



Community management of rural water supply systems

Policy Brief

Research objective.

The aim of this 'Community Water *plus*' research project has been to give DFAT Australian Aid, other donors, IFIs and low-income country governments the evidence base to determine and justify the investment *and ongoing resources* needed to support community rural water services in low-income countries over the long-term.

The research was undertaken in India so as to capture the widest possible range of community management experiences, by wealth, by hydro-geological conditions, by approach by government and by donors and NGOs.

'Communities can and do manage!'

The research found that communities can and do make a meaningful contribution towards the self-management of their water services – either through good use of the remarkably empowered local self-government in India (Gram Panchayat) or through the autonomy (and accountability) delivered through registration of the village water committee under the Societies Act.

'Communities will pay a little'

Successful community management is also a function of delivering services that householders want. The change to piped rural water supplies in India, now complemented by the trend towards individual household piped service appears to lead towards a stronger willingness to pay for those services.

METHODOLOGY

- These findings are based on the results of 20 detailed case studies of 'successful' community managed rural water supply systems across 17 States. This range covered low, middle and high-income States, enterprise focused and social development focused States and the whole range of hydrogeological conditions.
- The research approach required surveys with 30 households in three successful 'villages' with a 'control' village also similarly surveyed in each case. The role and resources of the community water service provider and the 'enabling support environment' were investigated through key informant interviews and document analysis.

KEY MESSAGES

- 'Communities manage!'
 - 'Communities will pay
a little'
 - 'Communities need ongoing support'
- To sponsors:**
- 'Go big or go home!'
 - 'If you built it, you own it'
 - 'Sanitation requires water'

However, we found that even in the higher-income states willingness to pay anything more than operation and minor maintenance costs is fairly limited – just as it is in urban water supply in India.

'Communities need ongoing support'

As shown in the table below, we found that:

- The principle that communities should cover close to 100% of operation and maintenance costs for rural water services is not followed in successful community management programmes in India;
- These programmes include substantial recurrent support from government and other agencies (around 50% of recurrent costs for piped supply);
- A lot of this support is through unrecognised subsidies' such as reduced power charges or the provision of bulk water at less than cost;
- If other countries want the same levels of success then there is a need for government (or donors) to finance a significant proportion of recurrent costs including direct subsidy to cover operation and maintenance; The results also indicate a very substantial external support for capital maintenance (including enhancement and expansion) at approximately 85% of the total.

However, the research did find that the improved level of service delivered through household piped connections, and its subsequent vulnerability to a single pump failure, delivered a much strengthened determination to ‘fix on failure’. Whether through community savings, special collections or appeals to local government, communities were able to repair or replace pumps quickly.

For longer-term capital maintenance of (long-life) pipe networks, along with service extension and enhancement, the summary table shows the extent of ongoing support from government at about 85%.

To sponsors: ‘Go big or go home’

These results suggest to us that donors and governments now need to be ‘thinking bigger’ in terms of both the level of service to be enabled and in the initial commitment to community sensitisation and empowerment, at a minimum of 10% of the higher capital expenditure on piped services (not necessarily to the household in the first instance).

Where hydro-geological conditions do not allow for single borehole support to a piped network then a government entity will be required to manage a bulk water supply. Communities remain quite capable (better?) at managing the village distribution network of the bulk supply delivered to an overhead service reservoir. This also

Summary of Capital Expenditure per person for successful community managed water

INR60/USD PPP3.4 (2014)	Capital Expenditure (InterQuartileRange)		Recurrent Expenditure (InterQuartileRange)	
High Service Level Community Performance	\$184-\$247		\$6-\$32	
Medium Service Level Community Performance	\$73-\$279		\$6-28	
Low Service Level Community Performance	\$93-\$281		\$5-\$13	
	CapEx Hardware	CapEx Software	CapEx Community	Recurrent shares
Mean (%)	84%	11%	5%	table below
Inter Quartile Range	99%-87%	1%-7%	0%-7%	

Summary of Recurrent Expenditure per person for successful community managed water

	OpEx direct support	OpEx enabling support	OpEx community	CapManEx support hardware	CapManEx support software	CapManEx community
Mean (%)	26%	21%	53%	82%	3%	15%
Inter Quartile Range	1%-30%	6%-18%	52%-93%	79%-89%	0%-0%	11%-21%

run’ style funding of water improvements is not effective.

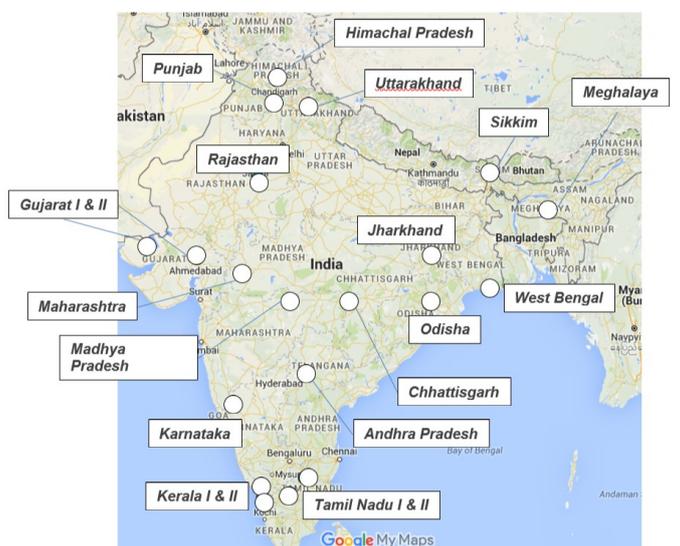
- Communities cannot manage everything – support to bulk water supply and/or power costs continues to be needed – and it is the external sponsor (capex provider) who remains responsible for ongoing support;
- Delivering an unaffordable water supply (through the common 90% contribution to initial investment) means that communities cannot be expected to deliver capital maintenance in the short term;
- By building big, capital maintenance is less of a challenge and community funds may well be able and willing to pay for pump replacement as well as repairs to pipeline bursts.
- But should we stop talking of community management in India? And move towards a discourse of “co-production” that more accurately clarifies the shared contribution of government/external agencies and communities

‘Sanitation requires water’

There is a welcome emphasis now on the need for improved sanitation to ensure public health for all in addition to specific benefits for women and children. In policy terms it must be recognised that this is not an ‘either/or’ choice – good sanitation depends upon good water supply: “Sustained toilet use, both at the individual or community level, cannot be ensured in the absence of water” <http://sanitation.indiawaterportal.org/english/node/4585>

Further reading

The research overview is available as Hutchings, P., Franceys, R., Smits, S. and Mekala, S. 2016 *The future of rural water supply*, Earthscan, London, forthcoming. The individual case study reports and summaries and research protocols can be found on the website as below:



ensures that the power costs are largely covered by the bulk supplier, reducing operations costs and more easily allowing for only partial payment through user charges.

‘If you built it, you own it ...’

Donors and governments are advised that a ‘chuck and

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This document is an output from research funded by DFAT. The views and opinions expressed in this document are those of the authors and do not necessarily reflect the views of DFAT or the Australian Government.

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Research project website for further information: <http://www.irwash.org/projects/india-community-water-plus-project>