



Pit-emptying practices in Lusaka: how to encourage households to use safer and more environmentally friendly services

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In Lusaka, health and environmental hazards have been aggravated by the unsafe disposal of pit latrine sludge by informal pit emptiers. In this note, we make several recommendations to increase the use of formal, safe and environmentally friendly emptiers.

The lack of safe sanitation in Lusaka is a huge health and environmental hazard

Less than 10% of Lusaka's 1.7 million population is connected to the sewerage network. Around 60% do not have access to improved sanitation facilities and rely on pit latrines, which are essentially a hole in the ground covered by a concrete slab (with a small hole) and a shelter.

The prevalence of pit latrines and Lusaka's high water-table has led to the contamination of ground water and spreading water related diseases such as cholera and typhoid¹.

This is exacerbated by households using informal emptiers

Most households in Lusaka use informal 'emptiers' who bury or dump the waste close to the household's premises, exacerbating the health and environmental hazards.

¹ Lusaka went through cholera outbreaks in 2017-2018, affecting in particular the densely populated peri urban area of Kanyama. Kalingalinga underwent a severe episode of typhoid in 2017.

In recent years, Lusaka Water & Sewerage Company (LWSC) has helped establish groups of formal emptiers. Formal emptiers use protective clothing, improved tools, and – very importantly – transport waste to a LWSC treatment facility rather than bury it on-site.

Oddly, despite formal emptiers being cheaper², they manage less than 1% of total pit latrine waste.



Pit latrine in peri-urban Lusaka

So why do households prefer informal emptiers?

Informal emptiers better respond to household's constraints:

- **Households can pay in instalments:** Although more expensive, informal emptiers often spread payment over time to reduce the upfront cash outlay for households.
- **Informal emptiers fully empty pit latrines:** Formal emptiers are limited

² The charges of formal emptiers ranges from US\$25 for 12 barrels to US\$45 for 32 barrels, with an average charge of US\$38 per m³. Conversely, charges of informal emptiers range from \$75 to \$120 per job.

by a capacity of 32 barrels, which is sometimes not sufficient to fully empty a pit latrine. Because informal emptiers usually dump on site, they do not face this constraint and fully empty pit latrine.

- **Households prefer to provide work for community members.** Informal emptiers are often members of the community or relatives. They are also easier to contact than formal emptiers.



Formal pit latrine emptiers in peri-urban Lusaka

The use of safe, formal emptiers can be encouraged by subsidising the cost

ECA and WSUP, through World Bank Group funding, are currently advising LWSC on mechanisms to improve the management of faecal sludge in Lusaka, including finding ways to encourage the use of safe and formal emptiers.

One key recommendation is to cross-subsidised charges by formal emptiers through a ‘sanitation levy’. The sanitation levy is a fixed percentage applied to the water bills of LWSC customers who are not connected the sewerage network. This will free up funds to scale up the services of formal pit emptiers and make them

significantly cheaper, or even free. This reduction in price, alongside awareness campaigns and improvements to the formal emptying businesses (improving efficiency, allowing payments in instalments, etc.), should drastically increase the volume of waste safely disposed in Lusaka.

...And by making the whole service chain financially sustainable

Another key recommendation is that new treatment facilities (currently under design) should be leased out to a private partner who is paid on an output basis, for example \$/m³ of treated biosolids. This can potentially transform the sector, as it will give the new treatment operator a very strong incentive to collect more pit latrine waste. The treatment operator will be free to incentivise emptying. For example, by directly mobilising and contracting pit emptiers, by providing them with better equipment, by marketing on their behalf, or by paying them for every m³ of waste delivered to the facilities which, in turn, should make emptying cheaper for households.

Transformational change of Lusaka’s sanitation sector is just around the corner

LWSC is currently reviewing ECA and WSUP’s recommendations and finalising a new sector structure. We expect that a sanitation levy and new private sector contracts will be in place within the next few years.

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