

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA17335

Date ISDS Prepared/Updated: 04-Mar-2016

Date ISDS Approved/Disclosed: 19-Feb-2016

I. BASIC INFORMATION

1. Basic Project Data

Country:	Pakistan	Project ID:	P154255
Project Name:	PK-Balochistan Integrated Water Resources Management & Development Project (P154255)		
Task Team Leader(s):	Mahwash Wasiq, Muhammad Riaz		
Estimated Appraisal Date:	22-Feb-2016	Estimated Board Date:	02-Jun-2016
Managing Unit:	GWA06	Lending Instrument:	Investment Project Financing
Sector(s):	Irrigation and drainage (60%), Forestry (10%), Public administration- Water, sanitation and flood protection (10%), Water supply (10%), Flood protection (10%)		
Theme(s):	Natural disaster management (10%), Rural services and infrastructure (40%), Other rural development (10%), Climate change (10%), Water resource management (30%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	209.70	Total Bank Financing:	200.00
Financing Gap:	0.00		
Financing Source			Amount
BORROWER/RECIPIENT			9.70
International Development Association (IDA)			200.00
Total			209.70
Environmental Category:	A - Full Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

To strengthen provincial government capacity for water resources monitoring and management and

to improve community-based water management for targeted irrigation schemes in Balochistan.

3. Project Description

The Project will begin the transformation of water management in Balochistan from a narrow irrigation project focus, to an integrated multi-sectoral river basin planning and development approach. It will achieve this through institutional restructuring and strengthening, investments in hydro-meteorological data and water information systems, and priority infrastructure investments in irrigation, potable water supply, flood protection, watershed and rangeland management. The project comprises the following components:

Component A: Institutions, Capacity and Information

This component will lay the foundation for a gradual transition to IWRM in Balochistan in line with the IWRM policy described above. It will support institutional restructuring, professional development, installation and operation of hydro-meteorological systems, and establishment of river basin information systems.

Component B: Sector Sub-projects

This component will support implementation of IWRM sectoral investments within a framework of community mobilization and participation. Investments will include: B1 – Construction and/or rehabilitation of irrigation and potable water supply facilities; flood protection infrastructure; B2 – Related watershed and rangeland management and environmental protection works; and B3 – On-farm water management and agricultural productivity activities.

Sub-component B1 will implement eight irrigation sub-projects: four each in the Nari and Porali basins, spanning ~128,000 ha and benefiting ~48,100 households. Development work will include remodeling of the headwork and secondary canals, command area development in perennial irrigation, spate irrigation (Sailaba) and rainwater harvesting (Khushkaba) irrigation areas, and construction of access farm tracks. The Project will support construction and rehabilitation of sixteen village water supply schemes providing potable water supply to ~4,200 households. High-intensity rain in the steep upper catchments generates high-energy flash flooding and there is a dire need for flood protection works in five districts in the Nari basin and in two districts in the Porali basin. The proposed works will protect ~14,600 ha of farmland and ~4,100 low-income family homes benefitting ~10,200 households and protecting 31 km of village roads (with 18 bridges and culverts) and various irrigation infrastructure.

Sub-component B2 will support a participatory approach to watershed management and rangeland management at the irrigation scheme level, to complement the new infrastructure investments under sub-component B1. Watershed management will include soil and water conservation measures, drainage improvement, rainwater harvesting, rehabilitation/protection of irrigable land degraded/ endangered by erosion gullies and plantations. Rangeland management will focus on pasture and biomass production through introduction of rotational grazing and stocking rate limits. Total sub-component beneficiaries are ~280,000.

Sub-component B3 will improve on-farm and field irrigation water efficiency and farm productivity. Community mobilization and Farmer organizations will be established. Beneficiary farmers will contribute in-kind with labor for cost sharing of the development work. Matching grants will be given to service providers and farmers for high-efficiency irrigation systems, land leveling, farm machinery and diverse training. Training will encompass improved water management technologies, improved crop management including Integrated Pest Management and crop diversification,

exposure visits, training for women in agriculture and livestock, and on the job and off-site training for project/department staff. Total beneficiaries for this component are ~20,000 (within irrigation beneficiaries).

Component C: Project Management & Technical Assistance

This component will support project management, monitoring and evaluation and studies. The component will finance expenditures associated with overall project implementation costs including incremental costs associated with PMU and the PIUs, Project Supervision and Implementation Assistance (PSIA) consultants, Monitoring and Evaluation (M&E) consultants, and implementation of Management Plans and Strategic Studies including Environmental Management Plan, Social Management Plan, Gender Action Plan, and strategic studies. Study tours will also be included with piloting of new technologies and others that may be identified during project implementation, as well as feasibility studies for other potential river basins.

These activities not only have a positive impact on the environmental sustainability but also build resilience to climate change and associated impacts of floods and drought.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The proposed project is to be implemented in the two river basins of Nari and Porali in the water stressed and highly arid province of Balochistan, where traditional irrigation dominates. The selected basins are home to unique and fragile ecosystems. The Porali River to the Arabian Sea, supporting coastal mangrove forests in the Lasbela district. Both river basins have extensive rangelands and pastures that support grazing livestock and wild ungulate populations. There are two wildlife sanctuaries and one game reserve in the Nari Basin and one wildlife sanctuary in the Porali Basin. As the project aims to increase cultivated area and water diversions (including construction of new irrigation schemes) there is a possibility of pasture land conversion, decreased freshwater flows to mangrove forests, and possible introduction of newer crop varieties, for all of which, detailed analysis of impacts is required. The project also include drought mitigation and flood protection measures that are expected to deliver environmental benefits; these need to be ensured and amplified.

5. Environmental and Social Safeguards Specialists

Abdelaziz Lagnaoui (GEN06)

Chaohua Zhang (GSU06)

Maqsood Ahmed (GSU06)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	Multiple ecological zones to be affected, with possibility of some irreversible change in the functioning of the eco-zones require detailed environmental assessment. Implementation of sub-projects will also have construction-related environmental impacts such as air quality deterioration, water and soil contamination, land use and land form changes, and impacts on biological resources. This policy is triggered to requiring detailed environmental assessment and prepare environmental monitoring and mitigation plan.
Natural Habitats OP/BP	Yes	This policy is triggered because of the potential

4.04		environmental impacts of project activities on the natural habitats and protected areas in the two river basins. The EIA will identify and delineate areas of critical habitat and ensure application of the mitigation hierarchy in accordance with this policy for all project works.
Forests OP/BP 4.36	Yes	Juniper forests in Ziarat and Mangrove forests at the coast of Lasbela may be affected due to the presence in the project area of influence. Mitigation measures are thus proposed as part of the EMP.
Pest Management OP 4.09	Yes	Major interventions planned to enhance agricultural productivity with a possible introduction of newer crop varieties that together may affect local pest population leading to increased use of pesticides and other agro-chemicals. A pest management plan is included in the disclosed ESA.
Physical Cultural Resources OP/BP 4.11	Yes	The social assessment revealed local significant heritage places such as religious buildings, graveyards and religious shrines. Mitigation measures have been incorporated into the EMP including provisions for a detailed Cultural Heritage Management Plan.
Indigenous Peoples OP/BP 4.10	No	No indigenous people as defined in the OP reside in the Province.
Involuntary Resettlement OP/BP 4.12	Yes	Project schemes will require lands for their construction and this will trigger OP 4.12 through land taking and possible relocation.
Safety of Dams OP/BP 4.37	No	This policy is not triggered as the project will not support the construction or rehabilitation of dams nor will it support other investments which rely on the services of existing dams. The project infrastructure investments, including irrigation, potable water supply and flood protection, will not rely on the performance of any existing dams.
Projects on International Waterways OP/BP 7.50	No	This policy is not triggered as neither the Porali nor the Nari are international rivers as defined in OP7.50. The Nari basin is within the geographic extent of the Indus River Basin and the Indus is an international river. However, the Nari River terminates in inland lakes before reaching the Indus River, hence it is not a tributary of the Indus.
Projects in Disputed Areas OP/BP 7.60	No	No disputed territories exist in the Province.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify
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and describe any potential large scale, significant and/or irreversible impacts:
<p>The project will divert floodwater for increased and improved irrigation. This may potentially cause negative environmental impacts that can be mitigated through appropriate design and construction methods. Water diversion may impact ecological flows, biodiversity hotspots, protected areas as well as livelihoods downstream. In addition, improvements in irrigation systems may lead to the expansion of agricultural activity into traditionally non-agricultural lands (i.e. forest and rangelands). The potential negative impacts would be associated with construction/rehabilitation/operation of infrastructure for diversion of floodwaters for irrigation. The project is expected to require land for its civil works investments. However, considering the linear nature of the investments and low productive status of the lands, the impacts of land taking on livelihoods are expected to be marginal in most cases. OP 4.10 is not considered triggered as the social assessments indicate that there are no indigenous communities residing in the project area that fall under the definition of indigenous people in the OP 4.10. Considering the challenges associated with watershed management and potential impacts of infrastructure, the project has been classified as Category A for environmental and social safeguards.</p>
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
<p>Overall, the project is expected to have environmental benefits, by encouraging integrated water resources management promoting: (i) water savings technologies in irrigated agriculture, (ii) improved agriculture practices and promotion of drought tolerant cropping varieties, (iii) improved watershed and rangeland management to increase groundwater recharge, and (iv) contribute to the conservation of Juniper forests in the Nari basin and mangrove forests in the Porali delta. These activities will also build resilience to climate change and associated flood and drought impacts. A cumulative impact assessment has been prepared as part of the ESA. It reviews plans for similar water diversions, delay action and storage dams, and large scale dam projects for a 10-year time horizon. It also evaluates the likely impacts of planned and future interventions in the two river basins over this period.</p>
3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
<p>The EA considers alternative project approaches for watershed management in the two target river basins.</p>
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
<p>Balochistan Irrigation Department, an institution of the Government of Balochistan, will be the lead implementing agency. The department has developed a Resettlement Policy Framework to guide the design and implementation of future program schemes. However, the department has completed the design for Year One schemes and a Social Impact Assessment And Mitigation Plan has been developed to identify and address the adverse impacts.</p>
<p>The Irrigation Department has limited capacity to implement safeguard requirements and will require considerable support to implement the triggered safeguard policies. The ESA report will propose an appropriate safeguards implementation arrangement that will involve collaboration between the project management and implementation units. To achieve this, the PMU will hire Environmental and Social Safeguard Specialists to enhance capacity and manage any environmental or social issues that arise during implementation. M&E Consultants will provide additional support and will monitor social issues. Training will be provided for project management and implementation staff.</p>

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
Stakeholders include government departments, communities and farmers from the target river basins. The ESA will consult these stakeholders, including NGOs, to obtain technical inputs. Preliminary ESIA reports were prepared for both schemes as part of the previous project, Balochistan Small Scale Irrigation Project. The reports propose a more focused consultation at the command area, watershed and downstream community levels at project inception stage, and then a final consultation at project completion. Consultation with government stakeholders will take place at both inception and completion stages. The reports have been disclosed in-country and in the Bank's InfoShop

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	18-Jan-2016
Date of submission to InfoShop	26-Jan-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	18-Feb-2016
"In country" Disclosure	
Pakistan	25-Jan-2016
<i>Comments:</i>	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	29-Jan-2016
Date of submission to InfoShop	09-Feb-2016
"In country" Disclosure	
Pakistan	09-Feb-2016
<i>Comments:</i>	
Pest Management Plan	
Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	18-Jan-2016
Date of submission to InfoShop	26-Jan-2016
"In country" Disclosure	
Pakistan	25-Jan-2016
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	
While impacts on Physical Cultural Heritage were assessed to be minor, the EMP includes a specific recommendation to develop a Cultural Heritage Management Plan (CHMP) during the first year of project implementation, in addition to outlining the management actions to be taken for cultural heritage likely to be affected by the project. These include: (i) in the unlikely case of discovery of any artefact or site of archaeological, cultural, historical, or religious significance during construction activities, the works will be stopped in that area, and the appropriate department will be	

informed, (ii) if sites of religious significance are encountered during construction activities, the works will be stopped in that area, and the appropriate department will be informed, as outlined in the chance finds procedure included in the disclosed EA; (iii) and finalization of the CHMP within the first year of project implementation.

Terms of reference for the CHMP are included in Annex 3 of the disclosed EA.

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP/BP 4.04 - Natural Habitats			
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP 4.09 - Pest Management			
Does the EA adequately address the pest management issues?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Is a separate PMP required?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP/BP 4.11 - Physical Cultural Resources			
Does the EA include adequate measures related to cultural property?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Is physical displacement/relocation expected?	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>]	TBD [<input type="checkbox"/>]
Provided estimated number of people to be affected			

Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] TBD [<input type="checkbox"/>]
Provided estimated number of people to be affected	
OP/BP 4.36 - Forests	
Has the sector-wide analysis of policy and institutional issues and constraints been carried out?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the project design include satisfactory measures to overcome these constraints?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the project finance commercial harvesting, and if so, does it include provisions for certification system?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader(s):	Name: Mahwash Wasiq, Muhammad Riaz	
Approved By		
Safeguards Advisor:	Name: Zia Al Jalaly (SA)	Date: 10-Mar-2016
Practice Manager/Manager:	Name: Ousmane Dione (PMGR)	Date: 10-Mar-2016