



TANZANIA

HAI DISTRICT WATER SUPPLY PHASE I TO IV-1 AND IV-2



Construction of reservoir

Client	Ministry of Water, Steering Committee of HDWSP (Phase I to IV-1) Hai District Council (Phase IV-2)
Financing	KfW Dev. Bank, co-financing by GoT as well as EZE (Phase I to IV-1) EU Water Facility (Phase IV-2)
Duration of Services	01/1990 – 04/2013
Consulting Fee	12 155 628 EUR

Scope of Services

- Feasibility Studies (incl. EIA, SEA, EcoFin Analysis)
- Detailed design and preparation of tender documents for supplies of materials and equipment;
- Tendering and award of supply contracts
- Site supervision of rehabilitation and extension works
- Project management
- Self-help and force account labour mobilisation, organisation and guidance
- Training on the job
- Establishment of community based and demand driven water services providers (utilities), i.e. five registered trusts so far
- Operational training (management, commercial and technical) of water services providers as well as of village water committees
- Target groups information and sensitization campaigns

Brief Project Description

The project area is located in North Tanzania on the southern and western slopes of Mount Kilimanjaro. It lies between altitudes of 1800 and 900 masl within the agriculturally cultivated zone and the Maasai steppe in the lowlands and enters into the rain forest of the mountain. In West Kilimanjaro cultivation is practised in form of large scale farms and in North-west Kilimanjaro of forest plantations.

The rural target group consists of small holder farmers growing coffee, banana, maize and vegetables in mixed cropping along the fertile slopes of Mount Kilimanjaro, large scale farm workers in the western and of forestry workers in the north-western part; all of them suffering from water related diseases due to inadequate and unsafe water supply. In the project area several water supply systems existed, many of them were run down and under dimensioned.

The programme Hai District Water Supply was implemented in various phases, Phase I starting in 1990 and completed by 2013. The aim of the programme is the supply of the target population with adequate clean and hygienically safe potable water, improvement of the hygienic situation for the rural population in the Hai and Siha Districts (the northern part of the previously uniform Hai District has been separated in 2008 to the Siha District comprising now West and North-west Kilimanjaro).

The project is being implemented in a non-conventional approach. Trench excavation and other simple manual works are carried out in self-help by the beneficiaries (without any payment). These are then complemented by direct local labour for works of higher skills, such as masonry and carpentry. Therefore the labour force had to be trained on the job in order to obtain good workmanship. Works implemented include the rehabilitation and new construction of stream and river intakes, gravity pipelines (feeder lines, transmission mains and branch lines), reservoirs, pressure reducing tanks, air valves, wash outs and public taps. Additionally, all consumption points (public taps, yard and house connections) are equipped with water meters to provide for billing according to consumption.

Under the project seven water supply entities have been newly established which is envisaged to take over the responsibility for operating and maintaining the scheme after completion. Commercial and operating staff been trained with major emphasis given to the introduction of a computerised billing system according to metered consumption.

The scattered smaller systems in the West and North-west will be attached either to already established Trusts or other institutions, such as one of the commercial farms. That was already successfully implemented during the previous phases with smaller systems which have been attached to then already existing Trusts and even Moshi Urban Waster & Sewerage Authority.

Under Phase IV-2 a Water Service Facility (WSF) in Bomango'mbe has been established in 2010 to support the Water Supply Trusts in technical issues. The WSF acts as service provider facility for the Water Supply Trusts in HAI, Siha and Moshi districts in the Kilimanjaro region through outsourcing of certain activities and responsibilities. The WSF offers

- ✓ technical training (e.g. water meter installation and reading, maintenance, repairs and cleaning of water meters)
- ✓ training in billing and accounting
- ✓ bulk procurement for the water supply trusts to achieve cost efficiency
- ✓ services for sludge emptying of septic tanks

Institutional Support and Training

- Socio-economic and cultural studies
- Establishment of community based organisations to operate the systems
- Implementation of management, operation, maintenance, and accounting and billing units
- Set up and training of O+M and billing units
- Technical and computer training of counterpart staff
- Technical training of local labour
- Water user education and awareness campaigns
- Health and hygiene education campaigns
- O&M-training
- Annual performance competition among the Trusts with award of the first ranking one

Technical Data

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| • Total population served (2015) | 426,600 inhab. | Total water demand | 21,212 m ³ /d |
| • Total length of the pipe network | 1,028 km | Number of pressure reducing tanks | 422 |
| • House connections / water meters | 12,620 | Number of intakes | 35 |
| • Number of public taps / water meters | 1,527 | Bulk water meters | 235 |
| • Reservoirs, rehabilitated : 80 nos. | 6,450 m ³ | Valve chambers | 2,300 |
| • Reservoirs, new: 71 nos. | 5,609 m ³ | | |