

A critical mass analysis of community-based financing of water services in rural Kenya

TIM FOSTER

Rationale

- Collecting sufficient revenue from water users is a key stumbling block to effective and sustainable operation and maintenance of rural water supplies
- This study sought to understand how the proportion of financial contributors in a community affects the payment behaviours of individual households and ultimately the longevity of revenue collection systems

Methods

- The study site was Kwale County in Kenya, which played host to the first large scale deployment of the Afridev handpump by way of a programme that installed 550+ handpump-equipped boreholes between 1983 and 1995
- All water points in two sub-counties (Msambweni and Lunga Lunga) were mapped in 2013, and respondents were asked whether financial records were being kept by water committees
- In total, financial records were identified at 100 communities, and data used for this study comprised 43,020 household payments over a 26 year period
- Analysis focused on (a) month-to-month change in user contribution rate; (b) revenue collection survival rate; and (c) revenue collection patterns for the best performing communities

Results

- Some communities have been able to sustain their water service over a long period of time even if a moderate proportion of users do not contribute financially
- Monthly contribution rates remain relatively stable once more than 60% of water users are paying
- Revenue collection systems become unstable and are prone to collapse if user contributions drop below a 60% threshold in the wet season or 40% in the dry season



Full paper available at this link:

[http://dx.doi.org/10.1016/](http://dx.doi.org/10.1016/j.wrr.2017.04.003)

[j.wrr.2017.04.003](http://dx.doi.org/10.1016/j.wrr.2017.04.003)

For more information,

please email Tim Foster:

timothy.r.foster@gmail.com

Citation: Foster, T. (2017). A critical mass analysis of community-based financing of water services in rural Kenya. *Water Resources and Rural Development*, 10, 1-13.

Acknowledgements: New Mobile Citizens and Waterpoint Sustainability in Rural Africa (ESRC Project ES/J018120/1)
Insuring Against Rural Water Risk" (ESRC Project ES/K012150/1)
Groundwater Risk Management for Growth and Development (NE/M008894/1)

