



JORDAN

NORTHERN REGION SOLID WASTE MANAGEMENT STUDY (NRSWMS), AMMAN / IRBID



Client General Corporation for Environment Protection GCEP, Amman

Financing World Bank

Duration of Services 1998 - 2000

Cost of Implementation 375,000 EUR

Scope of Services

- Analysis of the actual situation of waste recycling and disposal (market analysis for recycling material, assessment of the landfill site)
- Site evaluation and feasibility study for waste recycling and treatment plants
- Security concept for the landfill Al-Ekeder (including sludge dehydration)
- Financial and economic assessment of sub-projects
- Disposal concept of hospital waste
- Institutional strengthening and improvement of private sector participation
- Consulting of waste management authorities and the public concerned in technical subjects

Brief Project Description

This project is part of the Mediterranean Environmental Technical Assistance Programs (METAP) which generally aim at the sustainable improvement of the environmental quality of these countries.

In the northern region of Jordan the implementation of modern and sustainable waste management is required which comply with the increasing environmental and waste related problems of the country. The administrative responsibilities within the sector are still not sufficiently developed and financing is limited. Appropriate technical as well as organisational improvement measures are to be identified as part of a waste management strategy for the region.

The following sub-projects were identified and assessed in respect to their location, environmental impact and financial and economic viability.

- transfer stations in Jerash (capacity: 22.000t/a, distance to landfill ca. 50 km)
- mechanical/biological treatment plant at Al-Ekeder (1.Phase 15.000 t/a, designed as a pilot project)
- a recycling centre in Irbid as an initial waste reduction measure

Furthermore, an environmental impact assessment (EIA) was prepared for the central landfill AL-Ekeder. The findings indicated that it is feasible from an environmental as well as economic point of view to continue with the operation under certain preconditions. These include mitigation measures for the already full-filled disposal areas and for the extension areas. The design of technical securing measures as well as the conception of a landfill operation with a high environmental compatibility are further important components of the project.

Institutional strengthening measures for local authorities and institutions concerned with waste management, especially for GCEP (General Corporation for Environment Protection) are elaborated. A further aspect of the project is the stronger private sector participation.

Essential Data on Project

• - Catchment area of the landfill	2,000 km ²	• - Amount of waste for disposal	120,000 t/a
• - Connected inhabitants	1.2 Mio.	• - Amount of sludge for disposal	1,000,000 m ³ /a
• - Area of the landfill Al-Ekeder	55 ha		