

Field experiment in Gerbmhiz dam Ethiopia in 2004 and 2005

A field experiment for sediment removal from Gerbmhiz dam was performed in 2004 and 2005. A 100 mm GTO reservoir dredge was applied. The field experiment was sponsored and supervised by GTO.

Reservoir volume is 1,3 mill m³. This is one of several hundred reservoirs of its kind in Ethiopia, which was built to secure irrigation after the famine in mid 80's and now gradually is filling with sediments.

The reservoir provides irrigation water for farmland that feeds 1600 people. 13 000 m³ will have to be removed annually to maintain the reservoir. (I.e. removal of 8 m³ annually will “feed” one person.)

One of the main findings of this study is that the dredged water and sediment mixture can be used for irrigation purposes – in that way sediments are removed without any loss of water.

Contact person:

PhD student Kiflom Belete

Department of Hydraulic and Env. Eng.

SP Andersens veg 5

NTNU

Trondheim

Norway

Tel +4773594769

