



MAURITANIA

REHABILITATION OF SMALL DAMS HODH EL GHARBI, HODH CHARGUI, ASSABA, GUIDIMAKA



Client	Ministère de Développement Rural et de l'Environnement, Nouakchott
Financing	Kreditanstalt für Wiederaufbau (KfW), Frankfurt
Duration of Services	2004 - 2005
Cost of Implementation (estimated)	Approx. 5 Mio. €

Scope of Services

- Project identification and pre-assessment of smallholder irrigation schemes at 26 locations in the 4 southern provinces;
- Assessment of agricultural potentials for each site, including physical and economical criteria;
- Preparation of hydrological, hydraulic and engineering studies;
- Socio-economic assessment;
- Elaboration of engineering design for dams and their appurtenant structures, and
- Preparation of feasibility study for 10 selected irrigation schemes

Brief Project Description

In the framework of German-Mauritanian Co-operation the German Government represented by KfW supports and finances the rehabilitation of small dams for flood irrigation, which forms a mayor source of income and thereby sustains rural livelihoods in Southern Mauritania.

The present Phase II of the Project is considered as an extension of the first Small Dam Rehabilitation Project for which Final Design Documents have been prepared by CES in 2002 for 10 dams located in the Hodh El Gharbi Province. In 2004 all of these dams have been fully rehabilitated under supervision of CES.

The actual Project area spreads over the country's four southern provinces Hodh El Gharbi, Hodh Chargui, Assaba and Guidimaka. It covers an area of approximately 160,000 km².

The Study screened a total of 26 existing dam commanded irrigation schemes with respect to their physical and socio-economic environments and in regard of engineering aspects. 10 schemes have been identified for further study on feasibility level.

During the screening phase, activities concentrated on the preparation of data bases which include pedological, agricultural, socio-economic, environmental, hydrological, meteorological and engineering parameters. The related activities widely relied on field topography, GIS supported interpretation of satellite imagery and on field surveys. The derived information supported the decision on 10 schemes which were finally selected for the Feasibility Study.

The Project's Feasibility stage focuses on the support of local small scale irrigation. In this sahelian and mostly savannah like environment sporadic rainfalls allow only marginal agricultural activities if no additional water can be provided.

Since pre-colonial times small dams have been built in the region to make use of sporadically available surface water. The dams are traditionally used to harvest water from short and often forceful flood events. After the soils of the inundated shallow reservoir areas are sufficiently moistured the water is released and agriculture takes place within the wetted perimeter. In the past the floods destroyed many dams and livelihoods. Sustainable agriculture demands the reduction of such risks in the future. Dam layouts that are adapted to the flood hazards as well as to the needs and to the skills of the local population are the main key to the problem and have therefore been developed in closed cooperation with all stakeholders.

