# tech update pumps



By Helen Mubarak

Pumping systems provide Haitian villages with clean, sustainable drinking water

ike 884 million people worldwide, the majority of Haitians lack access to safe water. This is no longer the case for the 4,900 residents of the villages of Dauphine and Rossignol.

In June 2012, Grundfos hosted the Kansas City Walk for Water to support Water Missions Intl. (WMI), a nonprofit organization combatting the global water crisis. Joining with the local community, Grundfos staff raised \$50,000—enough to ensure access to a sustainable source of clean water for an entire community.

Terry Teach, vice president of sales for Grundfos, visited Haiti with his wife, Kathy, Aug. 30 to Sept. 3, 2012.

"As we drove through Haiti, we saw quite a few water systems that had been installed and then abandoned," Terry said. "The people need longterm, sustainable solutions in order to lift themselves out of poverty. That's

what Grundfos and Water Missions Intl. have provided."

The partnership combines Grundfos' technology with WMI's holistic approach to community development. From the genesis of a project to implementation, WMI has sustainability in mind. It is as much about education as technology.

## **Complete Treatment System**

In Dauphine and Rossignol, the \$50,000 raised funded two Grundfos Lifelink systems, plus the training needed to sustain them and the hygiene lessons needed to prevent contamination.

Lifelink is a turnkey water solution for remote communities without access to water and electricity. It is a transparent solution that encompasses both the water solution itself and the business model, ensuring long-term environmental, financial and social sustainability.

Many traditional water projects fail because the need for future service, spare parts and ongoing training is neglected due to lack of skills and funds. No infrastructure is established to cover this need.

Lifelink also solves another challenge: mismanagement of funds. Villagers are charged a nominal water fee to help with the system's upkeep. Transactions take place via mobile phones and SmartCards in a closed payment structure, eliminating the exchange of cash. Because a percentage of the payments for water is allocated to service and maintenance, lengthy downtime and negligence due to lack of funds are no longer issues.

Lifelink systems comprise a number of technologies:

- Pump: A Grundfos submersible pump ensures reliable operation under tough conditions.
- · Renewable energy: Solar panels or wind turbines generate energy to pump groundwater.
- Water tower: The pumped water is stored in an elevated water tank



The new treatment system includes a pump, a renewable energy source and a water tower for storage

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and gravity fed into an automatic water-tapping unit.

### **Life-Changing Water**

"Through the Walk for Water and Water Missions Intl., we've been able to connect incredible technology with an incredible need," Terry said.

The women and children of the two villages no longer spend hours each day walking to a contaminated water source to gather water in 5-gal buckets. Access to clean water close to home will free up time for education and work and prevent sickness from waterborne diseases.

What Water Missions Intl. is doing with Grundfos' help is truly transforming people's lives," Kathy said. "Thanks to the installation of sustainable safe water systems, Haitians are not only able to significantly improve their health, but they are also able to better their overall wellbeing and quality of life."

#### A Step Forward

When the Teachs arrived in Dauphine, they were greeted by the cheers of hundreds of visitors well aware of the importance of the technology they brought. A village leader explained Grundfos' contribution to the crowd, pointing toward a company flag flying in the heart of the village, where the new water station would be located.

"It was very moving to see this area of hope and progress," Kathy said. "Grundfos employees can take great pride in being a part of that. Thanks to those who participated in the Kansas City Walk for Water, the entire village of Dauphine has access to safe, sustainable water."

As part of the trip, the Teachs also visited Gorman, a village where WMI had previously installed a Grundfos SQFlex to draw groundwater into a water tower. Gorman provided evidence

that a simple water system could be effective in spurring development.

Since the pump and tower were installed in Gorman, the villagers were able to build a school that educates close to 200 children whose water-fetching duties previously prevented them from receiving an education. Because villagers pay a small fee for their water, WMI is able to sustain the system and put the proceeds into its upkeep.

Dauphine and Rossignol will now have the opportunity to realize the same outcome. "Those who participated in the Kansas City Walk for Water should understand the difference they're making in the villagers' lives," Terry said.

Elsewhere in Haiti, the main source of water is typically a heavily contaminated, garbage-filled river that also is used for bathing and washing clothes. In a country where houses are made of plastic tarps and metal scraps, and where electricity and paved roads are scarce, clean water is a step toward growth.

"Our trip to Haiti was both heartwrenching and heartwarming," Kathy said. "It was so sad to witness the extreme poverty and bleak living conditions of people across the island. Yet I will never forget the moment when the children of Dauphine presented Terry with a Grundfos flag in gratitude of the life-changing gift they had just received. Thanks to the Kansas City Walk for Water, there is hope for the future of these children." wqp

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