#### The case of the Department of Water & Sanitation Development

# COMMUNITY MANAGEMENT OF RURAL WATER SUPPLY Community Water <sup>plus</sup>

Jharkhand

# Three interesting features of this case

- DWSD provides a matching grant to the audited records of user tariff collection, which incentivises VWSC to collect them
- Jharkhand is a new and poor state and there are many challenges ahead; the case represented here is a relative success in a public programme in this State
- Block Resource Centre works as a 'phantom' institution

#### Key data on the Jharkhand context

All India data for reference in parenthesis Water supply coverage: 96% (96%) GDP per capita: \$2,632 (\$4,243) HDI - 0.376 (0.467) Devolution Index rank: 21 out of 24 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. In this document we capture the inputs that contributed in improving water supply to households and an assessment of the costs incurred in this programme of the Department of Water and Sanitation Development (DWSD) in Jharkhand.

Since Jharkhand's formation in the year 2000, piped water in the state is being managed and expanded by the newly constituted DWSD. To foster its management DWSD is involving the community through Village Water and Sanitation Committee (VWSC). DWSD is providing technical and financial support both on supply and request basis, while VWSCs are responsible for its operation and maintenance. The type of support arrangement between DWSD and VWSC is classified as community management with direct support, bordering on direct public provisioning since DWSD extends heavy financial subsidy for operational expenses.



#### The enabling support environment

DWSD and its district counterparts provide an Enabling Support Environment for the VWSCs, many of which are in nascent stage and yet to evolve into a strong body which can take on the financial and administrative management of water supply. Concretely, the support provided by DWSD includes:

- Training: Training is provided to the VWSC in service delivery, training 'Jal Sahiya', the water volunteer in water quality testing, and conducting minor repairs and book keeping.
- Subsidies: Financial support spans from initial capital investment to major and minor repairs. Payment of electricity bills, a major operational expenditure, is also done by DWSD. DWSD managed advocate with Electricity to Department to get the electricity rate for drinking water abstraction slashed thus reducing the overall operational expenditure. Finally, annual grant matching the amount of user tariffs collected, while being a financial support also incentivizes VWSC to collect them.

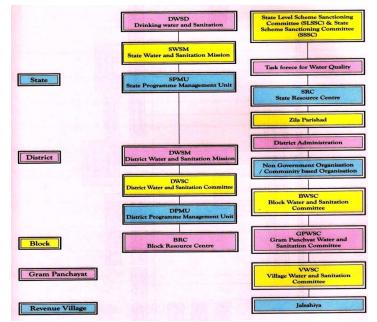


Figure1: Institutional structure of the Water and Sanitation Programme in Jharkhand

- **Monitoring**: DWSD carries out monitoring visits by its engineers, and hires private auditors for auditing VWSCs activities.
- **Guidelines:** DWSD has developed operational guidelines and IEC materials for extensive awareness initiatives.
- **Technical advice:** Sometimes on request support is also extended like plumbing, electrical work and minor repairs. Proximity of DWSD offices and approachability of junior engineers in Bero and Khijri allows VWSC to get DWSD advice. DWSD responds and solves complaints received on toll free number.

#### **Community service provider**

At the community level it is the VWSC is managing the piped water scheme. Their roles include -

- Carrying out all operation and maintenance work. Though the VWSC do these works, it is the DWSD that often pays for spares and takes up some minor repair works.
- Collecting tariffs and managing accounts and cash.
- The 'Jal Sahiya', is responsible for water quality testing and communicating committee's decisions to the villagers. She is one of the village daughter-law which helps in retaining the trained resource.
- Though the VWSC is closely linked to the Gram Panchayat, it functions independently for all practical matters such as receiving grants from DWSD or making autonomous decisions.
- The VWSCs in all four villages have professionalised certain tasks and employed staff like pump operators, bill collectors, mechanics and guard. Their salaries are paid from the collected tariff. The number of staff depends on the size and scheme complexity. All committee charge minimum tariff initially but subsequently increase it to meet more of their operational expenditure.

## Service received by households

The villages are mostly covered by household connections or have private wells, hand pumps or boreholes. The service level received is presented below:

	Quantity	Accessibility	Water quality perception	Continuity	Reliability
High	26	87	74	2	98
Improved	9	2	0	9	1
Basic	32	1	16	51	0
Sub-standard	20	5	10	37	1
No service	13	5	0	0	0

Table 1: Distribution of households with different service levels summary (n=90)

Assessment of VWSC managed piped water system indicated that the majority of consumers in the villages were receiving acceptable service levels, which confirms the effectiveness of service provision. However, only 15% to 42% of households are connected to the piped water scheme, whilst the rest rely on other sources.

Particularly accessibility and reliability score high, but still 33% of users receive unacceptable quantity. And around 37% receive water for less than one hour a day, which shows that major challenges remain. Interestingly, perceived quality is slightly higher in the control village, and perceived reliability is uniformly high.

Equity is an issue as the marginalized households located at the periphery by default remain out of the purview of piped water scheme.

#### The costs

Capital costs - of a total of 3638 INR/person - are largely done by the external support entities in the study area. The national government and the state water supply agency (that is DWSD) cover half each of these costs. There was no community contribution to the initial implementation costs. Of all the capital costs, around less than 1% is for software support, that is staff time devoted towards mobilising the community and training the VWSC in the operation of the scheme. In terms of recurrent costs, it is to be noted that again a major part comes from the external support entities. Of the 97 INR/person/year, communities pay around 29%. These are roughly the costs of minor operation and maintenance. Local government contributions are the costs of major repairs - capital maintenance like purchasing new or repairing a burnt motor. Out of this, INR 15 are direct support costs, INR 53 for operation and maintenance and INR. 1 for indirect support.

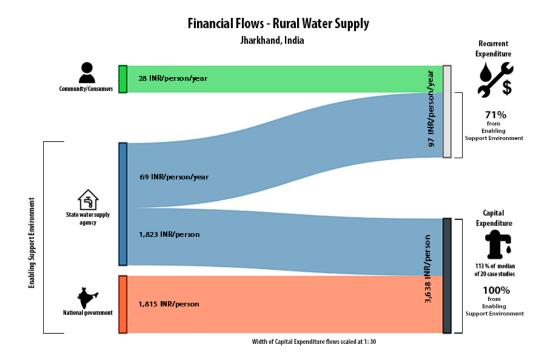


Figure 2: Financial flows for capital and recurrent costs

### Conclusion

The case study concluded that DWSD is the institution responsible for implementing water supply schemes and supporting the VWSC through qualified technical staff, good leadership, monitoring functionality, auditing, water quality testing. This kind of partnering between DWSD and VWSC is transactional type, which is common in a government department supporting a large number of service providers.

In the studied villages quite intensive, but informal, additional support is given to the VWSC involving technical assistance by advising on scheme implementation and providing plumbers or electricians to assist in minor maintenance and repairs.

These costs borne by DWSD are the 'plus' component that supports the sustainable functioning of communitymanaged rural water supply systems in Jharkhand. Although most of the operating costs are paid by DWSD and department staffs are involved in day to day operation and maintenance, the VWSCs are functioning effectively, involve the community in all decisions and raise enough money through tariff collection to pay their staff. The VWSC functions independently from the Gram Panchayat.

Household surveys to verify the effectiveness of service provision for users indicated villages receive largely acceptable services, even though about a third don't receive adequate quantity and continuity. Moreover, connection rates are quite low and in absence of public stand posts reliance on other water sources are high, therefore efforts to increase the number of connections are required. VWSCs would need to increase their revenue dramatically if they should pay for the entire operating expenses, as tariffs currently only cover a small part of it and DWSD is directly subsidizing service provision by paying for electricity bills and minor maintenance.

The type of service provision model can be classified as 'community management with direct support' bordering to 'public provision with community involvement'.

#### 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 Prakash C Dash, Pramil K. Panda, Ragini Sinha and Matthias Javorszky. 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.

