



# STRENGTHENING IRRIGATION AND USE OF WATER RESOURCES ON FARMS IN EGYPT

The Farm-level Irrigation Modernization Project (co-financed by the International Bank for Reconstruction and Development, the French Development Agency and the Government of Egypt) aimed to increase agricultural productivity and improve access to higher-quality water on up to 200 000 feddans (80 000 ha) in the command areas of Mahmoudia in Beheira Governorate, and the Manaifa and Meet Yazid main canals in Kafr-el-Sheikh Governorate in the Nile Delta. Given the lack of adequate technical staff for supervision of the project's work and quality control, a technical audit was implemented to review and assess the planning, technical design and implementation of the interventions carried out under the Farm-level Irrigation Modernization Project. Its aim was to help ensure better development outcomes for the ultimate beneficiaries of the original irrigation project, but also wiser use of resources by project planners, designers and implementers in the field of agriculture water management.



## WHAT DID THE PROJECT DO?

The project oversaw the verification of design standards, norms, specifications, construction quality and workmanship, as well as physical status and functionality of the completed marwa works. Specifically, activities were geared towards the following outputs: (i) improving equity in the distribution of quality water to farmers, (ii) improving the speed and efficiency of water conveyance, which will lower labour and pumping costs and (iii) enhancing farmers' knowledge and awareness of innovative irrigation technology and associated cropping practices.

## IMPACT

The technical audit's approach, process and results (in particular the final report and workshop) were crucial in assisting the Government to determine how to improve the efficiency and effectiveness of future similar agriculture water management investments, which will be critical in the development of future investment strategies and policies and will contribute towards more sustainable and successful investments. In addition, the conclusions of the audit provided specific recommendations to stakeholders on the technical design, construction quality and functionality of the completed work.

## KEY FACTS

### Contribution

USD 299 926

### Duration

January 2017 – March 2018

### Resource Partner

Government of Egypt

### Partners

Government ministries (including Ministry of Agriculture and Land Reclamation and Ministry of Water Resources and Irrigation), water users' associations and academic institutions

### Beneficiaries

Small-scale farmers and family farmers from rural communities, policy and decision-makers at ministerial level, technical experts from academic institutions

# ACTIVITIES

- Initial desk review carried out of project documents, including technical reports, progress reports, reports covering quality control processes and project design (such as maps, design of mesqa pump-house modification works and proposed marwa improvements).
- Initial assessment of completed works audited, including agreement on the sampling process to be used to identify marwa.
- Field inspections of a sample of completed works carried out to check that different structures were constructed as per the design, drawings and specification, and to assess their construction quality.
- Stakeholder consultation and field survey carried out (based on responses from 252 farmers in Beheira Governorate) to determine whether all planning, technical design and implementation processes had been performed as required.
- Synthesis of all observations from the initial desk review, site inspection and surveys used to produce a final technical audit report.
- Final validation workshop organized on the findings of the audit and a summary produced on the lessons learned.



SUSTAINABLE DEVELOPMENT GOALS



**Project Code**  
UTF/EGY/025/EGY

**Project Title**  
Technical Audit of Farm-level Irrigation  
Modernization Project in Egypt

**Contacts**  
FAO Office in Egypt  
[FAO-EGY@fao.org](mailto:FAO-EGY@fao.org)

**Maher Salman (Lead Technical Officer)**  
[Maher.Salman@fao.org](mailto:Maher.Salman@fao.org)



Resource Mobilization Division  
Marketing, Outreach and Reporting Unit  
[Reporting@fao.org](mailto:Reporting@fao.org)