

Sewerage and Drainage Project 1 – Environmental Loan

Ex post evaluation Abstract

The present project for wastewater collection, treatment and disposal for the coastal town of a Mediterranean Member State was part of a regional project prepared by the World Bank. The Council of Europe Development Bank (CEB) provided, in 1991, co-funding for the proposed measures for the Sewerage Board (SB) concerned. The purpose of the project was to build a reliable sewerage system which met safety standards and eliminated environmental as well as health risks of the existing system. The latter was based on individual sanitation pits as well as hotel-run small sewage treatment plants. The nearby salt lakes (wetlands) and southern outskirts of the town are of considerable importance and are described as “a unique national environmental and ecological treasure.” These salt lakes are considered of international environmental interest as hydro-biotopes, while the Great Salt Lake is listed under protected wetlands, according to the Ramsar Convention on Wetlands. In 1997, the Council of Ministers approved a Programme for the Protection and Management of these salt lakes.

The physical project measures comprised the construction of a sewerage system, a wastewater treatment plant (STP, capacity 8 500 m³/day), a distribution network for treated effluent, and drainage measures for storm water. In 2009, some 29 000 residents plus tourist facilities with a bed capacity of 7 000 were connected to the system, corresponding to 36 000 population-equivalents (PE). Direct beneficiaries are the aforementioned connected persons. However, as the entire town depends strongly on the tourist industry, the total population (55 000 people) benefited indirectly from the investments.

Total investment costs were estimated in 1991 at 46.6 m€ and, due to expanded investment measures, were stated as 53.95 m€ in 2009. The CEB financed 35% of the total cost, while the World Bank contributed 23% and the Government, together with the SB, financed about 42% thereto. Smaller additional measure were financed by the Borrower (i.e. the SB); under part B of the project, coverage of the higher lying parts of the town has presently started, with partial funding by the CEB. The specific investment costs are calculated to be 1 270 € per population-equivalent or 974 €/PE after deducting investment costs for the tertiary treatment and irrigation components carried out primarily in the public interest. Total costs are rather high, due to the necessary layout of the system along the coastline, tertiary treatment requirements, and construction within a high groundwater table.

Overall, the project is rated satisfactory. The evaluation found that the design quality and preparation show a few deficiencies and could have been, to a certain extent, more cost-efficient. Generally, the implemented infrastructure is of good quality. The technical staff of the SB successfully operates and maintains the implemented sewage collection, treatment and disposal facilities as well as the storm water drainage installations. This is evidenced by the consistently high average treatment efficiency of the treatment plant (99%). The Borrower has made substantial progress in terms of institutional development and financial management, supported by a fully developed organisational structure and professional management which was found to be largely free from political interference by the Management Board. The SB is well prepared for the challenges of incorporating new smaller municipalities in future. In general, the quality of the treated effluent and the treated sludge complies with the stringent limits set by the controlling authority, and bathing water quality has improved. The treated effluent is reused for irrigation purposes and substitutes annually for 1.5 million m³ of freshwater in the water-scarce region of the town. Sludge of the treatment plant is applied in agriculture as fertilizer and complies with quality standards.

The evaluation mission recommends to the CEB (i) to continue the sector dialogue with the relevant Ministries; (ii) to clearly define project and overall objectives, including monitoring indicators, at project preparation; (iii) for future projects, to engage in technical supervision missions throughout the project cycle.

Recommendations to the SB include (i) several technical measures for consideration in Phase B of the project, for example monitoring of grease-releasing businesses, full equipment of pumps and STP with overflow or by-pass, a reception station for septage at the STP, arranging for repair of the separation dam between reservoirs to allow independent operation, and sheltering the sludge storage area; (ii) management-related recommendations which include identifying measures to ensure a more rapid connection of residents to the network; continued implementation of tariff increases for sound financing of investments and a continued shift of the income basis onto consumption-related fees, as opposed to property-related fees, so as to strengthen the polluter-pays principle; and ensuring maintenance of good financial and technical management practices after extension of the network to new municipalities.