

Improving water, sanitation, and hygiene behaviors in schools

Successes and lessons learned from Mangochi District, Malawi, September 2008

BACKGROUND

Water and sanitation-related diseases remain one of the most significant child health problems worldwide. Infections linked to inadequate sanitation, such as cholera, malaria, trachoma, schistosomiasis, and diarrhea cause children to be sick, weakened, or even disabled. These diseases affect children's physical development, school attendance, and academic performance. The lack of separate and adequate sanitation and washing facilities in schools also discourages girls from attending school, particularly during menstruation, affecting their school performance and increasing their risk of dropping out.

When Save the Children launched its School Health and Nutrition (SHN) program in Mangochi, Malawi in 1998, only 42 percent of schools had access to clean water and none had hand-washing facilities. Although the majority of schools had latrines, most were standard pit latrines rather than the ventilated improved pit latrines Save the Children recommends. Only 54 percent of schools had separate facilities for girls.¹ In 2003, when Save the Children expanded its SHN program in Malawi to Balaka district, the situation was a marginally better than it had been in Mangochi five years before: 67 percent of schools had access to clean water and 71 percent had separate toilets for girls and boys. However as in Mangochi, **no schools in Balaka had hand-washing facilities.**²



A nine year-old boy drinks clean water from a borehole installed by Save the Children.

Qualitative surveys conducted in both districts^{3,4} also showed that before Save the Children's SHN program:

- Students traveled long distances to fetch water, which often made them late to class or caused them to miss class altogether. A student from Chiunda School explained, "We used to stand in long queues for so many minutes before getting the water."
- Girls who traveled to collect water faced harassment from boys and men. Adolescent girls from Malembo School reported, "We would meet sugar daddies [older men] at the water point who would coax us into having sex with them."
- Girls missed school when they were menstruating due to the lack of privacy in school latrines.
- Students drank from unprotected shallow wells and rivers where livestock also drank. Students from Mtaya School noted, "River water was unhygienic as people would step in the same water when drawing it."
- Students did not wash their hands after using the toilet because there were no hand-washing facilities.
- Observations at schools showed that despite the availability of facilities, many children did not use them because they were locked or unhygienic.

To increase access to and use of safe water and sanitation facilities, Save the Children worked with communities, schools, and water and sanitation experts to construct and rehabilitate boreholes, latrines, and hand-washing facilities and to train teachers and communities on hygiene. Save the Children undertook the water and sanitation effort within the context of a comprehensive School Health and Nutrition (SHN) program, aimed at addressing all key health and nutrition problems that prevent children from fully participating in school.



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APPROACH

Provision of safe drinking water

After an initial assessment by district water monitoring assistants to identify schools without safe drinking water, each community selected a site for a new borehole that would provide access to clean drinking water.

Communities provided some of the resources for construction (bricks, sand, and labor) and contractors drilled the boreholes and tested water quality. Save the Children helped communities form and train water point committees to maintain, repair, and clean the boreholes. These committees comprise ten village members with equal representation of men and women, and the village headman. Two schools received piped water from the Malawi Development Corporation (MALDECO) and the Christian Health Association of Malawi (CHAM) hospital. With funding from the program, district water monitoring assistants rehabilitated nonfunctional boreholes in some schools to ensure that all schools had functional water points.

Provision of latrines and hand-washing facilities

Save the Children identified schools with no latrines and hand-washing facilities during program review meetings. We mobilized communities to provide construction materials (sand and bricks). Save the Children provided the more costly materials, hired the contractors, and supervised the overall process.

Community capacity building

Save the Children organized several trainings to ensure that community members had the capacity to manage



Separate, ventilated latrines with doors and hand-washing facilities nearby not only promote good hygiene but also enable girls to consistently attend school.

the new facilities and were familiar with key hygiene messages:

- Water point committees participated in a five-day training on community-based management from the Ministries of Irrigation and Water Development, Health, and Community Services.
- Village health committees received training in hygiene and proper latrine use and taught mothers good hygiene practices and toilet training techniques.
- In each school, two teachers and one health surveillance assistant received training in hygiene education, using participatory approaches
- Save the Children trained district primary education advisers and health zone coordinators to become trainers in cholera prevention and management prior to the rainy season when cholera is most common.

Promoting behavior change

With technical support from the Manoff Group, Save the Children developed activities and materials to ensure children adopted appropriate habits for use of water and sanitation facilities. We conducted formative research to assess the main barriers to and motivations for adopting healthy hygiene behaviors. We then piloted a range of activities implemented the most successful approaches in all target schools:

- Each education zone organized a clean school competition and awarded gifts (school materials) to the three cleanest schools to recognize their efforts and enhance their hygiene practices.
- Save the Children distributed leaflets and posters promoting hand-washing and the proper use of toilets and discouraging vandalism of facilities.
- We produced cassette tapes with age-appropriate hygiene messages and distributed them in schools along with cassette players for teacher use during hygiene lessons.
- We developed a guide on children's toilet use and distributed it to mothers.
- A local community radio station also helped disseminate cholera prevention messages developed by program staff and partners.

COVERAGE

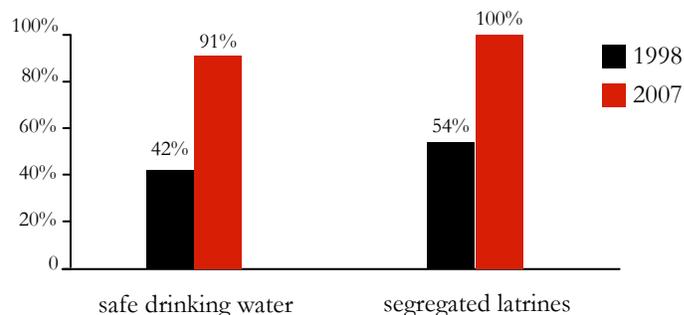
Throughout the life of the SHN program in Mangochi, Save the Children constructed 32 safe water points, 23 in villages and nine in schools. Additionally, we constructed 100 hand-washing facilities in 72 schools and 96 toilets in 58 schools.

SUCCESSSES

Quantitative and qualitative end line surveys conducted in Balaka and Mangochi district in 2006 and 2007 respectively showed that the presence of adequate water and sanitation facilities have had a tremendous impact on children's lives and communities.^{2,3,4}

- By 2007, nearly all target schools in Mangochi had safe drinking water (borehole or tap) and all schools had separate toilet facilities for boys and girls. All schools in Mangochi had hand-washing facilities. In Balaka by 2006, nearly all schools had safe drinking water and segregated latrines. However only 15 percent had hand-washing facilities. See chart at right.
- Children no longer have to walk long distances or wait in long lines to get water; they are able to report to class on time and attend more consistently. Girls are no longer harassed by men while getting water.
- Schools have separate latrines with doors for girls and boys, so girls say that they no longer stay at home for three to four days when menstruating.
- Pupils say they are now using toilets instead of going to the bathroom in the bush, under trees, and in classrooms. As a result, children report fewer cases of diarrheal disease. A student at Njese School said, "Before we had toilets we used to relieve ourselves in classes."
- The number of children who treat their drinking water has more than doubled (from 25 percent in 1998 to 56 percent in 2007). Before the program, most children treated water by boiling (76 percent). At the end of the program, only 29 percent treated water by boiling, while 53 percent treated water by chlorination, up from 17 percent.
- The percentage of homes with latrines also increased during the program (to 84 percent from 74 percent). These home-based latrines were constructed entirely

Portion of target schools with safe drinking water and segregated latrines in Mangochi, 1998-2007



by the community. The percent of children whose main source of home drinking water is safe increased from 68 percent to 84 percent. Most of this is a result of increased use of boreholes (from 45 percent in 1998 to 67 percent in 2007). In Mangochi, Save the Children drilled 23 boreholes in villages where schools already had boreholes, thereby increasing the potable water available to all community members.

CHALLENGES AND LESSONS LEARNED

Despite these important achievements, the project encountered a number of challenges:

- One of the biggest challenges was improving hand-washing with soap. The endline survey in Mangochi in 2007 found that only 33 percent of the hand-washing facilities in schools were functional and none had soap or ash. Most relied on the school and community to regularly fill the water container and did not have water. When communities provide soap, it usually gets stolen. The same survey also found that just 41 percent of children report hand-washing after visiting the toilet and only 28 percent of children said that they used soap and water the last time they washed their hands.
- Community resource efforts were not consistent. For In less active communities that did not provide sand, bricks and labor, latrines and hand-washing facilities were not constructed. However, among most communities that did provide resources, community participation helped create a sense of ownership and

- ensured the facilities were well-maintained.
- Community members sometimes vandalized hand-washing facilities by removing parts like the water tap, affecting the functioning of spouts. School committees could not always afford to purchase the replacement parts necessary to fix facilities quickly. To minimize these incidents, Save the Children directed communities to report all instances of vandalism to the police.
 - Rural shop owners did not regularly keep borehole parts in stock, so community members had to travel long distances to buy them. Enhanced coordination with other agencies would help. For example, UNICEF can train rural shop owners to restock borehole parts.
 - Water monitoring assistants conducted frequent supervision of the water point committees to ensure the committees and the boreholes functioned properly. Prompt reporting of major borehole breakdowns to district partners, is also essential to ensure the continued operation of boreholes.
 - Monitoring of hygiene education in schools was infrequent, as primary education advisors rarely monitored the teaching of hygiene. Teachers complained that they have too many topics to teach (though hygiene is included in the curriculum). Some teachers said they were not comfortable with the topic due to its sensitive nature and the use of words such as “defecation.”

NEXT STEPS

While Save the Children’s SHN program saw tremendous progress in improving access to safe water and adequate latrines, hand-washing remained a low priority for schools and communities. Hand-washing facilities are not maintained and children rarely wash their hands with soap or ash. A targeted campaign around the importance of hand-washing is needed. Save the Children’s experience in

Mangochi and Balaka districts illustrate the importance of community participation and ownership along with regular supervision. Our experience also highlights the many challenges of establishing and maintaining these facilities and improving community hygiene behaviors.

After approximately 20 years of programming and ten years supporting School Health and Nutrition in the district, Save the Children is phasing its programs out of Mangochi. Malawi’s Ministry of Education adopted most of Save the Children’s School Health and Nutrition activities when it began a nation SHN program in 2007. Unfortunately, the provision of water and sanitation facilities is expensive and the government will probably not be able to bare the full cost to equip all schools with adequate facilities.

For more information, please contact:

Humphreys Kalengamaliro
hkalengamaliro@savechildren.org

or **Natalie Roschnik**
nroschnik@savechildren.org

Photos by
 Michael Bisceglie and Humphreys Kalengamaliro

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 - ²*Balaka Phase out survey report*, 2006.
 - ³*Mangochi End line Survey Report* [Qualitative], 2008.
 - ⁴*Balaka Post-Intervention Survey Report* [Qualitative], 2006.



Save the Children

2000 L Street, NW, Suite 500, Washington, DC 20036
 (202) 640-6600 • www.savethechildren.org

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