

## The sanitation business of the Hand Pump Mechanics Association in Kabarole District

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### SANITATION CHALLENGES AND GAPS IN KABAROLE DISTRICT

- The level of access to safely managed sanitation services is very low. Only 7% of households have access in urban areas.
- Majority of households have sanitation facilities that cannot be emptied. This hinders the safe disposal of waste.
- Private sector has limited capacity to provide emptying and transportation services of faecal sludge. Only one cesspool emptier is operating in the district.
- Limited capacity for treatment and disposal or re-use of faecal sludge.
- The proportion of households that practice handwashing with soap is low. Less than 10% of the households had improved sanitation facilities with hand-washing facilities with water and soap.

Source: Kabarole District Master Plan for Universal Access to WASH Services 2017-2030

An evaluation of the sanitation business of the Handpump Mechanics Association KAHASA in Kabarole District has learned that the business model needs upgrading to make it commercially viable.

### THE WASH CONTEXT OF KABAROLE DISTRICT

Whereas 95% of the 84,345 households in Kabarole District (2014 Population and Housing Census) have sanitation facilities, water-borne toilets are used in only 1% of households. The majority use traditional latrines and a few use the conventional types. Just a handful of households use the ventilated improved pit (commonly known as VIP) latrines.

Moreover, an analysis of the 2017 sanitation market assessment survey results using the sanitation ladder as a benchmark revealed a steep reduction in the proportion of households with sanitation facilities that meet the grade: adequate superstructure, concrete slab, as well as availability of water and soap for handwashing. Only 1% of the households fulfilled all four parameters. To complicate matters, 19% of the households surveyed showed evidence of open defecation around the sanitation facilities and the compound.



In Kabarole District, less than 2% of the population is connected to the sewer, with 98% using on-site sanitation facilities of which 1% are septic tanks, 4% lined pits, and 93% unlined pits. Typically, 80% of the unlined facilities, which is the case for most private pits, are abandoned when they fill up while the rest are emptied manually through a variety of means such as the use of plastic jerrycans.

The fact that there is only one cesspool emptying truck in the district is a barrier to the uptake of emptying services as a modern way of evacuating faecal sludge. This notwithstanding that the National Water and Sewerage Corporation levies a relatively low tariff for discharge of faecal sludge at its treatment plant. This is intended as an incentive to encourage people to opt for legal discharge.

That is the context in which KAHASA, the Kabarole Hand Pump and Sanitation Association, has for the last decade struggled to find a niche for its services in the sanitation value chain that includes capture, containment, emptying, transport, treatment, and safe reuse or disposal of faecal matter.

## THE FUNCTIONING OF KAHASA

KAHASA operates through annual memoranda of understanding with the District Community Development Office on behalf of the local government, while the District Water Department is responsible for the technical supervision of the work the association does for clients in the communities.

Joram Kato, a mobiliser for KAHASA, is closely involved with the business of the association both as a sanitation service provider and as one of the caretakers of the business. KAHASA is in fact registered as a community-based organisation (CBO) with a social enterprise mission.

KAHASA's client base, in addition to the Kabarole District headquarters, consists of five institutions (one health centre IV in Kabarole and four schools in Bunyangabu), three households, and two commercial properties. Yet, with a charge of UGX 30,000 per barrel (200 litres) of sludge, most clients consider the service expensive. "Households bargain a lot and are usually given discounts," says Kato. "Some customers don't want to pay by the barrel. They prefer to pay a flat rate."

Challenges also abound at the points of service. The typical volume in a household latrine is estimated to be eight barrels of sludge, which is compounded by the habit of dumping solid materials in the pits. This necessitates time-consuming and costly sorting to separate the solid



from the liquid waste. Desludging is easier with household toilets that can be emptied through a septic tank. Line pits are also easier and cheaper to drain, yet most pit latrines in KAHASA's market are unlined. This poses problems when soil collapses into the pit as often happens, making it harder and more costly to drain a pit where sludge is mixed with soil.

There is also the technological challenge. The manual gulper that KAHASA uses to pump sludge out of pits is short. The deeper the pit gets the more energy it requires. The gulper can only be used to a certain depth beyond which the only option is manual desludging, which necessitates the use of protective gear. KAHASA mechanics are able to take precautions with heavy-duty gloves, goggles, and nose masks to reduce the health risks that could arise from exposure to waste material.

Transportation is a key factor in the costing equation. The tricycle that KAHASA uses to transport the sludge, which was donated by IRC, has a limited capacity of four barrels. According to Kato, "a bigger tricycle could bring down the cost of our services."

Moreover, the sludge dumping site, a lagoon set up by the National Water and Sewerage Corporation, is located in Bunyangabu District, about 30 kms from Fort Portal town where KAHASA's operating base is and which is its primary market. The distance is a problem for the tricycle which can only travel at a controlled speed to avoid



spilling the liquid sludge. It is basically uneconomical to transport just four barrels, the maximum capacity of the tricycle, over such a long distance. It takes on average a day to drain a pit worth eight barrels of sludge if the dumping site is located within two kilometres. Where the waste is dumped on site, it is possible to empty a pit within hours as there is no distance to cover. Whereas public health and environmental safety regulations prohibit on-site dumping, it is what some clients prefer because of the distance to the lagoon, which increases the cost of the service.

Yet some clients such as hotels think of the desludging service as too rudimentary and time-consuming. “Hospitality clients are sensitive,” says Kato. Not only do they want the job to be done very fast, they also want it done discreetly, either late in the evening or at night, to avoid exposing their guests to the spectacle of a waste evacuation operation.

### UPGRADING THE BUSINESS OPERATIONS OF KAHASA

To streamline its business operations, KAHASA opened up a bank account and adopted the practice of signing formal contracts with clients. In general, institutions prefer being charged a lump sum rate to being charged per barrel of sludge. Individual households, on the other hand, are generally reluctant to sign contracts in favour of verbal agreements, and the rate they are charged is not fixed as it often depends on the price they can afford or negotiate.

To benefit from the government policy of affirmative action for HPMAAs, KAHASA had to streamline its governance. With the District Water Officer as its patron, the leadership of the association comprises a chairperson, secretary, treasurer, and board members. The association meets with the patron every quarter and the board meets every month to review reports which are shared with the patron. The association is organised under three departments: sanitation, water (including plumbing), and masonry.

When the association secures a prospective client, the chairperson normally delegates a member to go to assess the job, which is then assigned to the appropriate department. For any deal that is signed, the chairperson and the secretary sign the contracts on behalf of the association.

### THE BUSINESS MODEL

The business case for KAHASA was to fill the gap in the market as a result of the inefficiency of manual service providers. KAHASA's strategy was to mechanise and professionalise the services using the technology of a

gulper and more efficient evacuation of sludge using a tricycle. For all these strategies, KAHASA continues to operate with a thin profit margin due to the failure to follow through with its business strategy. As a case in point, the association outsources jobs to individual members and non-members as sub-contractors for a share of the profit, contrary to the original idea of the association and its members undertaking work as a collective enterprise. With improved revenue, the association would have been in a position to acquire better machines that would have given it a competitive edge and obviated the need to rely on individual sub-contractors, particularly those who are not members of KAHASA, to handle its jobs.

The problem partly has to do with attitude. Some KAHASA members shy away from the pit emptying business because of the stigma they feel it attracts as it is considered by some in their communities to be a dirty job. In response, they opt to sub-contract jobs to other handpump mechanics who are non-members for a commission.

At the same time, KAHASA is facing stiff competition from the operator of a cesspool emptier who serves the same market. Despite its small size in terms of capacity, it does the job faster, more efficiently, and it is cleaner and attractive to clients such as those in the hospitality business who believe that the sight of sludge handling crews on their premises is damaging their brand.

It is estimated that a 10,000-litre cesspool emptier goes for about UGX 800 million. Despite the price tag, it is considered to be the most efficient technology available in the industry. Cheaper alternatives with a capacity of 3,000 litres are reportedly available at a moderate cost of UGX 150-200 million.



Without a doubt, KAHASA's future as a competitive HMPA and thriving sanitation business will ultimately depend on the financial sustainability and commercial viability of its business model.

KAHASA has considered the option of approaching the Micro Finance Support Centre for a loan to finance the procurement of a cesspool emptier, perhaps with the District Local Government (DLG) as a guarantor. But accessing financing would require a paper trail of meticulous record keeping, an area where KAHASA is trying to improve. They could also go for sanitation financial products offered by the various financial institutions in the district.

KAHASA's job is clearly cut out for it. The association is supposed to have two members from each of the 15 sub-counties in Kabarole District. However, of the association's 25 members who were registered by September 2019, just about five were active, a sign of an overall lack of commitment.

## ACHIEVEMENTS

KAHASA benefitted from support by the Ministry of Water and Environment to build its capacity in business planning. As a result, the association has been able to expand beyond water supply into sanitation.

KAHASA is recognised across Kabarole District as a provider of services in the maintenance and rehabilitation of rural water supply facilities. The presence of the association's members on the ground in the communities has reduced response times in general and ensured steady functionality of water access points through timely repairs.

Whereas there is room for improvement in the area of business planning, KAHASA has been repositioned as a market-oriented enterprise. With further capacity

building and changes in its governance systems, KAHASA will in future be in a good position to access commercial financing to grow and diversify its business. This will eliminate dependence on local government contracts.

## RECOMMENDATIONS AND WAY FORWARD

Efforts to turn the situation around have involved training the members in group dynamics and business planning, among others. Intensifying these and other capacity building initiatives will contribute to getting members refocused on the vision and mission of the association.

On the strategic level, reorganising the association by reducing the size of the membership will enable it to retain only those who are committed and interested in the core business of KAHASA.

To inject new life into its business model, KAHASA is considering specialising in sanitation as its niche. This is primarily a private business domain and the association would not need to rely on the DLG for support. With specialisation in sanitation comes the opportunity to diversify into biogas by recycling faecal sludge to produce manure and charcoal briquettes as an additional income stream.

To manage costs and operate efficiently, KAHASA should focus on construction of emptiable and lined pit latrines which are easier to drain and are not as much of a strain on the equipment as the unlined pits.

Lastly, by partnering with lending institutions, KAHASA could be prequalified as the preferred service provider for the construction, operation, and maintenance of facilities for any client of a financial institution who secures a sanitation loan. This is a win-win that will ensure reliable and quality service for loan clients and a steady income stream for the association.

### About IRC

IRC is an international think-and-do tank that works with governments, NGOs, businesses and people around the world to find long-term solutions to the global crisis in water, sanitation and hygiene services. At the heart of its mission is the aim to move from short-term

interventions to sustainable water, sanitation and hygiene services. With over 40 years of experience, IRC runs programmes in more than 25 countries and large-scale projects in seven focus countries in Africa, Asia and Latin America. It is supported by a team of over 100 staff across the world.

### About this brief

This brief was authored by Lydia Mirembe of IRC Uganda. Since 2011 IRC has been supporting Hand Pump Mechanics Associations (HPMA) to develop into viable business entities. A tool was designed to help develop, document and visualise business models for new or existing businesses. In 2015-2016, a process of mentoring the associations to manage profitable businesses in a number of districts were conducted.

This was followed by one-day leadership and management skills trainings. And recently the viability of the sanitation business model of the HPMA was assessed in Kabarole district.

### For additional information see:

IRC supports hand pump mechanics to develop business models and Leadership and management skills training for hand pump mechanics

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