

COMBINED PROJECT INFORMATION DOCUMENTS / INTEGRATED SAFEGUARDS DATA SHEET (PID/ISDS)

Additional Financing

Report No.: PIDISDSA16272

Date Prepared/Updated: 04-Mar-2017

I. BASIC INFORMATION

A. Basic Project Data

Country:	Pakistan	Project ID:	P157736
		Parent Project ID (if any):	P125999
Project Name:	Additional Financing for Punjab Irrigated Agriculture Productivity Program Phase-1 (P157736)		
Parent Project Name:	PK Punjab Irrig Agri Productivity Improvement Prog Phase-I (P125999)		
Region:	SOUTH ASIA		
Estimated Appraisal Date:	18-Jan-2017	Estimated Board Date:	23-Mar-2017
Practice Area (Lead):	Agriculture	Lending Instrument:	Investment Project Financing
Borrower(s)	Islamic Republic of Pakistan		
Implementing Agency	Directorate General Agriculture (Water Management)		
Financing (in USD Million)			
Financing Source			Amount
International Bank for Reconstruction and Development			130.00
Local Farmer Organizations			70.00
Financing Gap			0.00
Total Project Cost			200.00
Environmental Category:	B-Partial Assessment		
Appraisal Review Decision (from Decision Note):	The review did authorize the team to appraise and negotiate		
Other Decision:			
Is this a Repeater project?	Yes		

B. Introduction and Context

Country Context

Pakistan posted the GDP growth of 4.2 percent in FY2014/15, below the 5.1 percent target. Private investments as share of GDP declined to 9.7 percent, but overall deficit remained 5.3 percent of GDP, 0.3 percent higher than estimated. While Pakistan continues to score poorly on doing business indicators, there are signs of improvement. Growth in FY16 was expected to be moderate at 4.5 percent, well below the 5.5 percent target. For FY17, the expected growth is 5.2 percent while for FY18 it is projected at 5.5 percent.

Sectoral and Institutional Context

Pakistan's agriculture sector is heavily depends on irrigation - more than 90 percent of production is from irrigated lands. However, per capita availability of useable water is decreasing with population growth, pollution and inefficient use of water. An estimated 40 percent of water is lost in the unlined watercourses due to seepage, spillage, side leakage and evapotranspiration. In Punjab, out of the total 59,500 watercourses, about 43,700 were improved in various projects and Government's National Program for Improvement of Watercourses (NPIW). Under PIPIP 5,500 new watercourses are being improved leaving about 10,300 that still need improvements.

C. Proposed Development Objective(s)

Original Project Development Objective(s) - Parent

The project's main objective is to improve productivity of water use in irrigated agriculture. This will be achieved through improved physical delivery efficiency and irrigation practices, crop diversification and effective application of inputs that will translate into greater agricultural output per unit of water used. The project's objectives would contribute to increased agricultural production, employment and incomes, higher living standards and positive environmental outcomes.

Proposed Project Development Objective(s) - Additional Financing

The project's main objective is to improve productivity of water use in irrigated agriculture. This will be achieved through improved physical delivery efficiency and irrigation practices, crop diversification and effective application of inputs that will translate into greater agricultural output per unit of water used. The project's objectives would contribute to increased agricultural production, employment and incomes, higher living standards and positive environmental outcomes.

Key Results

The AF would support: (a) installation of high efficiency irrigation systems; (b) improvement of community irrigation systems; (c) introduction of modern technologies and methods in irrigated agriculture, assistance in crop diversification and training; and (d) Project management, construction supervision, quality control, technical assistance and training.

D. Project Description

The AF would provide resources for: (i) component B of the project related to upgrading of the Community Irrigation Systems; (ii) a new sub-component C3 is added focusing on post-harvest processing, value addition and market linkages; and (iii) make up for loss of resources due to changes in exchange rates between SDRs to USD.

Component Name:

Upgrading of the Community Irrigation Systems

Comments (optional)

W/Cs would be improved using only pre-cast concrete sections (PCPS) with water-tight joints. The WUAs/farmers would share costs through providing labor, and the Government of the Punjab

would provide PCPS and other material needed for watercourse improvement. The AF would improve 2,000 W/Cs and irrigation schemes – making the total number of schemes under component B 11,000.

Component Name:

Improved Agriculture Technology/Practices and Monitoring and Evaluation

Comments (optional)

Changes in this component are based on implementation experience and lessons learnt. These changes include: (i) supplementing support under sub-component C1 and C2 for monitoring and evaluation and impact assessment of the additional works under the AF; and (ii) adding a new sub-component to address value addition and market access for farmers adopting efficient irrigation technologies.

E. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The AF project will be implemented in Punjab province of Pakistan. Agriculture in Punjab is affected by waterlogging and salinity. In central and southern Punjab, rainfall is more sporadic and agriculture is entirely irrigation dependent.

F. Environmental and Social Safeguards Specialists

Ahmad Imran Aslam(GEN06)

Salma Omar(GSU06)

II. IMPLEMENTATION

The implementation arrangements under the AF will remain the same as for the Original Project. The Director General Agriculture (Water Management) (DG-AWM) will continue to be responsible for the implementation of the Project. The Directorate of On-Farm Water Management (OFWM) has demonstrated that it has the capacity to implement such programs in the Punjab.

III. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The Government prepared an Environmental and Social Assessment (ESA) for the original project. An Addendum to ESA covering revised and up-scaled scope of work has also been prepared. The Addendum is cleared and disclosed. The key potentially negative environmental and social impacts of the proposed interventions under the AF project include changes in land use pattern particularly where barren/fallow land is brought under cultivation, contamination of soil and water caused by excessive use of agro-chemical inputs, salt build up in crop root zone, loss of natural vegetation and trees for water course improvement, loss of crops caused by water course improvement works,

		<p>and reduced ground water recharge caused by water course lining. These potential impacts are temporary and reversible in nature and can be mitigated with the help of appropriate mitigation measures, such as avoiding interventions in the environmental hot spots and wildlife protected areas when expanding the cultivation fields, awareness raising and capacity building of farmers for judicious use of chemical inputs, occasional flood irrigation in fields using high efficiency irrigation systems to avoid salt build-up in soil, tree plantation to compensate any tree cutting, avoiding cropped area while carrying out the water course improvement and other construction works during the project, and limiting the extent of water course lining in the sweet groundwater zone to minimize negative impacts on groundwater recharge. Some of the new activities proposed under AF may have additional environmental impacts like those related with disposal of waste and wastewater from fruit washing bays and cleaning platforms, construction related issues with small-scale platforms, and disposal of discarded fruits, vegetables (generally and largely biodegradable material). Occupational health and safety may be an additional potential environmental impacts for the new activities related to post-harvest processing centers. The Addendum proposes adequate mitigation measures for these issues and after the adequate implementation of mitigation measures, no residual impacts are forecasted.</p>
Natural Habitats OP/BP 4.04	No	The project supports activities only in already disturbed environment and no project site is located in any natural habitat.
Forests OP/BP 4.36	No	The project does not support any activity in the forest land.
Pest Management OP 4.09	No	The proposed interventions are likely to reduce the quantities of agro-chemicals particularly the ones that are water soluble.
Physical Cultural Resources OP/BP 4.11	No	The project activities will be undertaken where cultivation is being practiced for decades if not longer. Hence presence of any physical cultural resources is extremely unlikely. Chance Find procedures are nonetheless included in the main ESA.

Indigenous Peoples OP/BP 4.10	No	There are no indigenous communities in project area.
Involuntary Resettlement OP/BP 4.12	No	No land acquisition is envisaged for the proposed activities.
Safety of Dams OP/BP 4.37	No	The project does not include any component, which involves construction of new or rehabilitation/upgradation or renovation of any existing dam.
Projects on International Waterways OP/BP 7.50	Yes	An exemption to notification was obtained for the original project that also applies to the AF.
Projects in Disputed Areas OP/BP 7.60	No	The project is located in the Punjab province, which does not have any disputed area as defined in the policy.

IV. 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 and describe any potential large scale, significant and/or irreversible impacts:

The project prepared an Environmental and Social Assessment (ESA) report, which suggests that the proposed project does not pose any long term or irreversible adverse environmental impacts. The key potentially negative environmental and social impacts of the proposed interventions under the original project include changes in land use pattern particularly where barren/fallow land is brought under cultivation, contamination of soil and water caused by excessive use of chemical inputs, salt build up in crop root zone, loss of natural vegetation and trees for water course improvement and reduced ground water recharge caused by water course lining. Scope of additional work proposed under Component B does not bring in any additional or new environmental impacts other than those which have already been covered in the ESA prepared for the original project. New activities proposed under Component C3 may have additional environmental impacts like those related with disposal of waste and wastewater from fruit/vegetable washing bays and cleaning platforms, construction related issues with small-scale washing bays and platforms, and disposal of discarded fruits, vegetables (generally and largely biodegradable material). Occupational health and safety may be an additional potential environmental impacts for the new activities related to post-harvest processing centers. These potential impacts are temporary and reversible in nature and can be mitigated with the help of appropriate mitigation measures, such as avoiding interventions in the environmental hot spots and wildlife protected areas when expanding the cultivation fields, awareness raising and capacity building of farmers for judicious use of chemical inputs, occasional flood irrigation in fields using high efficiency irrigation systems to avoid salt build-up in soil, tree plantation to compensate any tree cutting, avoiding cropped area while carrying out the water course improvement and other construction works during the project, and limiting the extent of water course lining in the sweet groundwater zone to minimize negative impacts on groundwater recharge. The Addendum proposes adequate mitigation measures for the issues arising out of the implementation of component C3 and after the adequate implementation of proposed mitigation measures, no residual impacts are forecasted. Land acquisition will not be required for the project rehabilitation works, which

will be undertaken within their existing boundaries. There are no indigenous communities in the project areas as defined under World Bank OP 4.10 on Indigenous Peoples. The project will support livelihoods through improvements in food harvesting and handling of produce. In particular, women may benefit from these interventions through decreased work load in post-harvest processing. The community water course improvement will benefit agricultural communities' especially small farmers.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Agriculture and irrigation development are key priorities of the Government's development agenda with the aim to improve agricultural productivity, irrigation efficiency and livelihood of the people. The long term impacts of the project will contribute to reduction in poverty in conjunction with environmental protection.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The ESA report elaborates on various project alternatives including, 'no project' option, alternative irrigation methods, alternative land-leveling methods, alternative methods of on-farm water conservation and alternative methods of implementation. Analysis concluded that high efficiency irrigation results in reduced need of farm inputs such as fertilizers, pesticides, fungicides, and herbicides, as well as reduced vulnerability of crops to pest attacks and proliferation of weeds, leading to less use of pesticides and herbicides. In addition, fertigation (application of fertilizers or other soil additives through the irrigation system) is done through drip and sprinkler, which results in increased effectiveness of fertilizers with reduced quantities needed. Similarly, through high efficiency irrigation systems, chemigation (application of pesticides, fungicides, and herbicides) is also done through drip and sprinklers, resulting in effective use of chemicals with reduced quantities needed. The overall result of high efficiency irrigation system is therefore a much reduced usage of chemical inputs and introduction of post-harvest technology under AF will help better achieve the PDO. The only comparable alternative for this activity is 'no project option'.

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.

The original ESA is based on detailed assessment and includes an Environment and Social Management Plan (ESMP) for any possible environmental and social impacts under the project. The Addendum to the ESA uses the same ESMP with some additions related to the proposed activities under Component C3 and proposes preparation of a separate ESMP for each post-harvest fruit/vegetable processing facility. These ESMPs will need to be cleared by the Bank before these facilities can be established. For establishing these facilities, transparent and accessible guidelines on the selection process will be established, and communicated widely to all farmers to ensure that the selection process is seen as transparent and fair, and possible social conflict is avoided. The ESA Addendum is cleared and disclosed.

The original ESA report presents a well-structured organogram for the implementation arrangements of EMP. The Director General Agriculture Water Management (DG-AWM) is overall responsible for environmental and social performance of the project in accordance with the national and WB requirements. An officer is designated as the Environmental and Social Coordinator (ESC) for ensuring effective implementation of ESMP. The ESC

coordinates with the WMOs at the district level, who have been designated as the district environmental and social coordinators (DESCs) at district level. The DESCs supervise and coordinate with the WUAs and farmers for the actual implementation of the environmental and social guidelines and other ESMP requirements. These institutional arrangements have been effective in ESMP implementation of the original project and will be continued for AF project.

The Project Implementation and Supervision Consultant (PISC) are responsible for implementation of ESMP while M&E Consultants are responsible for monitoring. Production and maintenance of all documentation outlined in ESMP is to be done by PISC. The client has been successfully implementing the ESMP in the original project and understands fully the planning and operational levels of safeguards requirements. While GD-AWM does not have an environmental management unit within its operational hierarchy, it continues to implement project level implementation of ESMP. The implementation performance of environmental safeguards in the original project is satisfactory. Quarterly progress reports are done regularly and will continue for the AF. Training is conducted for field staff as outlined in the ESA and these will continue for the AF. Monitoring will include both quantitative and qualitative data through consultations and feedback from beneficiaries, especially women, and will be included in the progress reports.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Key stakeholders consulted at various levels include: (i) People directly affected by the Project and Project beneficiaries (i.e., farmers, WUA members, and other villagers), (ii) Sales and service companies, (iii) Officials from the Agriculture Department and agriculture research institutes, (iv) Environment Protection Agency of Punjab, (v) Academia, (vi) Donors, and (vii) NGOs, international organizations, and other interest groups. Consultations with the project stakeholders were carried out during preparation of original ESA. The stakeholders have remained involved during the implementation including the project affected people, project beneficiaries and other local communities in several districts. Similar consultations were carried out for AF project during the preparation of the ESA Addendum and will continue during the implementation of the AF.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	11-Mar-2015
Date of submission to InfoShop	15-Jun-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Pakistan	14-Jun-2016
<i>Comments:</i> Addendum to the ESA is prepared for the AF project. The ESA Addendum is disclosed by GoPunjab and is available through website: http://ofwm.agripunjab.gov.pk/system/files/PIPIP_ESA.pdf	
Pakistan	

<i>Comments:</i>	
Pakistan	
<i>Comments:</i>	
Pakistan	
<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::	

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 7.50 - Projects on International Waterways						
Have the other riparians been notified of the project?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	NA	<input type="checkbox"/>
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
Has the RVP approved such an exception?	Yes	<input checked="" type="checkbox"/>	No	<input 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	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>

the implementation of measures related to safeguard policies?						
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"/>

V. Contact point

World Bank

Contact: Masood Ahmad
Title: Lead Hydropower Specialist

Contact: Tahira Syed
Title: Senior Rural Development Speci

Borrower/Client/Recipient

Name: Islamic Republic of Pakistan
Contact: Mr. Tariq Pasha
Title: Secretary
Email:

Implementing Agencies

Name: Directorate General Agriculture (Water Management)
Contact: Malik Muhammad Akram
Title: Director General
Email: pipipwm@gmail.com

VI. For more information contact:

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

VII. Approval

Task Team Leader(s):	Name: Masood Ahmad, Tahira Syed
Approved By:	

Safeguards Advisor:	Name: Aki Tsuda (SA)	Date: 14-Feb-2017
Practice Manager/Manager:	Name: Martien Van Nieuwkoop (PMGR)	Date: 18-Feb-2017
Country Director:	Name:Anthony Cholst (CD)	Date:07-Mar-2017