

INTEGRATED SAFEGUARDS DATA SHEET

APPRAISAL STAGE

Report No.: ISDSA1186

Date ISDS Prepared/Updated: 25-Mar-2015

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I. BASIC INFORMATION

1. Basic Project Data

Country:	Morocco	Project ID:	P150930
Project Name:	MA-Large Scale Irrigation Modernization Project (P150930)		
Task Team Leader(s):	Gabriella Izzi		
Estimated Appraisal Date:	23-Mar-2015	Estimated Board Date:	27-May-2015
Managing Unit:	GWADR	Lending Instrument:	Investment Project Financing
Sector(s):	Agricultural extension and research (3%), Irrigation and drainage (80%), Public administration- Agriculture, fishing and forestry (1 7%)		
Theme(s):	Rural services and infrastructure (67%), Water resource management (33%)		
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:	150.00	Total Bank Financing:	150.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			0.00
International Bank for Reconstruction and Development			150.00
Total			150.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The project development objectives are: (i) for targeted ORMVAs, to provide an improved water service to farmers, and (ii) for targeted farmers, to have better access to improved irrigation technologies.

3. Project Description

The Large Scale Irrigation Modernization project supports the Regional Agricultural Development Offices (ORMVAs) of Tadla, Haouz, Doukkala (in the Oum er Rbia river basin), and of Gharb (in the Sebou river basin) in providing farmers located in the LSI perimeters with an improved water service. This means individual access (rather than collective), on-demand (rather than on rotation), reliable (with faster re-establishment of the service in case of shut-downs), and equitable (in terms of flow and pressure across the irrigation network). Targeted farmers in LSI perimeter will be freed up of some structural constraints, e.g. related to collective water management, rigid water distribution rules and frequent shut-downs, and have the opportunity to improve their farming choices, adopting improved irrigation technologies (mainly drip irrigation), which are more efficient in the use of the scarce water resource and better suited for high-value crops.

The project includes 3 components: (1) Improving the irrigation network infrastructure; (2) Supporting farmers' access to improved irrigation technologies; and (3) Supporting implementing agencies' management of the irrigation network, and implementation of the project.

Component 1: Improving the irrigation network infrastructure

Component 1 will construct pressurized irrigation networks to replace existing gravity networks, and renovate existing pressurized irrigation networks. Under adequate management, the networks' design will allow providing farmers with an improved quality irrigation water service delivery, in line with the technical requirements of improved irrigation technologies. Component 1 activities include: (i) detailed studies including topographic works and laboratory tests; (ii) technical assistance to ORMVAs to monitor and control of works; (iii) upgrading main irrigation canals and constructing reservoirs to install flow-regulation systems necessary for on-demand irrigation; (iv) constructing feeder pipes for areas which benefit from gravity pressurization and rehabilitating pumping stations for those areas that need artificial pressurization; (v) constructing filtration stations; (vi) constructing distribution piped networks to replace existing canals or rehabilitating and extending existing piped networks; (vii) installing outlets and associated devices, including meters, at block and farm levels to regulate, measure, and control water delivered to farmers. This component will be executed by the ORMVAs.

Component 2: Supporting farmers' access to improved irrigation technologies

Component 2 will strengthen farmers' knowledge of and access to improved irrigation technologies (mainly drip irrigation) and the opportunities linked, to allow them taking advantage of the improved water service provided by the ORMVAs. Farmers will become familiar with the advantages of the improved irrigation technologies, and will have easier access to financing opportunities under the FDA to adopt them. Once the improved irrigation technologies is in place, farmers will receive irrigation advisory services, and their capacity to manage and maintain the irrigation systems will be strengthened. Farmers will also develop better knowledge of their groundwater, where appropriate. Component 2 activities will include: (i) provision of technical assistance to the ORMVAs to support farmers to access and manage improved irrigation technologies; (ii) provision of equipment to the ORMVAs to monitor performance of irrigation systems; (iii) provision of technical assistance and equipment to the ORMVAs to create or strengthen the irrigation information system; and (iv) rehabilitation of buildings and acquisition of equipment for the Water Users Associations (WUAs). This component will be executed by the ORMVAs.

Component 3: Supporting implementing agencies' management of the irrigation network, and

implementation of the project

Component 3 will strengthen the institutional capacity of the ORMVAs in operating and maintaining the irrigation networks, to ensure that new and improved networks are managed so to provide farmers with an improved water service, in line with the technical requirements of improved irrigation technologies. Component 3 will also support the DIAEA and the ORMVAs implementing the project. Component 3 activities will include: (i) technical assistance to ORMVAs to improve operation and maintenance (O&M) of the irrigation network; (ii) training, technical assistance, computer equipment, and associated tools to DIAEA and ORMVAs for project management; (iii) implementation of the EMP (iv) provision of equipment and infrastructure rehabilitation for DIAEA and ORMVAs; and (v) purchase of vehicles. This component will be executed by the ORMVAs and the DIAEA. The DIAEA will be responsible for all the activities that require a coordinated approach across the ORMVAs.

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

The project will be implemented in targeted irrigation sectors of the Tadla, Haouz, and Doukkala large scale irrigation perimeters in the Oum Er Rbia basin, and of the Gharb large scale irrigation perimeter in the Sebou basin. The targeted area is approximately 29,000 ha.

5. Environmental and Social Safeguards Specialists

John R. Butler (GSURR)

Ruma Tavorath (GENDR)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The Environmental and Social Impact Assessment (ESIA) identifies some potential negative impacts which are manageable through the implementation of the Environmental Management Plan (EMP), including the identification of a series of mitigations measures, a monitoring and supervision plan to ensure proper implementation of the defined EMP, as well as a training component. These potential impacts include: reduction of aquifer recharge, because a share of the current irrigation losses passes into aquifers; increased salinization of soils near the root zone, because of reduced leaching; and tensions between participating and non-participating farmers.
Natural Habitats OP/BP 4.04	No	The project does not finance any activities in natural habitats and no natural habitats are expected to be impacted.
Forests OP/BP 4.36	No	The project does not finance any investments in forested areas. No forest land or forest cover is expected to be impacted.

Pest Management OP 4.09	No	The ESIA concludes that agrochemicals are not a major concern. The OP 4.09 is not triggered as the project will not finance purchase of pesticides and will not induce the increased use of pesticides.
Physical Cultural Resources OP/BP 4.11	No	
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	Yes	The project does not expect to cause any involuntary displacement. The policy is triggered in case of potential small scale land acquisition, particularly for pipes and basins that might be located on private land. It is expected that most land acquisition will take place through amicable agreements between the land owners / farmers and the Commune. In case of lack of agreement, the Moroccan regulations for expropriation for public utility will apply (law 7-81). A framework approach has been pursued. In places where potential land acquisitions may take place, the sites have not been defined yet due to ongoing technical discussions. A Resettlement Policy Framework (RPF) in line with these regulations and Bank's guidelines was prepared.
Safety of Dams OP/BP 4.37	Yes	The project does not invest in dams. Nevertheless, the policy is triggered because the sustainability of the irrigation sectors targeted is dependent on the functioning and safety of existing dams. Triggering the policy helps ensure that the source of water is dependable and safe for sustaining the expected results of the project. National legislation for monitoring and management of dams (water law No. 10-95) has been reviewed and found fully in line with the requirements of the policy. The safety inspection and assessment reports for a sample of the dams have been reviewed and compliance with World Bank requirements verified.
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

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

The proposed activities funded under the project is expected to have a larger environmental benefit in terms of promoting sustainable water resources management through improving the practices and application efficiency of water use which could offset aquifer abstraction. These objectives are

<p>in line with the Government program on these topics, which is supported through Bank sector dialogue and the Integrated Green Growth DPL series. However, there are possible potential negative impacts of the proposed project which may include: Reduction of aquifer recharge, because of reduction in deep percolation consequent to the introduction of drip irrigation; increased salinization of soils near the root zone because of reduced leaching; and potential risk of tensions between participating farmers and non-participating farmers.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p>
<p>No significant indirect or long term environmental impacts are expected. The project will support GOMs efforts in modernizing irrigated agriculture and improving water resources management. It is designed to address hydrological and commercial risks that farmers are facing. These risks have encouraged farmers to grow crops that are tolerant of irregular water supplies and that are not perishable post-harvest, but that get lower than potential returns. The project proposes to mitigate hydrological risk by ensuring that a given quantity of water is continuously available to the farmer whenever he or she wants it. These interventions will ensure participating farmers to overcome current and future water deficits by making their water use more productive and environmentally sustainable. No major negative irreversible environmental impact is foreseen and the project is retained as category B.</p>
<p>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</p>
<p>N/A</p>
<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>
<p>The Borrower prepared an environmental impact assessment (ESIA) and a comprehensive Environmental Management Plan (EMP), which include the identification of a series of mitigations measures, a monitoring and supervision plan and a training component. This was finalized after thorough consultations with stakeholders. The project will support exploration of remote sensing technology to monitor water consumption. To mitigate the potential soil quality problems, and fertilizer problems, project-financed technical assistance will work with farmers to find optimum techniques to manage each individual circumstance. The EMP also stipulates provisions for minimizing health, environmental and nuisance problems during the construction phase. The capacity of the Borrower for the implementation and supervision of the EMP is modest. Training has been undertaken in the original project and the revised EMP also includes a training program (including budget) for building expertise on implementation of ESMP, monitoring the quality of water and soil, control of irrigation techniques as well on her communication skills with farmers. The project finances the implementation of the EMP. During supervision, the team will ensure that this capacity is maintained within each of the implementing agencies and that project progress reports will include proper enough information on the status of EMP implementation as well as actions undertaken to supervise and monitor its implementation.</p>
<p>5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.</p>
<p>The ESIA was discussed during thorough consultations with stakeholders in the irrigation areas in the basin. Key stakeholders includes regional and sub-regional entities involved in the design of the project including the ORMVAs (Office de mise en valeur agricole), Agricultural water user associations, group of farmers. As part of the elaboration of the ESIA and the related EMP, a series of public consultations have been undertaken with farmers. The ESIA captures these consultations and documents the feedback from the consulted stakeholders.</p>

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	27-Jan-2015
Date of submission to InfoShop	12-Mar-2015
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	////
"In country" Disclosure	
Morocco	06-Mar-2015
<i>Comments:</i>	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	26-Jan-2015
Date of submission to InfoShop	12-Mar-2015
"In country" Disclosure	
Morocco	06-Mar-2015
<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/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"/>]
OP/BP 4.37 - Safety of Dams			
Have dam safety plans been prepared?	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>]	NA [<input type="checkbox"/>]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>]	NA [<input type="checkbox"/>]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	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: Gabriella Izzi	
<i>Approved By</i>		
Practice Manager/ Manager:	Name:	Date: