

# SUSTAINABILITY: In Rural Kenya Do Schools Maintain Water and Sanitation Changes?

## Questions

Dramatic change can be quick. In little time, a rural school in Kenya without easy access to water can be provided with a borehole or a system to catch rainwater. In mere weeks, this water can be treated for drinking and used to fill containers for students to wash their hands after using latrines. But will these changes last?

## Research

In April 2008, Emory University's Center for Global Safe Water (CGSW), the research partner of the SWASH+ project, conducted a study in 55 out of 60 schools that had been pilots for a safe water system intervention in 2005 to determine whether interventions in school water, sanitation and hygiene (WASH) had been lasting. CARE had introduced containers and trained teachers (called patrons) in promoting hand washing after latrine use and water treatment with a chlorine-based solution.

Emory's criteria for judging sustained improvements in conditions were that a school must provide water for drinking in safe storage containers, treat drinking water daily with an appropriate technology, and have water and soap available for hand washing every day.

## Findings

Five out of 55 schools surveyed were found to meet enough of the criteria for sustained effectiveness to be deemed successful. Specifically, 36% of schools had drinking water the day of the (unannounced) evaluation with only 9% of those having measurable levels of chlorine in the water. Only 18% had hand washing water and 2 percent had soap at the hand washing containers at the time of the visit.

Certainly, there are some easily identifiable problems. Containers break, their plastic taps lose handles, schools may not have funds available to buy soap or sufficient quantities of the solution for water treatment, and teachers trained in water treatment and hygiene promotion move on. However, beyond these issues, more research is needed to understand barriers to sustainabil-

ity. The research also revealed that the five schools with treated water on the day of the evaluation had the following commonalities:

- **Access to water:** All had access to rainwater in the rainy season and four out of five schools had a water source less than half a kilometer in distance during the dry season.
- **Funding:** All five schools reported the school having a budget for WASH; four schools used these funds to buy water treatment products and three to buy soap.
- **Trained champions:** All successful schools had active head teachers and /or patrons involved with the water and sanitation activities, including the same patrons that had been trained by CARE. Four out of five schools reported having new patrons involved in water and sanitation activities and the school management committee doing some activities on water, sanitation and hygiene.
- **Observed benefits:** Four out of five schools reported the importance of observed health benefits during the period of the intervention as a contributing factor in continuing safe water system activities.



Children at a hand washing station.

Based on the 2008 report, *Sustainability assessment of the 2005 pilot schools*, by the Center for Global Safe Water at Emory University, available at [www.swashplus.org](http://www.swashplus.org).

SWASH+ is a five-year applied research project to identify, develop, and test innovative approaches to school-based water, sanitation and hygiene in Nyanza Province, Kenya. The partners that form the SWASH+ consortium are CARE, Emory University, the Great Lakes University of Kisumu, the Government of Kenya, the Kenya Water for Health Organisation (KWAHO), and Water.org (formerly Water Partners). Visit us online at [www.swashplus.org](http://www.swashplus.org).