

### **Lessons Learned from Participatory Management**

This century has witnessed a tremendous expansion of irrigated area. State agencies constructed and managed new systems, and often absorbed the operation and maintenance of existing systems which had previously been managed by local users. State irrigation bureaucracies, formed initially under colonial administrations, blossomed in both budget and staff.

These agencies became increasingly stretched as they expanded their area coverage, and were also pulled further down to the farmer level by political pressures to "do something" for the farmers. The trend was towards **Type 1, where "Government does everything"**. In India, for example, the construction in the 1950s of the Bhakra canal network, the largest development investment in India's first 5-year plan, provided an outlets for 200 hectare blocks; farmers were responsible for digging the small canals from this outlet to their individual fields. By the early 1980s, this management divide was obscured as politicians delivered on their promise to construct permanent field channels for the farmers, and assume the extra cost and management burden of doing so. Lessons learned in the Phillipine's and Mexico exemplify the trend towards participation.

- **The Phillipine Model**
- **The Mexico Model**

## Type-1 Where “Government does everything”

### I.1.1 What is PIM?

#### I.1.2 Continuum of Involvement in Management Decisions

We can characterize the range of state - user relationships as a continuum from the state doing everything on behalf of the users, to the case of the state doing nothing for the users, other than leaving them alone. In between these two ends of the continuum is a very large gray (or blue) area where a government agency performs some management functions and farmers perform other functions. For purposes of discussion, we can divide the continuum into four types from more to less government involvement:

**Type 1: Government does everything.** In Malaysia, the Department of Irrigation and Drainage provides for the operation and maintenance of the main and secondary canals, while government sponsored farmers' organizations are responsible for providing water to individual farms. Farmers have no responsibility, and make no management decisions, about the water upstream from their outlets.

**Type 2: State dominates; users help.** The conventional management division in large irrigation systems is that the state takes responsibility for operation and maintenance of the headworks such as a dam or river diversion, and the main, secondary, and larger tertiary canals, while farmers are responsible for managing water distribution and maintenance along the lowest level canals. Typically this entails farmer groups of between 10 and 50 farm families who are expected to work out sharing arrangements on their own.

**Type 3: Users dominate; state facilitates.** In some countries, associations of water users enter into contractual agreements with state water agencies for the provision of specific water services. In the **case of Mexico**, the National Water Commission manages the headworks and main canals, while legally recognized water user associations employ their own technical staff for the management of the secondary and tertiary levels of the canal networks. Farmers pay their associations for the water, and a small portion of that fee is passed on to the National Water Commission for their services.

**Type 4: Farmers do everything:** In the Hill regions of Nepal most of the irrigated area is in the hands of local communities who have constructed their own canal systems, generally tapping small stream flows. Similar examples of local, farmer-managed systems can be found in nearly every country where irrigation is important, and the rules and customs of such systems provides a valuable pool of local knowledge that can be tapped in developing new irrigated areas.

## Case of Mexico

### Lessons Learned from Participatory Management: Mexico Model

Independently from the trend towards joint management at the lower ends of the system, a model of irrigation management transfer was evolving in Latin America, in response to structural adjustment pressures. This model constitutes the qualitatively different paradigm of **Type 3: the users dominate, and the state facilitates.**

In the mid 1980s when Mexico was in the throes of a debt crisis, the government was broke. The large irrigation districts under Federal control suffered as maintenance was deferred and the productivity of unpaid, demoralized engineering staff declined. Out of necessity, the government reorganized the state irrigation agency to create the National Water Commission, or CNA in its Spanish acronym, with a mandate to turn over the management of the irrigation districts to associations of users created specially for this purpose.

In 1990, Mexico transferred the first irrigation district to the users. By 1995, more than 2/3 of the country's 3.2 million ha network -- divided into 80 irrigation districts, had been transferred to 316 irrigation associations. The transfer program was initially in the most productive irrigation districts, which were best organized and with the most commercially oriented farmers. The most important criterion for selecting districts was the potential of the user organization to become financially self-sufficient, with users paying the fees to cover the costs of operations, maintenance, and administration.

What could the government offer the farmers as an incentive to accept higher costs for their irrigation? In fact, there was a carrot as well as a stick. The carrot was management autonomy. The farmers would be free to set their own rules for when to clean the canals, and how to distribute the water. The farmers would hire their own technical staff -- engineers and accountants -- to run their system. The canal would be

theirs on a 20-year concession, which is in practice a transfer of ownership.

But there was also a "stick". If farmers refused to take over management, the government could offer no assurance that the canal network could be kept in repair. The government in effect threatened to default on its conventional understanding with farmers regarding levels of subsidy in the irrigation sector because it no longer had the financial means to do so. The government, however, also promised and provided technical, organizational, and legal assistance in realizing the transfer. Many farmers, and particularly the commercially oriented ones, could not accept the risk that the irrigation infrastructure might collapse. They preferred to take over the management, and with a few exceptions, they haven't looked back. They are paying much more for their water without the government subsidy, but the reliability and responsiveness of their new management structure is well worth the price. For them it is a "win" situation, and for the government as well. What are farmer's comparative advantages when they are managing for themselves? They have direct incentives to manage irrigation water in a productive and sustainable manner; they offer an on-the-ground presence that even the most dedicated off-site agency staff cannot equal, and they have an intimate knowledge about their fellow irrigators. The state's comparative advantage is in the depth of financial and technical resources it can draw upon, and the regulatory and administrative capacity for managing water supplies to competing interests.

### **I.1.3 Lessons Learned from Participatory Management: Phillipines Model**

Just as the state's involvement -- or "micro-management" was reaching its peak in the 1980s, there were countervailing forces appearing. In the Philippines the process can be traced to the mid 1970s when President Marcos ordered the National Irrigation Administration to move towards self-financing. The agency responded by withdrawing from the small communal systems which had once been self-managed, but had grown dependent on the government.

**This weaning process was accomplished through intensive grass-roots organizing and capacity building both among farmers and within the agency itself.** Water user associations were formed to take over operations and maintenance, and to contribute to capital costs of improvements. Beginning in 1980, this organizing approach was applied to the state-run systems that had no prior history of self-management. As with the management transfer in communal systems, the goal here was cost savings to the agency, both through direct recovery of water fees, and the replacement of some low level agency operational functions by association volunteers.

Until recently, this modest level of joint management was the dream of irrigation policy reformers, and the Philippines served as the model. The paradigm was one of "joint management" where farmers would become management partners with the agency, and decisions would be made jointly. But the relationship is asymmetrical; the state controls the technical expertise and subsidizes maintenance and improvements even in the canals operated by farmers.

### **I.1.4 Lessons Learned from Participatory Management: Phillipines Model**

#### **I.1.5 Developing a Participatory Approach to Irrigation**

The first and best documented nationwide program to build participation in as a cornerstone of irrigation policy occurred in the Philippines. Among other factors, legislation passed in 1974 to make

the National Irrigation Administration financially autonomous was crucial to the agency's active support for farmer participation. As a financially independent agency, NIA's subsidies were phased out, and all expenditures, including staff salaries, had to be met from irrigation service fees. This created powerful incentives for the agency to devolve recurrent O&M to farmers and increase collection of irrigation fees. The latter, in turn, required improving irrigation service so that farmers would be willing to pay, while cutting costs, so the payments would be minimized.

The process of institutionalizing this approach entailed workshops, training programs, and information dissemination within the agency and the farming community. This "learning process" was carried out with the help of outside consultants, academic researchers, and donors, but the initiative came from within the agency. A number of elements of the NIA approach have been borrowed by other countries, including:

- Legal recognition of user groups prior to their active collaboration with government;
- Use of in-house community organizers;
- Performance measures for irrigation personnel which encourage greater accountability to the farmers they serve;
- Increased participation of farmers in key decisions and in up-front planning and development of the physical systems;
- Development of cost recovery mechanisms which made farmers more responsible and instilled a sense of collective ownership of systems; and
- Development of budget systems which can be adjusted to be responsive to clients.

Through these changes, NIA has evolved from an agency primarily concerned with construction to one committed to developing farmer irrigation associations and supporting their management capacities once projects are completed.

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