

Delivering safely-managed water to schools in Kenya

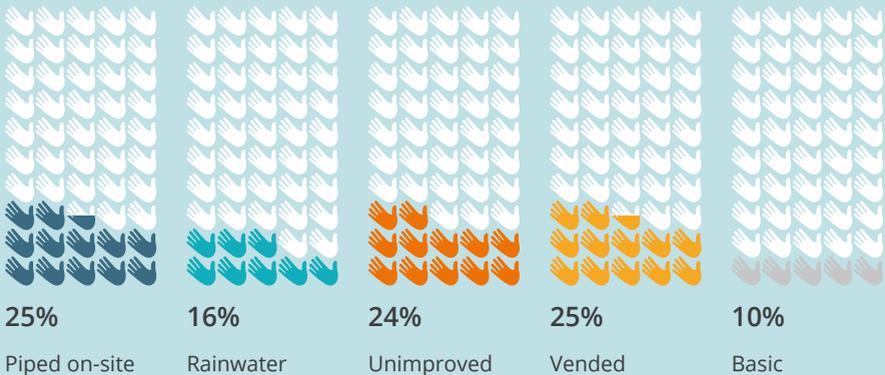
Summary | March 2021

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With two out of every five Kenyans aged between four and seventeen years old, education is critical for the current welfare and the future development of 20 million children attending 37,910 primary and 11,399 secondary schools. Without safe water in schools for drinking, food preparation, handwashing and general hygiene and sanitation, even basic education outcomes will prove difficult to achieve and sustain. The COVID-19 pandemic has increased understanding of the critical role of water services in schools for health, gender equality, and social development.

We report on the status of school water, sanitation and hygiene (WASH) services in Kitui County drawing upon a survey of 1,887 primary and secondary schools in 2019. We evaluate water resource risks in the county to understand how climate anomalies affect rainwater harvesting for schools and the influence of geology on groundwater quality. Second, we consider policy responses to guide new thinking on the delivery of safely-managed water services. The latter is informed by the performance of a professional maintenance service provider guaranteeing rapid repairs to handpumps and small piped systems within days, and monthly monitoring of water quality.

Percentage of schools reporting daily group handwashing, by main school water supply

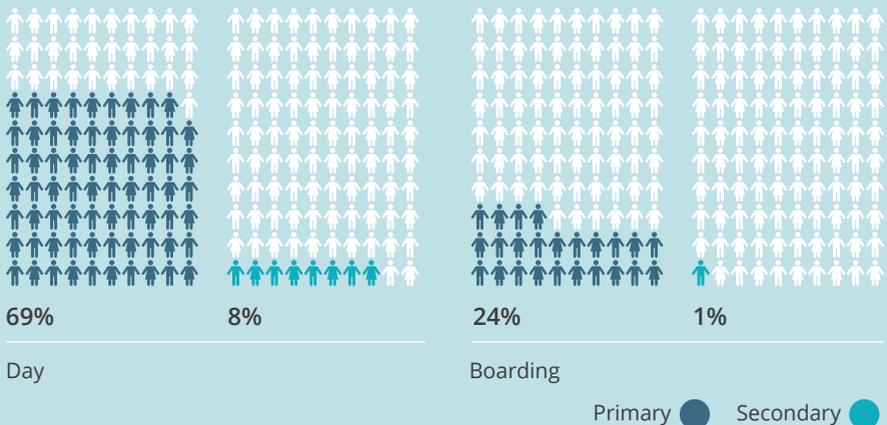


Despite national education plans and policies, the allocation of responsibility for WASH services within schools at the county level remains ambiguous. County governments are developing their own laws and policies but until there is effective coordination between national and county governments, each school will continue to be individually responsible for managing the delivery of WASH services. In the absence of effective monitoring and regulation, there will be limited oversight to understand and improve performance.

Results show investing in piped water or rainwater harvesting do not result in more reliable or safe water for drinking, handwashing, menstrual hygiene management, food preparation or general cleaning. Climate risks and funding gaps compound challenges requiring more efficient and coordinated management at scale.

We identify four conditions to improve outcomes. First, to clarify national and county responsibilities for WASH services in schools. Second, to improve monitoring and regulatory capacity at the county level. Third, to use information from monitoring systems to rethink funding models. And, finally, to pilot performance-based models to support a national programme of reform.

Percentage of pupils who sometimes carry water to school



Key findings



Water risks

- Over 1 in 2 schools have no hand-washing facility.
- Daily group handwashing activities are reported in less than 1 in 3 schools.
- Fewer than 1 in 2 schools report toilets as clean.
- Few teachers have water quality concerns (4%) though monthly monitoring reveals multiple hazards, including *E. coli*, fluoride, salinity and nitrate.
- Over 8 in 10 schools have rainwater harvesting tanks, though 40% have storage for a week or less.



Funding inequalities

- One third of schools spend no money on water services.
- Secondary schools spend over 5 times more on water per pupil than primary schools.
- 1 in 3 schools purchase 16,544 m³ of vended water per year costing USD115,754.
- 70% of vended water is bought in the dry months from June through October.

Percentage of pupils reporting 'high vending', Sep 2018–Oct 2019





Water management

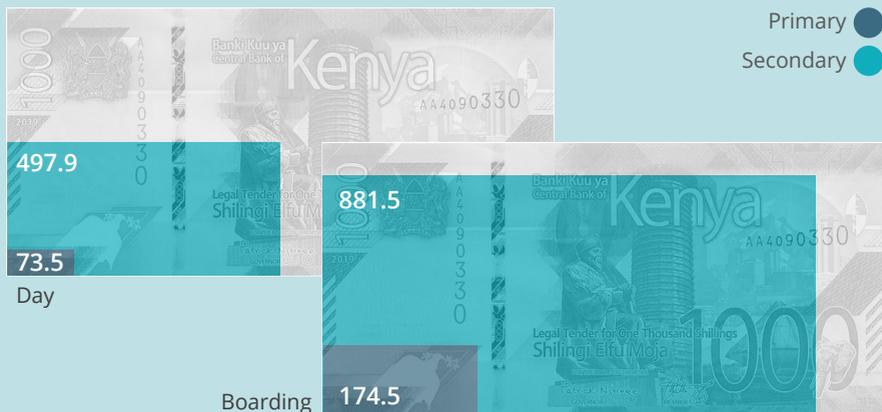
- School water management lacks clear responsibilities in service delivery between national and county governments.
- Water concerns include availability (35%), reliability (26%), cost (11%) and distance (9%).
- Schools relying mainly on rainwater are least likely to report daily group handwashing activities (16%).
- Daily group handwashing activities are as likely in schools relying on piped water on-site as in those relying on vended water (25%).
- Primary schools are 8 times more likely to report pupils carrying water to school than secondary schools.



Learning challenges

- Teachers relate absenteeism at school to sickness, fees and a lack of food or water.
- 1 in 2 secondary schools report no water for Menstrual Hygiene Management (MHM); schools with piped water on-site have the highest share with no water for MHM (31%), followed by schools with rainwater for main supply.
- Male teachers do not relate water concerns with MHM; female teachers do, but are one third of the total of 3,141 staff.

Median annual water expenditure per pupil



Recommendations

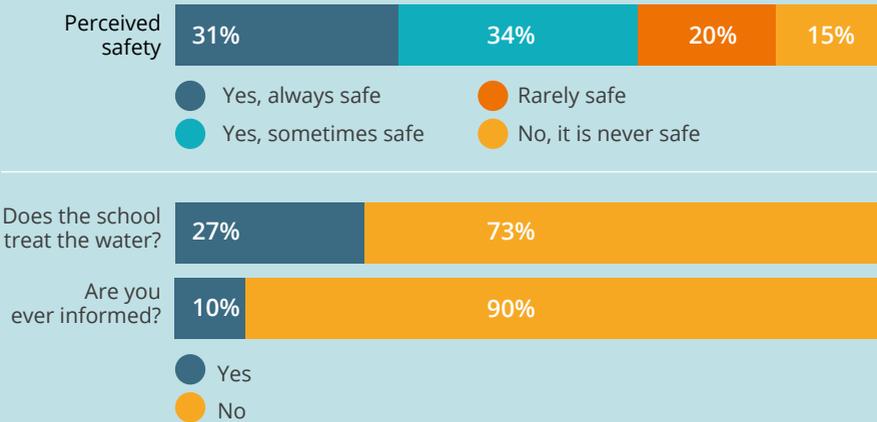
1 Clarify national and county responsibilities for WASH in schools

Without clear separation and accountability in the roles for WASH provision in schools between national and county governments, the prospects to achieve and maintain safely-managed WASH services in schools are remote. Working together, the national government's Ministry of Education can focus on education outcomes supported by the county governments in delivering universal WASH services.

2 Improve monitoring and regulatory capacity

Without improved monitoring and measurement of WASH service delivery, legal and policy reform will be unaccountable and non-transparent. The narrow goals and occasional nature of global reporting are insufficient to meet Kenya's clear and binding targets for WASH services. WASH stakeholders can convene in regular WASH forums under the leadership of the county government to coordinate monitoring and reporting with a common database to support regulation.

Perceived water safety, treatment and access to safety information



3 Performance-based service delivery models

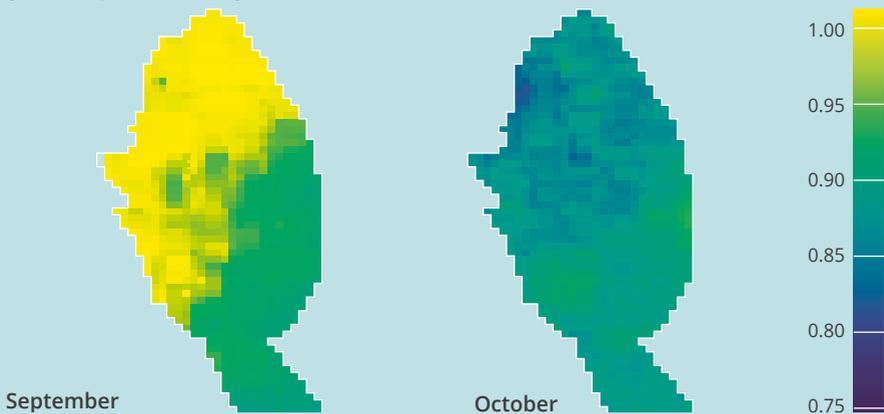
Results from Kitui County demonstrate professional delivery and monitoring of water services in schools is feasible. Government, household, and donor funding for water services in schools, including the costs of vended water, suggest equivalent resources are being spent today. With a transition to a professional service delivery model, efficiency and equity gains could be achieved.

4 Rethink sector funding

The global pandemic demands new thinking on how sustainable funding can be secured and maintained. National budget allocations are insufficient and inefficiently allocated. New funding models are emerging in Africa based on verifiable performance metrics and commitments by local governments.

This is a watershed moment in a time of crisis. Kitui County is uniquely placed to scale up the results and lessons of a more sustainable model for safely-managed water services. Delivering safely-managed water to schools in Kenya is feasible but will depend on exceptional political leadership and ministerial cooperation to agree and execute a shared vision.

Ratio of days with zero rainfall in September and October (CHIRPS, 1981–2018)



About the report

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About REACH

REACH is a global research programme to improve water security for 10 million poor people in Africa and Asia by 2024. In Kenya, REACH consists of a collaboration between the University of Oxford, the University of Nairobi and UNICEF. www.reachwater.org.uk

About the Sustainable WASH Systems Learning Partnership

The Sustainable WASH Systems Learning Partnership is a global USAID cooperative agreement to identify locally-driven solutions to the challenge of developing robust local systems capable of sustaining water, sanitation, and hygiene (WASH) service delivery. Contact: Elizabeth Jordan, ejordan@usaid.gov www.globalwaters.org/SWS

Reference

Hope, R., Katuva, J., Nyaga, C., Koehler, J., Charles, K., Nowicki, S., Dyer, E., Olago, D., Tanui, F., Trevett, A., Thomas, M., and Gladstone, N. (2021). Delivering safely-managed water to schools in Kenya. REACH Working Paper 8, University of Oxford, UK.

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