policy briefing

Life cycle costs of water, sanitation, and hygiene access in Kenyan primary school

Key Messages

- Limited funding often leads to poor maintenance of school WASH facilities.
- A life cycle costing analysis of rural Kenyan primary schools indicated that school WASH expenditures averaged 1.38 USD per student per year while the estimated costs for operation and maintenance required to bring school WASH up to standard was 3.03 USD per student per year.
- Additional investment in operations and maintenance of WASH facilities is likely to reduce the need for reinvestment in broken or unsafe WASH facilities.

The Need Access to safe sustainable water, sanitation, and hygiene (WASH) facilities in sub-Saharan Africa is low. Where WASH facilities do exist, they are often non-functional or poorly maintained. Consumable products, such as soap for hand washing, are often not continually available. Girls can be particularly disadvantaged when poor maintenance limits their ability to manage menstruation at school. Lack funding is typically the biggest challenge schools face in maintaining WASH facilities.

The Study Financial information on the overall lifetime costs of WASH facilities allows schools to budget for sustainable operation and maintenance. This study used principal reports, NGO and government interviews to determine the cost of establishing, operating, and maintaining WASH facilities in Kenyan primary schools over the course of the technologies’ lifespan. Life cycle costing analysis was used to determine costs. This study measured (1) capital hardware (building infrastructure), (2) capital software (training teachers and students), (3) operation and minor maintenances (time spent on maintenance, consumable supplies, small repairs), and (4) capital maintenances (major repairs or replacements).
The Findings Data was collected from NGO and government offices, local hardware shops and 89 rural primary schools across three Kenyan counties.

Average costs: WASH expenditures per year for schools was an average of 1.38 USD per student, though spending differed widely across schools surveyed. Estimated costs for operation and maintenance required to bring school WASH up to standard (WHO standard plus additional costs for menstrual hygiene management) was 3.03 USD per student per year.

Financial sources: Donors and NGOs were the largest source of funding for school WASH, though parent teacher associations (PTAs) were also significant contributors to WASH financing. PTAs contributed more than school budgets and almost half as much as NGOs.

Policy Recommendations Many schools in Kenya do not meet standards for safe WASH, and additional investment in operation and maintenance of WASH facilities is likely to reduce the need for reinvestment in broken or unsafe WASH facilities. Budgetary information on WASH life cycle costs can help schools plan for funding operation and maintenance.

Further Readings

Publications