Where do Kampala's poor "go"?

Urban sanitation conditions in Kampala's low-income areas

Results of a representative survey conducted with 1'500 poor households in Uganda's capital during November 2010 show that the majority of Kampala's urban poor have access to on-site sanitation facilities. Despite the widespread accessibility to sanitation, the conditions of many facilities are unsatisfactory due to the generally large number of users per stance. This leads to low hygienic standards and waiting times for toilet users. As a result, "flying toilets" is (at least occasionally) still a common practice among the urban poor, and many toilets are abandoned after a relatively short time - thus questioning the true level of sanitation access in Kampala's low-income areas. Household investment in good-quality on-site facilities is discouraged by the lack of property rights and high prices, often exceeding the average annual per capita income in Kampala's poor settlements.

Who are Kampala's Urban Poor?

The majority (70%) of Kampala's poor households are tenants. Only 30% of the households own the house and property they live on. The median monthly income of a tenant household is US$36 per capita and not much higher for household owners (US$39 per capita per month). However, 73% of tenant households live in one room with an average of four household members, paying a monthly rent of US$26. In contrast, house owners usually have much more living space, with only 15% residing in a house with one room (but, on average with five household members). About half of the tenants fear eviction from the house they live in, while only 6% of house owners expressed this worry. Depending on rental status, the time household occupants spend in the same house also differs significantly: the median time for tenants is two years compared to ten years for house owners. Moreover, tenants are almost six times more likely to have moving plans within the next six months than owners (30% compared to 5%), thus discouraging any long-term investments in sanitation or home improvements.

Sanitation Situation in Kampala

Since Kampala's centralized sewerage system is limited to the high-income and centrally located neighbourhoods, slum dwellers rely on on-site sanitation, most often located outside the house. 95% of households use pit latrines with a cement slab or ventilated improved pit latrines (VIPs). This could be considered as improved sanitation from a technical point of view. However, 84% of users have to share their toilet with on average 6.7 households (or 30.2 individuals). International debate is still open if shared or public sanitation facilities should be considered as "improved". While UN-Habitat defines a toilet shared with a "reasonable" number of people as adequate sanitation (UN-Habitat, 2006), the WHO/UNICEF Joint Monitoring Programme considers shared facilities as unimproved (JMP, 2008).

84% of Kampala's poor use a shared or a public toilet

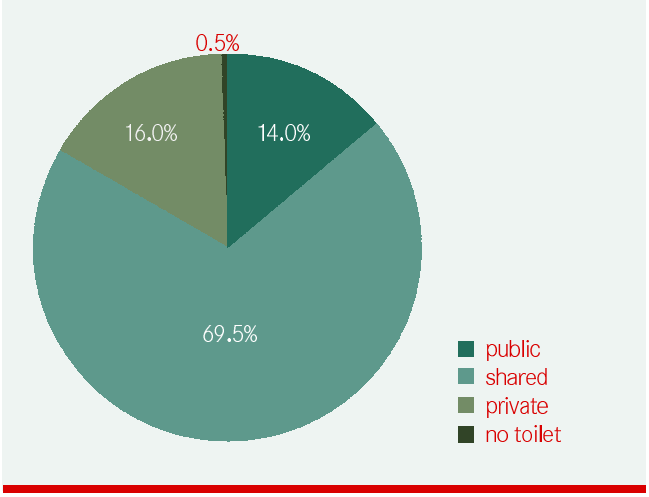


Figure 1: Distribution of sanitation arrangements

According to Figure 1, two thirds of Kampala's slum dwellers use – what we call – a "shared toilet", which is used by a limited number of households who know each other. On average 4.3 neighboring households use a stance of a shared toilet. Publicly accessible community toilets are visited by 14% of slum dwellers. In almost half (46%) of poor neighborhoods (zones), no public toilet is available and in the remaining zones there are on average only two functioning public toilets per zone. As a result, users of public toilets have to share the same stance with an average of 18.2 households or 82 people, thus leading to waiting times before using the toilet in 80% of all cases (see Figure 2). Only 16% of the poor use a private toilet whose users are, by definition, members of the same household.

Public toilets are used by 82 users per stance

Figure 2: Average number of toilet users per stance

Study Highlights

1. 95% of the urban poor have access to an on-site sanitation facility
2. 70% of Kampala's urban poor are tenants living in one room with 4 individuals and using a shared or public toilet
3. Among shared and public toilet users, one stance is on average used by 30 individuals or 7 households
4. Private toilets are a privilege of house owners
5. Only 47% of sanitation facilities are clean enough to be used properly
6. 45% of sanitation facilities are abandoned after 5 years because they are full or have broken down
7. The cost of an improved sanitation facility exceeds the annual per capita income

As illustrated in Figure 3, tenants predominantly use shared or public toilets whereas private toilets are the privilege of house owners. Overall, tenants have to share a toilet stance with almost 40% more users (7.3 households per stance) than owners (5.3 households per stance). 75% of tenants in Kampala's poor areas state that they would not be allowed to build on their landlord's property and are thus discouraged to make such an investment. This raises the risk of unhealthy conditions and lack of privacy among those lacking property rights. To close this gap, municipal by-laws requiring landlords to provide their tenants with adequate sanitation (i.e. with an acceptable ratio of users per stance) should be more effectively implemented in the city's slum dwellings.

Owners are 8 times more likely to use a private toilet than tenants

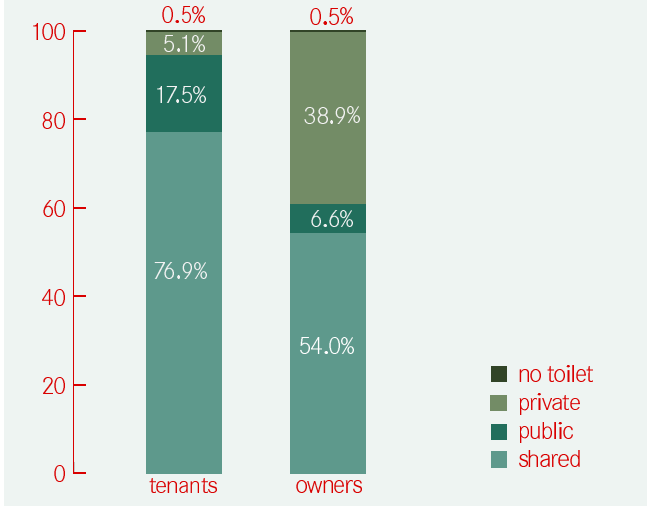


Figure 3: Sanitation arrangement by tenant/owner

Although the use of so-called "flying toilets" or open defecation is less common than in other big cities in East Africa, the practice is not unknown among Kampalans. However, 9 out of 10 respondents perceive this to be a very disgusting practice and more than 80% state that

they would be very ashamed to do so. As a result, less than 1% of the population openly admits to regularly practice open defecation. But based on observations within and around respondent houses, interviewer opinion is that 11% of private, 16% of shared and even 35% of public toilet user households (at least occasionally) make use of a "flying toilet".

Satisfaction and Conditions of Sanitation Facilities

Although widespread access to sanitation is given, the conditions of the existing facilities lead to low satisfaction levels: more than half of the households are dissatisfied with their current sanitation situation. Satisfaction levels vary widely between user arrangements, with private facility users being almost four times more satisfied compared to public toilet users (see Figure 4). This is underlined by the fact that more than 80% of households rather dislike sharing a toilet with other people. The most frequent problems mentioned causing dissatisfaction with toilets are hence "bad smell" (33%), "lack of privacy" (24%) and "waiting times" (15%).

Private toilet users are 4 times more satisfied than public toilet users

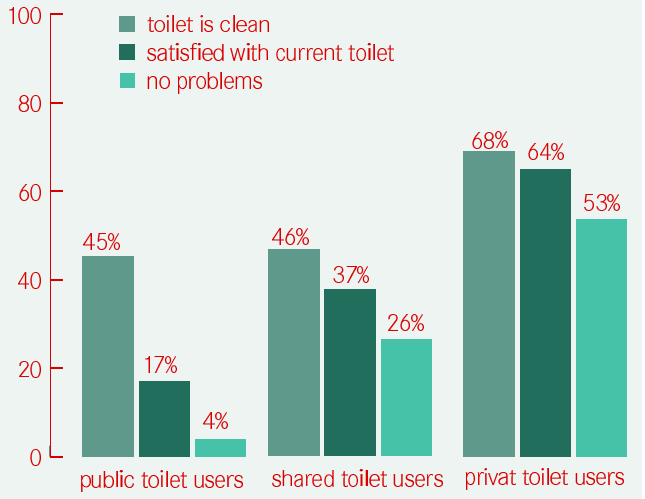


Figure 4: Satisfaction with/condition of sanitation facilities

It is also notable that more than half of private toilet users state to have no problems at all with their current sanitation facility, whereas only 26% of shared toilet users and only 4% of public toilet users make this statement. Similarly, cleanliness varies considerably among different user arrangements. Each sanitation facility was photographed during the survey and systematically classified in terms of cleanliness inside. 69% of private toilets were classified as clean and almost none is perceived as being too dirty to use. However, for shared and public toilets users, the number declines to 45% of toilets which can be classified as clean. Moreover, a substantial percentage of public toilets (10%) were found to be too dirty to be used anymore. There is a clear need to improve Kampala's sanitation situation by reducing the number of users per sanitation facility to improve healthy conditions and to increase user satisfaction.

Sanitation Costs and Purchasing Power of the Poor

In Kampala, the price of an improved sanitation facility is high compared to other developing country cities. Reasons might be the high cost of construction materials, particularly cement, and the monopolistic market structure of building material providers. Consequently, a one stance ventilated improved pit latrine (VIP) with a 30ft deep pit costs around UGSh 1million (~US$ 500) in areas with a low water table. In areas with high water table the prices are even 20% higher. Given the median per person income of tenants and owners, slum dwellers would need more than an annual per capita income to pay for a newly built VIP at current costs. This result is in line with households' perception of their capacity to make a larger investment. 28% state that they would need more than 3 years to pay back an amount of UGSh 1.5million (~US $750). The remaining 72% households would still need on average 2 years to pay back such an amount. This limited up-front investment capacity calls for flexible financing mechanisms, such as loans, to offer poor households the possibility to pay back in installments over a longer time period. However, currently only 5% of the poor state to have a bank loan, indicating that credit constraints might also be an obstacle to sanitation coverage in Kampala.

Emptying Habits among Kampala's Sanitation Users

More than half of respondents believe that people would think very negatively about them if they failed to empty their toilets after filling up. Nevertheless, a noteworthy 35% of poor households who have lived in their current house for a period of more than 5 years abandoned their former toilet because it filled up (see Figure 5). When asked about the status of toilets of other households, the majority of people cannot give an answer but 15% know of full latrines in their neighborhood. 6 out of 10 poor respondents report to find it difficult to empty

Study Description

The results presented in this policy brief form part of a larger three-year research study conducted by Makerere University, the Swiss Federal Institute of Technology (ETH Zurich) and the Swiss Federal Institute of Aquatic Science and Technology (Eawag). This study is funded by the NCCR North-South research programme and the European Union Water Initiative (ERA FP7) and is conducted by four principal investigators and three PhD students from Uganda and Switzerland. The study aims to systematically analyse the sanitation situation of Kampala's low income households, to learn about the use and maintenance habits of the poor, to understand existing constraints and potential for private investment into improved sanitation facilities and maintenance, and to identify and to test promising interventions to increase the demand for and sustainability of sanitation facilities of Kampala's poor.

their toilet facilities. The major difficulties regarding regular emptying that were mentioned are: smell (44%), unlined pits (10%), and difficult access for vacuum trucks (8%).

45% of latrines are abandoned after 5 years because of filling up or breaking down

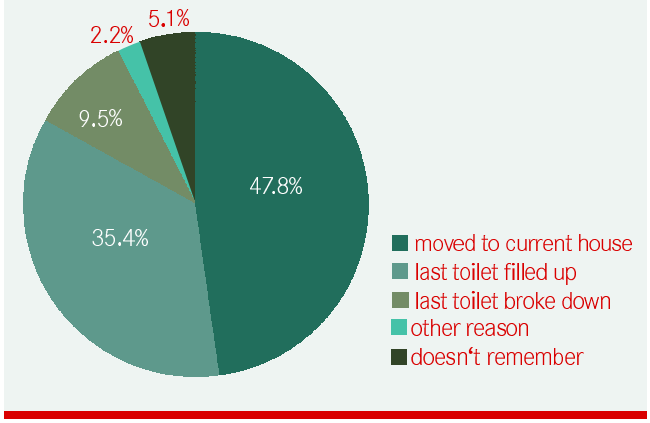
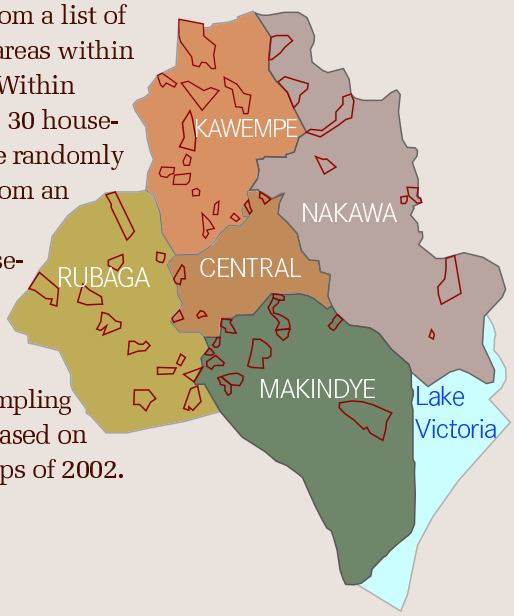


Figure 5: Reasons for having changed toilet facility

Of the households who have emptied their latrines within the last years, 88% contracted a private emptier, emptying the toilet with the help of a vacuum truck within one week (60%). However, 5% of households state to manually empty their toilet themselves. The average costs for emptying a pit latrine lie between UGSh 50,000 (US$23) to UGSh 100,000 (US$ 46) depending on who does the emptying. The emptying price depends on the methods applied and can include unsanitary practices leading to environmental hazards. House owners usually pay for the emptying of their sanitation facilities themselves (91%), while for the majority of tenants their landlord covers the cost (72%). In 15% of cases, tenant households which share a toilet contributed to the emptying costs. More than 65% of households actually do not know where the emptied faecal sludge is taken. About 23% believe it to be taken to a treatment facility, while 2% admit that the faecal sludge is simply dumped into neighborhood surroundings, a drainage channel or river.

Study Sample

To select the 1'500 sample households for this study, a two-stage clustered random sampling method was applied. In a first step, 50 low-income zones with no access to the central sewerage system were randomly selected from a list of 304 slum areas within Kampala. Within each zone, 30 households were randomly selected from an average of 1'450 households per zone, using geographic sampling methods based on census maps of 2002.



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Research Partners

ETH Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

MAKERERE UNIVERSITY

eawag aquatic research

Funding

south north NCCR

SPLASH

Austria Development Cooperation (ADC), Department for International Development (DFID), Ministère des Affaires Étrangères et Européenes (MAEE), Swedish International Development Cooperation Agency (SIDA), Swiss Agency for Development and Cooperation (SDC), Bill & Melinda Gates Foundation.