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REACHING THE UNREACHED: CHALLENGES FOR THE 21ST CENTURY

System development for future sustainability

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THE EFFECTIVENESS OF operation and maintenance has become very important in ensuring long term sustainability of the improved water systems. With the major investments on water sector during the early part of the decade Programme the emphasis was mainly placed only on new construction. A low profile was given for capacity building at the lowest level with user participation; in the development process. The outcome had been under priced water services, resulting in continuous deterioration of the improved facilities. As a result the national agencies had to continue reinvesting on rehabilitation diverting its scarce resources meant for still unreached communities.

The recent innovative approaches used by the National Water Supply & Drainage Board (NWS&DB) of Sri Lanka as a part of its Rural Water Supply development programmes for small towns under different funding sources such as DANIDA, FINNIDA and IDA has ensured complete participation of all the users and partners in the whole development process leading to sustainable system development. This paper intends to highlight the strategies adopted and to discuss on various issues and outline a project specific system development procedure for the future.

Strategy

The main concept in the strategy had been gradual empowerment of the beneficiaries and the other partners in the target small towns on planning, Implementation and management of water systems with following basic elements on participatory development.

- The entire programmes will be demand driven and people centred deviating from conventional supply driven programmes.
- Involvement of all the partners such as users, line agencies, local authorities, NGOs and politicians and the private sector on the water system planning, implementation and management phases.
- The beneficiary community with other partners jointly decides on appropriate management model and the arrangements based on local capacity through planning workshops. This is a deviation from conventional top down approach on imposing predetermined management mechanism on the communities.
- The agency involvement will be limited to a facilitator with the provision of Technology and management and execution of complex technology work and provision of part of funding.

Cost recovery

The general policy in the three programmes had been adaption of scheme specific or localized tariffs based on local level affordability and priority for water. In five small towns water schemes in Kandy the scheme specific tariffs were implemented which are in average three times higher than the national tariff. This accounts for recovery of full O&M cost and 15% of the investment cost. In the small town programme funded under IDA assisted CWSSP a tariff which recovers O&M was agreed, and a minimum of 20% of upfront contributions were made by the beneficiary community as labour or cash, during the construction.

Role of support organization

A support organization was utilized by the relevant projects in mobilizing the community from planning to management phases of water systems. This has reduced NWS&DB burden on additional resources during the project development phase and two different formulae were tried out in this direction.

Utilization of the relevant local authority in the area.

In small towns in Kandy, Matale and Polonnaruwa districts the software activities and other simple constructions were organized and supervised by the relevant local authority. Although the final outcome had been selection of model B(as mentioned in para 5) for the management of facilities, the most encouraging aspect of this strategy is increased institutional participation from the inception of the programme and ability to gradually transit to O&M phase with greater commitment. However being a government agency this mechanism had its own limitations for becoming flexible and adaptable at programme level.

Utilization of NGOS

In the IDA funded programme NGOs had been used as support organizations. This gave the programme added flexibility on working with different communities and make participatory development more realistic & meaningful.

Management models, issues and bottenecks

Three types of alternative management models had been identified and tested by the NWS&DB as accepted under legal and social framework within Sri Lanka. The roles & responsibilities are shared by the Community Base Or-

ganization (CBO), local authority and the NWS&DB in each model.

The responsible partner for operation & maintenance differs for each model as mentioned below and the other functions are shared between balance management partners.

- Model A- Community based organizations (CBO)
- Model B-Local Authority (LA)
- Model C- National Water Supply & Drainage Board (NWS&DB)

In the case of management Model A introduced to Kuruwita in Ratnapura District, legal issues arisen are transfer of assets to CBO and liability of the CBO as a legal entity towards the users; under the existing laws. A separate study on legal aspects was carried out in this direction. The major drawback in Model B and C had been the possibility of neglecting of user involvement during O&M stage. In one case in Ampitiya the LA has increased the service area and the service population deviating from the original design, resulting in complete deterioration of services despite very high user protests. Therefore, in all three models signing and effecting tripatriate agreements will be very much important .However there are certain minor amendments required on the existing laws and act to make all the management models more sustainable and effective on operation.

Private sector participation

During the planing & design process for two small towns in Kandy local private consultants were used to provide opportunity for private sector participation. Further utilization of specialized contractors and suppliers were encouraged as a strategy to promote private sector participation at macro level.

Arrangements are also made to build up capacity of local level artisions and promote minor workshops run by private entrepreneurs, to supplement the development phase of the small town as well as to play resourceful role during the operation & maintenance phase.

Capacity development

Capacity development is a gradual process which encompasses transfer of technology to the lowest appropriate level on continuous basis. The strengthening of the O&M partner was done with;

- Human resource development programme including the areas of technical, managerial , financial and stores management.
- A logistic development programme to buildup stores, mini workshops and increase of mobility.
- Procedure development to streamline procedure and standardize the formats, to facilitate smooth O&M.

Lessons learned and recommendations for future

These lessons learned in water supply system development for small town water supply systems by the NWS&DB with greater emphasis on user participation and strategies focused on greater utilization of local resources and capacity building and transfer of technology to the lowest possible level, will be valuable guiding tools for planing and implementation of future water supply systems, in small towns. The recommended strategy had been outlined as a flow diagram in the Fig 1. The lessons learned and recommendations could be concluded as;

- The beneficiary community should be key players of the programme from the planning to maintenance even deciding on the management system for the future operation & maintenance.
- The sustainability of the management models depends also on legal and social recognition and their inter-connections.
- The water tariff increases could be effected with proper consultation with the community considering social & political context, prioritising water among user needs.
- The technology and management should be transferred to lowest appropriate level towards the user for ensuring operational efficiency.
- The National agencies can achieve better results by encouraging greater participation of the small & medium scale private sector and the NGOs and other local agencies in the development of WSS, adding extra resources that could be manageable for predetermined outputs and performance indicators with added flexibility. This could reduce need for further expansions of agencies which will lead to efficient and flexible mechanism for project development and management.

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Figure 1. An outline procedure for participatory development of water systems in small towns