Performance-based Funding for Reliable Rural Water Services in Africa

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# About 'Uptime'

Uptime is a global consortium working to deliver drinking water services to millions of rural people through long-term, performance-based funding to achieve Sustainable Development Goal 6.1.



water for good.



water <mark>ﷺ mission</mark>

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# **Executive Summary**

A graveyard of failed water supply infrastructure across Africa points to the legacy of well-meaning but poorly-executed investments. The enduring problem is that providing maintenance services to rural and remote populations is not financially viable in many contexts. Without credible data on observed delivery costs, government, donors, private finance or other investors cannot allocate current funding efficiently.

Despite financial risks and operational challenges, multiple service providers are innovating on service delivery approaches to improve financial and operational performance in "last mile" contexts. We report on major improvements in functionality of rural water infrastructure in Burkina Faso, Central African Republic, Kenya and Uganda achieved by performance-based providers where rural water users pay a share of the costs. This study provides preliminary evidence to support the case for a long-term, multi-country funding facility for SDG 6.1 delivery that "leaves no one behind".



# Findings

# Waterpoints maintained by service providers were functional over 90% of the time, significantly outperforming the regional average.

Available figures indicate that service providers outperformed the regional functionality average by

approximately 20 percentage points. Furthermore, service providers that provide rapid breakdown response in their service model repaired over 90% of breakdowns within 3 days.

#### Rural water users paid some but not all of the costs.

Rural water users paid the service providers approximately USD 310,000 in 2018. Payment indicates there is demand for these services, but the revenue is insufficient to cover the full operating costs. Service providers incurred a combined shortfall of approximately USD 890,000. This analysis provides a local and short-term measure of financial sustainability (see methods, p.18).



Figure 2. Water user payments for services

Multiple factors influence levels of cost-recovery and most service areas do not break even on operating costs. Working ratio calculates the proportion of operating costs covered by local customer revenues. Analysis includes the total direct and indirect costs incurred by an operational unit, excluding capital costs. Piped schemes show a range of working ratios, with some approaching or achieving operational cost-recovery. Handpump service areas show a financial shortfall in all cases, but remain a common source of water in rural areas where service providers operate. The range of observed working ratios also differs depending on other factors including payment methods and contracting arrangements.



Annual Operational Working Ratios

#### Figure 3. Range of annual operational working ratios

Institutional design is a key determinant of operational and financial performance. Where a service provider has a contracted delivery plan with government in an exclusive service delivery area, an acceptable tariff and clear performance targets the operational working ratio is more likely to break even. This applies to piped water systems where the known advantages of population density, on-site or nearby connections, water treatment and economies of scale provide comparative advantages to other alternatives. More generally, many service providers operate in contexts where government permits competition and provides no long-term commitment to the providers, creating operational uncertainty and reducing financial sustainability.

The investment case must consider financial, economic and social impacts. Commercial finance with positive returns is limited, except for particular conditions most applicable to piped water schemes, which do not apply to much of rural Africa. Selective bias to the minority of financially-attractive cases will limit prospects for universal service delivery. The positive social impacts of reliable water systems for women, pastoralists, children in schools and the sick at clinics, particularly in times of drought or places of conflict, underline significant non-financial benefits in the investment case for universal delivery.



Figure. 4. Funding characteristics by working ratio measures and progress to universal services

# Conclusion

Sustainable financing of reliable rural water services requires three conditions to be satisfied: 1) appropriate institutional arrangements; 2) effective maintenance contracts; and 3) robust operational data. Fulfilling these requirements and implementing robust revenue collection systems could deliver high-quality services with concessional funding targeted towards areas of greatest need. Our analysis shows that all three requirements are achievable but not widely realized. If policymakers and funders commit to fulfilling these requirements, leaving no-one behind could become a reality.