

# The Impact of Safe Water

By Lauren McCarter

Solar-powered treatment system provides clean water for Uganda community

On the shores of Lake Victoria in Uganda there is a rural community called Maruba. Rain is rare, so the people of Maruba used to rely on the lake as their only source of freshwater. Unfortunately, it was teeming with microbiological contaminants that cause waterborne diseases such as schistosomiasis, dysentery and diarrhea. The water was further contaminated by pesticides used by local farmers to treat crops. Rain would wash these harmful chemicals into the lake. With no other option, the people of Maruba had to rely on a water supply that caused constant illness—and even death—for those who drank it.

Water Missions Intl., a Christian engineering nonprofit organization that specializes in providing safe, sustainable water and sanitation solutions for those in need, worked with the people of Maruba to transform the water of Lake Victoria from something that brought misery and illness into a source of life. Engineers designed a water treatment solution tailored to the community's needs.

They installed a Living Water treatment system, which pumps water from the lake and then filters it and disinfects it with chlorine. The solar-powered system has the capacity to treat approximately 10 gal per minute. The treated water is distributed to five different tap stands throughout the community.

Understanding that it was not enough just to install a treatment system, Water Missions Intl. worked with the community to ensure that the project became an ongoing success. A team trained community members on how to independently manage their new water treatment system so that it would serve as a permanent solution to their need for safe water. The team also held workshops where it taught healthy WASH (water, sanitation and hygiene) practices to combat other obstacles that could compromise health.

After sustained follow-ups and monitoring, Water Missions Intl. turned management of the project over to the community. The people of Maruba are able to maintain their system indefinitely by adopting a financial model that allows the system operators to charge a small amount (\$0.04 per liter), agreed upon by the community, for safe water. The fees cover the maintenance costs for the system and ensure that it will continue to provide safe water for years to come.

## A World of Difference

When asked about what life is like for them now, the people of Maruba say they see a difference. “The safe water changes our situation, because it’s not easy when you’re sick and in pain because of unhealthy water,” said Grace Ojambo, a long-term Maruba resident. “We would have to spend money on tablets for treatment. I praise God and thank Water Missions for bringing us safe water, which is now close by and good for our bodies.”

The impact was so great that the

local medical clinic noticed a change, too. “We opened a clinic in Maruba because of the high prevalence of water-related diseases, especially diarrhea, typhoid and skin diseases,” said Mukaga Apollo, director of the clinic. “However, three months after Water Missions Intl. provided safe water, diarrhea was reduced by 90%, as [were] other water-related illnesses. People stopped coming to the clinic, except those suffering from malaria, eye infections and HIV/AIDS.”

Thanks to access to safe drinking water, the number of patients in the clinic declined dramatically and the clinic closed its doors to move on to another community in need (there is another clinic less than 3 miles away for those still suffering from non-water-related ailments). The former clinic building now serves as a community guest house and a physical illustration of the power of safe water.

“I’ve witnessed the impact of safe water on people’s lives,” Apollo said. “As long as Maruba has safe water, there will always be a great improvement in their health, as well as community development.”

Water Missions Intl. continues to work with communities like Maruba in Uganda, and hopes that every project can produce the life-changing transformation Maruba underwent. Life free of waterborne illness is a basic human right, but one that close to one billion people still lack. The organization has provided access to safe water for more than 2.4 million people in 49 countries on five continents since 2001, and continues to combat the global crisis one community at a time. *wqp*

Lauren McCarter is development assistant for Water Missions Intl. McCarter can be reached at [lmccarter@watermissions.org](mailto:lmccarter@watermissions.org) or 843.769.7395.

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Before the water treatment system was installed, the Maruba community used untreated water from Lake Victoria for drinking, which often led to disease outbreaks.