

Involving Farmers in Their Own Destiny

Pakistan's water-sector reform was created to inject more efficiency and accountability into irrigation management, and to link farmers and water institutions through an ongoing dialogue. The initial problem was that most farmers did not have the skills to take on these responsibilities. IWMI's research work—and advice to the government since 1995—has helped local authorities manage change and prepared farmers to take a hands-on approach to managing their water resources.

Since the mid-1990s, Pakistan has been seeking to reform its irrigation sector. The primary motivation behind this effort is to create financially sustainable irrigation agencies and improved operation and maintenance of the infrastructure.

A history of inadequate management, combined with an increasing demand for water by irrigators and other water users, has resulted in low, inequitable, and unreliable water supplies. This water-scarcity situation has given birth to a hidden economy, where users illegally tapped irrigation systems to generate a black market in water.

The entry into force of the 1997 Provincial Irrigation and Drainage Authority Acts, paved the way for the creation of three new institutions. Irrigation Departments will become semiautonomous Provincial Irrigation and Drainage Authorities (PIDA). Area Water Boards will be formed, through which farmers and personnel of PIDAs will jointly manage irrigation and drainage networks at the canal command level. Management responsibilities at the distribution level will be transferred to Farmer Organizations (FOs).

Open and more frequent dialogue is the central strategy of this reform. Through these new structures, agency personnel and farmers will cooperate in the joint-management of irrigation resources.

But there is a major practical obstacle to this well-laid plan. Currently, farmers are neither organized to become effective

partners in managing the irrigation and drainage infrastructure nor sufficiently skilled to take responsibility for operation and maintenance. To build these skills, international donor agencies and the Government of Pakistan launched social mobilization pilot projects, to organize farmers into water user organizations, provide them with training in essential skills, and involve them in operation and maintenance activities at distributaries or small dams.

Beginning in 1995, IWMI Pakistan ran six pilot projects at the Hakra 4-R Distributary and the Shapur and Mirwal Small Dams in the Punjab Province, and at the Bareji and Heran Distributaries and Dhoro Naro Minor in the Sindh Province. The objective of this work was to test the viability of FOs and their capacity to participate in the management of their irrigation systems at the local level.

In 1998, IWMI Pakistan's project activities generated several significant impacts on the progress of the irrigation-sector reform.

Farmer participation in maintenance

The Water Users' Federation (WUF) of the Hakra 4-R distributary carried out a five-day maintenance campaign to desilt and repair its distributary. About 800 farmers participated and mobilized 120 tractors along with implements (cultivator, blades, spades, etc.) to repair 93 damaged sites. The estimated value of resources mobilized was Rs 124,000 (US\$2800), which is about three times less than the cost estimated by the Punjab Irrigation Department for maintenance of the distributary.

Creating the Hakra 4-R Water Users' Federation

The formation of the Hakra 4-R WUF was publicly recognized by the oath-taking ceremony of 121 farmer leaders representing 4,600 water users from 41 villages in the command area of the distributary.

A provincial minister and local political leaders attended the ceremony. They were "...impressed with the dedication and enthusiasm of the participants."

Conflict resolution: Shapur Small Dam

Persistent conflicts over the inequitable distribution of irrigation water were experienced among water users from two branch canals at the Shapur Dam. The proportional discharge units at a distribution point on the main canal, serving two sub-command areas, were not completed due to a construction failure. The smaller command area received more than its equitable share. IWMI's mediation efforts led to the acceptance of the sanctioned command area principle and the recalibration and modification of the structure. The branch canals were rehabilitated with farmers' participation and Irrigation Department staff to minimize losses and ensure water supply to their extremities. This successful conflict resolution galvanized the divided community

of irrigators into formally organizing themselves as a water user association.

Policy impact: Punjab Irrigation and Drainage Authority

The newly formed Punjab Irrigation and Drainage Authority appointed the former legal consultant to IWMI Pakistan and high-level local law academic, as its General Manager, Legal Affairs. He reviewed the existing irrigation laws in Pakistan and devised a model legal framework, based on close consultations with farmers in Hakra 4-R and IWMI Pakistan's research staff. This model is the basis for the evolution of Punjab's new regulatory framework in the irrigation sector.

In 1999, Pilot Area Water Boards will be established in the four provinces, and farmers will be mobilized to create FOs. IWMI Pakistan will continue to support the reform process by providing policy advice to the PIDAs. It will facilitate and monitor the formation of FOs at the Hakra Branch Canal in Punjab and the Jamroa/Nara Canal in Sindh.

A key step toward farmer-managed irrigation is understanding the structure of each society. Here, scientists and villagers do social mapping. ↓

The work of IWMI Pakistan in the water policy, institutions and management sector has helped policy makers and high-level irrigation managers better appreciate the need for reform, and see the potential benefits more clearly

