

## Community managed water supplies in rural Jaipur: Swajaldhara scheme 15 years on

### Rajasthan

# COMMUNITY MANAGEMENT OF RURAL WATER SUPPLY

## Community Water *plus*

### Three interesting features of this case

- Community management can work with minimal support but is susceptible to failure
- A safe sustainable source of water is a limiting factor in the service, which is beyond the technical and financial capabilities of community service providers
- Villages studied have experienced varying degrees of urbanisation, which has led to v increase in demand for water for domestic purposes. Hence, water systems must keep pace with economic development.
- With the change in funding patter by Government of India that is increasingly channelling the funding through Panchayat Raj Institutions, public water utilities need to shift their focus on supporting community service providers from centralised, engineering-focused interventions

### Key data on the Rajasthan context

All India data for reference in parenthesis

Water supply coverage: 87% (96%)

GDP per capita: \$3,763 (\$4,243)

HDI: 0.434 (0.467)

Devolution Index Rank: 6 out of 24

Photo: Rajesh Poonia

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 arrangements for support to community-managed Swajaldhara schemes in Rajasthan, and their costs.

Rajasthan is a semi-arid area, suffering from acute water resource challenges, where community-managed open wells, private wells, ponds and small-scale irrigation reservoirs have been the traditional sources of rural drinking water. Due to a rapidly growing population and increased demands for water, these water resources are increasingly unreliable. Swajaldhara was an early attempt by the Government of India to roll out community managed water supplies across the country. In Rajasthan, this saw infrastructure being financed jointly by the government and communities before being handed over to communities to run independently, but with little on-going support. This often leads to failing services. But positive exceptions exist, some of which are discussed here.



## The enabling support environment

The Public Health Engineering Department (PHED) has been responsible for the water services in urban and rural areas in this state. Its main role is seen as the sanctioning and technical design of new rural water supply schemes, with limited work on generating demand and sensitizing villages.

The Water Supply Support Organisation (WSSO) – a wing of the PHED, provides training and other awareness activities.

A chain of committees was created within the PHED to implement programmes and monitor progress at the State, District and Village level.

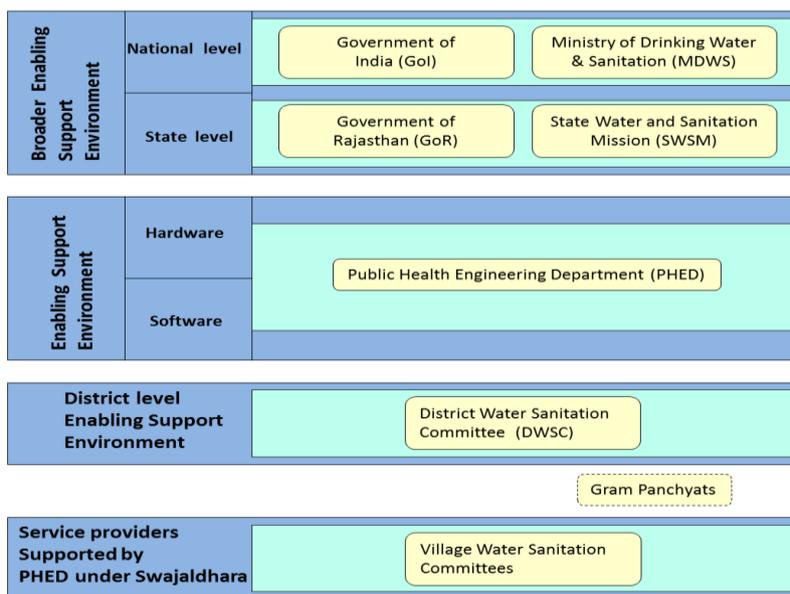


Figure 1 Institutional set-up in Swajaldhara

The support to Village Water and Sanitation Committees was provided by field-level staff of the PHED. The PHED also advises the VWSC on the need for asset maintenance and replacement, though capital replacement decisions and costs were purely the responsibility of the VWSC. Finally, the PHED was responsible for conducting regular water quality tests. However, implementation of this was not consistent, and results were infrequently fed back to the VWSCs. Through this case study it became apparent that the PHED also provided a range of other support to VWSC, however inconsistently - relying on both the individual staff providing support and communities actively seeking that support – with little in the way of tools to support communities as opposed to building infrastructure. The PHED was found to be heavily focused on current initiatives, and not paying much attention schemes earlier implemented. The majority of support provided by the PHED was in the capital investment phase.

Gram Panchayats also played an undefined supporting role at the village level by occasional financial support to Village Water and Sanitation Committees; the Gram Panchayat office was used as a meeting place and office for the Committee; the Sarpanch, an ex-officio Chairman of the Committee, provided a link between the two bodies at a local level.

## Community service provider

The community level service provider was the Village Water and Sanitation Committee (VWSC). According to the Swajaldhara guidelines, once the water supply system was operational, the PHED had no further role to play. The VWSC was responsible for financing and operating the system, whilst the technical member of the VWSC took the lead on maintenance and asset renewal. Under the Swajaldhara scheme each community had to establish a formal VWSC. These VWSCs were the owners of the infrastructure and responsible for the maintenance and operation of it. Although established as a sub-committee of the Gram Panchayat, they were legally and largely operationally independent – the key link between the Gram Panchayat and VWSC was the Sarpanch who chaired the VWSC. There were at least 11 members of each VWSC and no formal quotas for the inclusion of women or other marginalised groups. Elections took place every five years in line with the Gram Panchayat elections and appeared to happen in a systematic and fair way. All the VWSCs had minimal staffing levels – such as a pump operator. Activities such as bill collection were either carried out by the pump operator or on a volunteer basis. For larger maintenance roles, day labourers were employed as and when they were needed.

There were significant differences in the performance of the VWSC, in two villages VWSCs somewhat seem to function on a more formal basis with regards to record keeping, and also manage significant cash reserves. This formality may be a result of the larger village forcing the VWSC to operate more as a conventional service

provider. Although the Swajaldhara programme was intended to be community oriented, there was little evidence of active engagement with communities as a whole.

### Service received by households

The table below provides data on the service levels received by households. It indicates that 70% of the households has piped water supply. The remaining households depended largely on PHED maintained handpumps or public stand posts. The alternative sources used were very different in these villages. In all villages studied, the coverage was equal to or greater than overall coverage for the marginalized communities, suggesting an equitable service.

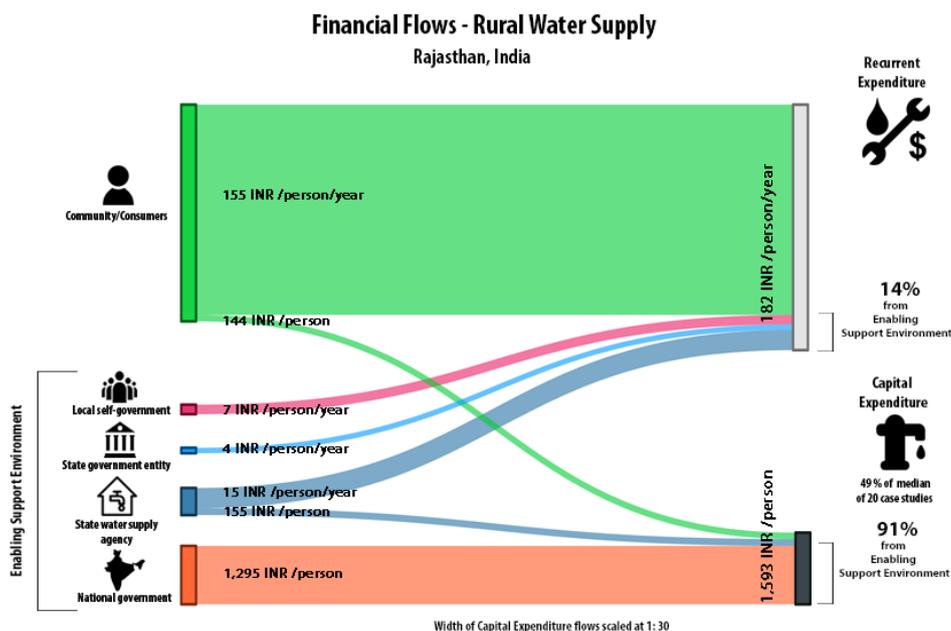
The household surveys undertaken in the study gave an insight into the service levels people received in the villages. The data show that both quantity and continuity were not meeting standards for a significant part of the households. This also meant that more than half of households reported being only somewhat satisfied or not satisfied with the service received. All households that used a handpump as their primary source reported being less than very satisfied, predominantly because of fluoride issues.

**Table 2: Service levels**

Service Level	Quantity %	Accessibility %	Quality %	Continuity %	Reliability %
High	23%	100%	67%	0%	27%
Improved	9%	0%	0%	0%	57%
Basic	22%	0%	27%	21%	0%
sub-standard	23%	0%	6%	79%	14%
no service	24%	0%	0%	0%	2%

### The costs

Capital costs - of a total of 1593 INR/person - are largely done the national government scheme covering over 80% of these costs. The state water supply agency – PHED- covers close to 10%. Community contributions to the initial implementation costs are close to 10% as prescribed in the Swajaldhara guidelines. Of all the capital costs, around 4% is for software support, however no significant evidence of this could be found.



**Figure 2: Financial flows of capital and recurrent costs**

In terms of recurrent costs, these come mainly from community contribution. Of the 182 INR/person/year, communities pay around 85%. These are roughly the costs of minor operation and maintenance, for which they pay for electricity, labour, chemicals and minor repair. Where capital maintenance has taken place, communities have taken up these costs. Some villages even have built up any reserves. But, this is seen as mostly meeting the costs of unforeseen emergencies, rather than being available for investment in improved services or infrastructure replacement in the future. Some minor contributions are made by the PHED towards maintenance as well.

## Conclusions

The villages in this case study (located in Jaipur District, Rajasthan) have been provided with drinking water supplies through the Swajaldhara programme: an early attempt by the Government of India to promote widespread community management of rural water supplies. Although they have been provided with high quality infrastructure, and receive improved water supplies (typically household connections), the long term success in individual villages is variable. Whilst the state of Rajasthan does provide limited on-going support through the PHED, this is largely limited to technical issues and is reactionary – dependent on villages recognising the problems they face and seeking support. This has allowed community service providers in some villages of the villages studied to fail, resulting in a reduced service to households, and there are concerns over sustainability in others.

## 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 Benjamin Harris, Dr Urmila Brighu and Rajesh Poonia. The full case study can be downloaded <http://www.ircwash.org/projects/india-community-water-plus-project>



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