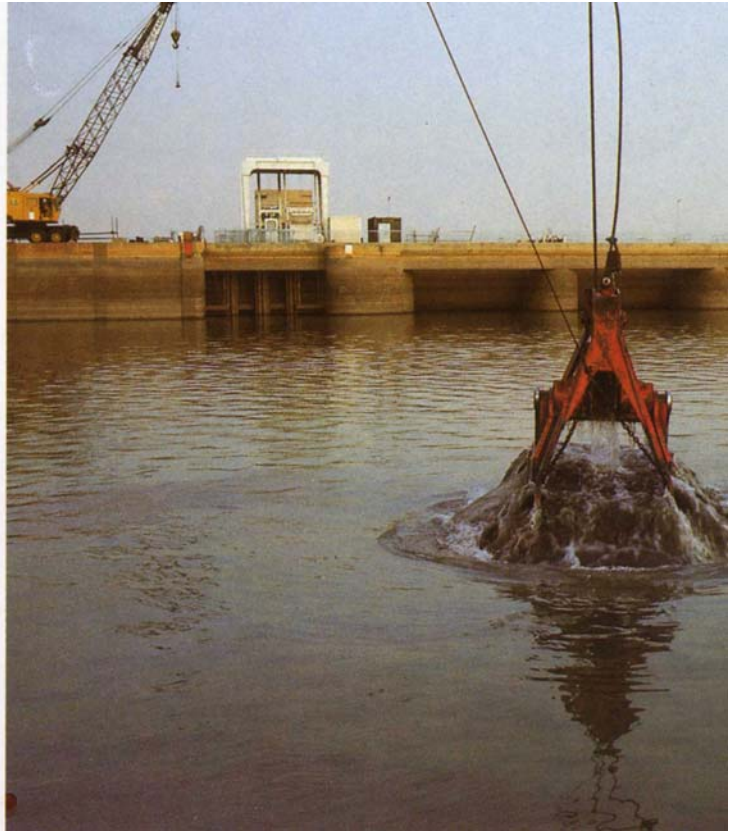


Dredging at Roseires Reservoir



bad weather occasionally caused delay



dredging of the underwater slope

The Roseires dam is situated in the Blue Nile, approximately 600 km south of Khartoum. The main function of the water reservoir behind the dam is to feed the agricultural irrigation system and, to a lesser extent, the power supply to the Blue Nile electricity grid that stretches as far as Khartoum.

At the beginning of every rainy season vast quantities of silt, logs, grass roots and debris are carried into the reservoir and ultimately, these clog up the intakes of the power station in the dam, impeding the power supply.

During the rainy season of 1983, the situation became so urgent that an immediate solution had to be found. The type and volume of the debris and silt meant that specialised clearing equipment had to be used. Moreover, an adequate long term solution was necessary.

This involved the definition of the river's regime on the basis of a full bathymetric survey and the creation of a new dredging department, for which staff would have to be trained.

Early 1984 an emergency led to a joint project initiated by US AID, the Netherlands Development Cooperation Programme and the Sudanese authorities. The first two supplied the necessary grab dredgers, dump barges, tugs and survey vessels. Expatriate personnel undertook the clearance programme, completing it before the beginning of the next rainy season.

Next, a training programme was launched, including survey techniques, determination of dredging needs, and the planning and taking of action in accordance with the information gathered. It also dealt with maintenance, repairs and general logistic support. Meanwhile, numerous bathymetric surveys and measuring campaigns were carried out. These were compiled and the calibrated mathematical model that was developed, based on this data made it possible to define an efficient dredging strategy.

Finally, DEMAS provided organisational and management advice in the setting up of the new dredging department which can now deal with the work that needs to be carried out.

Client

Ministry of Irrigation

Location

The Sudan

Year

1983 - 1988

Services

- dredge crew training
- survey and training
- project assistance
- management training

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