

PROJECT INFORMATION DOCUMENT (PID)
Updated (appraisal stage)

Report No.: AB7299

Project Name	Sindh: Additional Financing for the Water Sector Improvement Project
Region	South Asia
Country	Pakistan
Sector	Irrigation and drainage (80%); general water, sanitation and flood protection sector (20%)
Lending Instrument	Investment Project Financing
Project ID	P131325
Parent Project ID	P084302
Borrower	Islamic Republic of Pakistan, Economic Affairs Division
Implementing Agency	Sindh Irrigation and Drainage Authority (SIDA)
Environment Category	A – Full Assessment
Date PID Prepared	March 14, 2014
Date of Appraisal Authorization	April 15, 2014
Date of Board Approval	July 21, 2014

1. Country and Sector Background

Pakistan's economy has experienced recent declines in economic growth rates, falling from a high of 8% in 2007. The recent outlook for growth has been estimated at 3% for 2012-13. Much of the economic slowdown can be attributed to deteriorating and increasingly unpredictable macroeconomic and security conditions, as well as recent catastrophic natural disasters. While economic performance is expected to improve, concerns over debt, external financing, and fiscal weaknesses will continue to pose a challenge.

Agriculture remains a mainstay of the national economy. Over recent decades Pakistan's agriculture has made major gains, playing an important role in the achievement of national objectives related to economic growth, food security, poverty reduction, social stability, and trade. The sector accounts for about 23% of Gross Domestic Product (GDP) and employs about 44% of the labor force. Around a quarter of Pakistan's land area is under cultivation and is watered by the largest continuous irrigation and canal system in the world, the Indus Basin Irrigation System (IBIS). IBIS accounts for approximately US\$300 billion of investment (at current rates), 22% of the GDP, 65% of its employment, and 70% of its export earnings.

Annually 120 billion cubic meters (m³) of the Indus water out of 176 billion m³ is diverted through IBIS dams, barrages and canals to feed the irrigation sector. The hydrograph of the river is strongly seasonal with a long low-water season between October and March and a high-water season between April and September, driven primarily by snowmelt in the upper catchment and monsoon rainfall. The river usually peaks in mid-August or early September. Pakistan's agricultural sector is almost wholly dependent on irrigation: irrigated land supplies more than 90 percent of agricultural production. Agriculture in most areas is not possible without irrigation because the climate of Pakistan is arid to semi-arid with low and variable rainfall. Annual rainfall over much of the area is not more than 150 mm per annum with high evaporation rates, ranging from 1,250 mm to 2,800 mm per annum.

Sindh Province is home to over 42 million people. Over 60% of the population lives in rural areas where poverty is pervasive. The Indus river water is especially important to agriculture and the livelihoods of the population. It is estimated that the poor derive 56% of their income from agriculture. In addition, Sindh makes up a large portion (26%) of Pakistan's cultivated area and produces about a quarter (24%) of major irrigated crops, such as cotton, rice, sugarcane, and wheat.

2. Objectives

The objective is to improve the efficiency and effectiveness of irrigation water distribution, particularly with respect to reliability, equity and user satisfaction in three Area Water Boards (AWBs) namely: Ghotki Feeder AWB, Left Bank Canals AWB and Nara Canal AWB. The objective will remain unchanged under the additional financing. No changes are proposed to the design and implementation modalities of the project.

3. Rationale for Bank Involvement

The primary rationale for the proposed Additional Financing is to provide the financing gap in the original project. Of the US\$150.2 million IDA credit, US\$120.2 million was designated for the rehabilitation and improvement of the irrigation and drainage system. The scope and cost of the works identified to achieve the objectives turned out much higher than originally estimated. With continuing price escalations, much of the estimated costs for works and services have increased, and the scope of works, particularly on the Nara Canal, is much larger than originally estimated. In addition, the externalities of subsequent floods in 2010 and 2011 have also adversely impacted the completion timeline for the infrastructure rehabilitation. Therefore, the project's intended financing associated with improving the irrigation system in a systematic way covering key hydraulic infrastructure, main and branch canals, and distributaries and minors will be insufficient to complete all intended works. The proposed additional financing would be the quickest and logical way to complete the original project.

The proposed additional financing is consistent with the Country Partnership Strategy (CPS) for 2010-14. The CPS emphasizes among other things the need for improving infrastructure to support growth (Pillar 3). Under Pillar 3, improved sustainability of water and irrigation systems contributes to the "sub-pillar" of strengthened irrigation infrastructure and agricultural competitiveness.

4. Description

The proposed additional financing would help finance the costs associated with improving the irrigation system including key hydraulic infrastructure, main and branch canals, and distributaries and minors that were though covered under the scope of the original project but could not be undertaken because of the cost escalation and hence shortage of funds. The scope of original project included three main canals: Nara, Ghotki, and Left Bank. The rehabilitation and improvement works for the Nara canal have been divided into three contract packages. Two packages have been awarded and the construction works are underway. The additional financing will be utilized for the comprehensive improvements still required through the remaining Nara Canal contract package, as well as to finance contract packages for Ghotki and Left Bank canals to complete the entire system. Also a few selected distributaries canals in the three AWBs would be improved. The improved water management is expected to lead to increased agricultural

production and income of **580,000 farm-families** over about 1.8 million ha (about 30% of the irrigated area in Sindh), which is one of the poorest regions of the country. The proposed additional funding is complementary to this initiative, and would ensure that the scope of work planned under the original project is completed in time with aspired quality. More details of activities to be financed out of the additional financing under each project component are as follows:

Component A: Community Development and Capacity Building (US\$ 3 million): continue to strengthen capacity of SIDA, AWB and Farmers Organizations (FOs) to enable them to perform their responsibilities according to the Sindh Water Management Ordinance of 2002. The additional financing will continue to strengthen the capacity of FOs to carry out operation and maintenance of the irrigation and drainage systems. The capacity building will ensure that SIDA, AWBs and FOs are able to become self-sustaining by managing the infrastructure rehabilitated through this project.

Component B: Rehabilitation and Improvement of Irrigation and Drainage System (US\$ 143 million): continue to rehabilitate and improve three main large canals namely Ghotki Feeder canal, Fulleli canal and Mithrao canal. The rehabilitation of three canals will include the following works: (a) rehabilitation or replacement of regulating structures including rehabilitation or replacement of gates. This will include provision of hydraulic control gates at the replacement structures; (b) establishing a modified hydraulic profile; (c) erosion protection works and embankment strengthening; (d) reinstatement or replacement of inspection and non-inspection paths and (d) rehabilitation or replacement of road bridges crossing the canals.

Component C: Management Plan for Major Irrigation and Drainage Infrastructure (US\$ 0.5 million): continue to support feasibility and design studies for rehabilitation of Guddu and Sukker barrages.

Component D: Monitoring and Evaluation of the Project Impact and Environmental Management Plan (US\$1 million): continue to support monitoring and evaluation and supervision of the environment management plan and social action plan during the extended project duration.

Component E: Project Coordination, Monitoring, Technical Assistance and Training (US\$ 2.5 million): continue to support the project coordination, monitoring of implementation activities, management and supervision of procurement by an independent project management consultant procurement agent, and technical assistance and training during the extended project duration.

5. Financing

Source:

BORROWER/RECIPIENT	0
International Development Association (IDA)	150 million

6. Implementation

The experience to date indicates that the existing implementing arrangements are satisfactory for planning, implementing, and coordinating the project activities including incremental activities funded by the additional financing. The Project Coordination and Monitoring Unit (PCMU), under the guidance of a Project Steering Committee, is responsible for monitoring and coordinating all project implementation activities. The PCMU oversees the implementation of the project's components through the Sindh Irrigation and Drainage Authority. This management structure will continue to be used for implementation of activities under the Additional Financing. Overall the project implementation progress is satisfactory. Progress of the five project components has been accelerating and the progress of environmental and social plans (safeguards) are satisfactory. The project implementation is in compliance with the four legal covenants.

7. Sustainability

The additional financing would continue to deepen the reforms already underway in Sindh's irrigation and drainage sector. This will improve the efficiency, quality, accountability and sustainability of irrigation and drainage services. The project would contribute towards agricultural production and employment generation in rural areas of Sindh being one of the poorest regions in the country, leading to improving the lives of vulnerable population. The additional financing would address the systemic issues of the irrigation and drainage sector leading to its sustainability in the long run. The key sustainability of the project would be that the irrigation and drainage reforms started in Sindh roll out in such a way that farmers are able to manage the systems and irrigation services are delivered with requisite quality, efficiency, and accountability.

8. Safeguard Policies (including public consultation)

The safeguard category of the original project is 'A'. An Integrated Social and Environmental Assessment (ISEA) and a Social Resettlement Policy Framework have been prepared for the original project, and these have been disclosed by the PCMU on SIDA and P&D websites. In accordance with the requirements detailed in ISEA, separate environmental assessments and environmental management plans are being prepared for individual contract packages and are under the review of the Bank. ISEA calls for elaborate institutional set-up for safeguards management, and these arrangements are in place.

The safeguard category for the additional financing will also be 'A'. The ISEA remains valid for the additional financing as well.

Safeguard Policies Triggered	Yes	No	OP/BP 4.00
Environmental Assessment (OP/BP 4.01)	X		
Natural Habitats (OP/BP 4.04)	X		
Forests (OP/BP 4.36)		X	
Pest Management (OP 4.09)	X		
Physical Cultural Resources (OP/BP 4.11)		X	
Indigenous Peoples (OP/BP 4.10)		X	
Involuntary Resettlement (OP/BP 4.12)	X		
Safety of Dams (OP/BP 4.37)		X	
Projects on International Waterways (OP/BP 7.50)	X		
Projects in Disputed Areas (OP/BP 7.60)		X	

9. List of Factual Technical Documents

- Project Appraisal Document, August 2007.
- Integrated Social and Environmental Assessment Report, Summary and Full Report, November 2006.

10. Contact point

Contact: Abdulhamid Azad
Title: Senior Irrigation Engineer
Tel: +1 202 4734189
Email: aazad@worldbank.org
Location: Washington DC

Borrower/Client/Recipient

Islamic Republic of Pakistan, Economic Affairs Division
Pak. Sect. Islamabad
Telephone: + 92-51-9206382

Implementing Agency

Sindh Irrigation and Drainage Authority
Junejo Zahid Hussain, Hyderabad, Pakistan
Tel: + 92 301 8378787
Email: zahidjunejo@hotmail.com

Project Coordinating & Monitoring Agency:

Project Coordination & Monitoring Unit (PCMU)
P&D Department, Government of Sindh
Dr. Fateh Muhammad Marri, Karachi, Pakistan
Tel: +92-21-9205862
Email: fateh.marri@wsip.gov.pk

11. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Email: pic@worldbank.org
Web: <http://www.worldbank.org/infoshop>