



Tunisia

39 Water Supply & Sewage System Improvement Project in Southern Tunisia

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This project's objective was to ensure the supply of domestic water and the treatment of household and industrial wastewater by constructing water supply and sewage systems in Jerba and Zarzis, etc., which are tourism centers in southern Tunisia, and thereby contribute to the improvement of the area residents' living and hygienic environment and to the promotion of the tourism industry.

Loan Amount/Disbursed Amount: 7,577 million yen/6,053 million yen

Loan Agreement: March 1995

Terms and Conditions: Interest rate 3.0%; Repayment period 25 years (grace period 7 years); General untied

Final Disbursement Date: December 2002

Executing Agency: Societe Nationale d'Exploitation et de Distribution des Eaux (SONEDE) and Office National de l'Assainissement (ONAS)



External Evaluator: Keishi Miyazaki (Overseas Project Management Consultants, Ltd.)
Field Survey: September 2004

Evaluation Result

In this project, water supply and sewage systems, such as the desalination plants and the sewage plant, were constructed almost as planned. The project period significantly exceeded the plan because of a second round of bidding on construction, the time required for evaluation of bids related to the construction of the sewage plant, and others. However, the project cost was lower than planned.

Due to this project, the water supply population in the area served by the water supply project (Jerba, Zarzis, Ben Guerdan, Medenine, and Tataouine) increased by a total of approximately 120,000 persons. The average water system coverage rate improved from approximately 80% prior to the project to 90%. The sewage treatment population in the area that benefited from the sewage project (tourist zone in eastern Jerba) increased by approximately 8,000 persons, and the sewer coverage rate improved from 13% prior to the project to 27%*1.

In the beneficiary survey targeted at 166 households, approximately 74% responded that "the volume of the supplied water is sufficient or almost sufficient." However, approximately 52% of the total households are not satisfied with the taste, since in some areas desalinated water taken from wells with high salinity has to be mixed with other well water in order to ensure sufficient volume. Meanwhile, decline of the infant mortality rate under one year old (per 1,000

births) in Jerba and Zarzis from 26.2 infants (1995) to 9.7 infants (2004*2) had been observed, though a direct attribution by this project could not be verified. In addition, increase of the number of hotels and hotel beds in Jerba and Zarzis from 144 hotels with 45,307 beds (2001) to 151 hotels with 49,317 beds (2003) had been observed. SONEDE and ONAS have no problems in the technical capacity and the operation and maintenance system. Although they are experiencing strained profits, their capital ratios are high.

*1 Both the sewage treatment population and the sewer coverage rate are based on the resident population alone in the beneficiary area. If tourists staying in the hotels are included, the effects of this project are larger.

*2 The infant mortality rate under one year old (per 1,000 births) in 2003 in Tunisia was 19 infants.

Third-Party Evaluator's Opinion

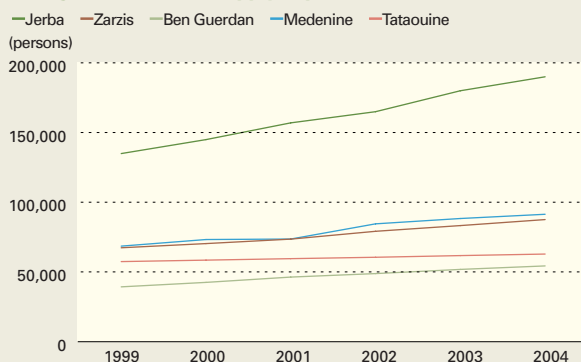
This project is a part of integrated water resources management. I am pleased that Japan is taking the lead in providing assistance for the water resources sector, which is extremely vital for the economy and environment of Tunisia, by combining financial and technical support.

Third-Party Evaluator: Mr. Nouredine Mejdoub (public sector)

Obtained a doctoral degree in political science from University de Paris I Pantheon-Sorbonne. Former ambassador to the U.N. Currently chairperson of the Tunisia-Japan Friendship Association. Former ambassador to Japan and to the US. Specializes in diplomacy.

Effects of the Project: Changes in the Water Supply Population and Sewage Treatment Population

Changes in the Water Supply Population



Changes in Sewage Treatment Population

