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SUSTAINABILITY OF WATER AND SANITATION SYSTEMS

Demand driven approach for sustainability

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KENYA FINLAND WESTERN Water Supply Programme is co-financed by the Governments of Finland and Kenya. The programme operates under the auspices of the Ministry of Land Reclamation, Regional and Water Development, Kenya.

Kenya-Finland Western Water Supply Programme started its operations in Western Province in Kenya in 1981. The programme has the overall objective of enabling the rural communities in Western Province develop and manage sustainable water projects. During the two first implementation phases (1985 - 1993) more than 3300 water points and 50 piped water supplies were constructed or rehabilitated. All these were implemented using the Supply Driven Approach, which was found inappropriate. This approach laid more emphasis on meeting physical targets and giving less time to develop a sustainable water supply. The Phase IV, started in May 1993, introduced the Demand Driven Approach, as an operational strategy in which the planned activities are determined by the people's demand, willingness and ability to participate in the implementation process and in operations and maintenance of water supplies.

Demand driven approach

The strategy empowers the beneficiaries to become controllers of their own development. The Demand Driven Approach refers to a development strategy where the people themselves are expected to take the initiative and the responsibility for improving their water supply situation rather than being passive recipients of the Government services. In this approach support is given only to activities which are genuinely required and requested by the beneficiaries. The beneficiaries should be willing and prepared to take over responsibilities for managing the projects and paying for construction, operations and maintenance costs. This implies that the consumers are to be the controllers of their development process and the Programme and the Government are facilitators.

Under this new operational strategy the Programme has prepared promotional materials in the form of modules to facilitate the communities toward water supply development and sustainability. The eight modules form a complete "information package". Each module carries specific information regarding water supply development and sustainability as summarized below.

Module I: Demand Driven Approach in water development

Covers policy issues governing water supply development and various development partners and how they relate to one another.

Module II: General information and procedure for the development of community managed water supplies
Summarizes all the steps and stages of community preparations towards development of a water supply.

Module III: Technological options

Highlights on the technological options used within the programme area.

Module IV: Community piped water supplies

Provides guidelines on how to develop and run community owned piped water supplies.

Module V: Health education

Discuss the importance of health education, water related problems and diseases and possible solutions.

Module VI: Self management support

Presents back-up support systems for sustaining water projects on self-help basis.

Module VII: Hand pump maintenance and sparepart distribution system

Provides guidelines on operation and maintenance of hand pumps used in the programme area. It also discusses spareparts procurement and distribution system.

Module VIII: Training

Summarizes the information on training of user groups and the authorities involved in operating and maintaining the developed water supplies.

Procedures for development of water supply

For actual work to start, the following should be accomplished:

- application for a water supply to the District Water Engineer (DWE) through the Divisional Water Officer
- formation and registration of the management committee, opening of the bank account and proceed land easement
- site verification that include preliminary surveys, socioeconomic/technical assessment, feasibility studies. This is a joint venture done by the DWE's, Programme, Ministry of Culture and Social Services (MoCSS) and any relevant NGO's staff

- cost estimates will be prepared and the beneficiaries will be invoiced before the commencement of construction works
- the selection of contractor(s) will be done at District level and beneficiaries are expected to send at least a representative to be present
- the beneficiaries will be required to sign the contract of Agreement Forms before construction is sanctioned
- once the construction starts, the beneficiaries are expected to cooperate and accomplish their agreed part. The works will be executed by the selected contractor(s) and supervised by the beneficiaries, DWE's, MoCSS and Programme
- a certificate of completion will be prepared and awarded by the DWE once construction is completed. The community Chairman will sign on behalf of the community
- the water facility will be given a one year guarantee period.

Role and responsibilities of parties involved

The community

The role to be played by the communities will depend on the type of activities being carried out and the stage of implementation as follows:

Planning

- identify a site/intake
- provide land for the project development
- form a water committee to coordinate the activities

Officials of the water committee will sign contract agreements on behalf of the community for water development and make necessary payments in accordance with the contract.

Implementation

- provide available labour and materials which will be quantified and reduced from their required monetary contributions
- supervise and report on the development of the works
- participate in inspection
- provide required local inputs and participate actively in all stages.

Operation and maintenance

- raise funds, open a bank/postal account and pay for repairs
- organize for security of the supply
- provide personnel to be trained and take responsibility of use and care of the water supplies.

The Government

The role of the Government will incorporate all the efforts and contributions of the Government ministries supporting community development activities includ-

ing water supply development. To facilitate the implementation of the water projects the Government will:

- provide funds as local contribution according to what is agreed upon
- provide technical staff and advice
- promote, support and supervise the works during project implementation
- coordinate water activities at all levels of development (sub DDC, District Development Committee (DDC), national)
- ensure promotion of health education and sanitation by training the community and staff
- be responsible for community development activities
- mobilize and support the communities to strengthen institutional building
- promote intersectoral linkages within its ministries and NGOs
- register and promote water committees
- ensure that land easements are registered for legal safeguard and to guarantee accessibility
- assist in certifying the information given by the applicants in liaison with the local development committees
- advice the communities on the means to conserve the water resource
- provide training opportunities on environmental hygiene to keep the water facilities clean.

Kenya Finland western water supply programme

The role of the programme will mainly be advisory and catalytic in the development process. The programme will provide limited support for the water development in Western Province and technical assistance. In addition the programme will:

- arrange and organize necessary training to facilitate transfer of technology and skills
- develop promotional material, create awareness on safe water in collaboration with Ministry of Health (MoH)
- provide logistics and operational support, coordinate transfer of technology and skills, and develop local delivery and distribution of spare parts
- liaise with Ministries and NGOs to promote intersectoral collaboration.

Note: The Programme role will be limited to the above issues till the end of 1995.

Non-governmental organizations

These are both externally and locally funded voluntary organizations assisting the local communities in achieving certain goals. The NGOs will collaborate and coordinate with each other and relevant Government departments to:

- mobilize the communities for the participatory planning
- give back-up support in terms of training opportunities and transport
- encourage income generating activities
- give direct cash donations if possible
- find marketing channels for the products from the initiated income generating activities.

Private sector

This comprises of the profit making organizations, businessmen, insurance companies, contractors etc. They can be both found in and outside the community. Its roles will be:

- sell materials to the communities
- sell services to the communities
- advance loans and credit to the communities in need of such services

Cost sharing

The typical costs of the water points are following:

Protected spring	USD	700 - 900
Hand dug well	USD	1,300 - 2,500
Borehole	USD	9,000 - 17,000

The community contributions for the implementation and training costs have been as follows:

Community water point	25%
Community water point, potable water already closer than 500 m	50%
Institutions (schools, health centers etc.)	75%
Private	100%

The minimum cash contribution is 2% of the total implementation costs. The remaining share could be paid either by providing materials or labour. Approximately 37% of the community contribution has been paid in cash, 44% in materials and 19% in labour.

In addition to the water points the Programme has implemented four community piped water supplies where the communities have contributed 30% of the implementation costs. (A separate presentation on community managed water supplies is given during the conference)

Lessons learned and experience gained

The DDA strategy has been adopted to

- ensure sustainability
- provide adequate time for beneficiaries to understand the relationship between water, health and standard of living
- help the communities to understand technical, financial, institutional and organizational implications of the water supply systems

During the year 1994, 980 applications were received, 631 field investigations, cost estimates and proforma invoices were done and sent to the communities. Altogether 254 communities paid their invoices out of which 225 were community water points, 10 were institutions and 19 private.

The Programme has successfully achieved its target and mainly with good experience and feedback. However, some problems have also been faced:

- it has been difficult to verify whether the application has been submitted by a community or a private person
- land easements for project sites have proved to be very difficult. The problem arises when the water point has been registered as a community one but has later proved to be private, and the land owner does not allow the community members to enter his yard to fetch water
- registration within the MoCSS is very slow process, some of the communities existed only on paper but not in reality
- communities have difficulties to understand the importance of collecting funds for future maintenance
- spare parts of the installed pumps are quite expensive and not easily available
- number of applications decreased drastically when the Programme stopped the subsidy.

The further development of DDA to promote sustainable water supply without any external subsidy seems to be difficult. What is the communities' real ability of willingness to pay remains to be seen.