Eight million Ugandans live without reliable access to clean water. The Ugandan government and overseas donors are making large infrastructure investments to improve water supply to the rural poor but only 80 per cent of existing water pumps currently work. GOAL Uganda is supporting water pump mechanics so that they can build trust with rural communities and provide routine maintenance and fixing breakdowns in exchange for regular payments.

The challenge

In late 2014, GOAL set out to understand why investments in the water supply infrastructure were not leading to better services for rural communities. They discovered that the underlying reason for Uganda’s water pump failure rates was poor collection rates of user fees by community water committees. Nearly 80 per cent of people were unwilling to pay for maintenance and repairs, even though they could afford it.

GOAL's research also revealed that although over 90 per cent of mechanics had sufficient technically skills and the right equipment to repair the broken water pumps, they did not have the business skills or relationships with the communities to sell their services.

The main market failures, in economists' terms, were a lack of coordination and high cost of enforcing agreements. Both of these failures were on the demand side, where communities struggled to raise and hold onto the money needed to pay for repairs. More than 60 per cent of community water committees, set up to collect user fees for water, had no money in their accounts for repairs at the time of the survey.
This created a vicious cycle of low willingness to pay, no funds for repairs and no investment in maintenance, leading to frequent pump breakdowns and long downtimes. It undermined mechanics that went months without receiving payment and created cash flow problems as a result.

### A new approach

GOAL's vision is for a reversed pattern of behaviour:

- Communities raise enough money to pay for routine maintenance
- Mechanics are responsive and provide quality service on a regular basis
- To support this new market, local government provides oversight and mediation to make sure both sides are keeping up their side of the bargain.

The programme approach is to pilot this model at a district level and to influence policy and practice at a national scale.

### Regular payments crucial

Given that mechanics had high technical capacity but weak business skills, GOAL chose to work with an existing business with strong links to the mechanics in order to create a new offer to communities. The new model being introduced is a service contract for the maintenance and repair of water points, in return for quarterly payments. By shifting from payment for repair to payment for maintenance service, functionality should improve with significantly less downtime.

A new business model for water pump repair:

- Water committees, set up by communities themselves, collect money from each household and pay a set fee each quarter to service providers.
- Mechanics provide maintenance services for boreholes on a fixed schedule, in return for a fixed quarterly fee. They also promise to repair any breakdowns at no extra cost, which incentivises quality, as they will spend less of their own money on repairs if maintenance is done well.
- The business case for service providers is estimated to generate a 13 per cent profit margin. This is based on historical pump failure rates.
- For the economies of scale to be fully realised for the service provider, they would need contracts with multiple communities. This helps ensure enough money in the bank to cover the higher, but less frequent, costs of having to fix a pump failure.

GOAL's primary role in the early stages of the pilot has...
been to support service providers to develop their business model and marketing strategy. For the first year of the programme, GOAL agreed to subsidise some of the cost of parts required for major repairs and upgrading of pipes. This keeps service providers profitable while they build their repair reserves to cover higher, one-off costs of major repairs. Initially, the reserve will be managed jointly to ensure donor investments are used wisely.

At a community level, the new model needs water committees to take a more assertive approach to collecting fees from their users. To support them, GOAL has developed a parallel intervention to introduce water committees to mobile money technology for increased transparency. This ensures there will be a record of every transaction and reduce chances of corruption, helping to reduce the cost of enforcement, which was a barrier to fixing pumps.

Building reputations

GOAL introduced the service contract model in early 2015, so to date there are few concrete results to report. GOAL plans to track the contracts signed, the level of satisfaction amongst communities, the length of interruptions to water service and the number of pump breakdowns successfully fixed.

The long-term strategy for this business model to succeed relies on successful service providers building on their reputation and expanding the number of communities they serve. To reinforce the relationship between service providers and communities, GOAL is working with the local government to help it play a stronger regulation and mediation role. As the provision of water is a public good, this role involves agreeing to the service charge rate and ensuring that service providers offer a good service, and that communities continue to pay regular fees.

There are some new developments in the water and sanitation sector at the national scale around a new model for operations and maintenance across Uganda. Building on this pilot, GOAL will be well positioned to share lessons learned from the maintenance service model into national policy discussions.

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