

## Sanitation as a Business: Scaling School-based Sanitation to the Community

By Sarah Bramley, Regional Manager–Africa, Water For People

The problem of school sanitation is massive. As more governments move to free primary education, school populations continue to rise. School latrines that were in many cases not adequate before the increase in enrollment are increasingly overcapacity, insufficient, and often not structurally sound. The World Health Organization's recommended standard is one latrine stall for every 30 boys and one stall for every 25 girls. Many schools in Africa have only one latrine stall per 100 students or more.

The need for sanitation obviously does not stop at schools. Students who are fortunate enough to see sanitation and hygiene improved at their schools often go home to households that do not have a latrine. More and more school sanitation projects are looking to students to help increase household sanitation. However, with limited family income, student voices often go unheeded.

When families do construct household latrines, the sustainability of those latrines is questionable. Although the maintenance required for a simple, improved traditional latrine is low, families are sometimes unwilling or unable to perform it. As the level of technology advances (i.e., families choose ventilated improved pit latrines or composting toilets), the required maintenance also increases.

Furthermore, as the sector leans toward reducing subsidies for sanitation, encouraging families to purchase their own latrine, many households are unable to afford more

than an improved traditional latrine made of locally available materials. Given the option, many households would prefer a higher level of service, which is more expensive. Several organizations have shown that microcredit for household sanitation is possible, but most agree that it is difficult. Unlike the traditional microcredit model used to start or improve a business, there is usually no income generated from building a latrine, and therefore families have a difficult time repaying a loan.

### Addressing challenges in Malawi

In 2007, The World Bank's Development Marketplace funded Water For People–Malawi's pilot to test an innovative approach to address these challenges. Since then, country coordinator Kate

Harawa has been leading efforts in a multipronged approach to develop sustainable sanitation services that do not fall into the traditional highly subsidized latrine construction traps that plague the sector. In this model, children, who are generally not targeted for sanitation and hygiene, become catalysts of change in the household and broader community. School sanitation is combined with a children's household toilet program to reduce the incidence of diarrhea by eliminating open defecation by toddlers, increasing hand washing, and facilitating household upgrades of latrines. The project will lead to 100% sanitation coverage in districts where it is implemented without relying on distorted subsidies that undermine the viability of future work.



An inventive hand-washing station outside a latrine in the village of Sekela, Malawi.

## How does the program work?

This program begins in schools. Although it is inherently a sanitation project, it begins as a “school-beautification” project. Schools are provided “arbor-loos” which are round, cement latrine slabs (80 centimeters in diameter) that are placed over shallow pits. These simple latrines are used by children. When the pit is full, the slab is moved to another pit, and a fruit tree, donated by the government of Malawi, is planted in each used pit. The trees thrive in the rich compost generated from human waste.

The first challenge for primary school students is to develop a plan to beautify their school through improved sanitation, implement the plan with the arbor-loos, and, when finished, install permanent latrines. A competition is held among schools to determine which school has the most beautiful campus. A “beautiful school” is one where students are using latrines, based on the number of new fruit trees within the campus and the lack of feces around the school grounds; where the permanent latrines are well maintained; where the hand-washing station is in good order; and where students can be seen using improved hygiene techniques (e.g., washing their hands).

In the second phase of the program, students are given vouchers for a child’s latrine. The voucher can be redeemed through their family’s purchase of a household latrine, which is purchased on a loan. The vendor provides and constructs an EcoSan latrine. In the case of Malawi, this is often a “sky-loo,” which is a latrine above a compartment (not unlike a Port-o-Potty) where excrement is collected. Latrines are built with two compartments. After the first compartment is filled, the family seals it for composting, generating high-quality, safe, organic fertilizer. They then use the second compartment.

After the contents of the first compartment have dried completely (usually nine months after the compartment has been closed), the vendor returns to buy the valuable compost from the family, which is then sold to a fertilizer company.

With each collection, the household works down its debt to the sanitation vendor. At the same time, a relationship is established between the household and the vendor. The vendor provides the household the service of collecting their compost and the vendor makes a profit from the sale of the compost to the fertilizer company. In this model, simply using the latrine becomes an income-generating activity, and therefore makes household payment of a loan more feasible than in previous sanitation microcredit projects.

To increase sustainability, after the loan is paid off, the household continues to sell its compost to the vendor, who continues to sell it to the fertilizer company. Because the household is now making money from the sale, they have a continued incentive to use the latrine properly. So long as they use the latrine as designed, they have a regular income from the sale of their compost.

The vendor also has continued incentive to collect the compost, as the company continues to make money from the sale of the compost to the fertilizer company. At the same time, the vendor has incentive to increase latrine coverage in the same community, and even to expand coverage into other communities. So long as the vendor can make a profit on the compost, the company has incentive to keep the business growing. In this way, Water For People anticipates that the program will be scalable without continued external support.



*A mixture of ash and soil are put into the latrine after each use. This “flushing” ensures that pathogens are neutralized, and aids in the production of high-quality compost. The ash residue left on fingers is a great visual reminder to wash hands.*

---

## Contributing to the sector

Water For People–Malawi’s development of this program offers solutions to major challenges in the sanitation sector. By addressing school sanitation in a new and creative way, it tests an innovative response to a significant area of need. By offering a new way of financing sanitation, the program proposes a new way of doing business that has the potential to provide service to many more people more quickly than in traditional interventions. Water For People believes that this program may be transferable to other countries as well, and hopes that by testing this work in Malawi, the organization will serve as a leader for others in the sector. ■