Participatory approach in macro level planning for rural water supply in Sri Lanka

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Participatory approach in macro level planning for rural water supply in Sri Lanka

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Introduction

Strategies and approaches in rural water supply implementation have been revitalized with new practices aiming to solve many prevailing issues in the sector during last three decades. However, efforts made to solve some the fundamental issues were adequate but many issues are yet to be addressed. It is evident due to the complexity of issues and lack of innovative thoughts, many of these were not taken into account or purposely ignored in most national level rural water supply (RWS) projects. Provision of equal opportunities to all rural communities to obtain water supply and sanitation facilities without any discrimination, guide communities to select the appropriate water supply technology to fulfill their aspiration promptly based on their affordability and maintain equilibrium between productive utilisation of limited resources and provision of facilities to the most needy communities in line with the framework of demand driven approach are some of the main fundamental issues did not addressed effectively so far.

The RWS in Sri Lanka usually implement with donor funds (grant or soft loans) provided for the construction of small piped water supply schemes and point source water supplies. According to the RWS national policy total responsibility at all stages of project implementation are lied on beneficiary communities and they are compelled to meet certain milestones/conditions. More theoretically, the RWSS projects are implemented based on demand driven and community responsive approach and in a project area the continuation of project assistance for the improvements to facilities depends on the fulfillment of milestones.

In reality, implementation of schemes is delayed in many beneficiary villages and some have dropped out due to incomplete or unsuccessful to achieve the stipulated milestones. It happened, as beneficiary households in some of the selected villages for WS improvements did not participate any activities such as community meetings, formation of CBOs and payment of qualifying fee, contribution of cash and unskilled labour etc. However, dropout of communities is a social and political sensitive issue and many instances the project assistance is continued even though they were not comply with the agreed tasks. This has made ill effect on participatory approaches and strategies emerged during last few decades and the smooth project implementation in other communities where similar conditions are prevailing.

Route Cause of Issues

Experience in the national level water supply projects show that the route causes of the above situation were lack of macro level planning in RWS projects. It is found that following are in lacking in the RWS projects:

• Proper method and strategy, which provides equal opportunities for all potential beneficiary communities to apply for improved water supply facilities and to select the best and most needy communities by avoiding the artificial demand created by the interest groups or influential people in the villages.

• Adequate data and information to assess the community needs as fast as possible and to fulfill the aspiration of the beneficiaries.
Macro level planning (MLP) through participatory rapid rural appraisal (PRRA)

On viewing the issues, challenges and constraints faced by the previous RWS projects, the ADB assisted Rural Water supply and Sanitation Project adopted a systematic approach in planning of rural water supply programs in their project districts. This PRRA based approach has alleviated the prevailing fundamental issues mentioned above and assisted smooth project planning and implementation. The overall activities of the MLP were carried out within four months jointly by the non-governmental organization (NGO) and project staff. The MLP has focused on three main areas as described below.

Socioeconomic profiles and establish affordability of beneficiaries

PRRA exercise has carried out to prepare village Socio-economic Profile for each and every village, which consists of following data and information viz: (i) existing water supply and sanitation coverage and need for water supply and sanitation services of beneficiary communities (ii) income, poverty, disadvantage groups in the GNDs and prevailing water borne diseases among the potential beneficiary communities (iii) social capital in communities (iv) affordability and willingness to pay for improved WSS facilities and (v) general information of the topography, population density and mode of access etc of villages.

Except no (iii) & (iv) above all other data are available at various village level Government Offices. Collating, collecting these data and validating them were the immense task and more often it is found that these sets of raw data possess by village level officers were different from one to the other. Such data has been validated and updated with the participation of all village level officers. The assessment of social capital, affordability and willingness to pay for improved facilities was made in each and every village with the consultative meeting and use of effective PRA techniques.

Preparation of water resource profiles and the groundwater investigations

The activities pertaining to water resources planning and investigations have proven to be of critical importance for the project. Major bottlenecks have been detected during the participatory planning and design phase for both village and small town sub-projects due to the difficulties faced in finding reliable water sources. More often the key question in the design phase has been to establish whether a satisfactory, sustainable source is located within a reasonable distance of the supply area.

Availability of more information and data on water resource and to identification of the areas where ground water and surface water could be used for water supply is the main factor for mobilising beneficiaries for appropriate water supply, which is affordable to them. PRRA techniques has been used to investigate the following aspects of water resource investigation viz (i) ground water sources (ii) surface water sources.

The most important and complicated part of the water source investigation is the survey of ground water sources in selected PS divisions. Under this it has been focused to identify the (i) availability of ground water sources in villages in the PS divisions (ii) feasible locations for productive tube wells for pipe borne water supply and for deep tube wells with hand pumps and shallow tube wells including approximate yield and assessment of the quality (iii) feasible locations for common and individual dug wells with an assessment of quality.

Investigation of surface water source looked at the nature of water sources (rivers, streams, channels, springs, irrigation tanks etc) and their ownership (water sources are located in crown lands, declared areas for forest reserve and wildlife, plantations etc.) were established. Use of water sources by different groups of people- farmers and others and water right issues and possible conflict were assessed through community consultative meetings (number of farmers and areas cultivated under the water sources, purpose of use by other groups etc.). Surface water sources to be used for the water supply are identified during these consultative sessions.

Flow of surface water sources (streams, channels, springs) and water level measurement shallow ground water (shallow wells and overflow shallow wells) were taken every week and recorded in dry and wet seasons. The responsibilities of taking follow measurements and level measurements were delegated to the trained villages. This was one of the great achievements in participatory MLP in the project as there was a public debate over the water resources act in Sri Lanka, which has been interpret as a privatization of water sources. These data have been used prepare the village level water resource maps and subsequently used for the preparation of divisional level water resource maps.

Public awareness campaign (PAC) & stakeholder consultation

Comprehensive PAC has been conducted to provide equal opportunities for beneficiary communities to apply for improved WS. Community was requested to submit their application collectively and at least signatures of 50% of the households in the community were expected with the application.

Villages were prioritized on divisional basis with the participation of representatives from community, NGO, health, educational, political and project authorities. Selection of villages for project assistance was based on the socioeconomic and water resource profiles prepared.

Impact of MLP

The ADB assisted Rural Water Supply and Sanitation Project implemented in six districts in Sri Lanka. The total amount allocated for the RWSS is $39.3 million and it is expected to cover 908 villages. The selection of most needy 908 villages from six districts was an immense task as total number of
The project was planned to complete 424-village sub project in the first batch during 1999 December –2002 December. However details in the table-1 shows that the implementation was so slow and after 36 months, only 235 village schemes were completed and other schemes are in planning stages or under construction stage. This has happened entirely due to lack of data and information on socioeconomic conditions of communities and water resources especially ground water resource. This caused to delays in preparation of community proposals for improved water supply and subsequently affect the overall progress of the project implementation.

Situation has been completely different in the second batch of implementation and implementation of schemes is within the stipulated time frame or faster than anticipated time. Data in the table-1 shows the progress in the second batch and provide indication for the level of MLP data has been used for the planning and for the selection of appropriate water supply technology for the communities. Accordingly planning of all rural village schemes have been completed except the design of 7 small town schemes, which is more complex.

### Lessons learned

Macro level planning has been demonstrated sufficiently as an effective tool to address the prevailing issues in implementation of rural water supply. Selection of the most appropriate water supply technology without delay to fulfill the beneficiary aspiration and their affordability level and willingness to pay is a remarkable achievement of MLP.

The MLP creates an environment that will bring about interest among the communities to participate in the project and provide equal opportunities to all communities to take initiatives to apply for benefits. Also it has clearly proven that making the beneficiary communities aware of project policies and strategies in planning, design and implementation, including the community contribution encourage them to apply for improved facilities.

Preparation of data base on socioeconomic and water resource information on all villages in six district in Sri Lanka and published them will no doubt benefit to planners not only water supply sector but also in other sectors.

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**Table1. : Completion of water supply schemes where Participatory MLP conducted - as at June 2003**

<table>
<thead>
<tr>
<th>District</th>
<th>1st Batch December 1999-June 2003- without MLP</th>
<th>2nd Batch started in March/June 2003- with MLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anuradhapura</td>
<td>87</td>
<td>0</td>
</tr>
<tr>
<td>Puttalam</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>Kegalle</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>Kalutara</td>
<td>47</td>
<td>1</td>
</tr>
<tr>
<td>Hambantota</td>
<td>51</td>
<td>0</td>
</tr>
<tr>
<td>Monaragala</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>424</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

- Villages in these districts was 3493.

- The project was planned to implement in three batches of which the time frame for each batch was around 18-20 months. It was planned to complete 424-village sub project in the first batch during 1999 December –2002 December.