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Detailed Review of a Recent Publication: Rural water supply systems cannot succeed with community management alone

Chowns, E. 2015. Is Community Management An Efficient And Effective Model Of Public Service Delivery? Lessons From The Rural Water Supply Sector In Malawi. Public Administration and Development. 35, 263–276.

Community management of rural water supply systems was developed in the belief that local ownership and management of water points would lead to greater sustainability, and it has been widely implemented across the developing world. However despite successes in some places, community management has not proved the enduring solution many hoped for. Chowns has examined the reasons for this, illustrated with evidence from Malawi.

At the beginning of this paper, Chowns sets out a description of the community management model, describing it as follows: a group of 6 to 10 villagers is typically elected as a water point committee, with responsibilities for maintaining and repairing the water point, and collecting and saving community contributions. The author states that community management is expected to lead to better technical performance, under the assumption that locally-based technicians will be able to respond to breakdown more quickly and more frequently, and to improved financial sustainability through user contributions. Chowns explains that the theory is that users have "a direct interest in making such contributions as they would keep a clear link between these fees and the continued functionality of their water supply".

Despite the optimism associated with community management, it has not lived up to expectations, and there are many criticisms in the literature on rural water supply (explained in greater length in the literature review which follows). Chowns outlines some of the findings by other researchers: maintenance is rarely done, long delays ensue between breakdowns and repairs, community members lack the necessary skills, and repairs are poorly carried out. Financial sustainability has also been elusive. The amounts collected by management committees are generally far lower than required and often nothing is collected until a problem arises. Payment mechanisms are often inconsistent and financial mismanagement undermines willingness of rural residents to pay.

The data presented by the author from research in Malawi support these criticisms. The data were collected through a study of 679 water points in 24 villages and an analysis of the national water point database, supplemented by interviews of 276 users and water committee members plus other qualitative data. Analysis of these data identifies many failings in the community management approach in Malawi. Preventive maintenance was rare, many

Key Policy and Programmatic Takeaways

- Community management has proven to be problematic in its most basic form, but there are well-performing examples
- Community management that relies exclusively on users, without some level of external support and oversight, will not ensure high levels of functionality
- Well-designed, performance-based post construction support is needed to support rural communities to maintain their water systems
- A range of options for management of rural water supply systems should be considered
- Governments should consider supporting recurrent costs of rural water supply systems, but avoid removing user fees altogether

The WaSH Policy Research Digest is issued quarterly by The Water Institute at UNC—problem solvers focused on the sustainable management of water for health and human development—and comprises a review of a recent article or report, and a short literature review on a WaSH topic. It provides objective, concise, and timely information to advise WaSH policy development. To subscribe, please go to http://waterinstitute.unc.edu/wash-policy-research-digest. Questions or comments about this publication? Please contact us at waterinstitute@unc.edu.

committee members did not know how to undertake repairs despite training, few committees kept spare parts in stock, and none kept any record of stocks of spares. There were long downtime periods between repairs; the mean reported breakdown duration of the waterpoints in the study was 136 days.

Chowns' analysis of 13 cases showed that only three management committees had more than one-fifth of the amount of maintenance reserve funds they were supposed to. On average the amount saved was only 2% of what it should have been. The author suggests two main reasons for this: the money is not collected in the first place, or the money is collected, but badly managed or misused. She suggests that these are connected: if funds are poorly managed, community members will be reluctant to continue contributing.

The author also looked at district and national capacity and came to the conclusion that there were very low levels of post-construction support to user committees. She reports that "support is not usually requested; and even if it is, it is not usually forthcoming". District governments receive very limited funds from central government "barely enough to cover office expenses, let alone provide support to communities". It does not help that many water points in Malawi have been installed by external agencies, such as NGOs, with limited to no consultation with district government, adding to their burden of support.

The author makes some fairly strong statements regarding community management saying "the key findings of the study are clear: community management does not work well for communities". She has even stronger words for local and national governments: "it enables them to abdicate long-term responsibility for service provision".

Despite the strong criticism presented in the paper, the author concludes that community management should be not abandoned completely, just that it should be reformed. She suggests the reinstatement of some measure of centralization, creating a greater role for local and national government. She proposes that these changes could include increasing professionalization by carrying out maintenance and repair by area mechanics rather than the users themselves, providing closer supervision as well as inspection and audit of installations, and, perhaps most importantly, providing funding for recurrent costs. This last recommendation reflects the increasingly common view that it is extremely difficult to finance rural water supply exclusively from user contributions. The author suggests that clean water is a public good because of its public health impact and as such requires ongoing subsidy from the public purse. She takes this argument quite far by suggesting that that no user fees at all should be levied for rural water supplies. While some subsidy for rural water supply may be required, the author fails to adequately examine the implications of free water. Global evidence points to the fact that water user fees are not only essential to financial sustainability but also that price signals lead to more careful use of water. It is also hard to imagine how higher levels of government support would be financed without some measure of resource mobilisation from users.

This paper argues for rethinking community management as a one-size fits all approach. However, a clear limitation of the paper is the scope for making generalised statements on the performance of community management globally based solely on limited data from one country. The author also bases her criticisms on a very simplistic model of community management, while in fact many variants of community management exist, some of which are effective. These are explored in more detail in the accompanying literature review. The strongest take-away from this paper is that governments should consider a range of options including, but not exclusively, better-supported community management in order to ensure sustainability of rural water supplies.

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Literature review: Community management of rural water supplies

The emergence of community management can be traced back to the International Decade for Drinking Water and Sanitation during the 1980s, which saw an intensive period of investment and expansion in first-time access. This period also marked a reaction against the perceived – and actual – failures of highly centralized provision from the 1950s and 60s onwards (Moriarty et al., 2013). The move to place communities at the centre of their own water supplies aligned closely with the community participation and empowerment paradigm of that era. It also echoed the core ideology of self-sufficiency of many political independence struggles in countries, particularly in sub-Saharan Africa. Finally, this approach was a good fit with many donor investment programmes, where short-term projects could be completed and 'handed over' to communities who would then be expected to continue to sustain services over time (Lockwood and Smits, 2011).

In the late 1990s, community management was further bolstered and complemented as the predominant management model by the "demand-responsive approach", which was heavily promoted by the World Bank (Katz and Sara, 1997). From the 1980s onwards, community management, augmented with aspects of the demand responsive approach, spread rapidly and was taken up in many, if not the majority, of developing country water sector policies as the de jure management approach, often to the exclusion of all others. These approaches and principles are reflected in the sector policies of many countries today.

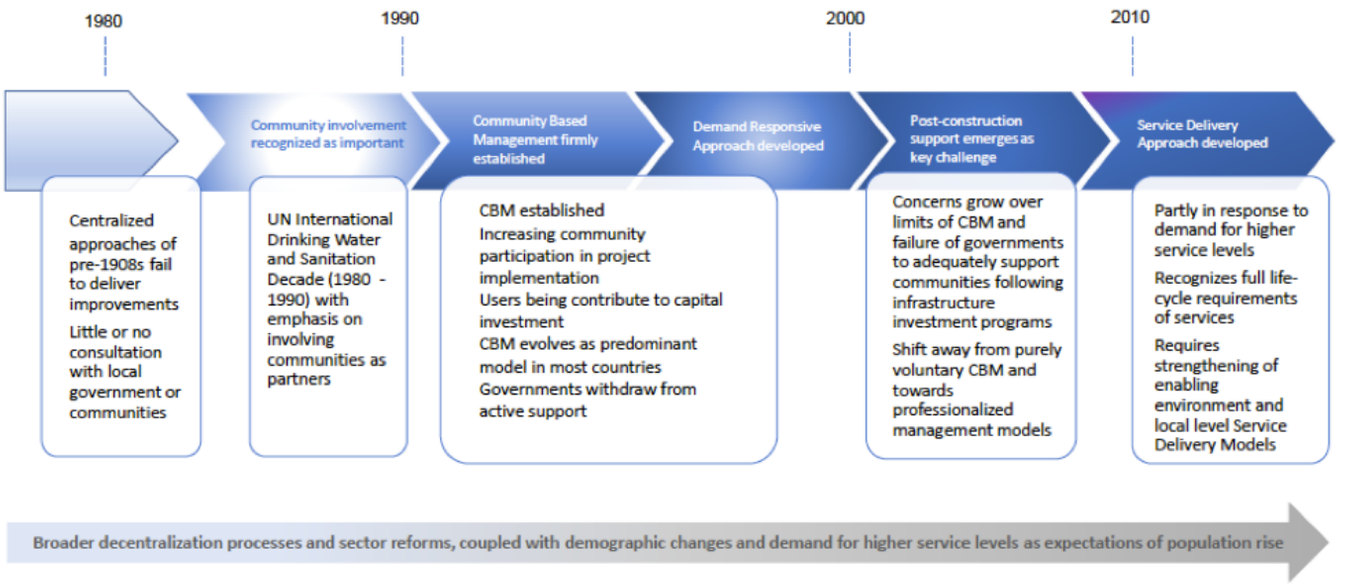

Figure 1: Evoluation of Paradigms in the Rural Water Sector, 1980 – 2010
Adapted from Lockwood and Smits (2011)

Over the decades there have been many positive experiences with community management, and there are examples, particularly from Latin America, indicating that this approach can provide effective services when subsidized and fully supported (e.g. the SISAR model from the state of Ceará in Brazil; World Bank, 2017). Similarly, research from India including an analysis of the sustainability and performance of "demand responsive" versus "supply-driven" water schemes in the state of Kerala revealed that demand responsive schemes perform well (Andres et al., 2017).

Nonetheless, since the end of the 1990s, there has been growing concern over the poor functionality rates associated with community management, and its limited prospects for ensuring long-term sustainability (Lockwood, 2002; Harvey and Reed, 2007; RWSN, 2009; Moriarty et al., 2013; Lockwood and Smits, 2011). The limitations of community management can be linked to two fundamental drivers, one internal to the model and the second reflecting the changing nature of the environment in which it has been operating for the last two to three decades.

Community management is based on the assumption that rural communities can 'take over' the operation, administration and management of the systems delivered through either development aid or public financing from national governments. Therefore, a basic premise of community management and the demand-responsive approach is that communities are willing and able to participate in management, pay for services and take ownership of a facility, even though this has often been interpreted as 'sense of ownership" rather than a legal formality (Moriarty et al., 2013). A number of studies indicate that these assumptions were overly optimistic and that many rural communities in fact require significant levels of external support to manage their own services. This is especially the case with more complex technologies, where voluntary management arrangements are often unrealistic (RWSN, 2010; Lockwood and Smits, 2011; Chowns, 2015). Whaley and Cleaver (2017) review a large volume of literature that underscores the need for such regularized and structured direct support to community-based entities. The Malawi study reviewed earlier in this Digest (Chowns, 2015) highlights the particular challenges of financing under the community management model and the crippling impact this can have on the viability of schemes (these studies focus on point sources with handpumps). Other research suggests financing from user fees can be improved by, for example, introducing 'pay as you fetch' tariffs, rather than a flat fee structure, although this still poses significant challenges (Foster and Hope, 2017). In response to the limits of conventional community management, there have been calls for professionalization of management of rural water service delivery and a more fully supported version of the community management approach, often referred to as "Community Management Plus" (Moriarty et al., 2013; Lockwood and Smits, 2015; Hutchings et al., 2017).

The second critical aspect limiting community management has been the changing socio-economic and cultural environment. Many low-income countries are experiencing unprecedented levels of economic growth accompanied by similarly accelerating rates of urbanisation. In rural areas, there is increasing demand for higher levels of services, both for domestic and small-scale productive needs, for instance homestead gardens and livestock. As economies grow and there is more widespread cash circulation – increasingly in the form of mobile money – users are also willing to pay, as long as services are adequate and well managed (Lockwood and Smits, 2015). In short, community management may no longer be 'fit for purpose' for increasing numbers of the rural populace in many countries. These short-comings will be further exacerbated as countries set ambitious targets for extending piped supplies to their rural populations (e.g., Ghana, India, Mozambique, Uganda).

A recent global study carried out for the World Bank in 16 countries provides comprehensive evidence from a

range of socio-economic contexts, illustrating the growing variety of management approaches for rural water service delivery (World Bank, 2017). Rural populations are not monolithic and present varied challenges and opportunities, meaning that policy makers at national level must develop differentiated strategies to meet the demands of these population groups.

With the adoption of the SDGs, and as many countries move along their development trajectory, demand for higher service levels is likely to increase in the future. This transition will lead to a differentiation in the rural water 'market' with a number of scenarios emerging. The biggest leap for lower and lower-middle income countries is the shift from point sources to piped networks. The World Bank study highlights an emerging trend of public and private utilities integrating rural populations as well as aggregated management models. This can establish the conditions for economies of scale and more professional management. A number of recent studies have documented the potential involvement of the domestic private sector, aimed at professionalizing management and improving service levels (Nathan Associates Inc., 2016; Ndaw, 2016; Pedro et al., 2016).

The challenge for all countries is to open up the policy space and encourage a range of well-supported management options, recognizing that there is no one right or wrong solution. Indeed, it is highly likely – and desirable – that several models would be required to co-exist and operate within the same country, even where there are relatively advanced service delivery models, as is the case in some provinces in China (World Bank, 2017).

In conclusion, the literature suggests that while community management may not be sufficient as the predominant, or only, management approach in many contexts, it should be retained, with greater professionalization and support, alongside a range of other options, including utilities, local private sector operators and, at the other end of the rural spectrum, structured support for self-supply approaches to improve services for the most dispersed communities.

Literature review prepared by Harold Lockwood, Director, Aguaconsult, United Kingdom

References

Andres, L., Deb, S., Gambrill, M., Joseph, J., Kannath, P., Kumar, M., Kurian, P., Many, R., Muwonge., A. 2017. Sustainability of Demand Responsive Approaches to Rural Water Supply – The case of Kerala. Policy research Working Paper 8025. Washington DC.

Chowns, E. 2015. Is Community Management an Efficient and Effective Model of Public Service Delivery? Lessons from the Rural Water Supply Sector in Malawi. Public Administration and Development. 35, 263-276.

Foster, T., and Hope, R. 2017. Evaluating waterpoint sustainability and access implications of revenue collection approaches in rural Kenya, Water Resource. Res., 53, doi:10.1002/2016WR019634.

Harvey, P. and Reed, A. 2007. Community-managed water supplies in Africa: sustainable or dispensable? Community Dev J. 42 (3): 365-378.

Hutchings, P., Franceys, R. and Smits, S. 2017. Community Management of Rural Water Supply: Case Studies of Success from India. Earthscan/Routledge, London.

Foster, T. and Hope, R. 2016. A multi-decadal and social-ecological systems analysis of community waterpoint payment behaviours in rural Kenya. Journal of Rural Studies. 47(A): 85-96.

Nathan Associates Inc. 2016. Deepening the Knowledge of Management Models in Rural Water Supply in Tanzania – Field Study Report.

Ndaw, M. F. 2016. Private Sector Provision of Water Supply and Sanitation Services in Rural Areas and Small Towns: The role of the public sector. Water and Sanitation Program. World Bank.

Katz, T. and Sara, J. 1997. Making Rural Water Supply Sustainable: Recommendations from a Global Study. Water and Sanitation Program. UNDP-World Bank.

Lockwood, H. 2002. Institutional Support Mechanisms for Community-managed Rural Water Supply and Sanitation Systems in Latin America, Strategic Report 6, Environmental Health Project (EHP). Washington: USAID. Available at: http://pdf.dec.org/ pdf_docs/PNACR786.pdf.

Lockwood, H. and Smits, S. 2011. Supporting Rural water supply: moving towards a Service Delivery Approach. IRC-Aguaconsult, Practical Action Publishing.

Lockwood, H. and Smits, S. 2015. Reimagining rural water services: the future agenda. IRC. http://www.ircwash.org/sites/default/files/084-201502triple-s_introdefweb.pdf

Moriarty, P, Smits, S., Butterworth, J., Franceys, R. 2013. Trends in Rural Water Supply: Towards a Service Delivery Approach. Water Alternatives. 6(3), 329-349.

Simone, P., Macario, L., Hawkins, P. M. 2016. Developing delegated Management of Small Water Supply Systems: The Emergence of Private Sector Operators in Mozambique. World Bank Water and Sanitation Program.

RWSN. 2009. Handpump Data, Selected Countries in Sub-Saharan Africa. http://www.rural-water-supply.net/_ressources/documents/default/203.pdf

Whaley, L. and Cleaver, F. 2017. Can functionality save the community management model of rural water supply? Water resources and Rural Development. 9: 56-66.

World Bank. 2017. Sustainability Assessment of Rural Water Service Delivery Models: Findings of a Multi Country Review. Global Water Practice. World Bank, publication pending.