External Evaluator: Koichiro Ishimori

Poverty Reduction



43 Tunisia **Barbara Irrigation Project**

Contributions to expanded production of agricultural products and improvement of farmers' income are expected, but the realization of project effects is delayed.

Loan Amount / Disbursed Amount 1.913 billion yen / 1.518 billion yen Loan Agreement Terms & Conditions

Final Disbursement Date Executing Agency

March 1998 2.7% interest rate, 25 year repayment period (7 year grace period), (consulting services: 0.75% interest rate, 40 year repayment period (10 year grace period)), Partially untied October 2004

Ministère de l'Agriculture et des Ressources Hydrauliques (Ministry of Agriculture and Water Resources)

Project Objectives

The objective of this project was to improve agricultural productivity and increase agricultural production by irrigating 1,863 ha of farmland in Fernana and Haman Bourguiba, which are located in Barbara, Jendouba Governorate in northern Tunisia, and thereby contribute to improvement of farmers' livelihoods and standard of living.

Effectiveness and Impact

The construction of reservoirs, a regulating reservoir, and pump stations, and the installation of water pipes and irrigation canals were carried out through this project. In 2006, the area benefited by irrigation was 1,874 ha, which was more than the planned area of 1,863 ha. The number of farm households benefited by irrigation in 2006 was 555 compared to an initial plan of 539. However, the actual usage of irrigation is not progressing due to the lack of financing required by most farm households to introduce terminal irrigation equipment. Many are taking a wait-and-see attitude toward the activities of the few farm households that are introducing the equipment at this time. In addition, the farmers do not possess adequate knowledge of techniques for irrigation farming and for planting various types of crops. In part because time is needed for effects to be realized for irrigation projects involving new fields, the cultivated area was only 191 ha, which is significantly less than planned. Therefore, the effectiveness of this project is low. Nevertheless, it is hoped that farmers' attitude toward irrigation will improve in the future and that irrigation use will progress, since JBIC has started efforts in the target area for this project, including provision of planting guidance.



in Haman Bourguiba

Relevance

Rating **b**

This project has been highly relevant with Tunisia's national policies both at the time of the appraisal and at the time of the ex-post evaluation.

Efficiency

The project period was much longer than planned (170% of planned period) although the project cost was lower than planned (62% of planned cost), therefore the evaluation for efficiency is moderate.

Sustainability

While the Commissariat Régional au Développement Agricole (CRDA) in the Jendouba Governorate does not provide sufficient guidance on planting and operation and maintenance of equipment to the farmers association, JBIC has started to provide technical assistance to CRDA and sustainability of technical capacity is expected to increase in the future. Therefore, sustainability of this project is moderate.

Conclusion, Lessons Learned, Recommendation

In light of the above, this project is evaluated to be unsatisfactory. A lesson learned is that the provision of education concerning irrigation, and the provision of technical and financial assistance to stimulate actual implementation of irrigation should be considered while installing infrastructure. As a recommendation, it is advisable that the independent efforts by the Tunisian government (i.e. gratis provision of seeds and irrigation water, and provision of subsidies for introduction of irrigation equipment), such as those being undertaken in the Water Pipeline Construction and Irrigation Project in North Tunisia (see page 108) be implemented in the target area for this project as well.

Third-Party Opinion

This project is very important for the improvement of farmers' incomes and standards of living through the increased production of agricultural products in northern Tunisia. A program for 2008 onward has been planned to enhance the sustainability of this project.

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