

EGYPT

REHABILITATION OF OPEN DRAINS

Location

North Qena, Upper Egypt

Client

Egyptian Public Authority for
Drainage Projects (EPADP)

Financing

German Financial Cooperation (KfW)

Period

2002 – 2003

Value of Services

0.300 million US\$



Project Description

A well functioning drainage infrastructure is an indispensable precondition for increased and stable agricultural production. The drainage system of the Qena North General Directorate was found to be in a state of advanced deterioration, only partially fulfilling its prime task of keeping the groundwater table below crops' root zone. Drains are excessively widened by inappropriate maintenance activities and subsequent slope slides endangering adjacent buildings, roads, railway tracks and agricultural fields.

Rehabilitation in its conventional sense, i.e. to reinstate a structure to its design shape and dimensions usually is a very costly affair. The major task of this feasibility study therefore was to develop rehabilitation methods that are reinstating the drains' basic task and at the same time are improving potential deficiencies inherent in the original design, and which are being cost effective, sustainable and universally applicable.

Scope of Services

Feasibility study:

- Analysis of cause of damage of 30 km of drains (10% of total drains in Qena North General Directorate)
- Elaboration of a methodology of assessment of damage and classification of rehabilitation need
- Development of appropriate standard rehabilitation methods
- Economic justification of rehabilitation
- Identification of emergency rehabilitation needs, bills of quantities and cost estimates
- Preparation of a rehabilitation programme for 307 km of drains