

**40<sup>th</sup> WEDC International Conference, Loughborough, UK, 2017**

LOCAL ACTION WITH INTERNATIONAL COOPERATION TO IMPROVE AND  
SUSTAIN WATER, SANITATION AND HYGIENE SERVICES

**Community Water Plus: results from an investigation into  
community-managed rural water supply in India**

*P. Hutchings & R. Franceys (UK)*

PAPER 2634

---

*This paper reports on the outcomes from the 'Community Water Plus' (2013-2016) project that was designed to give donors, IFIs and low-income country governments the evidence base to determine and justify the ongoing resources needed to support community rural water services. The research demonstrated that significant recurrent financing from government and other sources subsidised the costs of services in successful community management programmes in India. The Gram Panchayat, the local-self government institution, also provided on-going support and carried out everyday operation, maintenance and administrative functions. The implications of the Indian experience are that successful rural water service delivery requires such significant on-going support, including funding and the delivery of key functions, that it is better to conceive of it as a form of coproduction between state and citizens, rather than community management, and governments should allocate resources accordingly.*

---

## **Introduction**

Community management is the most common model for rural water supply, but it has limitations, particularly when it comes to the ability to sustain services over the long-term. In an effort to identify what works and what doesn't when it comes to community management, the Community Water Plus (2013-2016) project investigated successful community-managed rural water supply programmes and approaches across India. The project was funded by DFAT (Australian Aid) and was 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, Netherlands, with overall project coordination provided by Cranfield University. It also worked closely with national and State government agencies as well as civil society partners, including delivering training workshops on supporting community management to officials from over 15 Indian States. This paper reports on the major research outcomes from the project and considers their implications.

## **Methods**

The findings reported are based on the results of 20 detailed case studies of 'successful' community managed rural water supply systems across 17 Indian States based on a stratified purposive sampling approach. The range of cases covered low, middle and high-income States, enterprise focused and social development focused States, and a range of hydrogeological conditions. The research approach focuses on documenting the role and resources of community service providers (e.g. water committees) as well as the enabling support environments in which they operate. Interviews (272), focus groups (130), household surveys (2,355) and document analysis were employed to investigate each case study. Methodologically, the research bridged the conventional divisions between 'small-n' qualitative and 'large-n' quantitative studies seeking to triangulate both approaches to deliver synthesized evidence across the twenty case studies on financial costs, institutional systems and performance, and service levels. A full overview of the methodology is available from Smits et al. (2015).

## Results

The research showed that there are communities successfully managing their own water supply across India but only with significant levels of support. Two main institutional approaches were found: managing as a sub-committee of the Gram Panchayat (a government resource empowered village council) where the Chair and Secretary (and Treasurer) of the council duplicate these roles in the Village Water and Sanitation Committee; secondly where the sub-committee is given autonomous status under 'The Societies Act'. In this setting the role of the charismatic leader (engineer) becomes more important and the approach is more similar to conventional ideas about independent water committees.

The research had originally been predicated on the existence of successful community management handpump supplied rural water, albeit with an emerging trend towards piped schemes. The reality of successful schemes reported to the researchers, and then investigated, was that all (almost all) were now piped schemes, many with an increasing emphasis on piped supplies to individual households. The research found that this has changed the psychology of sustainability in that pipe networks and overhead reservoirs are inherently robust and long-lived. Communities, when empowered, are very good at reporting and expecting the early repair of leaks in pipes. And when the critical pump infrastructure fails and everybody is without their household water for a period then solutions for repair or repurchase are quickly found. This is a very different situation from the past when a handpump fails and users (women) are expected simply to carry on walking to the next nearest or back to the stream with little apparent societal incentive to repair.

The research found that for this improved level of household service consumers were prepared to pay for their access to water, both in obtaining the initial connection and in contributing to the ongoing expenses of running the service. The results indicate that consumers are prepared to pay more for the service where there is successful community management. However, it was not possible to differentiate the extent to which this was due to a sense of community ownership or the level of service which good community management has delivered. The research found that, on average, consumers are prepared to pay for ongoing operation and minor maintenance costs. In the higher service level systems there are moves towards saving for and paying for capital maintenance of pumps.

The hypothesis of this 'community water plus' research was that communities need not only initial support but also ongoing support to deliver good services. The results confirm this hypothesis overwhelmingly, the figure indicating, on average, a fifty-fifty sharing of operating costs (often through little recognised power cost subsidies for 'public water supplies', an important issue for piped systems). The results also indicated a very substantial external support for capital maintenance (including enhancement and expansion) at approximately 85% of the total.

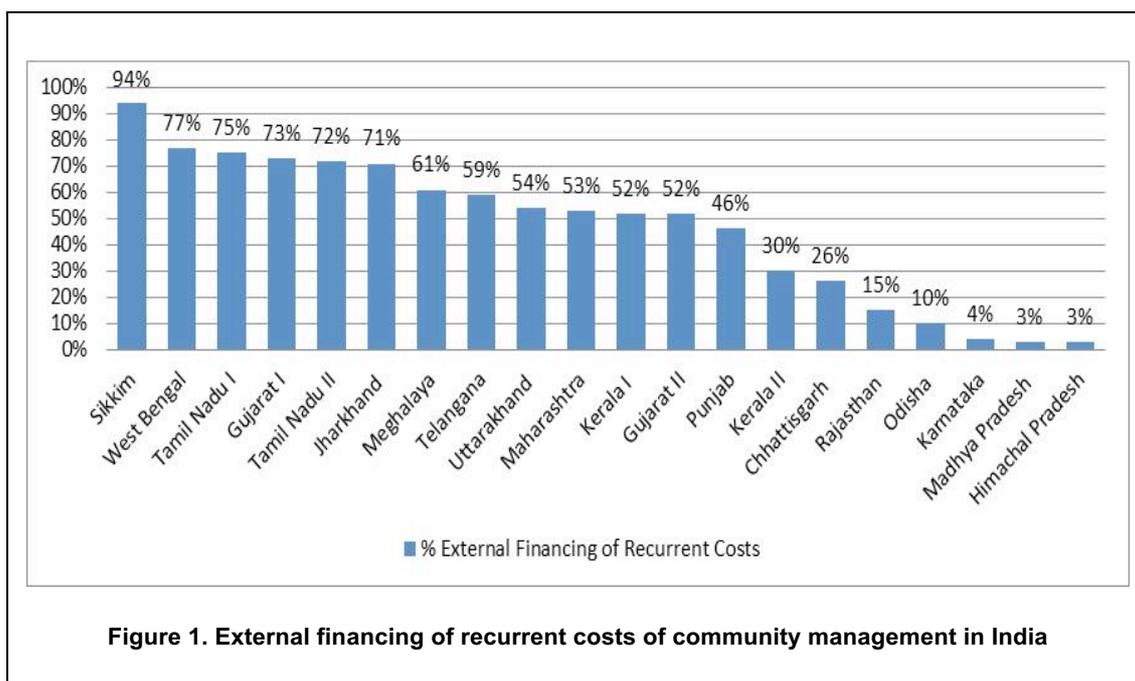
## Implications and conclusions

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 their on-going support commitments. In situations 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 and incur the majority of costs for doing so. This also 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. Communities remain quite capable at managing the village distribution network of the bulk supply delivered to an overhead service reservoir.

Donors and governments are advised that a 'chuck and 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;
- 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

A more comprehensive research overview is available as Hutchings et al. (2017). The individual case study reports and summaries and research protocols can also be found on the website at: <http://www.ircwash.org/projects/india-community-water-plus-project>.



### Acknowledgements

This paper is an output from the Community Water Plus project, a three-year research investigation funded by the Department of Foreign Affairs and Trade (DFAT) of the Australian government as part of the Australian Development Research Awards Scheme (Grant: 66470). The research was undertaken by a consortium of partners including the Administrative Staff College of India (Hyderabad), the Centre of Excellence for Change (Chennai), Malaviya National Institute of Technology (Jaipur), Xavier Institute of Social Service (Ranchi), IRC from The Netherlands and Cranfield University, UK, who were also responsible for overall project coordination.

### References

- Hutchings, P. Franceys, R. Smits, S. and Mekala, S. (2017). *Community management of rural water supply: case studies of success from India*. Earthscan Studies in Water Resource Management. Earthscan Routledge: London.
- Smits, S. Franceys, R. Mekala, S. and Hutchings, P. (2015). *Understanding the resource implications of the 'plus' in the community management of rural water supply systems in India: concepts and methods*. IRC: The Hague. Available from: <http://www.ircwash.org/resources/understanding-resource-implications-%E2%80%99plus%E2%80%98-community-management-rural-water-supply-systems>

### Contact details

*Dr Paul Hutchings is a Lecturer in WASH Impact Evaluation at Cranfield University. He worked under Dr Richard Franceys on the Community Water Plus research project at Cranfield. Richard now works as an independent consultant.*

Dr Paul Hutchings  
Cranfield University  
Tel: +44 (0) 1234 750111 x8352  
Email: [p.t.hutchings@cranfield.ac.uk](mailto:p.t.hutchings@cranfield.ac.uk)  
<https://www.cranfield.ac.uk/people/paul-hutchings-805215>

Dr Richard Franceys  
Water and Sanitation Management (Consultant)  
Tel: +44 (0) 7443617842  
Email: [richard@franceys.co.uk](mailto:richard@franceys.co.uk)  
<http://www.franceys.co.uk/about-us>