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TRANSFORMATION TOWARDS SUSTAINABLE
AND RESILIENT WASH SERVICES

Strengthening the enabling environment for urban sanitation: public-private collaboration in Kisumu, Kenya

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PAPER 2961

Collaboration between public and private actors is crucial for the successful delivery of safe, affordable and sustainable sanitation services in rapidly urbanising contexts. In Kisumu, Kenya, WSUP has been working with County government bodies and sanitation businesses to strengthen the enabling environment for urban faecal sludge management: the supporting regulatory, financial and institutional framework that encourages private sector participation and customer-focused service delivery. Bringing together the County Public Health Office, the city's utility (Kisumu Water and Sewerage Company – KIWASCO), and a sanitation business (Gasia Poa Waste Management Services), this partnership model balances the strengths of each stakeholder in order to improve the market for on-site sanitation services and products in the city. This paper explains how this approach was developed, its appeal to stakeholders, how programme activities are contributing to the strengthening FSM sector, and the next steps for the sector in Kisumu – and Kenya.

Activating the market for on-site sanitation services in Kisumu

Sanitation in the city of Kisumu

Kisumu is the third-largest city in Kenya, with a population rapidly approaching 400,000[1]. A significant proportion of its inhabitants live in informal settlements such as Manyatta A, Manyatta B and Obunga. In 2005/2006, it was estimated that around 70,000 households were spread across these informal settlements, and less than half of those had a toilet in their house or on their plot. [2]

Approximately 75% of household sanitation systems in Kisumu are pit latrines, but large pits are prone to collapse due to the nature of the soil in the area. To compensate, pits are often small, but this means that they fill up faster, particularly if (as is common in lower income settlements) they are shared between multiple households in a compound.[3] Service providers that extract sludge from these pits therefore should play a key role in preventing toilets from filling up, becoming unusable and then abandoned – but the County Government had only five vehicles suitable for collecting and transporting sludge across the whole city. As of February 2018, not all these vehicles are operational.

In the place of licensed (legal) pit/tank emptiers, a number of informal manual emptiers operate in the city, working at night to avoid fines (and even prosecution) and providing sub-standard, unhygienic services wherein faecal sludge is removed from pits and buried somewhere nearby.

Encouraging on-site sanitation service development

Citywide sanitation improvement requires the development of a supportive framework or an 'enabling environment': clear policies, operating guidelines, regulations, technical assistance, financial streams, and political buy-in. Lowering the barriers to entry, offering incentives for private operators, clarifying minimum operating standards and providing for their enforcement are all key aspects of the enabling environment that the public sector must deliver in order to encourage effective and affordable private sector engagement in on-site sanitation.

WSUP's engagement in Kisumu is part of a 2012-2017 programme funded by Bill & Melinda Gates Foundation, the objectives of which were to facilitate the growth of sanitation enterprises in the city and support a stronger enabling environment for on-site sanitation.

Building the relationship between public and private sanitation actors

Public-private collaboration in Kenya: an overview

Large-scale PPPs in Kenya are governed by national legislation – the Public Private Partnerships Act, 2013 – and managed by a 'special purpose' PPP Unit that sits within the National Treasury and acts as a secretariat and technical arm of the PPP Committee, upon which sit members of the government and private sector representatives. This national framework has not (yet) been mirrored on the County level (Counties are currently signing their own agreements, but County-level laws are yet to be enacted), and there have been calls for more clarity on sub-national PPP frameworks, which could include county PPP units. Many Kenyan County governments nonetheless appreciate the role of public-private collaboration in delivering safely managed urban WASH, although currently it falls to non-public bodies like businesses or NGOs to design public-private models and then present them to the relevant County department for their approval and buy-in.

Public-private agreements are currently more common in the water sector than sanitation – for example, water utilities sell water in bulk to private operators who can then sell the water on to consumers, using a price structure agreed with the utility in advance. The Kenya Environmental Sanitation and Hygiene Policy – KESHP – does, however, note that private sector involvement in urban sanitation needs to increase, and aims to promote models that can serve the poorest and most marginalised, and aspires to translate national PPP policies and regulations to the county level. Despite the lack of formalised County-level sanitation PPPs, there is certainly interest in initiating service-based collaborations between public bodies and private actors. This momentum was key to the development of the partnership model in Kisumu.

Gaining buy-in from Kisumu County Public Health Office

According to the Environmental Sanitation and Hygiene Policy, County Governments, acting through their public health office are responsible for effective sanitation regulation and enforcement, maintaining standards for environmental sanitation services, supervision and monitoring of all environmental sanitation projects. The Policy also mandates utilities to support emptying of on-site sanitation facilities such as latrines, in partnership with private sector partners. Gasia Poa's move into on-site sanitation services was an opportunity for the County Government to support such a partnership around the key areas of solid waste management, hygiene sensitisation and FSM.

Nature and structure of collaboration

The initial focus of the programme was to introduce new sanitation products to the market in Kisumu: a sanitation service model that was based on an EcoSan toilet shared by multiple households, or a container-based sanitation service model that revolved around individual households renting a CBS toilet. A company would then empty and transport sludge from either model for a fee. However, financial modelling early in the development process demonstrated that both models would require years of subsidisation before breaking even.

The programme therefore took a more holistic approach and attempted to target the factors that made the urban sanitation sector (and FSM specifically) discouraging to new service delivery models. WSUP identified Gasia Poa, a pre-existing waste removal company headed by Dickens Ochieng (an entrepreneur who was willing and able to expand his business into FSM) as a potentially viable sanitation provider with pre-existing capacity. Gasia Poa's move into FSM was accompanied by WSUP support to the County Government of Kisumu's Public Health Office to design new regulations, guidelines and enforcement training that would encourage the uptake of safely managed sanitation services. The city utility, KIWASCO, also has a role to play, and has reduced the fees for use of its dumping site in Nyalenda for Gasia Poa until the end of 2018. The stakeholders involved in this model combine their strengths and capacities in a number of ways, as demonstrated in Figure 1.



Figure 1. Public-private collaboration in urban sanitation service delivery in Kisumu: stakeholder relationships

Source: WSUP

Key project activities

Raising standards of manual pit emptying: businesses

WSUP has designed Standard Operating Procedures (SOPs) for manual emptiers in Kisumu, in collaboration with the Public Health Office. These Procedures lay out emptying, transport and disposal methods, behaviours and equipment that will protect the health of Gasia Poa's employees, as well as their clients and the general public. The SOPs were the first such guidelines produced in Kisumu and are an important step towards ensuring that all manual emptiers in the city perform to a minimally acceptable baseline in their day-to-day operations.

The SOPs split improved pit emptying and transport service provision into five stages: overall operations; emptying; transport; disposal; and customer acquisition.

Overall operations

1. Licensing: FSM operators must obtain 3 licenses before starting to empty, transport or dispose of sludge.
2. Employee health and safety: staff must be vaccinated for hepatitis B, cholera and typhoid, and have valid health insurance and have been trained by the County Public Health Office on the SOPs.
3. Equipment: Employers must supply their staff with full Personal Protective Equipment.

Emptying

1. Worksite operations: Preparation, authorised personnel, containment of contaminated items, full PPE, no phones, no smoking or alcohol, no eating, uncovered pits/tanks to be attended by staff.
2. Sludge removal: staff must not enter the pit or tank, improved tools for emptying to be used, sludge spillages to be cleared immediately, waste stored in sealed barrels.
3. Site departure: Site to be left in safe condition and cleaned before departure to disposal point (currently, Nyalenda 'lagoon').

Transport

1. Vehicle requirements: Sign displayed about what vehicle is carrying, vehicle cannot also be used to transport any items for human consumption, trailer must have sides to prevent barrels tipping.
2. Transport requirements: Vehicle cannot be overloaded, a plastic sheet should be used on the vehicle floor, barrels must be completely sealed, spillages must be cleaned and vehicle cleaned in a safe space.

Disposal

1. Waste disposal practices: Transported to Nyalenda wastewater lagoons, solid waste to be removed and burned at the KIWASCO treatment site.

2. Equipment washing: Should take place at the Nyalenda wastewater lagoons to prevent contamination when returning equipment to storage.

Customer relations

1. Marketing: must be realistic and accurate.
2. Site evaluations: should take place to evaluate specific site needs and to ensure that the pit/tank can be emptied safely.
3. Quotation: customers should be provided with an explanation of the breakdown of the quotation and that the price could change depending on the contents of the pit (i.e. higher volume than expected, high solid waste content etc.).

Enforcing the SOPs: Kisumu Public Health Office

Importantly, the Kisumu Public Health Office participated in the design of the SOPs and are therefore engaged with the concept of ensuring that safe manual emptying standards are introduced across the city. This is key to the longevity of the SOPs and safely managed sanitation in Kisumu more broadly: regulations must be matched by enforcement, discouraging unlicensed (illegal) and unsafe service provision that undercut formalised, licensed operators such as Gasia Poa. Rigorous monitoring and enforcement will have a positive impact on the uptake of improved services, but this kind of continuous oversight can only be applied by the public sector. Accordingly in Kisumu, WSUP has trained Public Health Officers and Community Health Volunteers in enforcement and monitoring of pit latrine or septic tank emptying. Breaching the SOPs could lead to a company losing their license.

Contributing to the design of a County Sanitation Policy

The SOPs are a valuable first step towards a well-regulated sector guided by clear policies that are stringently enforced on the local level. However, they are not a long-term solution, but an interim step designed to clarify minimum standards for FSM in the absence of regulations and policies designed by national- and County-level stakeholders. With this in mind, the County Government of Kisumu is replicating the Environmental Health and Sanitation Policy, which shall address the scaling up of access to improved urban sanitation, promotion of appropriate technology options, wastewater management, and disposal of waste. This County-level Policy is based in part on the SOPs, with support from WSUP. This is the first such policy in development on this administrative level in Kenya.

Providing targeted support to catalyse business development

WSUP staff are helping Gasia Poa develop its management and business operations. This support is based on a detailed capacity assessment – not only taking into account what the SME needs to improve, but attempting to match that carefully with WSUP's experiences and strengths. This kind of targeted support means that both WSUP and Gasia Poa are aligned in a manner that will ensure long-term business improvement without the need for prolonged external assistance. The aim is for WSUP to provide only what is really needed to get Gasia Poa off the ground while ensuring that Gasia Poa are well-positioned to continue to grow without WSUP.

The capacity assessment highlighted that Gasia Poa would require financial training and tracking, marketing planning and branding. Accordingly, WSUP undertook financial modelling that demonstrated to Gasia Poa how many pits need to be emptied in order to cover their costs. This has already helped with their financial planning – for example, highlighting that vehicle hire requires the company to empty nearly twice as many pits per month as they would have to if they bought their own vehicle.

Investing in Kisumu's sanitation infrastructure

KIWASCO has provided valuable support to Gasia Poa as it moves into on-site sanitation services. As well as reducing fees at its treatment site, KIWASCO has invested in its treatment infrastructure to accommodate Gasia Poa operators. Solid waste disposed of in pit latrines cause problems when desludging pits, and impact on the treatment plants as well. For example, an estimated 72 tonnes of solid waste contaminated by faecal sludge was delivered to treatment facilities run by KIWASCO in 2017. As well as assessing the future needs of the treatment infrastructure if licensed manual emptying is to scale up citywide, KIWASCO has constructed an incinerator for burning solid materials at the wastewater site which can be used by Gasia Poa, and an area where operators can clean their PPE, emptying equipment and barrels.

Impact on Kisumu so far

124 pit emptiers in Kisumu have been trained on the application of the SOPs and other hygienic requirements. Community Health Volunteers - the first line supervisors of the pit emptiers - have also received training on the SOPs, as have all City public health officers. This training of the public and private sector means that there will be a uniformity in manual emptying supervision and further community sensitisation.

Gasia Poa has maintained steady progress in completing emptying jobs, although the number of pits emptied per month will need to increase in order for the company to become sustainable (particularly when KIWASCO increases fees for use at the dumping site at the end of 2018). The value of working with businesses who offer other services (such as solid waste management) has been confirmed – the owner of Gasia Poa notes that a number of pit emptying jobs follow from solid waste management contracts, as homeowners and landlords take advantage of the fact that Gasia Poa can provide multiple services.

Customers rate the quality of the emptying service highly, thanks to the professionalism of the operators, and the convenience and cleanliness of the emptying itself. However, customers are not used to the price of using a licensed operator and are hesitant to pay more than KSh 8,000 (around USD 80). Gasia Poa, on the other hand, would struggle to reduce prices given the costs of each emptying job (which includes vehicle hire, fuel costs, staffing, equipment etc.). One potential way forward is to explore the possibility of buying a vehicle using a 5-year part-subsidized loan.

Next steps

Over the next two years, WSUP Kenya will provide Gasia Poa with technical assistance for the development of faecal sludge management in Kisumu through capacity building of stakeholders, particularly County Public Health Office and private sanitation operators. WSUP also plans to support operators in demand creation for the uptake of hygienic legal emptying.

Significant barriers remain that could block the development of safely managed on-site sanitation in Kisumu. Unlicensed operators are still active in the city, and high-level leadership from the city authorities is required to ensure that the SOPs are properly enforced. The completion of Kisumu County's Environmental Health and Sanitation Policy and accompanying enforcement procedures should alleviate this by introducing clear charges for non-compliant households, landlords and operators.

Financially, Gasia Poa's FSM arm has still not yet made an overall profit. Determining a future fixed dumping fee with KIWASCO will greatly aid Gasia Poa's financial planning (perhaps through a phased introduction of a fee, rather than introducing a new charge). Clear price points for customers need to be established, including preferential pricing that ensures that lower-income customers benefit from reduced prices. Introducing a phased payment process for customers may alleviate a reluctance to pay the prices offered at the moment – reducing the amount to be paid upfront may persuade more Kisumu residents to use the service rather than unlicensed emptiers who compete with Gasia Poa in terms of price, but cannot match the service offering in terms of convenience, cleanliness and customer follow-up. However, the FSM sector (and sanitation sector in Kenya more broadly) need to assess its long-term funding horizon, if more private operators are to enter a competitive and supportive sector. As it stands, urban sanitation service provision will require financial support, or at least in-kind support, from the public sector.

Learning

For sanitation businesses to thrive, the enabling environment in which they sit must be supportive; this includes policies, guidelines, political will to improve the sector, clear funding streams and incentives for private companies to encourage market entry. Regulations are key to driving uptake of services provided by safely managed, licensed suppliers. The private sector can provide innovation, speed and consumer-focused services, but cannot do so alone – public-private collaboration is a requirement for achieving national sanitation goals and providing improved and safe sanitation to all Kenyans.

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Notes

[1] Charles et al (2013)
[2] Karanja (2010)
[3] Simiyu et al (2017)

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