

# WHEN WATER BECOMES SUSTAINABLE BUSINESS

By pairing existing technologies with an innovative business model, Grundfos LIFELINK responsibly changes the way of operating and managing rural water supply systems.

By Carsten Kvistgaard



An oxcart is bumping along a red, dusty road in central Kenya with an empty water drum bouncing against the frame. A woman and two small boys are walking next to it. They have been walking for almost an hour when they finally stop at a small stone house next to the road. Women, children, and a few men swarm around the house, many carrying yellow plastic cans.

In the middle of the house stands a rectangular black box, almost like an obelisk. The woman enters the house, picks a small plastic piece from inside her dress pocket and places it in a slot in the black box. The digital display above shows: "credit 0 KSh". Then she fishes out her mobile phone.

## The LIFELINK concept

The world's leading pump manufacturer, Grundfos, heralds a new era in rural water supply. With its newly established subsidiary, Grundfos LIFELINK, it targets rural communities in Africa, Asia, and Latin America with a sustainable supply of safe drinking water at affordable prices.

LIFELINK is a business, not a charity. It builds upon a combination of pump,

mobile phone, and mobile banking technologies, and it is above all an innovative business model that allows consumers to pay back into the original system investment, simply by paying via their mobile for the water they use.

A LIFELINK System is a single-point water supply with a submersible borehole pump that is powered by energy from solar panels. Water is pumped to an elevated storage tank, whereupon it is led by gravity to a tap unit in a small house. The tap unit also serves as a payment facility.

## New habits, new opportunities

The woman's fingers dance across her mobile phone. First she checks her mobile bank account: There is still money, even after buying a goat yesterday. She types in a few more figures and hits "send". After a few seconds she receives an SMS: "100 KSh transferred to Grundfos for account AA0093". She inserts the plastic key again to check her balance: She now has 100 shillings for tapping water. Enough for almost two weeks. So she places the water key in another slot and water starts flowing through a hose to the 200-litre water drum on her oxcart.

A few weeks ago, she had to work hard at the hand pump for almost an hour to fill her drum. Now she can just relax and talk to people. One of them is a small, slight man carrying three jerrycans on his bicycle. His smile covers the whole of his face when he explains that he is doing good business: After paying two shillings per jerrycan at the water tap, he can drive less than half an hour away on his bicycle and sell it for 10 times as much to people who do not have the time or strength to travel a long distance to get safe drinking water. By expanding this business he will be in a position to feed his family.

Children come from the nearby school to fetch water. With three taps on the unit, everybody can now fill their canisters without waiting, like they did before the LIFELINK system — sometimes an hour or more. School lessons are not affected anymore.

A pump attendant looks after the system and ensures that everybody understands how to operate the tap system. He used to have a hard time counting people and cans and collecting money, but now he just needs to assist a few people. He is happy: "People now get what they pay for — no more, no less. And I don't have



water revenue, it goes back into the community's own account.

After their repayment of the system investment, the community will own the system and can invest the water income in new development projects. This closed-payment system prevents the need for cash to be exchanged between people and makes the concept transparent so that everybody with special interests and access — like financing institutions or donors — can follow each community's financial and technical performance via the Internet. A special surveillance facility even makes it possible to see how much water is being tapped and displays alarms so that LIFELINK's local service organization can take immediate action, should any problems arise. Thus, the system's sustainability not only deals with environmental aspects by using solar energy, but also with social and financial aspects.

The village chief explains: "I had an idea that this new water system would attract more people to our place. But I am surprised that we have been able to almost triple our water sales. I have a vision of LIFELINK systems in many more communities in our constituency because I see them as a motor of development. People get more time for productive work, cultivating and selling crops is much easier, and peoples' health standard improves because they don't need to take water from polluted sources."

The oxcart woman has filled her drum in 12 minutes and is heading home. Three other carts have already lined up. Women, children, and men come and go with jerrycans on their backs, on bicycles, donkeys, or wheelbarrows.

The creaking of the hand pump has ceased, replaced by cheerful voices and laughter. And while the sun sets behind the acacias and pump performance slowly fades, the pump attendant can make his account: 11 cubic metres. He can lock the doors. It has been a good day. ■

## Facts about LIFELINK and Grundfos

- LIFELINK is the Grundfos Group's first step into the so-called BOP market: The four billion people in the world who live for less than two USD per day (Base of Pyramid).
- LIFELINK is business with a responsible approach, closely connected to Grundfos' CSR policy. We call it inclusive business because it creates value for both Grundfos and the local communities.
- A LIFELINK system operates on solar energy and has a capacity of 8-16 m<sup>3</sup> per day.
- By paying a water tariff similar to officially recommended tariffs, a community can pay back a LIFELINK system over 5-7 years.
- Banking via mobile phones is becoming widespread in the developing world because traditional banks are little present in rural areas.
- Grundfos has a solid record on providing access to water through our well tested solar or wind powered pump solutions. Tens of thousands of these are working steadily all over the world, from developing countries to remote parts of USA and Australia.
- With such solutions, Grundfos contributes to fulfilment of several MDG's (Millenium Development Goals) in developing countries.

to explain it to them but can just help them instead. It's great fun."

## Financial and social sustainability

The money used to pay for the water via mobile phone banking goes into an account at the telecompany, where it is

transferred to the financing bank with whom LIFELINK has partnered. After deducting the community's monthly loan repayment, the bank transfers an amount to pay for a service contract between the community and LIFELINK to cover service, maintenance, and spare parts. If anything is left over from the