MAXIMIZING THE BENEFITS FROM WATER AND ENVIRONMENTAL SANITATION

Strategies adopted for sustained water supply and sanitation through community participation in Sri Lanka

I.V.W. Ediriweera, Sri Lanka

With the dawn of the new millennium, the Sri Lankan Government has set the goal of providing access to safe drinking water and basic sanitation to all its 20 million population by year 2025. The ensuing Water and Sanitation Sector reform program aims to achieve these targets through direct local authority and community participation in the design, construction, operation and ownership of schemes using a range of new sector concepts. The Community Water Supply and Sanitation Project I (1993-1998), which was implemented on a pilot basis, was rated in 2000 by the World Bank as its best managed and implemented rural water supply and sanitation project worldwide. This project has formed the cornerstone upon which the structure of subsequent projects were developed using the lessons learnt and benefits reaped. As a part of the current 2nd Community Water Supply and Sanitation Project, which commenced in 2003, an optimum project cycle has been formulated incorporating five purpose-driven Action Plans, details of which are described in this paper.

Water supply and sanitation - evolution
Successive Sri Lankan governments have agreed on the need for development of the nation’s water supply and sanitation infrastructure. Consequently they have set ambitious targets to provide access to safe drinking water and basic sanitation facilities to 85% of the population by 2015 and 100% by 2025. These objectives are in line with the UN’s Millennium Development Goals (MDG).

To reach these goals in a sustainable manner the Government has embarked on a significant reform program aimed at improving service delivery of water supply and sanitation in rural areas. The reforms seek to mainstream community-based Rural Water Supply and Sanitation (RWSS) approaches through decentralized implementation arrangements centered on Local Government institutions and the rural communities themselves. Successful introduction of the proposed sector reform program is a key factor if the mammoth targets facing the country are to be achieved, as existing local government authorities are judged incapable of handling even half the requirement. Although Local Government Authorities have a mandate for providing drinking water and sanitation facilities, basic needs have not been satisfactorily addressed due to a severe lack of resources and low priority (compared with other local government demands).

At the same time, the National Water Supply and Drainage Board (NWSDB) as the sole water supply agent for Sri Lanka has been overburdened by demands from the urban sector and has had only limited, albeit vital, input to RWSS. International and national agencies and NGOs have made small-scale RWSS interventions but these have been minor compared to need. Larger scale government RWSS projects over the past decade supported by the Asian Development Bank (ADB) and the World Bank (WB) have made a greater impact and importantly have been the catalyst for the initiatives discussed herein. Sector reforms now being exercised are anticipated to contribute towards increased coverage and meeting targets through decentralized implementation mechanisms.

Long years of experience witnessing deteriorating village WSS facilities has prompted policy makers and funding agencies to develop strategies to overcome the problems inherent with village level service delivery. Among the different approaches employed during the past decade or so, it was found that the ‘Community-Based’, ‘Community Centered’ and ‘Demand Driven’ approach is not only feasible, but the most fruitful method to ensure sustainability. Involving the communities actively in implementing projects at grassroots level ensures scheme longevity by improving maintenance through affording greater onus among the villagers. This approach was tested in Sri Lanka under the Community Water Supply and Sanitation (Pilot) Project I (1993-1998) and was found to be highly successful. The Project was rated in 2000 by the World Bank as “Best Practice” and “Well Managed” among 200 similar Bank-funded projects around the World.

2nd Community Water Supply and Sanitation Project
Following the success of CWSSP I, the WB agreed to provide a Grant of Rs.3,980 Million (US$ 39.8 Million) out of the total estimated cost of Rs.6,240 million (US $ 62.4) for implementation of the 2nd CWSSP. The first CWSSP was implemented in three districts from 1993 to 1998 using an innovative ‘community based’ and ‘people centered’ approach.

The 2nd CWSSP, which commenced in 2003, promotes a
‘Demand Responsive Approach’ (DRA) for implementation. This comprises sharing of capital costs and recovering of operation, maintenance and future replacement costs. Social equity is ensured through poverty alleviating, promoting gender balance and enabling the poor and ethnic minorities to participate, contribute and benefit from the project.

The demand for affordable levels of services in rural villages, estates and small towns is expressed through people’s willingness to participate in the project, by selecting appropriate technologies and service levels while paying a share of capital costs, all O&M and future replacement costs. DRA is also instrumental for transferring scheme ownership and management responsibility to Community Based Organisations (CBOs).

Within the project implementation framework, Non Government Organizations (NGO) and the Private Sector are also provided with ample opportunity to participate in different activities during successive project stages.

In addition to devolution of activities to provincial and local levels, more power and onus has been vested in the CBOs. Decision-making at all stages of project preparation and implementation is fully exercised by beneficiary communities. More importantly, responsibility for construction of water supply facilities and implementation of hygiene education, sanitation and environmental programs rests completely with the communities.

**Community participation in project implementation**

**Sub project (village) cycle**

23 months are earmarked for the total sub project cycle. Activities planned will elicit desired levels of active community participation throughout the project cycle.

**Selection of project locations**

In the process of prioritization, selecting the neediest communities is a challenging task as many communities fall under the low income group. The project has introduced a transparent system of prioritizing the communities based on their Need, Demand and Willingness to participate.

During the first two months of ‘Information Dissemination’, an NGO carries out a local area-wide awareness campaign which speaks of the Project, its benefits and the procedure for applying for project assistance.

This information is made available to the communities through public newspapers, posters, handbills, public address system etc. Each community is expected to submit a collective request for inclusion in the project. They also express their willingness to abide by project conditions which include contributing toward the capital cost of sub projects and providing the required voluntary labour. These activities are designed to obtain maximum community participation as a basis for selection of sub-project locations.

**Project implementation**

Project implementation activities commence with those sub-projects highest on the priority list. At the outset communities are provided with detailed project information through the assistance of experienced Community Facilitators (CFs).

They hold face-to-face discussions with the communities, to impart a better understanding of the project and its requirements, to assess any problems that exist and to establish the strengths and weaknesses of the community and key individuals.

Villagers form small groups, which then become united to form strong pressure groups. This provides opportunities to develop cohesiveness and a unity that encourages self-help activities to overcome the range of difficulties they face as individuals.

This also paves the way to reduce the cost of agricultural activities, thereby helping to increase household income. The small groups are further strengthened during project implementation with representatives forming a Core Group, which later selects representatives to form a Community Based Organisation (CBO). The CBOs are representation of a fair cross-section of the entire village.

The CBOs thereafter take the initiative in all village development activities. Community Action Plans, including water supply and sanitation, are planned, designed and implemented during the project period.

It has been observed that diversification of CBO charges beyond water supply and sanitation activities is key for sustainability of the CBO. Project capacity development programmes direct CBOs towards undertaking various community development and skill enhancing activities that involves rural, social and economic development.

The experience gathered under the project on construction planning, procurement and financial management is highly beneficial to the CBOs. A lesson to be extracted from the RWSS project implementation is that achieving water supply and sanitation needs should be the starting point of other development projects to be undertaken by the CBOs on behalf of the village.

**Participatory survey**

During the project, community participation is encouraged and sought through a number of key activities. The initial Participatory Survey is one important milestone in the process of project implementation. In compiling the survey, data collected by the small groups are analyzed by the community with support from the Community Facilitator.

Through the Participatory survey, essential information needed for planning is collected and analyzed, and provides an opportunity for the communities, both collectively and individually, to better understand their local situation. The survey, when completed, reveals the true picture of family and community strengths and weaknesses, allowing identification of community action focus areas.

Participatory survey is small in comparison to the activities the CBOs have to perform at the latter part of the project implementation. Nevertheless, the active involvement of the beneficiaries found to set a platform for the participatory de-
Government and donor agencies provide funding for con-

2. Action plan for sanitation

3. Action plan for Environment Program


5. Action Plan for CBO Diversification

The CBO is responsible for operation and maintenance, which needs to continue after the project period and this is implemented with direct community involvement. Again, preparation and implementation of these action plans is considered essential to further encourage community involvement during and after project implementation.

1. Action plan for hygiene education

Using data and information gathered during the participa-
tory survey, the communities design an intensive health
and hygiene education program under project facilitation. It is aimed at providing health and hygiene education for all project beneficiaries, with particular emphasis on school-going children and mothers.

Health monitoring

In addition to improving good health and hygiene practices, the project aims to monitor water related diseases, especially among small children (under 5 years). After baseline data collection, which takes place prior to project commencement, there is ongoing monitoring of pre-agreed health indicators, carried out with the help of local health authorities. The objective is to measure the project’s benefits in terms of its impact on the spread of water borne diseases by comparing results before, during and after project hygiene education interventions.

The subject of hygiene education becomes a prominent component in the villagers’ day-to-day life through implementation of the action plan for hygiene education.

2. Action plan for sanitation

Most rural development programs implemented by both Government and donor agencies provide funding for construction of sanitation facilities as grants. But the 2nd CWSSP changed this approach, aiming to discourage the practice of providing grants for creation of individual assets. The Project has adopted a credit program to provide loan funding for household latrine construction. As an initial step, the project provides seed money of Rs. 3000 per household, for up to a maximum of 50% of the total households that do not have sanitary latrines. These funds are provided to the CBO as a grant to form a revolving fund, from which loans are provided to individual households. The CBO, together with the community, is given the responsibility of deciding the amount to be lent, interest rate charged, repayment period and other loan conditions.

In certain circumstances (e.g. poverty) households that are unable repay their loans may be exempted from payment, if so decided by the community. The success of the pilot revolving fund system to date has demonstrated that active community participation is the key to acceptance and success of village-based sanitation programs.

3(a). Action plan for environment (1) - home based

During the initial stage of mobilization, the community prepares their household based Environment Plan (1) with their respective Partner Organisations (PO) – normally a local NGO familiar to the area and experienced in training the community. The household Environmental Action Plan is implemented between the 3rd and 7th project months.

Plan activities include:
• Home gardening
• Household composting
• Kitchen waste disposal
• Household wastewater disposal
• Clean household surroundings
• Households identified for different activities as mentioned above
• Targeted outputs and target dates for different hamlets

This plan is used as an entry point (tool) for project mobilization.

3(b). Action plan for environment (2) - village based

The Environment Plan (2) focuses on village-wide requirements. It is prepared during the 8th project month and implemented during the construction period. The Plan focuses mainly on:
• Identified water source protection activities
• Catchment preservation
• Common drainage and waste water disposal
• Costing of agreed activities
• Labour plan
• Time frame for completion
• Monitoring mechanisms etc.

4. Action plan for water supply

Of the many action plans prepared during the project, the Water Supply Action Plan is the most complex and the most community-involved plan. The success of the Water Supply Scheme rests on the extent of community involvement and therefore, maximum emphasis is given to assure active community participation and agreement at all stages of scheme planning and designing, construction, operation and maintenance.

The following typical activities are investigated, agreed and scheduled by the communities:
• Most technically feasible and economically affordable final option selected
Lessons learned

- Project cost and cost sharing arrangements for proposed option
- Community approval for final proposal and design
- Construction work plan
- Construction supervision plan
- Material procurement plan
- Labour plan
- Community contribution collection plan
- Tariff setting
- O&M arrangements
- Caretaking arrangements etc.

5. Action plan for CBO diversification

The long term sustainability of water supply and sanitation facilities is addressed prior to withdrawal of project assistance. This is only possible if the community understands and acknowledges the benefits that accrue from the active presence of their CBO. If CBO activities are confined only to collection of water tariffs, the tariff should be sufficient to recover expenses connected with the operation and maintenance of the facilities. In practice, however, communities dislike and cannot afford, to pay high tariffs. It is found therefore, that diversification of CBO activities is needed to ensure long-term sustainability of water supply schemes. Examples include creation of revolving credit programs and involvement in the marketing or supply of agricultural inputs.

The diversification Action Plan, prepared by the CBO and its community, consists of activities identified to enable individual members to increase their personal earning capacities, required inputs, mechanisms for providing these facilities, time frame, costs involved, if any etc. The sanitation seed money is commonly used, toward the end of the sanitation program, as a revolving credit fund for CBO diversification. CBO involvement in harnessing latent opportunities that may be found within the communities can form new trends that are important for future development.

Lessons learned

- At the inception stage of the project, communities are reluctant to put their faith in the participatory development approach particularly due to the ‘dependency’ attitude and top-down experiences from the past. The participatory survey and preparation of action plans effectively breaks the barrier of traditional thinking and progressively involve the community in the mainstream of development.
- It was observed that construction material procured by the community, for various reasons, was more costly than central procurement. However, it was found that procuring through CBOs, outweighed the negatives on a scale of social benefits. (a) a large boost to the CBO confidence (b) capacity development of the CBOs (c) training to determine quality material and provide opportunity to purchase better quality material and maintain optimum level of stocks for their own use. (d) instill a sense of ownership.
- The average recovery rate of the sanitation revolving fund under the 1st batch of implementation was found to be around 80%. This was an encouraging recovery rate that shows the success of the sanitation programme and the potential to fulfill the entire sanitation requirement of the community and projected needs, with comparison to the previously used sanitation subsidy (loan) system.
- In a country where poverty is an overriding factor and competition is an accepted way of achieving personal goals, it is refreshing for the communities to observe large leaps of development towards common goals with far less effort through the participatory approach.

Conclusion: RWSS and Socio-economic Development

Poor water supply and sanitation is highly correlated to poverty and social degradation, with 80% of sicknesses in villages being water-related, leading to lower productivity and reduction in household earnings and funds for development. Lack of knowledge of the link between water supply and sanitation, hygiene behavior and health, and the impact on productivity and economic and social enhancement has been a major impediment to rural development.

Valuable time is lost unproductively in traveling long distances to fetch water. Women sacrifice opportunities for social and economic advancement. Young women are seriously affected missing out on formal education due to time spent fetching water, or lack of sanitation facilities in schools, resulting in uneducated mothers; the engines of a family enhancement. Neither are they able to contribute actively to the economy of the country, denying the nation a large part of the potential workforce.

The health and productivity of rural folk through better water supply, sanitation and hygiene is crucial to the economy of the country while relieving the heavy dues on providing free medical care. Particularly in a country like Sri Lanka that predominantly depends on an agricultural economy sustained through labour borne from rural communities. As demonstrated by the 2nd CWSSP, strong and considered Community Participation approaches can redress a system of sustainable water supply and sanitation as well as contribute significantly towards the Government’s efforts on national poverty alleviation.

References


Contact addresses

I.V.W. Ediriweera, Deputy Director (Technical)
2nd Community Water Supply and Sanitation Project
9th Floor, Sethsiripaya, Battaramulla, Sri Lanka