

MANAGEMENT DEVOLUTION IN CHINA

Chinese economic reforms during the late 1970s and through the 1980s have devolved considerable economic power from the government. The reforms have led to dramatic institutional and management changes in the irrigation sector. Little is known outside China about these changes and their consequences. The application of the "Production Responsibility System" (PRS) to water management emphasizes management efficiency, incentives and profitability. Under the PRS, the common "Net Output Delivery Contract" system (*dabaogan*), permits a collective to lease land or agricultural capital to a third party, which in turn assumes responsibility for part of the collective's tax and commodity sales quota. Under the PRS, contracts for supplying agricultural inputs (including water) are given to third party service delivery organizations.

Different types of management reforms have been introduced under the PRS for large- and medium-scale irrigation systems owned by the **government** versus medium- and small-scale systems owned by the **collectives**. The revolutionary "Economic Contract Responsibility System" (ECRS) (*jingji chengbao zerenzhi*) has been applied to irrigation systems owned by collectives. The ECRS can be applied to an entire irrigation system or sub-sections of it. The rights to take over "means of production" or service delivery functions can be leased or sold outright to contracting water management organizations. Such contracting entities can be companies (*gongsi*), groups, joint households, households or even individuals.

Under the ECRS, the major part of the remuneration of workers in such contracting groups is linked directly to production or service output. The contract managers compensate the collective for their rights to the contract (which is somewhat similar to a franchise arrangement) and agree to perform specified functions. Such contract personnel generally have technical training and water management experience. Schemes are required to set up system-level budgets, fee collection systems and take all responsibility for profit or loss.

For the larger state-owned systems, the "Work Post Responsibility System" (WPRS) (*gangwei zerenzhi*) injects performance incentives into government bureaucratic organizations which are at the interface between administrative and resource management. In addition to fixed salaries, workers receive pay bonuses which are conditional upon attaining some measures of project output. For large government schemes, even the WPRS is generally considered as a temporary arrangement, eventually to be replaced by more devolved ECRS — as soon as economic conditions permit, which means "self-sufficiency with a surplus."

In the case of larger lift and gravity systems, contract companies are becoming increasingly important management entities. Although they are often staffed by former government water conservancy board employees, they represent privatized entrepreneurial units spun off from prior state bureaucracies. Some schemes (especially those which include extensive drainage and flood control components) are not fully self-financing because of the lack of income-generating potential for these components.

These institutional reforms have also brought about two new management innovations, one for irrigation fee charging and one for technology management. In the past, irrigation fees had gone into general government revenue accounts. This provided little incentive for collection and resulted in inadequate allocation of O & M resources back to the systems. Now irrigation fees are placed in system-level accounts. New water laws forbid use of water fees for uses other than operation and maintenance for the respective system from which the fees were collected.

The second type of innovation is so-called "Comprehensive Management," which emphasizes development of market-oriented enterprise activities to supplement revenues obtained through irrigation fees in system-level accounts. The idea of local financial self-sufficiency



Early indications suggest new forms of accountability can improve irrigation services.

is based not just on the production unit output per se, but on a potentially diversified and integrated entrepreneurial management system. This approach received central government sanction in 1985, when the government declared that all irrigation management entities should begin revising their roles from being management "undertaking units" (*shiyedanzwei*) to "enterprise units" (*qiye danwei*).

A great deal of variation exists in the new "entrepreneurial" institutional arrangements throughout China. Irrigation policy and management are generally province-level matters. Little is known internationally about China's experiences with irrigation management devolution. Mostly positive (albeit qualitative) reports are emerging about the effects of management devolution on the productivity, efficiency, profitability and sustainability of China's irrigation systems. In the near future, IIMI hopes to help stimulate research on irrigation management devolution in China through conducting collaborative case studies and a workshop. (M. Svendsen, IFPRI/D. Vermillion, IIMI)