# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Report No.: AC4667

Date ISDS Prepared/Updated: 10/29/2009

#### I. BASIC INFORMATION

### A. Basic Project Data

Country: Egypt, Arab Republic of	Project ID: P117745			
Project Name: EG-Farm-level Irrigation Modernization				
Task Team Leader: Julian A. Lampietti				
Estimated Appraisal Date: October 1, 2010	Estimated Board Date: December 14, 2010			
Managing Unit: MNSSD	Lending Instrument: Specific Investment			
	Loan			
Sector: General agriculture, fishing and forestry sector (50%);Crops (50%)				
Theme: Rural services and infrastructure (50%);Other rural development (50%)				
IBRD Amount (US\$m.): 100.00	-			
IDA Amount (US\$m.): 0.00				
GEF Amount (US\$m.): 0.00				
PCF Amount (US\$m.): 0.00				
Other financing amounts by source:				
Borrower	50.00			
	50.00			

#### B. Project Objectives [from section 2 of PCN]

The project development objective is to increase the irrigation efficiency and productivity of around 200,000 feddans primarily in the Delta old lands. This would be achieved through modernization of farm-level irrigation systems and improved water management in areas where upstream irrigation improvement interventions, both physical and institutional, have occurred and are fully functional. Such improvements have demonstrated significant positive impacts on water use and productivity, energy use, labor requirements and net financial returns to farmers. The project would also help to strengthen the delivery of farmer support services to help them achieve these goals. The success of the project would be measured by the following indicators:

- 1. reduced water consumption and increased irrigation efficiency as measured by water use per unit area (m3/feddan) and net returns per unit of water used (LE/m3);
- 2. increased farmer incomes as measured by real annual net returns from crop production per unit land area (LE/feddan); and
- 3. improved extension service delivery and performance monitoring (indicator TBD).

### C. Project Description [from section 3 of PCN]

The proposed project would provide a sector investment loan of US\$ 100 million over a five year period, with possible partnerships to be sought during project preparation.

Component 1: Farm-Level Irrigation Improvements (approximately US\$ 80 million). This component would support marwa and farm-level irrigation modernization for farmers on 200,000 feddans primarily in three Delta old land irrigation command areas (Mahmoudia, Manaifa and Meet Yazid). These locations are where branch canal and mesqa improvements have been carried out or are currently ongoing and where local organizations have been formed for sustainable O&M and irrigation management. Within this area, around 25,000 feddans of horticultural (fruit and vegetable) crops would be developed. Additional areas would be determined during project implementation based on farmer demand and land suitability. This component would provide financing for the following activities: (i) marwa and off-farm improvements comprising various pipe and hydrant systems, open channels and small gated outlets, with options designed and implemented in accordance with farmer needs and agreement; (ii) demand-driven farm-level improvements such as laser land-leveling, reshaping field drains, soil improvements, flexible hose systems, gated pipes or localized systems appropriate for horticultural crops; (iii) provision of machinery and equipment for land improvement, including support for the establishment of small private workshops for installation and maintenance; and (iv) field surveys, designs, and construction supervision and management. Service delivery could be outsourced to the local private sector as feasible.

Component 2: Farm-level Technology Development and Dissemination (approximately US\$ 20 million). The component would strengthen relevant MALR agencies and organizations responsible for implementation and O&M of the irrigation systems through training and improved information and monitoring systems, and would encompass project management including monitoring and evaluation (M&E). Component 2 would finance enhancement of farmer knowledge of modern irrigation and crop production technologies in support of component 1 through: (i) establishment of marwa-level demonstrations of farm-level irrigation technologies, including those suited for horticultural crops; (ii) farm-level adaptive research to identify innovative, cost-effective and efficient water application technologies and to increase yields; (iii) development of improved irrigation extension and advisory services including better delivery and performance monitoring; (iv) farmer training and support in improved farm-level water management, irrigation O&M, cropping practices including horticultural production, and marketing; and (v) design of potential irrigation technologies. These activities would be carried out in close interaction with participating farmers and the private sector. This component would pilot an improved extension model that can be monitored and transferred to other regions in support of the national MALR program for farm-level irrigation improvement.

Implementation arrangements: MALR agencies and units would lead project implementation . A Project Steering Committee would include representatives of MALR and other ministries and agencies including MWRI, project area Governorates, private sector and civil society, farmer associations and others as appropriate. An Executive Director would be responsible for project management and supported by staff responsible for M&E, financial management, procurement, and reporting. MALR#s Executive Authority for Land Improvement Projects (EALIP) would be responsible for farm-level irrigation improvements at the marwa level, and would coordinate with the Ministry of Water Resources and Irrigation (MWRI) at the interface with the mesqa

level. Farmers would participate in implementation, including contracting and/or execution of works and supply of materials through local farmer-led organizations. Local farmer-led organizations would manage farmer contributions in terms of labor and/or materials with cost recovery arrangements. Local farmer-led organizations in coordination with the MALR#s extension and research agency, the Agricultural Research Center (ARC) would carry out demonstrations, extension, applied research and farmer training activities.

Alternatives considered and rejected: (i) Other locations in the Delta and in Middle and Upper Egypt were considered. However, to achieve rapid delivery of cost-effective and sustainable results, it is considered better to focus on areas where improved irrigation systems and effective water user organizations are already in place at the mesqa level. (ii) The possibility of scaling up the pilot IIIMP farm-level activities through a project jointly managed by the MALR and MWRI comprising integrated mesqa/marwa and farm-level improvements, along the lines of the IIIMP, was considered. However, this option was rejected because of the greater institutional complexity and the need to focus on improved extension service delivery.

## **D.** Project location (if known)

The project will be located primarily in three Delta Old Land irrigation command areas (Mahmoudia, Manaifa and Meet Yazid).

# E. Borrower's Institutional Capacity for Safeguard Policies [from PCN]

Egypt has a reasonably good legal and regulatory framework related to environmental and social protection, including requirements for environmental assessments and mitigation.

# F. Environmental and Social Safeguards Specialists

Mr Knut Opsal (MNSSO)

Mr Ahmed Shawky M. Abdel Ghany (MNSWA)

#### II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	Χ		
No major environmental impacts are expected however, OP/BP 4.01 has been triggered on			
account of the need to assess the typical environmental and social aspects associated with			
irrigation projects. An environmental assessment will be comp	pleted prior	to appraisal.	
Natural Habitats (OP/BP 4.04)		X	
Forests (OP/BP 4.36)		X	
Pest Management (OP 4.09)			Х

The project development objective is to increase the irrigation efficiency and productivity of around 200,000 feddans of agricultural lands. The expectation is that this will be as a result of increased water productivity, not from the use of additional pesticides and fertilizers. The project will not finance the purchase of any fertilizers or pesticides. Safeguard issues related to OP 4.09 will be carefully assessed during the first preparation mission to determine if there are any significant potential environmental impacts due to increased use of fertilizers and pesticides as a result of the project.

Physical Cultural Resources (OP/BP 4.11)			X
Safeguard issues related to physical cultural resources (OF	P/BP 4.11) v	ill be assess	ed during

Safeguard Policies Triggered	Yes	No	TBD
the first preparation mission to verify any significant impacts.			
Indigenous Peoples (OP/BP 4.10)		Х	
Involuntary Resettlement (OP/BP 4.12)		Х	
Safety of Dams (OP/BP 4.37)		Х	
Projects on International Waterways (OP/BP 7.50)		Х	
Projects in Disputed Areas (OP/BP 7.60)		Х	

**Environmental Category:** B - Partial Assessment

### III. SAFEGUARD PREPARATION PLAN

- A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: 03/01/2010
- B. For simple projects that will not require a QER, the target date for preparing the PAD-stage ISDS: N/A
- C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the PAD-stage ISDS.

  N/A

#### IV. APPROVALS

Signed and submitted by:
Task Team Leader: Mr Julian A. Lampietti 10/26/2009

Approved by:
Regional Safeguards Coordinator: Mr Hocine Chalal 10/26/2009
Comments:
Sector Manager: Mr Luis F. Constantino 10/26/2009
Comments:

<sup>&</sup>lt;sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.