See the case video here



Yaa Wusua now has a reliable water connection at her home

"I love your water, your water is clean"

In a small community in the Eastern Region of Ghana, life has improved significantly over the past 18 months thanks to a new, smart water technology system that provides 8,000 residents with sustainable and reliable access to clean water. And the system is likely to expand.

The situation

Ask the villagers of Abomosu, in the cocoa-producing Atiwa West District of Eastern Ghana, how they are doing, and they will say life is good. That's because the population of about 8,000 now has permanent access to clean water that is safe to drink and use.

Just 18 months ago, this was not the case. The existing water system was not maintained and was dysfunctional, as is the case with many of Ghana's rural water systems. Water rationing was all-too common and residents, usually the women, spent hours every day fetching water from a nearby well or from private, unregulated boreholes. "It used to take me three hours to fetch water and fill my container; now it is good, now it is better."

Yaa Wusua Resident in Abomosu, Ghana



Read more cases here: www.grundfos.com/campaign/safewater-content-library

Possibility in every drop



Part of the installation

The solution

About 18 months ago, Ghana Water Initiative, an offshoot of Grundfos SafeWater, worked in partnership with the Community Water and Sanitation Agency and the Atiwa West District Assembly to install a smart, data-driven, revenue-producing water system in Abomosu — their first in Ghana. Today, safe running water is available throughout the community, flowing from a water tank with a capacity of 120m³.

The water comes from a 90m-deep borehole 1,5 km away from the village, where groundwater is pumped to the surface with a <u>Grundfos 7-23 submers-ible pump</u>. Currently 239 households are connected to this water tank. About half the customers pay cash, and the rest have smart meters, an innovative prepaid system that uses mobile-phone transactions rather than cash. Yaa Wusua is in the latter group, and a process of reaching every customer with prepaid metering is ongoing.

"This is good and easy," she says. "Now the water is at my home, and I use it for bathing, cooking and drinking. I love your water, your water is clean. There is no sediment or bacteria."

The water, usually untreated and murky, was the cause of waterborne diseases such as cholera. Village residents also bought water from vendors, but they were not always there when needed and charged high prices.

"It used to take me three hours to fetch water and fill my container; now it is good, now it is better," smiles Yaa Wusua, 54, a widow with four adult children who has lived all her life in Abomosu. She makes a living by selling homecooked meals and bread in front of her house on the main road.



Grundfos SP-family



Vera Beyireh is now benefitting from the AQTap

Saving time

Apart from the household connections, <u>AQTaps</u> have been installed at seven central locations in the village, replacing the old standpipes. An AQTap is a solar-powered, water-dispensing ATM that is operated with a card onto which users load money from their mobile phones. The prepaid water is available at the push of a button; easy, convenient and cashless.

Vera Beyireh, 20, a secondary school graduate living with her mother, relies almost entirely on an AQTap 50m from their home for water.

"The machine is good, really good. We have access to running water all the time. It was not like that before. I used to buy from water vendors but this is much better," she says.

At the AQTap she fills a 20-liter metal tub, which she carries on her head back to her home where she empties it into a 200-liter barrel.

"Life is easier now. I can finish my tasks more quickly. Thank God that you are here," Vera says.



The water storage tank



The clear blue dots show the household connections and the bigger dark blue dots show the AQTaps in Abomosu. All data is being monitored, evaluated and analysed to improve the processes and workflow.

Grundfos Holding A/S Poul Due Jensens Vej 7 DK-8850 Bjerringbro Tel: +45 87 50 14 00 www.grundfos.com

The outcome

Today, the seven AQTaps and the household connections are providing about 8,000 people in Abomosu with sustainable, clean water.

"We have more potential in Abomosu; we can get more houses connected" says Xorlali Yao-Kuma Kpodo, Engagement Manager, Ghana Water Initiative. "The locals are now praising our system and spreading awareness of it by word of mouth. This is really good, because even though our solution is cleaner, safer and cheaper, it can take time to change habits that have been engrained over many years."

"...it can take time to change habits that have been engrained over many years."

Xorlali Yao-Kuma Kpodo Engagement Manager, Ghana Water Initiative

