

# Good science for better policy: Making change happen

International Water Management Institute, November 2007



## IWMI action research helps to transform canal management in Central Asia

Combining sound science with effective partnerships, IWMI continues to contribute towards better water management in Central Asia. IWMI worked with the Scientific Information Centre of the Interstate Commission for Water Coordination (SIC ICWC) and water users in the region to pilot new institutional structures for water management. The new structures involve the establishment of Water User Associations—made up of small user groups from hydrographically identified areas—which then participate in main canal governance, a unique system for Central Asia with its legacy of centrally controlled systems. The success of the pilots has led to the adoption of related institutional reforms by the governments of Tajikistan, Kyrgyzstan and Uzbekistan and requests from all three countries to expand the areas for introducing the new institutional arrangements.



## Sri Lankan policymakers adopt IWMI recommendations for irrigation strategy

The IWMI report titled “Development Strategy for the Irrigation Sector of Sri Lanka 2006-2016” formed the basis for the country’s 10-year national irrigation sector development strategy. It addressed the inadequacy of current policies and strategies, identified policy gaps, and spelled out a clear vision and action plan to overcome these shortcomings. The report also highlighted the need for irrigation sector policies to be aligned with other related sector policies and also stressed the need for an enabling environment to capitalize on the full development potential of the sector. Sri Lanka’s Development Framework 2006-2007, in which the new irrigation strategy is incorporated, was broadly endorsed at the 2007 donor conference and served as a reference document in the Government’s 2007 Budget.



## IWMI-TATA Water Policy Program influences investments in sustainable groundwater management

Since 2000, the IWMI-TATA Water Policy Program has been challenging policymakers to think differently about the problems and potential of groundwater in India. In late 2006, India's Finance Minister invited IWMI to submit policy recommendations based on its research in preparation for the 2007-2008 Union Budget. One of the key recommendations—a program on groundwater recharge in hard rock regions of India—was incorporated into the final Union Budget, which provides Rs. 1,800 crore (US\$400 million) for the program.

Further policy recommendations helped the State of Gujarat address groundwater depletion and an unviable power industry. During the 1970s, the high transaction costs of metering irrigation tubewells led to flat power tariffs and a better quality of life for marginal farmers. However, it also resulted in groundwater overdraft and unsustainable electricity consumption. IWMI proposed a strategy of rationing power supply to tubewells and separating farm and non-farm power lines. In 2003 Gujarat adopted most IWMI recommendations and invested US\$260 million to rewire the rural electricity network. A recent survey confirmed a remarkable improvement in the quality of rural life, upsurge in non-farm economic activity and halving of electricity and groundwater use in agriculture.



## IWMI research used for policies and guidelines on the safe use of wastewater for food production

IWMI's research is helping to reshape national and international policies and practices on wastewater irrigation. Throughout the developing world, as much as 3.5 million hectares of land are irrigated with raw and diluted wastewater. While the practice plays an important role in food supply, poverty alleviation and local livelihoods, particularly in urban and peri-urban areas, wastewater irrigation is largely unrecognized in any official statistics or policies due to its health and environmental risks.

IWMI's research highlights the need to develop practical, cost-effective management options that maintain the advantages of urban waste resources while protecting environmental and human health. This research message is making an impact locally, nationally and globally. In Ghana, for example, IWMI's research recently influenced the country's new draft National Irrigation Policy, which is the first national policy in Africa that supports urban agriculture, recognizes informal irrigation and incorporates safe wastewater use. At an international level, IWMI research helped shape the World Health Organization's 2006 revised Guidelines for the Safe Use of Wastewater, Excreta and Greywater. While the previous guidelines set stringent water quality standards for irrigation application, the new guidelines take into account a country's social, technical, economic and environmental circumstances and provide a menu of risk-reducing strategies depending on what is locally feasible.