

Willingness of Kenyan water utility customers to pay a pro-poor sanitation surcharge

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Quick read...

- This Policy Brief reports a research project that evaluated the willingness of Kenyan water utility customers to pay a little bit extra on their water bill to support slum sanitation.
- The main factors influencing willingness to pay (WTP) were *trust* that the money would be spent correctly; perceived *own-benefit* from slum sanitation improvement; feelings of *solidarity* with slum dwellers; and *satisfaction* with water and sanitation services.
- Median WTP was 100 Kenya shillings (Ksh) per month, around \$1. If applied across all of Kenya's 91 utilities, this could potentially raise up to 1.6 billion Ksh annually, around \$16 million.

Rationale

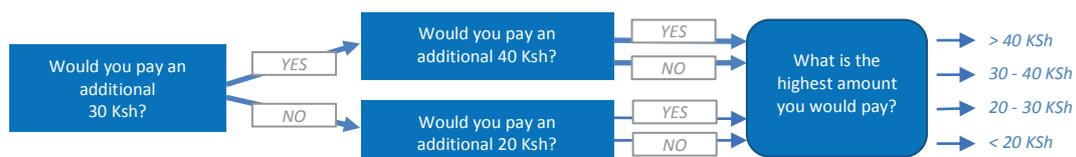
Over the period 2013 - 2030, a total of 500 billion Ksh (\$5 billion) will be required to provide adequate urban sanitation in Kenya, about \$280 million annually; the currently identified financial allocation is only about 6% of this total (estimates from the Kenyan Water Services Regulatory Board, WASREB).

One potential approach for part-filling this financing gap is the sanitation surcharge model: a redistributive cross-subsidy raised as an additional charge on water bills. The most long-standing example is from Zambia, where your water bill includes **a)** your water services charge, **b)** your sewerage services charge, plus **c)** a small additional amount to support sanitation services in low-income communities (i.e. the sanitation surcharge, in Zambia called "sanitation levy"). In Kenya, WASREB and other actors are considering the possible introduction of this model.

This research, carried out in close liaison with WASREB by research consultancy Aquaya, aimed to assess willingness to pay for a surcharge of this type among Kenyan utility customers. The research also explored factors affecting willingness to pay. The research centered on a survey of customers of 2 utilities: NAWASSCO in Nakuru, and RUJWASCO in Ruiru-Juja.

Methods

The research started with small qualitative studies (exploratory customer interviews, focus group discussions, and key informant interviews). This was followed by questionnaire survey of 400 randomly selected utility customers, stratified by income level. WTP was assessed using a *double-bound dichotomous choice model*, with question sequence as follows:



Additionally, the questionnaire assessed *customer attitude variables* including **a)** *trust* in the utility to spend the money correctly, **b)** perception of *own-benefit* that would arise from slum sanitation improvements in the respondent's city, **c)** feelings of *solidarity* and moral obligation to support poorer citizens, and **d)** *satisfaction* with own water and sanitation services. This then allowed the researchers to assess whether WTP was influenced by these variables.

Urban Sanitation Research Initiative Kenya

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Findings

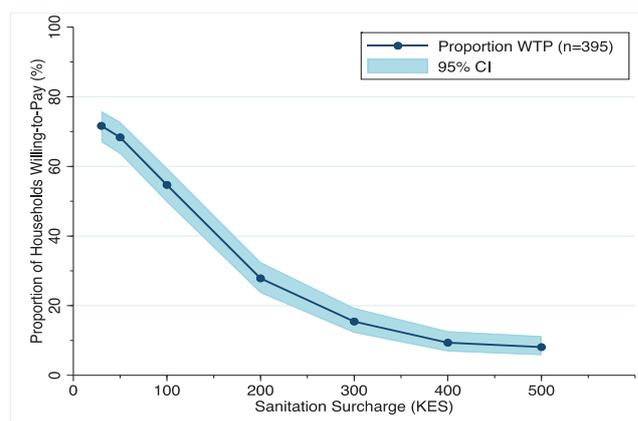
Considering NAWASSCO and RUJWASCO respondents together, 75% of respondents indicated willingness to pay some amount. WTP was in general lower among RUJWASCO customers than NAWASSCO customers, possibly reflecting lower customer satisfaction with RUJWASCO services. Evidently, WTP decreased with increasing amount, as shown in Figure 1. Median WTP was 100 Ksh per month, corresponding to 9% of the median water bill.

The researchers tested the effect of different messaging variants, but these had little effect on WTP. For example, some respondents were asked: “Suppose NAWASSCO was to establish a community health fund to provide low-income areas in Nakuru with improved sanitation. Would you pay [...]?”; while others were asked “Suppose NAWASSCO was to establish a clean environment fund [...]”. WTP did not differ substantially between the two groups. Methods of this type indicated a slight preference for payment of a flat amount, as opposed to a percentage amount.

By contrast, all four *customer attitude variables* had an effect on WTP. WTP was on average higher among respondents who expressed higher levels of *trust* that money raised would be spent correctly; among respondents who perceived higher levels of *own-benefit* from slum sanitation improvement; and among respondents who expressed higher levels of *solidarity* with slum dwellers; and among respondents who were *satisfied* with their current water and sanitation services.

Corruption was a frequent concern: one respondent said “I think one of the most discouraging things in Kenya is corruption which permeates the whole society...it even prevents me from contributing because I think I am enriching the already rich.”

Figure 1. Proportion of residents indicating willingness to pay, plotted against proposed payment amount.



Policy implications

This research demonstrates that there is clear willingness among Kenyan water utility customers to pay a pro-poor sanitation surcharge. This was a relatively small study of just two utilities, and we would certainly expect WTP to be higher among customers of utilities with higher customer satisfaction (like NAWASSCO); nonetheless, we consider that the broad findings are likely to be valid across most Kenyan cities. Interestingly, customers without a sewerage connection had a WTP comparable to customers with sewerage. The proposed sanitation investment type (sewerage vs. onsite) did not influence WTP.

At a February 2018 WASREB workshop in Naivasha (Kenya), where these findings were discussed with major urban utilities and counties, there was wide interest in taking this idea forward; though there was also strong consensus that a sanitation surcharge can only make a partial contribution, and there remains a requirement for substantially increased financial allocation to urban sanitation from national and municipal general budgets.

There was some disagreement at the workshop around the degree to which a future sanitation surcharge should be ring-fenced: some participants argued for strict 100% ring-fencing for slum sanitation; others argued for 60% spend on slums, and 40% spend on sanitation more widely (so that surcharge-paying customers see own-benefit).

For more detailed policy recommendations, see the report of the Naivasha workshop, available on the website of the Urban Sanitation Research Initiative: www.wsup.com/research.

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