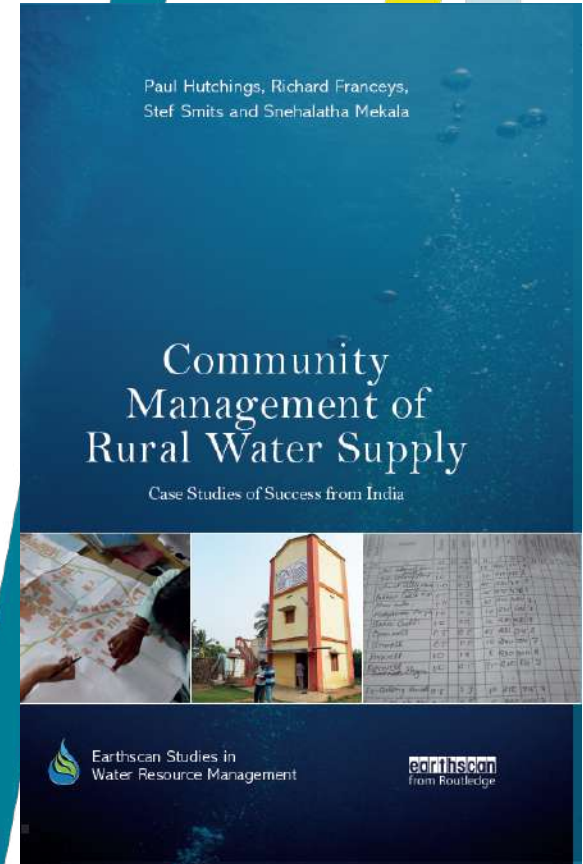


IRC

Supporting water sanitation
and hygiene services for life

Community Engagement in the Management and Ownership of Rural Drinking Water Supply

Richard Franceys
Ruchika Shiva
February 2023



Supported by



Why Community Engagement?

- Better chance of **sustainability**: effectiveness of outcomes over time
- At (*possibly*) lower overall cost
 - Local involvement can find local solutions
 - Higher cost recovery, where needed
 - Volunteer labour can be cheaper
- **Community Management+ Research:**
 - What level of support is needed, both institutional and financial?
 - Whilst ensuring the benefits of 'community'



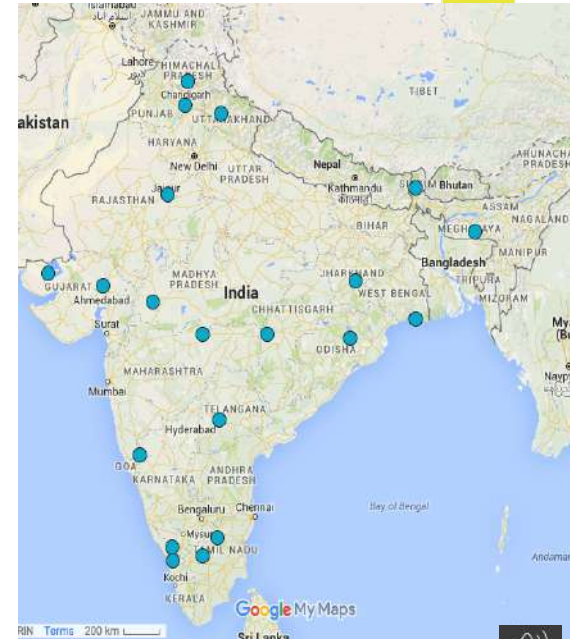
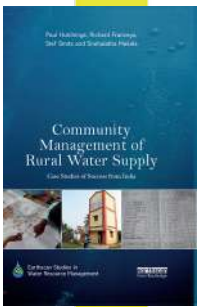
CM+ Research Methodology

The findings reported 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 wide range of hydrogeological conditions.

The research approach required surveys with 30 households in each of 3 'successful villages' plus a 'control' village (2,355 household surveys).

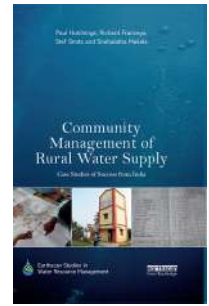
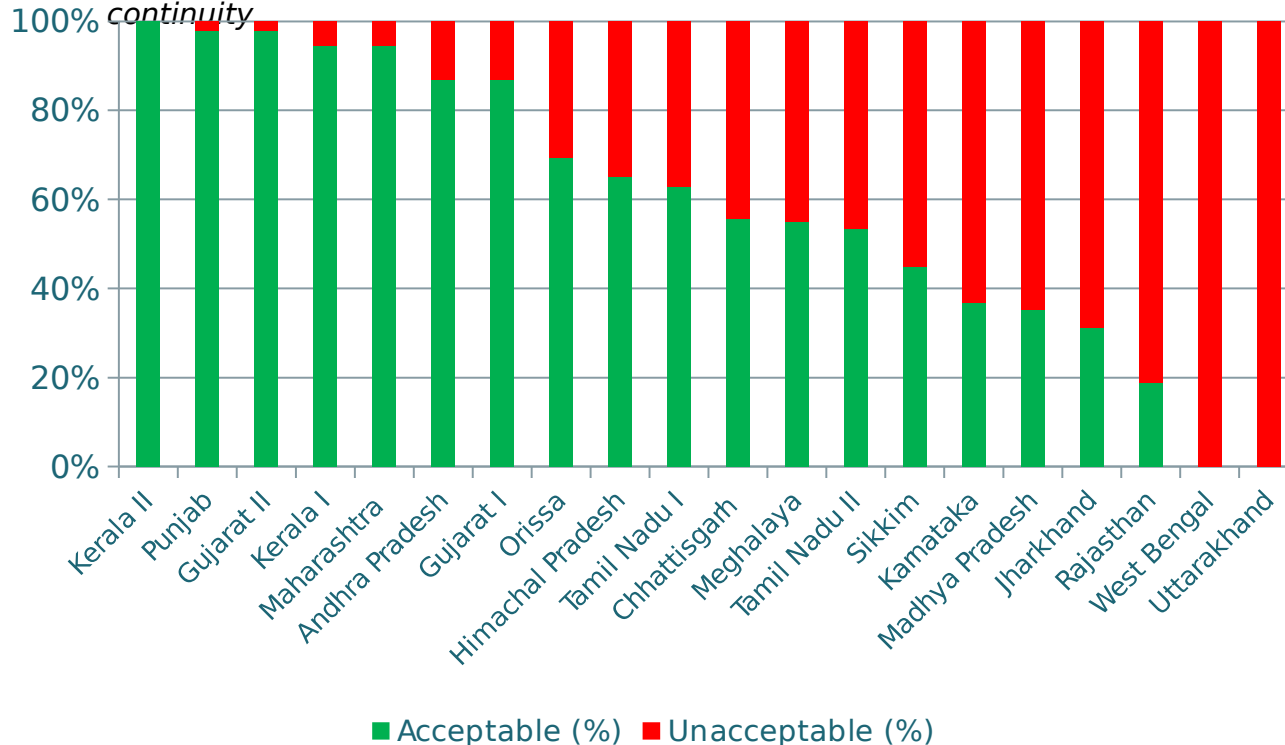
And we investigated the role and resources of the **community water service provider** and the **'enabling support entities'** through key informant interviews (272), focus groups (130) and document analysis.



Service levels

Reported via household survey (n ≈ 90 for each case study)

A composite indicator: quantity, accessibility, quality, reliability & continuity



Communities can and do manage!

- The reality of successful schemes reported to the researchers was that almost all were piped schemes, many with an increasing emphasis on pipelined supplies to individual households.
- The research found that this has changed the psychology, as well as the technology, of sustainability in that pipe networks and overhead reservoirs are inherently robust and long-lived (relative to handpumps).
- And communities, appreciating better piped services, when empowered are good at reporting, and expecting the



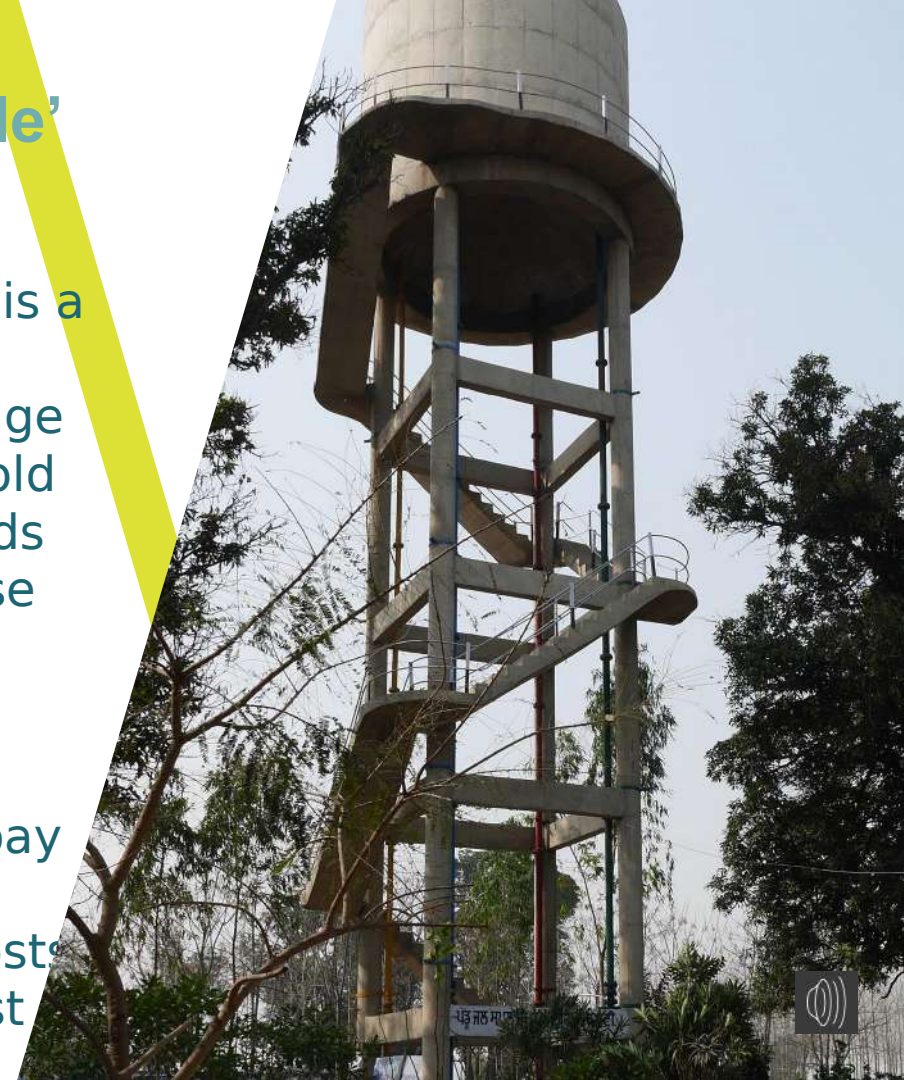
Communities can and do manage!

- And when the critical pump infrastructure fails, and the whole community is without their convenient household water for a period, then solutions for repair or repurchase are quickly found.
- A very different situation from the past when a handpump failed and users were expected to carry on walking to a further away pump or back to a stream with little apparent societal incentive to repair, resulting in the approx. 30% of handpumps always being out of action.



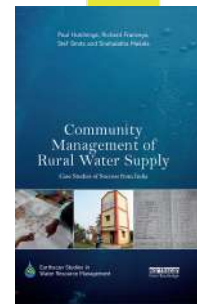
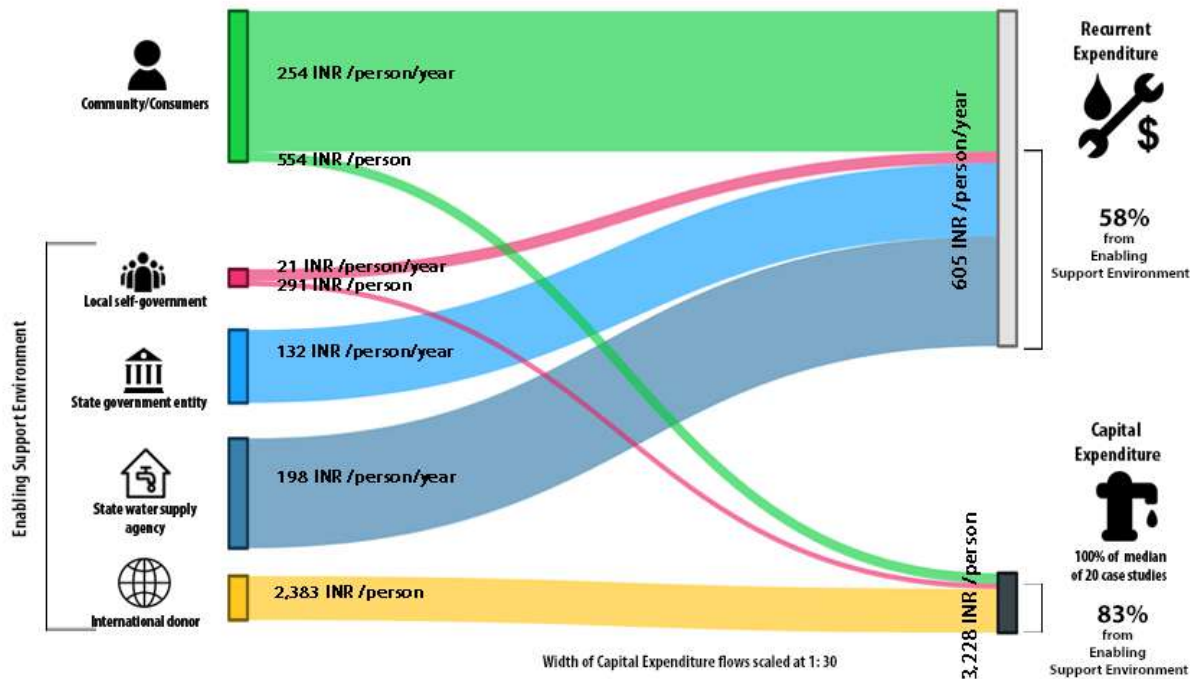
‘Communities will pay a little’

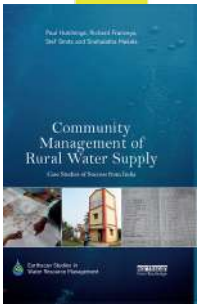
- Successful community management is a function of delivering services that householders (really) want. The change to piped, and now individual household piped service, appears to lead towards a stronger willingness to pay for those services.
- However, we found that even in the higher-income states willingness to pay anything more than a proportion of operation and minor maintenance costs is fairly limited – just as it is in urban water supply.



The financial research (*'Sankey diagrams'*)

Financial Flows - Rural Water Supply Kerala Nenmeni, India





Capital Expenditure

	CapEx Hardware Support	CapEx Software Support	CapEx Community
Mean (%)	84%	11%	5%
Interquartile range (IQR)	99%-87%	1%-7%	0%-7%

Operational Expenditure and Support

	OpEx direct support	OpEx enabling support	OpEx community
Mean (%)	26%	21%	53%
IQR	1%-30%	6%-18%	52%-93%

Capital Maintenance Expenditure

	CapManEx support hardware	CapManEx support software	CapManEx community
Mean (%)	82%	3%	15%
IQR	79%-89%	0%-0%	11%-21%



How do communities manage?

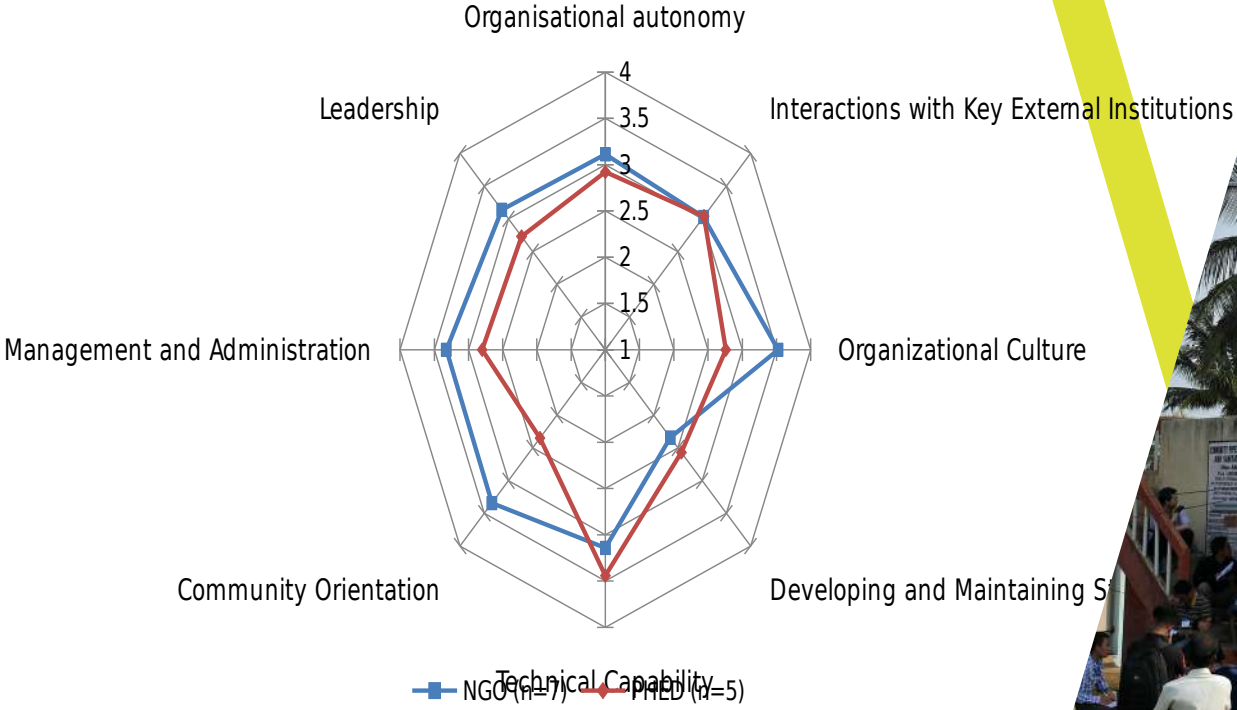
- Two main approaches are apparent:
- the Village Water and Sanitation Committee managing as a sub-committee of the Gram Panchayat where the *Chair, Secretary & Treasurer of the council duplicate these roles*;
- and secondly where the sub-committee is given autonomous status under **'The Societies Act'**.
- In this setting the role of the *convincing leader* (often an engineer) becomes more important.
- 10 • Both of these only being successful in



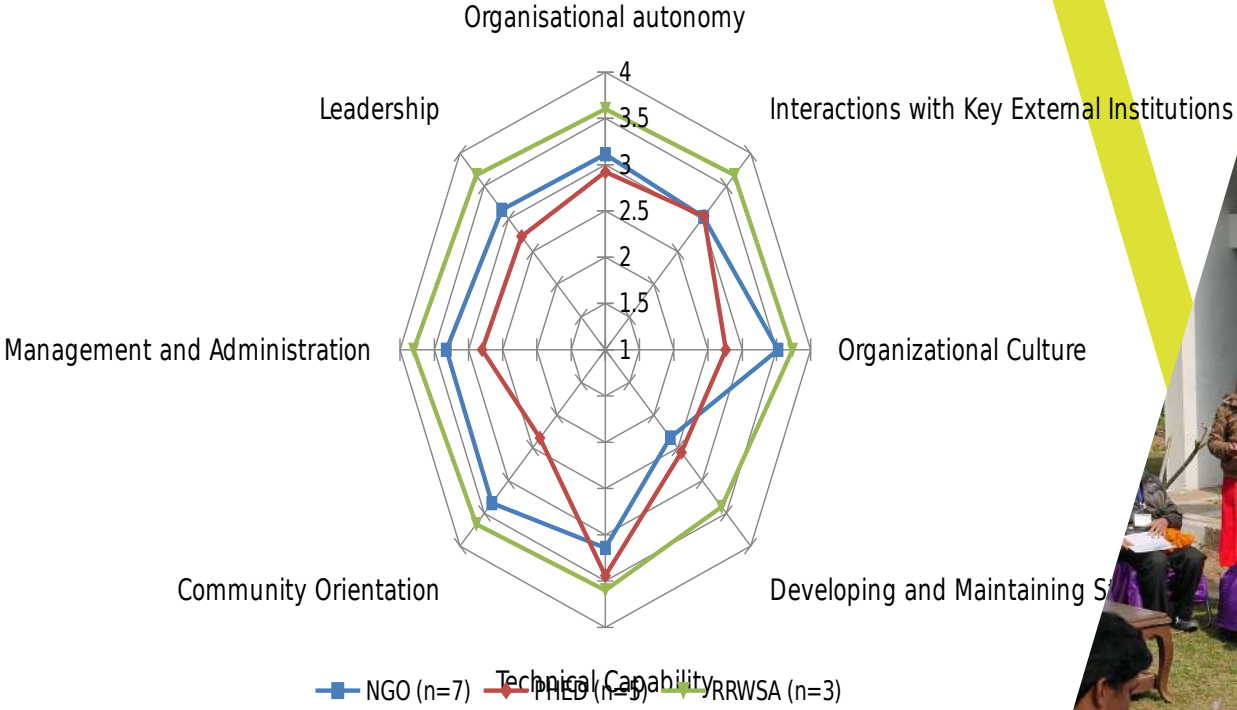
The requirement for effective Enabling Support Entities



The requirement for effective Enabling Support Entities

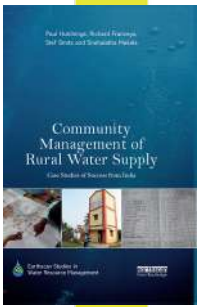


The requirement for effective Enabling Support Entities



Enabling Support Environment

- These results suggest that policy-makers have correctly **'gone big'** in terms the level of piped service now to be delivered, but also need to think big with respect to both the initial, and ongoing, commitment to **community sensitisation and empowerment**. 10% of CapEx, 20% OpEx in our survey.
- But, the research also shows that where hydro-geological & increasing demand conditions do not allow for borehole delivery to a SVS piped network then a **government entity will be required to manage a bulk treated surface water supply**.
- Communities remain involved, quite capable (better?) at **acting as village level retailers** of the government



Trajectories of development for successful Enabling Support Entities

Market demand/ Technological sophistication	Large demand, mass markets	Local demand, individual or batch markets
Simple	<i>Mechanical organisation</i>	<i>Craft organisation</i>
Technologies	fits Weber's model of bureaucracy and is centralised, hierarchical, specialised in tasks, formalised and large scale. It is efficient, produces in quantity, provides a standardised service or product and can realise economies of scale.	The traditional and dominant form until the industrial revolution. Most are family businesses or partnerships functioning in local markets with low capital and skill requirements.
Complex	<i>Mechanical-organic organisation</i>	<i>Organic organisation</i>
Technologies	Mechanical production and control system with an organic department for research and development or for other highly complex/technical tasks	Decentralised, relatively non-hierarchical, based on teamwork and networks, specialised around professional expertise, non-formalised and small scale. It is innovative or adaptive, produces quality and non standard goods and services in small numbers and does not benefit from economies of scale.



Trajectory of support to
'Utilisation?'



Trajectory of support to community
management?

Burns & Stalker – Organic/Mechanistic



Conclusion

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’

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 – particularly as groundwater resources are substituted by cross-panchayat boundary treated surface water sources which demand increasing technical professionalism

- **National Research Steering Committee Chair:** Mr. Sujoy Mojumdar; **Administrative Staff College of India, Hyderabad, Telangana** Professor Srinivas Chary, Ms Shaili Jasthi, Ms Swapna Uddaraju; **Centre of Excellence for Change, Chennai, Tamil Nadu** Dr Rema Saraswathy, Dr Rammohan Rao, Mr Raviprakash Madhudi with M S Vaidyanathan; **Malaviya National Institute of Technology, Jaipur, Rajasthan;** Dr Urmila Brighu and Mr Rajesh Poonia; **Xavier Institute of Social Service, Ranchi, Ranchi, Jharkhand** Mr Prakash Dash and Mr Pramil Panda; **IRC, The Netherlands** Ms Ruchika Shiva and Mr Depinder Kapur, Stef Smits; **Cranfield University, UK** Dr Richard Franceys, Dr Paul Hutchings

