



With the help of Grundfos booster pumps, a community in rural Rwanda enjoys the convenience of having water close to their homes

Grundfos pumps beat gravity to get water to Rwandans

In rural Rwanda, it's common to see people walking up and down steep paths on their daily water-collection chore, toting heavy 20-litre jerrycans long distances. World Vision Rwanda, together with the government, is trying to eliminate this ordeal by improving the water infrastructure. Because of the rugged terrain, where hilltops soar high above the valleys, powerful high-pressure pumps are needed to distribute water to local communities. And the Grundfos BMS range of pumps is 'up' for the task.

Rwanda, a small landlocked country dominated by hilly, tropical landscapes, is making a major effort to provide clean water to the entire population by 2024. World Vision Rwanda has come alongside the government and made a major commitment in 2018 to provide tens of millions of dollars to accelerate progress towards this ambitious goal. So far, they have reached nearly one million people with clean water.

“Given that Grundfos is a private business and World Vision works with humanitarian development, we appreciate the fact that Grundfos understands our operating model and is able to respond and adapt to it.”

Emmanuel Niyongira
Senior Operations Manager,
World Vision Rwanda

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GRUNDFOS 

Possibility in every drop



Migera, Rwanda

Achieving such an ambitious goal is only possible through partnerships, knowledge-sharing and collaboration, and World Vision Rwanda has chosen to work with Grundfos on several WASH (Water, Sanitation & Hygiene) initiatives. So far 28 projects have been launched as part of this partnership, providing a total of 300,000 people with drinking water access in 2022 alone. About half of these project are supplied with Grundfos Pumps.

Among the latest projects were four booster pumping stations in rural Rwanda that were built and commissioned in 2022.

A problem that pumps can fix

One of these four projects caters for the needs of the rural community of Migera, a town with approximately 12,500 citizens, in the eastern district of Kayonza, close to the Tanzanian border.

In the past, people here struggled with water access. They had to walk long distances to reach one of the three water sources serving the area, and the water was of poor quality. The chore invariably fell to women and children, who had to walk from their homes down to the water points in low-lying areas and then trudge back up the hill carrying heavy 20-litre jerrycans.

The lack of easily accessible water created challenges for Migera. Hygiene and sanitation were neglected, which caused health

issues; children missed school time because they had to help to fetch water. The water situation also undermined community development activities.

Recognising the challenges, World Vision Rwanda — in collaboration with the government, the Kayonza district administration and the Water & Sanitation Corporation (WASAC) — initiated the booster pump project to bring water closer to people's homes. Because of the hilly terrain, not just any pump would do — powerful high-pressure models were needed to lift water 400m uphill, from where it can be distributed to communities.

“We are happy to be partners with Grundfos because their equipment is a great help — all the stakeholders appreciate it. This is mainly because of the quality of the materials are made from. Plus, the Grundfos team always provides any support we need.”

Emmanuel Niyongira
Senior Operations Manager,
World Vision Rwanda

Having water close to their homes means that women can spend their time on productive activities



A highly efficient solution

For this project, World Vision Rwanda has chosen Grundfos submersible and booster pumps.

The submersible pumps lift the water from three boreholes (each 3,5m deep) into two suction tanks. The boosters then push the water 400m higher into three storage tanks with a combined capacity of 460m³, from where the water flows by gravity to the various villages and settlements. A total of 76 taps are supplied by the system, which comprises 36 km of pipeline.

The BM/BMS booster models, which are usually employed in reverse osmosis water treatment, are high-speed pumps with excellent energy efficiency ratings. This allows for cost savings without compromising the ability to provide the required water volumes. High-quality materials ensure durability and cut maintenance needs to the minimum.



The Migera water system

“Grundfos is a good partner because during the installation of these pumps, they offered trainings to all the stakeholders and even did the commissioning of the pumps. These pumps are of good quality, and they can save energy”

Fabiola Mukahirwa

WASH Engineer, World Vision Rwanda

To build local capacity, Grundfos provided World Vision Rwanda with training, technical support and on-site assistance as part of the installation, testing and commissioning process. This has given those operating the system the know-how to match water flow to demand in the most efficient way. World Vision monitors the pumps closely, together with the operators and staff from the district administration. The pumps have proved highly efficient so far.

The pumping system will be handed over to WASAC for management to take ownership of the water project and keep it running smoothly, so expectations are that the infrastructure will provide excellent service for a long time to come.

Water access improves lives

With the pumps successfully installed and commissioned, the people in Migera, and some surrounding villages, now have clean water close at hand and at an affordable price. The water system has eliminated the need for women and children to walk long distances to fetch water, time that they can spend on more productive activities. It is now easier to maintain high standards of

hygiene, in homes and at the Migera school, resulting in the better overall health of children.

The Migera school — it has only one — reports greatly improved attendance by its 995 students since the system came online, and better academic results.

“Ah! Life is much better now. We drink clean water, we fetch it very nearby, our children go to school and they are clean and wearing clean clothes. Life is good!”

John Gakwandi
Migera resident

Grundfos products supplied

[BM/BMS booster pumps](#)

[TPE feeder pumps](#)

[SP water intake pumps](#)



The water system comprises of 76 taps and 36 km of pipeline



Sanitation and hygiene standards have improved for the 995 students of the Migera school

“I’m so happy to see people having water close to their home. I remember the first time we opened the water, there were so many people at the public taps, and many jerrycans. So it was really amazing to see people receiving the project happily.”

Fabiola Mukahirwa
WASH Engineer, World Vision Rwanda