PAKISTAN NATIONAL DRAINAGE PROGRAM PROJECT (CREDIT NO. 2999-PK)

Follow Up to the
Meeting of the Executive Directors of the World Bank (October 31, 2006) on the
Inspection Panel Investigation Report No. 36382-PK and
Management Report and Recommendation

PROGRESS REPORT ON

IMPLEMENTATION OF THE ACTION PLAN

November 30, 2007

South Asia Region

Contents

Introduction	on
Summary of	of Progress on Implementation of the Action Plan
Progress of	n Immediate and Short Term Actions
Progress of	n Medium Term Actions 9
Long Term	n Outcomes9
Conclusion	ns
Annexes	
Annex 1.	Management Progress Report on the Implementation of the Action Plan, July 5, 2007
Annex 2.	Pakistan Poverty Alleviation Fund's (PPAF) Sindh Coastal Areas Development Program (SCAD). Tables and Diagrams
Annex 3.	Report by Bank Consultants. Environmental and Social Assessment of the Dhands. November 2007
Annex 4.	Report by FAO Consultant: Assessment of Badin and Mirpurkhas Districts, Flood Management Plan
Annex 5.	Report by FAO Consultant: Assessment of Present Condition of LBOD and Kadhan Pateji Outfall Drain (KPOD)
Annex 6.	Bank Response Letter to International River Network, November 2, 2007
Tables	
Table 1. Table 2.	Surface Water Salinity in the Dhands Action Plan
Figures	
Figure 1. Figure 2.	SCAD Projects by PO Left Bank of Indus River in Southern Sindh

Acronyms

AWB Area Water Board

CGAP Consultative Group to Assist the Poorest

DPL Development Policy Loan

FAO United Nations Food and Agriculture Organization

FAO-TCP FAO Technical Cooperation Program

FO Farmers' Organizations
GoP Government of Pakistan
GoS Government of Sindh

IFAD International Fund for Agricultural Development

KPOD Kadhan Pateji Outfall Drain LBOD Left Bank Outfall Drain

NDP Pakistan National Drainage Program NGO Nongovernmental organization NWFP North West Frontier Province

PO Partner Organization

PPAF Pakistan Poverty Alleviation Fund

SCAD Sindh Coastal Areas Development Program

SCAN Sindh Coastal Areas Network

SIDA Sindh Irrigation and Drainage Authority

TUP Targeting Utra Poor Program

WAPDA Water and Power Development Authority

WB World Bank

WMC Water Management Center

WSIP Sindh Water Sector Improvement Project

WWF World Wildlife Fund

PAKISTAN NATIONAL DRAINAGE PROGRAM PROJECT (Credit No. 2999-PK)

MANAGEMENT REPORT ON STATUS OF IMPLEMENTATION OF THE ACTION PLAN FOLLOWING THE INSPECTION PANEL INVESTIGATION REPORT (No. 36382-PK) AND MANAGEMENT REPORT AND RECOMMENDATION (INSP/R2004-0007/4&5)

PAKISTAN NATIONAL DRAINAGE PROGRAM PROJECT (Credit No. 2999-PK)

Introduction

- 1. This is the progress report in response to the Board's request to provide a twelve month report in November 2007 on the implementation status of the Action Plan for the Pakistan National Drainage Program Project (NDP), including information on new developments. The Action Plan was included in the Management Report and Recommendation that was discussed by the Board of Executive Directors on October 31, 2006, along with the Inspection Panel's investigation report. The Board endorsed Management's Action Plan and Elaboration of the Short-Term Action Plan. This report follows up on Management's first progress report of July 2007 (SecM2007-0333 see Annex 1), which was submitted to the Board, per its request, prior to the 2007 monsoon season in southern Pakistan.
- The present report provides the status of implementation following the 2007 2. monsoon season and describes short term activities, as well as medium and longer term initiatives. Management has carefully monitored and followed up on implementation of the Action Plan approved by the Executive Directors. A summary of the Action Plan is provided in Table 2 and five annexes contain supplementary information as follows: Annex 1 contains the Management Progress Report on the Action Plan presented to the Board in July 2007; Annex 2 presents details of the work done under the Pakistan Poverty Alleviation Fund (PPAF) through the Sindh Coastal Areas Development Program (SCAD) to address poverty alleviation activities in this region; Annex 3 is the report on the environmental and social conditions of the Dhands located next to the LBOD/Tidal Link outfall system; Annex 4 reports on the work done as part of the Flood Management Plan in Badin and Mirpurkhas districts; Annex 5 provides information on the physical conditions of the drainage system and the works done by the Sindh government; and Annex 6 contains a Management letter in response to an IRN brochure, circulated within the Board and the media, commenting on the implementation of the Action Plan. These materials have also been posted on www.worldbank.org.pk.

Summary of Progress on Implementation of the Action Plan

3. Overall, the Government of Sindh (GoS) has been diligent in implementing the Action Plan. Major results of the first year of implementation include:

- Livelihood interventions. Coastal Sindh has for the first time ever a strong and systematic livelihood program in place, the Sindh Coastal Areas Development program (SCAD). Significant progress has been made in addressing the harsh conditions of the local population. Direct actions to alleviate poverty are in progress through an inclusive, participatory and demand driven consultation process with the communities. The PPAF has engaged ten nongovernmental organizations (NGOs) in efforts to improve the living conditions of the transient fisherfolk communities. The PPAF is currently implementing development activities in 336 settlements, over 65 percent of which are in the Left Bank Outfall Drain (LBOD) area¹ (see Figure 1). Out of 218 SCAD community infrastructure schemes initiated so far, 73 percent are located in the LBOD backwash area (113 projects have been completed and 46 are ongoing). Under the PPAF, a Water Management Center (WMC)² has been established and will provide technical expertise and overall coordination for SCAD activities. These activities represent a total commitment of about US\$3 million. An overall envelope of approximately US\$25 million has been identified to cover 3.300 settlements in coastal Sindh by 2011, directly benefiting a population of over 1.1 million. PPAF will give priority to settlements in the LBOD region. PPAF III is currently under preparation and will be the major source of funds to support the identified livelihood interventions.
- Dhands Diagnostic Study. A rapid assessment of ecological and livelihood conditions of the Dhands in the vicinity of the outfall system has been undertaken. Thirteen workshops were carried out in the villages in the vicinity of the Dhands. The survey confirmed the harsh conditions of the villages and the lack of basic services in the area. With respect to the ecological conditions of the Dhands, the data shows that salinity in the Dhands has decreased significantly in 2007, compared to 2001-2003. On the other hand, biological and chemical pollution from the nearby cities and sugar mills is significant. However, overall the wetlands are highly productive and rich in nutrients, supporting numerous species of animal and plant life. There is growth potential for local shrimp fisheries. The conclusion of this study will be included in the preparation of the Left Bank comprehensive study of the Water Sector Improvement Project (WSIP).
- *LBOD Assessment*. Following on the outfall assessment undertaken in April/May 2007 and discussions with the GoS, notable progress has been made in improving the outfall system. The risk of floods has been reduced by enlarging the flow capacity of the outfall drains from 4,400 to 9,000 cusecs. On June 23, 2007, cyclone Yemyin 03B hit the coastal areas of Pakistan, causing severe damages in

¹ LBOD (1984-1997) is a major drain in Southern Sindh. NDP funded three ongoing LBOD contracts for the improvement of one irrigation canal and tubewells that were part of the irrigation component of the LBOD project. The amount financed by NDP was about 3.3 percent of the total cost.

² The PPAF Water Management Center focuses on drought mitigation, flood relief projects and efficient water use.

³ Dhands Study. Annex 3.

Karachi and Balochistan. Because of the rapid response of the GoS, no major damages occurred in Badin. The LBOD system capably handled the water flows in the area and no breaches were reported in the system. This was a clear result of the work that has been done on the LBOD system and the implementation of the Flood Management Plan. The GoS is committed to ensuring the long-term sustainability of flood management plans and operations.

- Flood Management Plans. Progress has been made in improving local government flood management systems. The assessment was carried out in April/May 2007 and discussed with the Government and updated again in November 2007 (Annex 4). Also, the district governments of Badin and Mirpurkhas, with the help of the Bank, have developed a "Contingency Plan to Combat Cyclones and Floods." While the preparation of these plans represents an important initiative in addressing flood risks and vulnerability, capacity building at the local level will remain a long term issue, and the Bank will continue to assist the Government in supporting this action over the medium to long term. These plans will be further improved and form part of the studies under the Flood Management Plan for the Left Bank of the Indus River and the Coastal Development Program that will be carried out under the WSIP.
- Sindh Water Sector Improvement Project (WSIP). The WSIP was approved by the Board and signed in September 2007. Major lessons learned during the last ten years of the Bank's involvement in the water sector have been incorporated into project design. Detailed plans to continue improvements in drainage and address flooding issues in the area on the Left Bank of the Indus River, including the functioning of the complex drainage infrastructure of the outfall system of LBOD and coastal zone, will be initiated under WSIP. The plans will be prepared in consultation with the project-affected people and stakeholders in the area.
- 4. While immediate actions have been taken to address the main issues affecting the area as a consequence of the floods of 2003 and 2006, flood risks in the coastal zone of the Indus River system will continue to be high. Efforts to reduce such risks need to be sustained through structural and non-structural measures in the medium and long term, some of which are being implemented under the WSIP and potential follow-up operations.

Progress on Immediate and Short Term Actions

5. Since the last progress report, the following immediate and short term actions have been undertaken or implemented by the SCAD⁵ through an informal organization, the Sindh Coastal Areas Network (SCAN):

⁴ Cyclone Yemyin 03B, with winds over 100 miles per hour and extremely heavy rains, hit the coastal zone of Pakistan causing severe damages to Karachi and the coast of Balochistan. The cyclone passed over Badin, without producing severe damages to the LBOD outfall system.

⁵ The SCAD includes: (a) improving access to basic services, including health, education, and drinking water supply and sanitation; (b) increasing incomes through improved crop, fisheries and livestock production as well as marketing and micro-finance services; (c) securing access to, and better management of, coastal area natural resources; (d)

- Social mobilization commenced in January 2007 and, to date, there are 563 community organizations established through the PPAF and its Partner Organizations (POs). Under SCAD, there is a target to organize a total of 5,000 communities in 3,300 settlements around the Sindh Coastal Area;
- As of October 2007, the PPAF and its ten POs have completed 218 infrastructure schemes (all marked in Figure 1 as ongoing or completed) with a total of 171,000 direct beneficiaries. Schemes include link roads that provide access to markets and main roads, water supply and sanitation, latrines and integrated area upgrade projects. Details on number of sub-projects and detailed breakdown of disbursements, information on SCAD outreach, progress made in social mobilization and infrastructure schemes implemented are presented in Tables 1 to 4 of Annex 2;
- A spot survey has been carried out to map all settlements in the coastal areas.
 Nine of the ten POs have completed their surveys and submitted the data to PPAF for verification and consolidation. This will be used to conduct a base mapping exercise for monitoring purposes;
- SCAN has developed and disseminated a "Constitution of the SCAN" which was adopted by all POs in Karachi in April 2007.⁶ (PPAF–WMC is currently the SCAN Secretariat of the Network);
- In terms of partnerships and areas of cooperation with SCAD and SCAN, there is a memorandum of association with WWF Pakistan under the theme of environment-poverty nexus, which includes representation of WWF on SCAN; and
- PPAF has also leveraged US\$1 million from the International Fund for Agricultural Development (IFAD), with technical assistance from the Consultative Group to Assist the Poorest (CGAP), for its Targeting Ultra Poor (TUP) Program, of which about US\$800,000 is for the LBOD area. TUP covers asset transfer, subsistence allowance, special health care and training.

forming viable community organizations that are inclusive, well governed, and can operate in partnership with the public and private sector; (e) integrating these areas with the national economy by developing rural growth centers; promoting integrated development of physical infrastructure, including construction of productive infrastructure, such as jetties and wharves; and developing transport and mobility, through the construction of inter- and intra-village roads and intermediate modes of transport, using infrastructure grants and micro-credit; (f) promoting technological innovations, particularly the use of solar and wind energy for pumping water and generating electricity; and (g) reducing physical vulnerability, through the construction of flood protection and sea water containment structures and better response mechanisms by communities.

⁶ Chairmanship is held on a rotational basis and currently the Chief Executive of the Aga Khan Planning and Building Service is the Chairperson, with the Chief Executive of Thardeep Rural Development Program as Co-chairperson. TheGeneral Manager of the PPAF-WMC is the Secretary General and the PPAF-WMC Manager is the network coordinator.

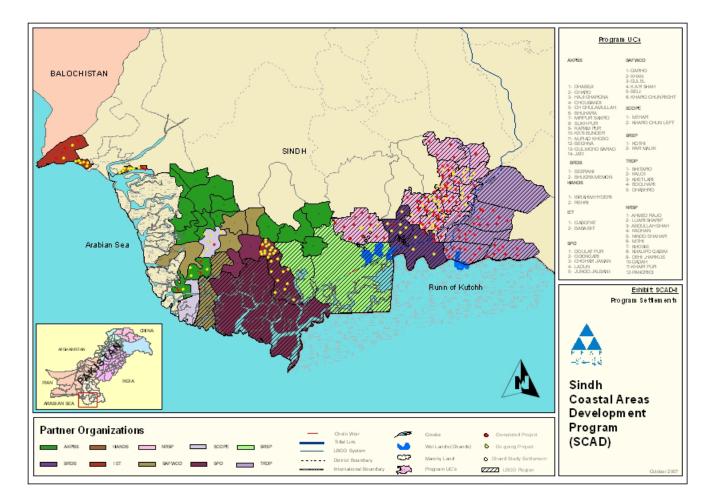


Figure 1. SCAD Programs - Ongoing and Completed

- 6. The WMC, which was set up to help address the dismal water management situation, manages implementation of SCAD. The PPAF has successfully leveraged its existing network of local POs and experience in villages around the Sindh Coastal belt to implement expeditiously infrastructure schemes, provide social safety nets in the form of asset transfers and livelihood training under the CGAP/IFAD pilot project for TUP, mobilize communities, and provide skill training to POs and Community Organizations.
- 7. Rapid Assessment of Ecological and Livelihood Conditions in the Dhands. The Dhands study, which was delayed due to extensive consultations with the Government and local organizations, has been divided into three coordinated sub-components: socioeconomic assessment, review of water quality and hydrology, and assessment of the ecosystem and its wetland functions.
- 8. The socioeconomic assessment focused on the people who live near the Pateji, Cholri, Sanhro and Mehro Dhands who have been affected by natural disasters and the

⁷ The mission of the WMC is to incorporate water focused interventions aimed at reducing chronic poverty and safeguarding against vulnerability to poverty due to increasing water scarcity and water related disasters.

⁸ The program is being managed through the WMC, which is fully staffed and has recently built a Geographic Information Systems (GIS) studio in order to visually track and map progress.

breakdown of the Tidal Link. A highly participatory approach was followed for this assessment. In total, 13 workshops (8 with men and 5 with women) were carried out in the 58 villages in the close vicinity of the Dhands, with 553 registered participants. The survey confirmed the harsh conditions of the villages and the lack of basic services such as water supply, education, electricity and communication. The main interest of the people in this area is in finding ways to increase their well being.

- 9. The four brackish wetlands known as the Dhands cover an area of 70 square kilometers that varies significantly during the year and from year to year. They are connected to a highly hyper-saline marshland known as the Rann of Kutch at the border with India (in the State of Gujarat). Beginning in the 1960s, an extensive drainage network was built that discharges into the Dhands.
- 10. The study indicates that salinity in the Dhands has decreased significantly in 2007 as compared to 2001-2003 (see Table 2) because of the abundant water in the irrigation system near the Dhands. The salinity levels in the Dhands are largely dependent on water supplies, rains during summer, and water diversions to the irrigation and drainage system. However, sewage from nearby towns, workshops and sugar mills contributes heavily to the deterioration of the wetlands. That said, despite heavy loading of biological and chemical pollution, dissolved oxygen levels in Dhands are at acceptable levels. The Badin Dhands and the Tidal Link now form a wetland that is a highly productive ecosystem, rich in nutrients, that supports ample biological life. This wetland complex is also home to highly specialized species adapted to the fluctuation in salinity. Shrimp fisheries are the most important commercial activity in the area and can grow substantially in the future.
- 11. The last progress report (July 2007) already provided an account of the rapid assessment of the Right Bank of the LBOD spinal drain and Kadhan Pateji Outfall Drain (KPOD) as well as of the local government's flood management plans. Since then, in addition to Badin, the Mirpurkas local government has also developed its Flood Management scheme (which includes an early warning system of imminent floods and provides information on mitigating impact). Moreover, the breaches in the drainage system caused by the 2003 and 2006 cyclones have been fixed and the flow capacity of the outfall drains has been substantially increased. Management responsibilities with respect to the monitoring and operation of the irrigation and diversion system have been agreed among the Sindh Irrigation and Drainage Authority (SIDA), the GoS, and the Water and Power Development Authority (WAPDA). The GoS is also commencing (in November 2007) preparation of a detailed maintenance program for the drainage network.

.

Table 1. Surface Water Salinity in the Badin Dhands (1997 to 2007)										
	Salinity (ppt)									
Location	Average and Range Jan. to June 1997 ^a	January 2001	January 2002	December 2002	December 2003	Average and Range January 2007				
Sanhro Dhand	7.7 (6-10.5)	31-40	35-38	40-48	43-48	17.3 (15-20)				
Sanhro/Mehro Dhand (lower Mehro Dhand and the passage to Sanhro Dhand)	6.6 (7-11)	35-38	38-42	40-43						
Mehro Dhand	3.7 (1-7)	35-38	38-42		40-45	12,9 (8-18)				
Cholri Dhand	13.6 (6-20) ^b	27-36	36-39	40-44	41-45	19.5 (16-23)				
Pateji Dhand	49.9 (26-50)	26-33	35-37	36-40	40-41	15.8 (15-17)				

a: Based on data collected by WAPDA from 178 sampling points analyzed by NIOb: The range close to Cholri Weir was 20-32 ppt.

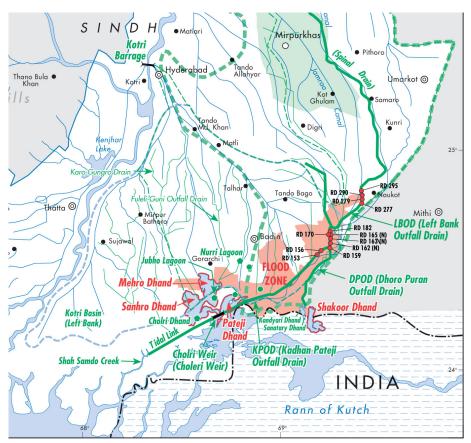


Figure 1. Left Bank of Indus River in Southern Sindh

(Source: POE Drainage Master Plan)

- 12. **Implementation of WSIP Phase-I Project**. The WSIP was negotiated in March 2007 and approved by the GoS and the Government of Pakistan (GoP). The Bank's Board of Executive Directors approved the project in September 2007. The Financing and Project Agreement have been signed. The Government is starting project implementation activities, including selection of consultants for project implementation and monitoring and evaluation.
- 13. The overarching objective of the WSIP is to improve the efficiency and effectiveness of irrigation water distribution in three Area Water Boards (AWB)—Ghotki, Nara and Left Bank—particularly with respect to measures of reliability, equity and user satisfaction. This would be achieved by: (a) deepening and broadening the institutional reforms that are already underway in Sindh; (b) improving the irrigation system in a systematic way, covering key hydraulic infrastructure, main and branch canals, and distributaries and minors; and (c) enhancing long term sustainability of the irrigation system through participatory irrigation management and developing institutions to improve operation and maintenance of the system and cost recovery. Improved water management would lead to increased agricultural production, employment and incomes from about 1.8 million hectares, or more than 30 percent of the irrigated area in Sindh, which is one of the poorest regions of the country.

14. The WSIP includes the following components:

- Component A. Community Development and Capacity Building (US\$10 million): Capacity of SIDA, AWBs, and Farmers' Organizations (FOs) will be strengthened under the project, enabling them to perform their responsibilities according to the Sindh Water Management Ordinance of 2002. The project will also strengthen the capacity of FOs to carry out operation and maintenance of the irrigation and drainage systems;
- Component B. Rehabilitation and Improvement of Irrigation and Drainage System (US\$139.8 million): The main and branch canals, distributaries/minors (secondary level canals) and drainage system in FO areas will be rehabilitated and improved and a modern water measurement and accounting system will be installed throughout the canal systems in the three AWBs;
- Component C. Management Plans for Major Irrigation & Drainage Infrastructure (US\$12 million): A feasibility study for rehabilitation of the Gudu barrage will be prepared and assistance provided to prepare studies for rehabilitation of the Sukkur and Kotri barrages. A regional master plan will be prepared to deal with floods and drainage issues on the Left Bank of the Indus River and measures designed for improvement of the Indus delta and the coastal zone;
- Component D. Monitoring and Evaluation of the Project Impact and Environmental Management Plan (US\$4.2 million): This component will be for monitoring and evaluation and supervision of the environmental management and social action plans; and

- Component E. Project Coordination, Monitoring, Technical Assistance and Training (US\$9 million): This component will support project coordination, monitoring of implementation activities, management and supervision of procurement by an independent project management consultant/procurement agent, and technical assistance and training.
- 15. Component C of the WSIP is particularly important, as it includes detailed studies and preparation of a regional master plan in consultation with stakeholders. This plan will address flooding and drainage issues in the area on the Left Bank of the Indus River, taking into consideration structural and non-structural measures, including remedial measures for any outstanding deficiencies in the LBOD and measures for the retention and/or safe disposal of storm and flood water. This study will incorporate the recommendations and lessons learned from the Dhands study, the findings of the Panel of Experts on environmental flows below Kotri and the pilot studies of the Kotri drainage basin prepared for the Drainage Master Plan under NDP. A separate plan will be prepared for rehabilitation and improvement of the delta area, wetlands and coastal zone, taking into consideration the environmental importance of the region and its economic potential, and drawing upon international experience. Feasibility studies will be completed and detailed designs will be prepared for priority works for implementation under a future investment project that Sindh may undertake with the assistance of its development partners.

Progress on Medium Term Actions

16. The last progress report addressed the Flood Management Plan for the Left Bank of the Indus River and the Coastal Development Program. There is no further progress to date. WSIP includes an allocation of US\$7 million, as part of Component C, to prepare a master plan to manage flood issues in the area of the Indus River and the coastal zone, along with the preparation of feasibility studies and detailed designs of priority works identified under the plan. The final concept and scope of the activities for the FAO Technical Cooperation Program, which aims to develop a project concept for a Coastal Development Program, are still under discussion with the GoS and GoP, and are not expected to be finalized before March 2008. As noted earlier, the PPAF has estimated at US\$25 million (up from US\$18 million) the financial requirement to support demand-driven community infrastructure and livelihood projects.

Long Term Outcomes

17. In the context of improving management of irrigation and drainage infrastructure, services and equitable distribution of water in Pakistan, the Bank has continued to intensify the dialogue with all Provinces in an effort to pursue institutional reforms coupled with infrastructure development. The Third Punjab Irrigation Sector Development Policy Loan (DPL-III), currently under preparation, is actively promoting

⁹ The second DPL supported the Government of Punjab Medium Term Irrigation Sector Reform Program, begun in 2005, in implementing institutional and policy reforms to improve provincial asset management plans; to make interprovincial water allocation and distribution more transparent; to decentralize irrigation management to water users

a new governance agenda in the irrigation sector to increase accountability and transparency in service provision and farmer participation. In Sindh, the WSIP will cover 30 percent of the irrigated area in which the Government has taken action to reform irrigation and drainage institutions, establish AWBs and develop FOs for irrigation management. In Balochistan, a small-scale irrigation and watershed management project, combined with drought mitigation measures, is being prepared. In Northwest Frontier Province (NWFP), the Bank is pursuing a dialogue to sustain the initial reform efforts carried out under the previous on-farm water management project.

18. An improved institutional framework for water resources management continues to be central to the Bank's ongoing discussions with the GoP on further development of water resources infrastructure on the Indus River. Pakistan is moving steadily to ensure the sustainable management of the Indus system; this includes the preparation and implementation of a comprehensive framework of policy and institutional reforms and development plans, all to provide sustainable and equitably-shared benefits to the people of Pakistan. This concept has been fully endorsed by key stakeholders at the highest level in the Government and by most civil society organizations. The ongoing challenge for the Bank and other donors is to move the process forward in a manner that ensures full government ownership at the federal and provincial levels and leadership in the water reform process, compliant with international best practice.

Conclusions

19. Implementation of the five actions under the Action Plan agreed by the Executive Directors during the discussion of the findings of the Inspection Panel's Investigation Report and the Management Report and Recommendation on the Pakistan NDP project remains broadly on track¹⁰. Although the solution to many of the poverty, ecological and flood management issues of the outfall area of Sindh are of a long term nature and require management and structural measures, the activities initiated under the Action Plan are an important step in the right direction. Despite strong support at a high level in the GoS, weak capacity at the local level will remain a serious issue and will need considerable strengthening. The Sindh coastal zone and, in particular, the LBOD outfall system will continue to remain a high-risk area. Addressing the complex socio-ecological and structural issues affecting this area will continue to be a difficult challenge compounded by recurrent adverse weather events. Management will remain actively engaged in following up on these issues. The NDP project is now closed; however, the Bank will continue to support the Government through the ongoing dialogue, the PPAF, the WSIP and the coastal zone management initiative under preparation.

associations; and to improve water productivity. DPL III will follow up on these reforms, and the Government of Punjab has requested the continued support of the Bank for a series of three additional DPLs.

¹⁰ IRN prepared a brochure that includes its comments on the implementation of the Action Plan. Bank officials met with IRN and one of the Requesters to discuss the status of the implementation of the Action Plan. A letter attached as Annex 6 was prepared as a response to the IRN position.

Table 2: Action Plan¹¹

Activities & Projects	A	В	C	Responsibility	Updated- Schedule
Immediate and Short Term					
• Implementation of Livelihood Improvement					
Program in Badin and Thatta Districts					
Phase I (US\$3 million)	✓			PPAF	2006-2007
Phase II (US\$25 million	✓				2007-2009
• Sindh WSIP	✓	✓	✓		
Appraisal				GoS/GoP/SIDA	Nov. 2006
Board Presentation				WB	Sep. 2007
Effectiveness				GoS/GoP/SIDA	Jan. 2008
Socio-economic and environmental diagnostic	✓		✓	WB/SIDA	Nov. 2007
study of the Dhands and surrounding areas					
• Assessment of the conditions of the right		\checkmark			
embankment of the LBOD spinal drain and				SIDA/WAPDA	May 2007
KPOD. Preparation of a maintenance plan.					and
					updated in
					November
					2007
Rapid Assessment of Existing Local and				SIDA/Local	May 2007
Government Flood Risk Management Systems.		✓		Governments.	and updated
Government From High Humagement Systems.					November
					2007
Medium Term	✓	,	,	CIDA	2007 2000
Flood Management Master Plan for the Left	•	•	•	SIDA	2007-2009
Bank of the Indus River in southern Sindh					
Coastal Development Program	✓		✓	WB/FAO-TCP	Mar. 2008
Project Concept Note					
Troject Concept Note					
Long Term Outcomes					
• Improved management (O&M) of irrigation and	/	_	./	C - D/C - C/WD	2007 2000
drainage infrastructure; improved service	•	•	V	GoP/GoS/WB	2006-2009
delivery and governance; and transparent and					
more equitable water allocation and distribution					
Modern institutional framework for Indus Basin				GoP/GoS/WB	2009-2016
water resources management	✓	✓	✓	301 / 305/ WD	2007 2010
Sustained governance reform agenda				GoP/GoS/WB	2009-2016
Sastanion governance referring agencia		\checkmark	\checkmark	- · · · · -	

KEY: A: Poverty and livelihoods, B: Flood risk, C: Threatened ecosystems

This table is a revision of the one included in the Action Plan in 2006. Two activities have been added in the section on "Immediate and Short Term" actions, and some of the dates have been amended for reasons that are explained in the report. The new activities were also included in the July 2007 progress report.