



Water resources management for drinking water

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HELVETAS HAS BEEN supporting the rural people of Nepal in constructing their own drinking water systems through the Self Reliant Drinking Water Support Programme (SRWSP). This programme evolved in 1992 from Helvetas' 16 years of experience in implementing drinking water systems in the Western Development Region (WDR) through its Community Water Supply and Sanitation Programme (CWSSP).

SRWSP is a programme based on true people's participation, combined with some other principles, assumptions, and conditionalities. These are being developed gradually based on experiences gained and feedback received. The basic and innovative feature of SRWSP is its step wise approach to project implementation. In essence, the step wise approach is a series of activities and bench marks that guarantee the integrity of the project process and increase the likelihood of community ownership.

By 1990, the reinstallation of multi party democracy in Nepal presented Helvetas with new opportunities for involving civil society in project work. Accordingly, since its inception in 1992, SRWSP got the opportunity of working with various types of partners, such as NGOs, consultants, and Village Development Committees (VDCs); and has been adjusting the programme as per its learnings. The recently concluded Participatory Self Assessment (PSA) and External Evaluation (EE) gave further opportunities to learn and fine-tune the present approach and practices.

This paper focuses on lessons learnt by the programme specifically with regard to the planning, utilization, management, and awareness aspects of water sources and drinking water projects; and the development of a new approach which looks at integrated water resources management to strengthen these aspects.

Lessons learnt from the past

One of the most prominent problems faced by SRWSP is disputes associated with the use of water sources. Usually the source disputes are observed as competition between the communities and sometimes individuals, either to establish ownership over the water bodies or on mode of water use, such as drinking water and irrigation. Because of such competition, many sources for drinking water and irrigation as well have been wrongly selected in the past making the transmission of the water to the communities often unnecessarily difficult and unscientific. This not only puts a question mark on sustainability, but is also wasting financial and human resources.

At national level the Government of Nepal has introduced the Water Resources Act 1992 which makes provision for the appropriate utilization, protection, management and development of all the water in Nepal. The act provides the ownership of any water resources to the state and prescribes highest priority for drinking water on mode of water use. The problem, however, is that people and planners at the village level are not aware of this Act, resulting in conflicts and inefficient planning of water use.

Some other common problems encountered in the communities are people's reluctance to share water with others, tendency to propose a farther source for drinking water schemes even though suitable nearer sources do exist, and, wanting to extract maximum water out of the source leaving no or less opportunities for others. All these problems are associated with inappropriate selection of the water sources combined with lack of planning on the use of the water sources in an open and democratic manner. This situation is further aggravated by gradual deterioration of water sources in rural hills as a result of continuous depleting of vegetative cover.

Improper use of water, leakage from different parts of the system, and, non use of waste water is also a piercing concern. The waste water from the tapstands and overflows from other structures which could be used for kitchen gardening are not realized, however, on the contrary creating mosquito breeding places or even posing risks of landslides. Better use of water is, therefore, not only a technical matter but more a social issue with need for raising awareness about water as a scarce commodity and developing a sense of ownership feeling in the communities.

Very often applications for drinking water projects received by SRWSP are for the rehabilitation of old projects where communities have previously failed to properly maintain the drinking water systems. Just replicating the same work done a few years ago, without establishing an effective mechanism to make the people willingly more responsible, means repetition of the same mistake. A different approach has to be taken now in order to make the pour-in of the resources meaningful.

The overcrowding of implementing organizations but lacking coordination among each other is also a burning problem. The differing working procedures and micropolicies of support has created confusion among the beneficiaries. On the other hand, some organizations are developing unsustainable practices to attract intermediaries, such as NGOs and consultancies in order to meet their project target. Such competition among many organiza-

tions also encouraged Helvetas to make its programme even more people oriented and innovative.

The present sub-sectoral approach of SRWSP has resulted a 1-2 years of relationship with the users. Water and Sanitation Management Committees (WSMCs) are very active during the duration of the project implementation, but tend to become less active afterwards. Similarly, women in these communities make an impressive step forwards regarding their role in the community, but due to lack of follow up activities they do not have the chance to make a real change in their life. Longer term relationships with the communities (and VDCs), beyond the implementation of only drinking water related activities seem to promise a step further in sustainable development.

After all, significant achievements of SRWSP are observed in the field of social mobilization of the communities; hygiene and sanitation situation; capacity building of partners; and provision of high quality drinking water systems. Nevertheless, it is felt that due to the sub-sectoral approach of SRWSP these achievements are not explored to their optimal level.

Need of a new approach

SRWSP has been considering and accepting the water sources proposed by the users, thinking that the ones identified by them generate a strong sense of ownership. However, taking into account all the source disputes, lack of awareness on existing legislations, tendency to hide the nearer sources, wanting more water than really required, expressing reluctance to share, etc.; SRWSP feels the challenge ahead is to utilize what exists in a more realistic, scientific and sustainable way- which means water related issues should not be considered in isolation.

The interactions between different users of water source, and the conflicts which stem from these interactions also lie at the heart of the need for an integrated approach.

Further looking upon the present scenerio, such as overrepresentation of organizations in a specific area, type of applications SRWSP have been receiving, and the experiences in present sub-sectoral approach; SRWSP concluded that if Helvetas is to remain consequent towards its commitment and concern for sustainable development in the mid-hills of Nepal, it must urgently move its attention towards the broader issue of water resources management.

The overall objective of water resources management (WARM) is to ensure optimal and sustainable use of water sources for economic and social development, by including the concerned communities in the planning process.

Key issues of importance

- Conservation and protection of the water sources and the catchment areas: Water sources have to be protected to ensure the perennality to satisfy the needs for water in human activities.
- Agreement on the use of available water resources among all the stake-holders: With the increasing scar-

city of available water, the counselling of interest of the various stake-holders becomes important.

- Efficient use of water: Lots of valuable water is lost due to improper use, leakage and non use of waste water in the drinking water as well as in the irrigation sector. Better use of the water is not only a technical matter but is even more affected by lack of awareness
- Management of the water resources should involve all stake-holders including the less powerful in the community.
- Water should be treated as having an economic and social value: In the past water has been seen as a free of charge resource ignoring its economic and social value.
- Capacity building of individuals and groups involved: To delegate water resources management at the lowest appropriate level, education, skill development capacity, motivation, human resource development for organizations involved etc. are basic requirements for the successful implementation
- Gender Sensitivity and Gender Balance:
- Transboundary water resources in the context of VDCs are of great importance as their use in the riparian VDCs are unavoidable. Cooperation and common understanding among these VDCs and communities is therefore required. Similarly, such cooperation and common understanding among the communities within the VDCs are also essential.

Piloting of WARM

SRWSP, therefore, has developed an approach on integrated Water Resources Management (WARM) which is being piloted in Bajung VDC in the Western Development Region. Bajung VDC was selected as a pilot area considering some of the factors such as, Helvetas' experience in this VDC in the past, and the VDC's present leadership situation.

During the piloting activities, emphasis has been given to the investigation and planning aspects related with the VDC level water related integrated plans (VDC water profile), and technicalities related with implementation of drinking water projects. Based on its key issues, SRWSP has facilitated for the delegation of water resources management at the lowest appropriate level (water and sanitation management committee) in accordance with national legislation (VDC Act, Water Resources Act, etc.). The facilitation is based on an approach of public participation, including that of women and under privileged groups.

SRWSP is currently implementing activities as per an action plan. As one of the principles of this new approach is the delegation of water resources management to the lowest appropriate level, capability building at that level was felt necessary. Therefore, a one week long training has already been conducted for the VDC officials including women members. This training has developed a shared vision among the VDC members with regard to development issues including gender role, which was a prerequisite to implement WARM related activities in the VDC.

Just recently a social team from SRWSP has assisted the VDC in preparing a social profile of all nine wards which includes: identification of all the sources, need assessment and prioritisation of needs. In order to facilitate the process, some of the PRA tools, such as, transects, resource mapping and venn diagrams were used. Special emphasis was given to encourage the women and people from underprivileged groups. Some of the interesting findings were: people were quite enthusiastic with outstanding participation; everything was done in a participatory way with a high number of women participating in the process; and; people have deep knowledge about the possible solutions with regard to their problems. The trained VDC people also facilitated the process quite well, which justifies the importance of VDC capability training organized by SRWSP. More interestingly, the number of water sources identified during the process was found four fold than the VDC knew before this exercise.

Now, it is planned to conduct a technical assessment, based upon the findings of the ward level social profile. The main objective of the technical assessment is to prepare a VDC water profile serving as a master plan for the VDC to plan, prioritize, execute, operate and manage water related activities in an integrated way. The technical assessment includes: measurement and description of all water sources; mapping the geographic locations of water sources; verification of existing infrastructures based upon social profile; and categorising water sources on mode of water use according to quality, capacity, accessibility and suitability.

After the preparation of the VDC water profile, SRWSP aims to assist the VDC in preparing a master plan, so that, it can utilize all the water sources for the best fulfilment of the people's needs; formulate and prioritise the projects;

and prepare action plan for the implementation of the projects. In order enable the VDC in fulfilling these roles, SRWSP plans to help the VDC in preparing project proposals and provide a forum to establish linkages with other water expert agencies. SRWSP, therefore, has planned to organize a workshop with the VDC and other water expert organizations, where the VDC will get the opportunity to develop and strengthen cooperating mechanisms with such organizations.

WARM has been promoted as an interdependent extension of SRWSP, with drinking water for the poorest remaining the focal point of the programme, but in the context of integrated water resources management. While implementing the drinking water projects as a commitment of SRWSP, the whole exercise on piloting this new approach will help to reduce material cost and saving resources by using the optimum source (quality, quantity, location) for each scheme.

Final remarks

WARM is a pilot programme based on lessons learned by SRWSP. Globally the issue of integrated water resources management is getting more importance. However, no examples exist in Nepal where experiences have been gained with an integrated way of looking at the water resources available. It may be too early to draw any conclusion at this moment since this concept is being tested. However, from Bajung's initial experiences, it can be concluded that this concept is the present need.

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