

## Second Punjab Irrigation Sector Development Policy Loan US\$100 million

With an average annual rainfall of less than 240 mm, Pakistan is one of the world's most arid countries. The Indus irrigation system is the largest contiguous irrigation system in the world. Today, irrigation is a critical factor for Pakistan's economy. However, Pakistan faces major water-related issues that have serious social, economic, and environmental implications: growing demand and declining water availability per capita; deteriorating infrastructure as a result of inadequate operation and maintenance; and inequitable canal water deliveries.

Surface and groundwater resources constitute the lifeline of Punjab's agro-based economy. To address the issues in irrigation, in the year 2004, Punjab prepared a medium-term Irrigation Sector Reform Program (ISRP). The ISRP is built on four pillars: (i) Institutional and Policy Reforms *to improve the management and maintenance of the irrigation system to ensure its long-term physical and financial sustainability*; (ii) Water Resources Management Reforms *to make intra-province water allocation and distribution more transparent*; (iii) Irrigation Service Delivery Reforms *to improve the quality, efficiency, and accountability with which irrigation services are delivered*; and (iv) Reforms *to improve water use efficiency and water productivity*.

Spurred by high-level ownership by farmers and government, the first year of ISRP, supported by DPL-I, has yielded very positive outcomes under each reform pillar. For example: (a) a good beginning has been made in moving away from the policies that had resulted in gradual deterioration of the hydraulic infrastructure in the past.; (b) *Intra-province water entitlements have been made more Transparent*. Punjab has established a robust Information System (IMIS) under which the water diverted in each of the 24 main canals is metered and the data captured on daily basis; (c) The quality, efficiency, and accountability of *irrigation services* have improved in the areas served by canals where reforms have been implemented. In one of the major canals the responsibility for Operation and Maintenance (O&M) and Abiana collection has been devolved to democratically elected Farmer Organizations (FOs); and (d) *Investments in water conservation technologies* has led to visible improvement in water use efficiency (20 percent to 30 percent increase) and productivity.

The purpose of the Second Punjab Irrigation Sector DPL is to provide continued financing to the Province of Punjab to move forward with implementation of the ISRP agenda under each reform pillar, focusing, *inter alia*, on (i) sustainability of the hydraulic infrastructure by sustaining adequate funding for M&R at the specific canal level, reducing costs, and further improving financial accountability; (ii) expanding the coverage and improving the quality of the IMIS to further enhance transparency in the administration of water entitlements; (iii) improving service delivery by scaling up irrigation management transfers to FOs, benchmarking of performance, improving communications with stakeholders, and mainstreaming environmental and social safeguards in O&M and asset management activities; and (iv) enhancing productivity through policy reform and incentives for adopting new technology, improving markets, and restructuring research.

Among the remaining challenges that warrant the Second Punjab Irrigation Sector DPL are: (a) need for continued high-level support to the irrigation reform agenda; (b) continued ownership and involvement of water users and farmers in implementation of reforms; (c) ensure availability of adequate levels of funding for Maintenance and Repair (M&R) and improved Irrigation and Power Department (IPD) capacity to utilize enhanced resources; and (d) continued enhancement of IPD's capacity for managing social and environmental risks associated with asset management activities.