

# Sanitation Financing: Embedding private sector financing in Fecal Sludge Management toward sustainable sanitation services

John Ndungutse February 2019

#### Abstract

Embedding private actors into sanitation can be a long-lasting solution towards sustainable sanitation. This article presents a synthesis of the private sector financing involvement into sanitation initiatives in Rwanda. This assessment is based on a cross-sectional study comparing different sanitation service delivery methods in Rwanda.

#### Introduction

Limited sanitation services in most sub-Saharan African countries and other low and middle income countries can be attributable to limited financing by public sector. It can be a major risk factor toward attainment of improved and sustainable sanitation services and the achievement of Sustainable Development Goal (SDG) 6. Limited financing capacity by public sector has led to increasing awareness that the private sector is needed to tackle sanitation service challenges, such as limited emptying services.

Sanitation business is about investing in solutions to sanitation problems by offering different products and services at appropriate prices. Improved sanitation is a huge market for private businesses. Embedding the private sector in the sanitation framework will enhance sanitation service delivery and involves strategies to engage the following actors:

- Individual entrepreneurs that offer simple products and services that do not require high investments. For instance, entrepreneurs that repair and install water pipes, toilets, and bathrooms can act as masons, plumbers, and traders to generate additional income.
- Small and Medium Enterprises (SMEs). If facilitated through loans from banks and Microfinance Institutions (MFIs), SMEs could support water and sanitation infrastructure in the rural-remote or dense-urban areas to the low-income families.

Water For People in Rwanda is facilitating sanitation marketing approaches in Rwanda through developing sanitation technologies, building the capacity of local entrepreneurs, working with local authorities, private sector organizations and communities to create demand for sanitation, and linking households and sanitation entrepreneurs to financial institutions to finance small scale sanitation initiatives.

Three sanitation initiatives/businesses have been identified and supported over the past three years to provide pit emptying services, latrine construction, and improve toilets using SaToPans. The three businesses are currently in the market phase of the sanitation plumbing schematic flow, and the Country Program aims to support at least two of them in reaching the scale phase over the next three years.

## Financing Approach

The nature and extent of public financing is based on tariffs, taxes, and transfers. For example, in the water, sanitation, and hygiene (WASH) sector, government and Water For People may



contribute toward capital expenditure (CapEx) on sanitation infrastructural facilities such as Decentralized Fecal Sludge Treatment plants (DEFAST), and private sector partners may sustainably manage these facilities meeting operational expenses. A case in point is the Gicumbi District DEFAST that was built by Water For People in conjunction with the Gicumbi district, then transferred to a private operator for sustainable management.

### **Sanitation Marketing**

Sanitation marketing introduces an explicit commercial component to addressing sanitation challenges. Such interventions seek to encourage entrepreneurs and businesses to develop the right sanitation products and services that are easily accessible to households at affordable price points. Sanitation marketing requires strong partnerships and coordination among various government departments and development partners to enable and catalyze a response from entrepreneurs and financiers with (a more aggregated) demand from households and consumers at the centre. Such partnerships also function in protecting consumers through awareness raising, not just on the need for investments in sanitation but also the types of investments that make sense.

Sanitation and hygiene interventions have the objective of ending open defecation and ensuring ongoing safe sanitation practices by households, with the goal of improving health, dignity, and other social goals. Reaching SDG 6.2 - which aims to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations - can be best attained using sanitation marketing.

## **Key Players**

Collaboration between different public and private actors is crucial within the sanitation sector. The involvement of the national Government of Rwanda is crucial for effective policy-making and funding, as well as for setting up agreements with private corporations that implement appropriate infrastructure. Local government also plays an important role in engaging with small and medium enterprises, NGOs, social entrepreneurs, and the civil society.

#### Public sector financing

The Government of Rwanda is focusing more efforts on improving sanitation, through its sanitation policy. It is creating more avenues and an enabling environment for sanitation entrepreneurs, such as offering tax incentives on sanitation businesses. Among the many sanitation projects that the government is supporting is the newly established sludge treatment plants based in the districts of Nyanza and Kayonza.

#### Private sector financing

Due to challenges in the public sector, the private sector has a pivotal role in achieving sustainable sanitation services. Among other key players in the sector, some private entrepreneurs are offering pit emptying services and improved latrine products to support Fecal Sludge Management.

Pit Vidura, GAPM Limited, BIDSS, and Lixil provide good examples of partnerships Water For People has created with private entrepreneurs to provide sludge emptying services in the City of Kigali, neighboring towns, and the district of Gicumbi. These companies were chosen from many other companies whose emptying services are limited to households and institutions that own septic tanks. Pit Vidura and GAPM Limited provide services to all categories of customers regardless of the sanitation technologies they use.



#### Pit Vidura

In practice, when pit latrines in urban areas fill up, manual emptiers remove the waste using buckets and dump it in the open environment or re-bury it in the ground, contaminating ground water sources. This practice threatens public health, and is illegal and unregulated. Pit Vidura provides a solution for the fast-growing pit emptying demand in Kigali.

Pit Vidura began a licensed pit sludge emptying business in 2016 using an Evac technology, an emptying device that creates a vacuum to suck sludge from toilets to a holding container. Pit Vidura offers safe, affordable, and clean pit latrine emptying services to households in dense urban settlements across Kigali. The excavated waste is transported by truck to the city's dump site, operated by the City of Kigali, and has replaced illegal manual emptying practices.

The company had struggled to break-even due to high operational expenses attributable to transporting sludge to the disposal site, until last October when the company managed to acquire its own emptying truck. Its market has expanded rapidly with more than 1,000 households serviced as of December 2018. Through private sector investment, Pit Vidura could reach even more households by expanding operations through the acquisition of an additional Evac.





#### **GAPM Limited**

Gicumbi Agriculture and Production Market (GAPM) Limited is a registered and licensed company that offers solid waste collection, transportation, and cleaning services and produces liquid and solid fertilizers. Key customers include a refugee camp, markets, schools, health care facilities, restaurants, and households.

GAPM Limited has been in the pit emptying business since 2017, following the construction of the DEFAST in Gicumbi District. Working at full capacity, the DEFAST can receive up to 15m³ of sludge per day. Main challenges include operational costs attributable to transporting sludge from customers to the treatment plant, and the need to expand sludge emptying to neighboring





towns and rural households. With a loan from a private sector partner, GAPM could expand its operations outside of Gicumbi town centre and scale its coverage. To address the finance challenges, Water For People in Rwanda is engaging GT Bank in Rwanda to avail funds for financing GAPM's operations.

#### **BIDSS and Lixil**

Big Data Services Limited (BIDSS) and Lixil (through Hajaro Limited) are in partnership with Water For People in Rwanda to increase Safe Toilet Pan (SaToPan) distribution in remote areas. A SaToPan is a simple, plastic, pour-flush pan that provides an air-tight seal, maintaining odor free latrines and preventing flies and insects from getting out of the pit to help to prevent the spread of disease. The product was first introduced in Rwanda in 2015 by Water For People and is being sold to households and institutions by BIDSS and Lixil.

To facilitate the initial installations of the SaToPans, Water For People supported an initial training of 127 masons in districts of Gicumbi and Rulindo. BIDSS and Lixil have taken up the initiative, and today, more than 1,251 masons have been trained to install SaToPan. BIDSS and Lixil have managed to supply SaToPans in 21 districts in Rwanda and are looking forward to extending supply in the remaining 9 districts.

While these partners have successfully distributed SaToPans in different parts of the country, full national coverage has been limited to financing needs, especially related to transportation costs. Water For People in Rwanda is working closely with BIDSS to improve access to finance and business plan development to better engage with the private sector.





## **Involvement of Lending Institutions**

Sanitation loans from the lending institutions in Rwanda can leverage sanitation development funding for greater impact and help meet ambitious national and global sanitation targets. MFIs and other lending institutions can play a vital role in the attainment of sanitation goals, as their loans can be used to help close the finance gap and expand sanitation businesses.

Water For People in Rwanda is working closely with GT Bank as a partner to issue out affordable sanitation loans. In another case, World Vision in Rwanda has partnered with Vision Fund MFI to issue out loans to sanitation businesses across the whole country. These loans can help support entrepreneurs in the Fecal Sludge Management business to improve sanitation service delivery.



The challenging factor is that sanitation is viewed as a unique and new venture in Rwanda. There is limited collateral/security, as noted in Water For People's annual reflection session with key sanitation partners in June 2018. Banks are offering sanitation financing at a slow pace, leading partners to wonder whether lending institutions will create sanitation portfolios for more entrepreneurs to come on board.

#### Conclusion

The private sector can support the Government of Rwanda in attaining SDG 6.2 by 2030, through innovations in sanitation ranging from emptying household latrines with onsite waste treatment or transportation and remote treatment/recycling of the waste. However, strong partnership among the public, private, and development sectors is required to reach sustainable sanitation services.

Increasing financing capacity of private operators through loan access may have more positive spillover effects on sanitation service delivery. For instance, the Government of Rwanda may create an enabling environment via policy framework, the private sector may bring in financing or co-financing, and other development partners like Water For People may bring in training and technical assistance capacity.

Creating a sanitation portfolio by lending institutions, more entrepreneurs can take advantage of the demand in the market for sanitation products and services and hence make progress toward achieving SDG 6.2.