

Inequalities in access to WASH services among low-income consumers: key findings from one citywide survey in Nakuru

Aims

WSUP carried out 7 citywide surveys in 2017/2018, aiming to provide a strong understanding of water and sanitation service levels in low-income communities (LICs) in **Dhaka**, Bangladesh; **Maputo**, Mozambique; **Nakuru**, Kenya; **Antananarivo**, **Mahajanga** and **Toliara** in Madagascar; and **Lusaka**, Zambia.

The surveys were designed and implemented to provide reasonably accurate estimates of the proportion of people in each city in each “service ladder” category for water and sanitation as defined by the WHO/UNICEF Joint Monitoring Programme (JMP).

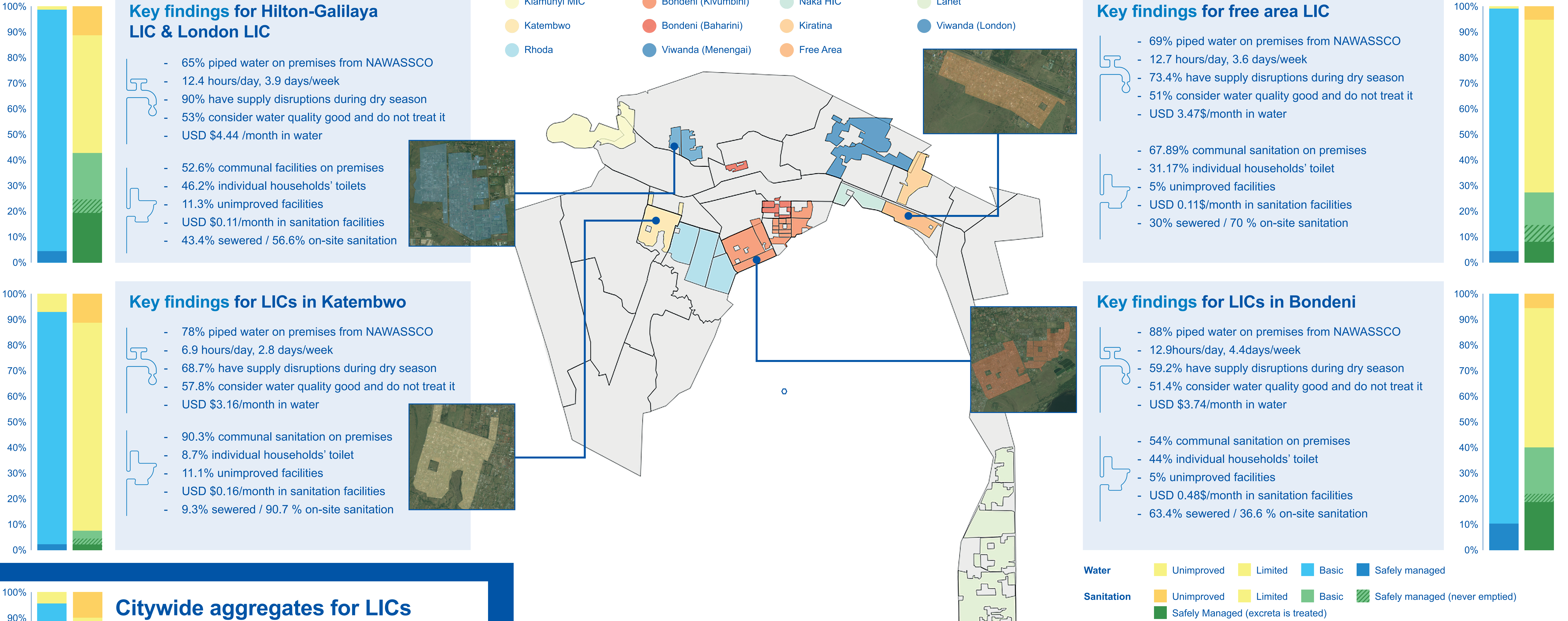
These surveys will be WSUP’s baseline assessment of service access in these cities and will be paralleled by end line surveys in 2019/2020, revealing progress towards universal WASH coverage.

This poster presents findings from one city: **Nakuru, Kenya**.

Methodology

We use a map-based systematic spatial sampling approach without clustering, and with posterior weighting for population size.

- Calculating sample size:** For a confidence level of 95% with precision within each EA to be $\pm 10\%$, sample size in Nakuru was calculated as: **110 households** in each **Enumeration Area (11)** for a total of **1210 households** (sample size enhanced by 10% to account for non-responses, data cleaning)
- Identifying Enumeration Areas:** **11 EAs (9 low-income areas, 1 middle- and 1 high-income area)** grouped by administrative divisions, proximity and similarities
- Dividing EAs into Primary Sampling Units:** Each **EA divided into 110 grids**. Centric Systematic Area Sampling approach used to **select single household closest to centre of the PSU**
- Household selection:** **Closest residential building with an adult female** willing to take survey. If none available, enumerators found alternative within half a grid-square
- Data collection tools:** **Questionnaire** (100+ questions) using **mWater** with **specific wealth assessment module**. Additional Nakuru data collected from water quality testing (100 HHs), interviews with utility, FGDs with communities and manual pit emptiers, 2015 SFD diagram



In Nakuru, the proportion of people receiving basic water services is fairly uniform but there are substantial intra-city differences in the time of supply and the impact of seasonal disruptions, which are not captured by aggregated results.

Similarly, the proportion of people with access to limited and basic sanitation services is uneven across the city and each area will therefore require its own solution.

This information is a useful reference for service providers and authorities (like NAWASSCO and Nakuru City Council) as they develop service provision solutions to further support

low-income communities going forwards. This kind of data, disaggregated by community, is of vital importance because aggregated results for the city as a whole are not nuanced enough to capture the micro context-specific needs of populations residing within low-income areas in Nakuru.

These WSUP-designed citywide surveys will provide this specific data for urban decision-makers and will be available online by the end of the year (<https://www.wsup.com/research/citysveys/>).