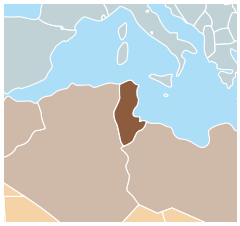
Middle East Tunisia



Irrigation Perimeters Improvement Project in Oases in South Tunisia

Contributing to water resources conservation by developing irrigation and drainage systems in oases in southern Tunisia

【External evaluator】
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Rating

Effectiveness, Impact	b	Overall rating C
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To ensure the stable supply of irrigation water and conserve groundwater resources by improving irrigation and drainage canals in the southern governorates of Gabès, Gafsa, Kébili, and Touzeur in Tunisia, thereby contributing to stable agricultural productivity and regional economic development.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 8,106 million yen / 6,417 million yen
- Loan agreement: December 1996
- Terms and conditions: 2.7% interest rate; 25-year repayment period (including a 7-year grace period); general untied [consulting services: 2.3% interest rate; 25-year repayment period (including a 7-year grace period); general untied]
- Final disbursement date: January 2006
- Executing agency: Ministere de l'Agriculture et des Ressources Hydrauliques (MARH) [Ministry of Agriculture and Water Resources]
- Website URL: http://www.ministeres.tn/html/ministeres/attributions/agriculture.html

A concrete farm ditch

Effects of Project Implementation (Effectiveness, Impact)

Since a smaller number of oases than planned were covered by this project, the number of beneficiary farmers in the four governorates totaled 32,360, representing about 82% of the planned value. Apart from Gabès where the project was implemented as planned, the total area cultivated under the project was 52% of the plan, on average.

On a positive note, the MARH has reported that the reduction in water losses due to leakage more efficient irrigation have resulted in higher crop yields and better quality of the crops. In a beneficiary survey, respondents replied that the project contributed to greater stability of water supply, more even water distribution, increased crop yields, and prompted more young people to return to farming.

This project has produced certain effects, and its effectiveness is moderate.

Relevance

This project has been highly relevant to Tunisia's national policies and development needs at the times of both appraisal and ex-post evaluation.

Boosting agricultural production has remained high on the agenda for the five-year plan, water resources development plan, and the water sector long-term strategy of the Tunisian government.

Efficiency

This project took longer in duration (139% of the planned period) and cost less than planned (75% of the planned cost); therefore the evaluation for efficiency is moderate. The extended period and the lower costs were the result of a rather inadequate schedule and cost projections made in the Feasibility Study that was preparedbased on sampling data that covered only 5% of the project's entire target area.

Sustainability

Though some problems have been observed in terms of the degredation of canals, sustainability of this project is fair. No major problems have been observed with the technical and financial aspects of the executing agency, namely the MARH, or the organizations responsible for the operation and maintenance (O&M) of the irrigation systems, that is, the Commissariat Régional au Développement Agricole (CRDA), which is in charge of the major and technical aspects of O&M, and the Groupement de Développement Agricole (GDA), which is responsible for minor and day-to-day O&M functions. With regard to the technical aspects, the MARH and CRDA provide technical assistance to the GDA. With regard to the financial aspects, the CRDA partly funds the activities of the GDA and the water fee collection rate is almost 100%. On the other hand, degradation of the concrete canals can be observed in some areas and the cause of this is now under investigation. The MARH has stated that it will implement studies to assess the condition of canals and to analyze and improve water quality.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be fairly satisfactory. Two major lessons have been learned from the project. First, when a new concept is introduced (for example, concreting farm ditches or developing drainage, as in this project), its local adaptability should be considered in the project design. Second, guidance regarding water conservation should be provided together with the development of the facilities. Including guidance for agricultural associations and farmers on how to save water as a project component could result in more efficient irrigation.