really necessary?

Outside assistance programs need to consider the nature of farmers' resource mobilization and how the assistance will affect the pattern of resource mobilization. The strength of the irrigation organization of the systems is based on the nature of resource mobilization. Assistance programs should seek to strengthen that organization. A resource mobilization perspective can be used as a methodological tool to understand how the irrigation system works, and to identify priority areas for assistance.

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