



Private sector in water development for sustainability

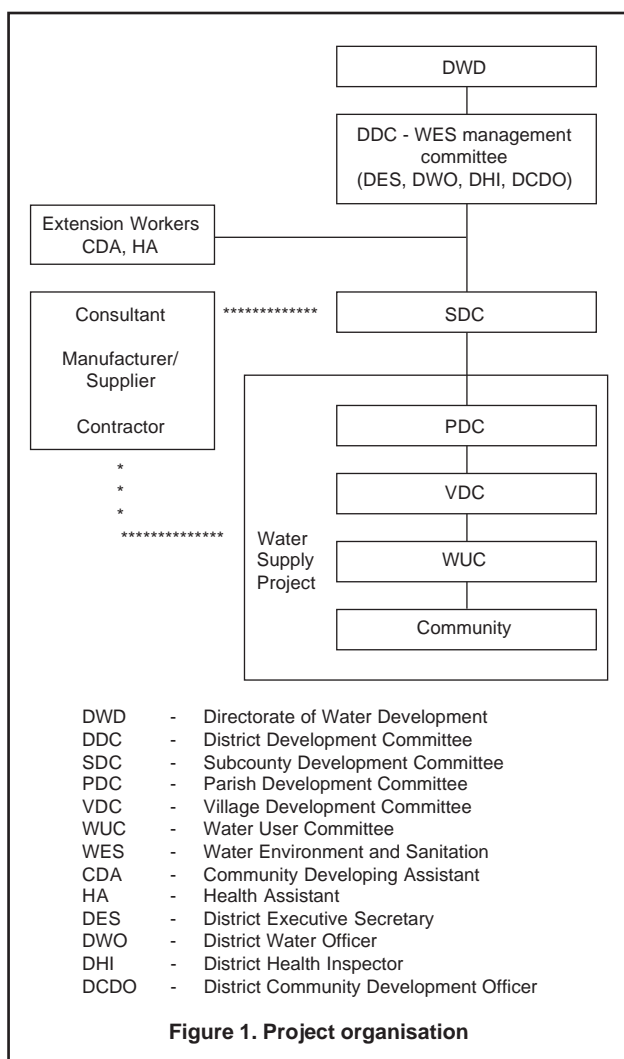
Daudi B. Makooma, Uganda



THIS PAPER DEALS with an approach which was used on a project in three subcounties of Luwero District. In this approach the private sector was reintroduced in the Uganda Water Development Sector. The water sources developed in this project were boreholes sited, drilled and equipped with handpumps. The private sector included a Consultant, a Contractor, Manufacturer/Supplier, Spareparts Dealers, Handpump Mechanics and Caretakers. The Communities through their Water User Committees could to some extent be considered as participating as a private sector.

Project Organization

Figure 1 shows the project organization.



Directorate of water development

DWD provided facilitating role by providing policy and guidelines to the project.

District administration

The DDC through the WES Management Committee was to ensure that the project activity schedule is achieved and provided advice. The WES was responsible for policy implementation, guidelines and authority approval. The WES committee was composed of the DES, DWD, DHI, DCDO. The WES was also responsible for monitoring of the project.

Subcounty development committee

The SDC assisted by extension workers was responsible for making regular awareness meetings to discuss the project activities. The SDC was also active in water survey, project planning, project implementation and project monitoring. The SDC was responsible for selection and cost sharing on training of handpump mechanics (HPM) and spare parts dealers (SPD).

Parish development committee

The PDC was responsible for coordinating of community development committees in water surveying, community dialogue, siting, implementation and monitoring.

The PDC nominated trainers for training of the community development committees and Water User Committees.

Village development committees

The VDC was responsible for carrying out and providing social, cultural and economic aspects of the community and they proposed the number of water points to cover their area. The VDC provided 3 proposed sites for each water point for final siting by consultant.

Water user committees

The WUC was elected by users coordinated by the VDC. The WUC was responsible for assisting the Contractor in planning and constructing of the water source. It also undertook the overall management of the water source and carry out all Operation and Maintenance activities. The WUC is expected to assist monitoring project activities and later O & M of the source.

The roles of the consultant, manufacturer/supplier and contractor will be defined in the next section.

Construction, operation and maintenance organization

Fig. 2 shows the construction, operation and maintenance arrangements for the project. (private sector only).

Consultant

The Consultant made a detailed water survey of the project area and prepared a report. The Consultant together with the Employer was responsible for prequalification of Contractors, invitation and evaluation of tenders and selection of Contractor.

He was responsible for design and supervision of water point construction, make final siting of water points, training of trainers, facilitators, handpump mechanics, spare parts dealers; and progress reporting.

During supervision of the drilling sites, the Consultant had to ensure that the Contractor's workmanship is in compliance with the provisions of the contract.

This includes contractor's setting up at each site, well plumbness, pump testing, water quality analysis, installation of pump and Contractors preparation of well data forms.

Manufacturer/supplier

The manufacturer/supplier has already been in previous arrangements for water development. He was to ensure that the equipment/materials comply with the Uganda National Bureau of Standards.

The contractors

The Contractor was selected after competitive bids were accepted and evaluated.

The Contractor constructed, pump tested, tested the water quality and installed pumps ensuring that the workmanship is in compliance with the specifications in the contract.

Spareparts dealers

Nominated by SDC and given training to carry out stocking and selling of hand pump spares. SPD buy spare parts on wholesale basis and sell them to hand pump mechanics and water sources caretakers at retail prices. The selling of handpump spare parts is just part of their business.

Handpump mechanics

The HPM were nominated by SDC. They were trained and later signed contracts with Water User Committees for preventive maintenance and repair of the handpumps. The HPM are expected to be paid by the communities depending upon the repair made on a handpump.

Water user committees

These were elected by the communities. The WUC were trained by the Parish Development Committee trainers with assistance of Community Development Assistant and Health Assistant of the District extension work team. The WUC includes two caretakers trained by the HPM to carry out minor repairs.

Communities

The communities were committed to the project, selected WUC, Caretakers and actively involved in developing, construction and Operation and Maintenance of the Water Source.

The communities are expected to contribute money for Operation and Maintenance of the water source.

How is the project expected to be sustainable?

Planning

Since all parties were involved in the planning of the water sources, this will encourage awareness of the existence of the water sources so that in future recurrent budgets for the subcounties these water sources will be catered for financially in anticipation of breakdown on any of the sources. This will make the sources sustainable even after a major breakdown.

Construction/siting

Since the consultant was responsible for siting, he was expected to do thorough hydrogeological investigations so as to maximize the success rate. The final success rate for the Luwero project was 93%.

During construction the Consultant was to ensure that the Contractor does work according to contract specification.

For every payment made to the Contractor there was a retention of 5% of the value of work done. This 5% will be paid to the Contractor on condition that defects (if any) are rectified at the end of the 1 year defects liability period.

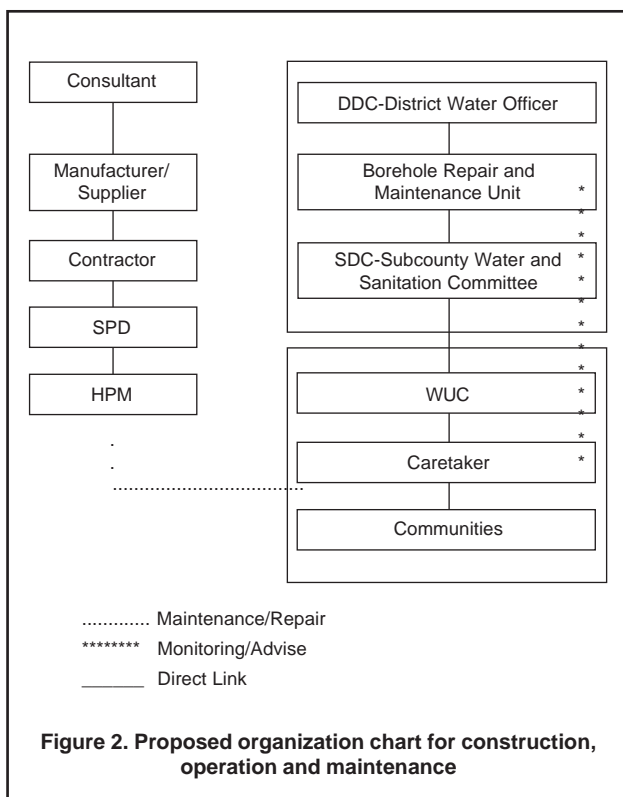


Figure 2. Proposed organization chart for construction, operation and maintenance

Since the Communities were involved in siting and construction process it is expected that communities will take the water source as their own property and not mishandle it.

Operation and maintenance

The training of SPD, HPM and Caretakers will ensure:

- availability of spareparts; SPD
- preventive maintenance; HPM
- minor maintenance; Caretakers

The Operation and Maintenance will be successful since the SPD, HPM and Caretakers expect to be paid from funds collected by the Communities for the services rendered.

Human resource development

The human resource development was based on a uniform approach which calls for a participatory and integrated methodology. The training of facilitators (all district extension workers in the line departments), the trainers and the community training went a long way in capacity building for the district. The personnel trained in the project will be expected to conduct regular training. This will increase the sustainability of the sources.

Successes and short comings of the project

Success

- The siting success rate was good.
- The training was well attended at all levels.
- The Contractor's rate of drilling was good (about 10 boreholes per month with one drilling rig).

Short comings

- The Parish trainers did not start training of the water user committees immediately. However, this is being followed up by the Consultant.
- It was later realized that training of only one hand pump mechanic per subcounty was a risk in case he absconds or dies.
- The project did not end on schedule because the materials (especially imported) were not received in time.

References

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