The Himmotthan Water Supply and Sanitation initiative

Uttarakhand

COMMUNITY MANAGEMENT OF RURAL WATER SUPPLY

Community Water *plus*

Three interesting features of this case

- Insurance of some of the main works (intake, filters and tanks) against landslides and floods
- Chlorination: the search for an appropriate type of chlorinator and doing the right dosification
- An NGO hiring a full-time monitoring and support staff member to work with "phased-out" villages.

Community Water Plus, a research project, has investigated twenty case studies of successful community managed rural water supply programmes across 17 states in India. Through these case studies, the research has gained insight into the type and amount of support to community organisations that is needed, and the resources implications of this 'plus' – in terms of money, staffing, and other factors. This document presents the experiences of the Himmotthan Water Supply and Sanitation initiative in developing community-managed rural water systems in the Uttarakhand Himalayas.

As part of the initiative, Village Empowerment Committees (VECs) are set up who are responsible for daily operation and maintenance of the gravity-fed schemes. They collect tariffs to cover all operation and minor maintenance costs, but also contribute to an insurance scheme for capital maintenance. They receive intensive support during the implementation phase by an NGO, which also provides ongoing support to 'phased-out' villages. Through this approach, communities now receive a supply that meets the standards.

Key data on the Uttarakhand context

All India data for reference in parenthesis
Water supply coverage: 91% (96%)
GDP per capita: $5,916 ($4,243)
HDI: 0.490 (0.467)
Devolution Index rank: 14 out of 24

Enabling support environment

The Himmotthan Water Supply and Sanitation Initiative involves three categories of organisation who provide support:

- Civil society organisations. This includes Himmotthan Society (an associate organization of Tata Trusts) itself, which help leverage funds through Tata Trust and other like-minded agencies, whilst carrying out programme management and providing technical know-how to the activities. It is assisted by a local Implementation Support Agency. In this case we focus on one of them: the Himalayan Institute and Hospital Trust (HIHT).
- Government entities. Himmotthan liaises with the State and district governments on issues such as where to implement the programme. Also, the initiative builds on good practices developed by the State government's rural water supply programme, Swajal. Only recently, the relationship with the Gram Panchayats, has been strengthened to a more contributory one.
- Private sector. There is an independent agency that provides technical and oversight support to the programme.

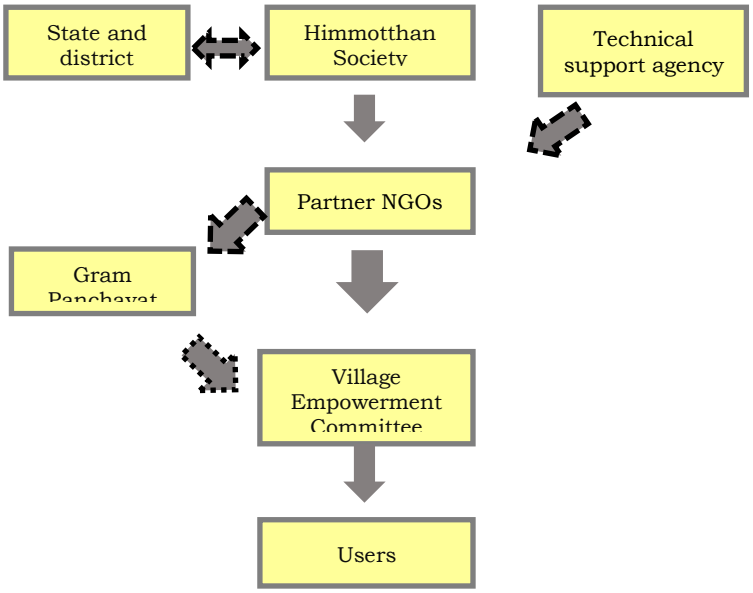

Figure 1: Financial flows for capital and recurrent costs

The water supply and sanitation initiative is implemented following a project cycle consisting of four phases: pre-planning (including pre-feasibility), planning, implementation and support to operation and maintenance. During the planning phase, communities can choose from three main technical options, but given the terrain gravity-fed piped schemes are the most common. Subsequently, as part of established exit policies (once the Trusts' support ceases), all assets created are handed over to the Village Empowerment Committee (VEC) for the operation and maintenance phase. To ensure the better follow up of previous phases project a full time staff has been appointed by the Trust through HIHT furthering more systematic monitoring and support to phased-out VECs in topics such as chlorination and book keeping.

Community service provider

The VECs are set up through the Himmotthan initiative, and are responsible for day to day operation and maintenance activities, as well as administration of the service. They sometimes employ a part-time village maintenance worker, but are also supported by voluntary labour contributions from the community. Though in general they perform well, some deficiencies are observed. For example, book keeping is rather basic. A particular challenge is chlorination, as chlorinators – particularly their regulators - are not robust and get damaged quickly.

The VECs in phased-out village also receive support from HIHT in some of those aspects, which is much appreciated by VECs and probably necessary to avoid that small issue become bigger problems. Another key area of support is around rehabilitation of damaged infrastructure, after floods and landslides, which occur with regularity in this mountainous area. Communities have insurances against damages to the head-works, caused by such events. HIHT has also directly financed some of these works.

Service received by households

All infrastructure was functioning well and in good condition. Damages incurred during the 2013 floods have been repaired. None of the systems, which were are 8 years to 10 years old, are coming to the end of its life-span.

The validation showed that the design service levels meet the standards norms of 40 lpcd for stand post and 70 lpcd for household connections. However, users report to take less water from their tap stands than what is designed for. This is likely to be a sub-estimation, as many users carry out some of the activities (doing the dishes and laundry) at the tap stands or at communal tanks. Other service level parameters, like quality, continuity and reliability do meet the standards. Though these systems provide a basic level of service, they do represent a huge improvement compared to the situation before – which could be witnessed in the nearby control village without any supply. Accessibility is very low there, as is satisfaction with the water situation.

Table 1: Percentages of households with different service levels (n = 81)

Service level	Design quantity	Quantity: reported use	Accessibility: reported time of single round trip	Quality perception	Continuity	Reliability
High	0	0	53	89	100	33
Improved	0	1	33		0	52
Standard	100	19	12	11	0	0
Basic	0	35	1	0	0	11
Low	0	46	0		0	0
No data	0	0	0	0	0	4

The costs

Capital investment costs are high at INR 15,350/person. This is in large part due to the difficult terrain, making costs of transport and implementation high. Though communities contribute 10% to hardware costs, some 30% of all capital costs is for software, implying that community contributions to the total are a bit less. Recurrent costs on the other hand are low, due to the fact that gravity-fed systems don't require expensive energy and pump maintenance and replacement. Communities cover almost all operation and minor maintenance, but they do receive important ongoing software support from the NGO.

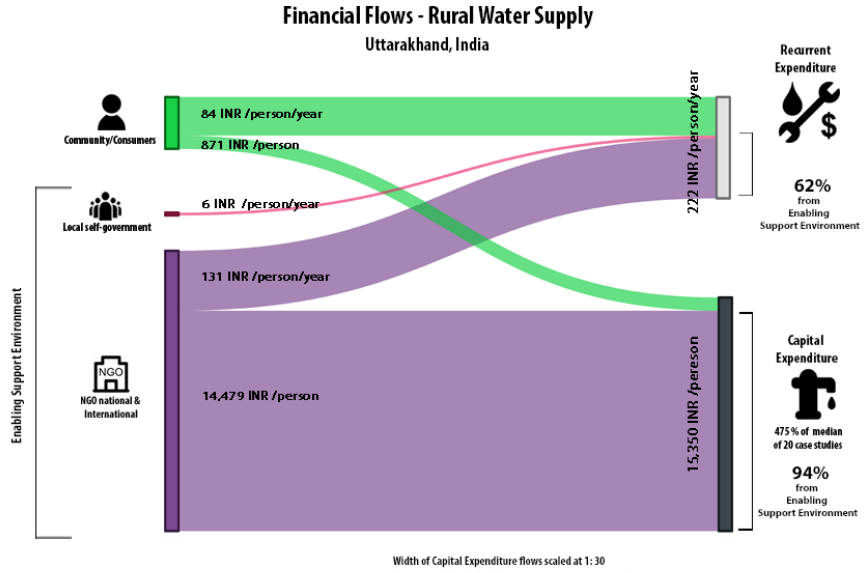

Figure 2: Financial flows for capital and recurrent costs

Conclusions

The study concludes that through strong and quality-oriented support during project implementation, necessary capacity is built for community management of these gravity-fed schemes. Communities do manage their systems effectively – though also inconsistencies on chlorination were observed. The recently started systematic support to phased-out villages is a key mechanism to address these deficiencies, as it allows for targeted problem solving and refreshing capacity of the VECs, and for which there exists a strong community demand. The other aspect in which the communities do need and get outside support is the replacement of works after damages caused by floods. After such events, communities need external funding and insurance pay-outs, as these costs cannot cover by the community itself at current tariff levels. It is through this combination of strong community management, and outside support, that these systems have been functioning and providing a level service that meets the design standard for almost 10 years.

About this note

This is a summary of a full case study as part of the Community Water Plus project. The original case study was written by Stef Smits, Ruchika Shiva and Depinder Kapur and the summary was prepared by Stef Smits. The full case study can be downloaded **http://www.ircwash.org/projects/india-community-water-plus-project.**

The project has investigated successful community-managed rural water supply programmes and approaches across India, and drawn out lessons on the support needed to make community-management successful. The project is funded by Australian Aid and is being implemented by a consortium of partners, including: the Administrative Staff College of India (ASCI), the Centre of Excellence for Change (CEC), Malaviya National Institute of Technology (MNIT), the Xavier Institute of Social Service (XISS) and IRC with overall project coordination provided by Cranfield University.

The research has been funded by the Australian Government through the Australian Development Awards Research Scheme under an award titled Community Management of Rural water Supply Systems in India. The views expressed in this summary sheet are those of the project and not necessarily those of the Australian Government. The Australian Government accepts no responsibility for any loss, damage or injury, resulting from reliance on any of the information or views contained in this summary sheet.