While shared sanitation is the most viable sanitation option for slums, evidence shows that slum sanitation facilities are poorly used, not properly cleaned and poorly maintained. A cleaning observation was undertaken among households sharing latrines in Kampala slums over a period of six months. Results showed that non-compliance with cleaning schedules, many users, defaulting on shared cleaning commitments, abuse of user fees, dirty and unpaved surroundings, lack of water and cleaning materials; slum house owners and tenants wanting more rent and cheap housing respectively with none having interest in sustainable sanitation are key barriers in shared sanitation cleaning. Sustainable sanitation implies; affordability, improved welfare, poverty alleviation, shared values, norms, regulation and enforcement as well as improved service delivery. This paper explores barriers to effective shared latrine cleaning and maintenance in slums of Kampala city.

Introduction
While the United Nations Joint Monitoring Programme (JMP) does not recognise shared sanitation as “improved sanitation”, because of the increased health risks of shared sanitation (WHO/UNICEF, 2014) in slums, shared sanitation facilities especially shared latrines are the most prevalent form of sanitation (Nakagiri et al., 2016, Günther et al., 2012, Nuwagaba, 2006). Sanitation provision in urban areas of Sub Saharan Africa (SSA) is predominantly on-site (Banerjee, S. G., and Morella, E. 2011) in Kampala city; shared latrines are the major sanitation option. The use of shared latrines is made worse by being inaccessible, flooding during the wet season; being locked, misused, lacking cleaning and maintenance (Isunju et al., 2011, Kwiringira et al., 2014a, Kwiringira et al., 2014b, Kwiringira et al., 2016a). As such, the state, use and management of shared sanitation facilities remain a critical component of the sanitation matrix in Kampala city (Nakagiri et al., 2016). The aim of the paper is to present the user barriers to shared sanitation cleaning and maintenance in the slums of Kampala with the objective of emphasizing that, the mere presence of a sanitation facility does not necessarily mean access to adequate sanitation. Statistics show that the proportion of shared sanitation is highest in SSA with about 20% using shared sanitation facilities (WHO/UNICEF, 2014). The proportion of shared sanitation tends to rise in urban poor areas to about 33%, and this rate is still on the increase (WHO/UNICEF, 2014). In many countries, particularly in crowded urban areas, shared sanitation is the only viable option for those wishing to avoid open defecation (Mara et al., 2010 Mazeau et al., 2014). Shared sanitation might provide the opportunity for individuals to move away from open defecation and take the first step on the sanitation ladder (Kwiringira et al., 2014a, WHO/UNICEF, 2014). Shared facilities represent a large and growing proportion of sanitation options available in low-income countries Isunju et al., 2011; Mara, 2010). The success of shared sanitation in urban planned settlements has been attributed to few users (Günther et al., 2012), user cooperation and social connectedness (Kwiringira, 2016b).
Methodology

Qualitative data was collected from six slum zones of Kisenyi -1, Dobbi, Jjuko, Gogonya, Kisaasizi, and White Nile that had low socio-economic and sanitation indices in Kampala city for a period of 6 months, from December 2014 to May 2015. Twelve Focus Group Discussions (FGDs) were conducted with each focus group discussion homogenously composed with 8-10 participants and lasting no more than 90 minutes. Focus Group Discussions were comprised of adult female or male respectively resident in the study zone for more than five years while also sharing a sanitation facility. Participants in FGDs volunteered to discuss their cleaning challenges. In addition, 15 key informant interviews were conducted. Cleaning was understood as the process of enabling and attempting to keep the available sanitation facilities free from dirt, stain, or impurities. As a quality control measure, research assistants were trained for two days and also participated in pre-testing the data collection tools. Data were analysed manually using content thematic approach (Graneheim and Lundman, 2004, Kondracki et al., 2002) to identify manifest and latent content in the discussion and interview scripts. Reports from FGDs transcripts were independently read several times to identify emerging themes and subthemes (Reynolds et al., 2011). For each FGD transcript, each idea was highlighted and initially coded as a ‘constraint’, and to what category of users (age, sex, health status etc.) it referred. Each highlighted text item and its assigned code were then transferred to a row in an Excel table to collect all highlighted FGD items. Once in Excel, items describing a similar constraint or barrier were grouped and further coded manually and sorted to capture cleaning and maintenance challenges. These identified themes and sub-themes were used for coding. Sub-group analysis was done, which involved examining the themes. Data coding began during data collection and went on until after data collection. This enhanced continuous analysis while also serving as an analytic method for coding and analysis (see Miles and Huberman, 1994). An initial codebook was developed based on the FGD guide, as well as review of the transcripts prior to developing the final codebook. The study protocol was approved by the Research Committee for the School of Social Sciences, College of Humanities and Social Sciences Makerere University. This committee considered all technical and ethical issues of the study. Clearance was also obtained from local leaders in the respective slum zones. During this initial phase, it was emphasised that participants were free to withdraw from the study if they so wished (see Emanuel et al., 2004, Sarantakos, 2012, Guillemin and Gillam, 2004). Indeed, some participants withdrew from the study when they so wished.

Results and discussion

The single most common challenge to shared cleaning and maintenance was; ‘Everyone minds their business and it is hard to identify all users of the shared facility.’ This was partly a result of the complexity of illicit terms of tenancy, with tenants usually refusing to clean the available facilities arguing that they rarely used the facilities since they went early for work and came back late. This category of tenants argued that they were not supposed to clean since they were irregular users. This user category only cleaned when they had no option in meeting their sanitation needs such having ‘important’ visitors. It was this same category that was accused of violating the cleaning roaster, breaking of padlocks, using flying toilets and generally being uncooperative. Figure 1 is a summary of the shared latrine cleaning challenges.

The most common (41 percent) setback to shared cleaning was attributed to the search for survival where sharing households did not find cleaning of shared facilities financially rewarding. This can be explained by low incomes and lack of secure livelihoods in slums. Men generally did not want to clean shared facilities reported at 23 percent. Non-compliance with cleaning schedules was reported at 11 percent, possibly due to the acute income needs in the community reported earlier. This led to defaulting on shared cleaning commitments especially under the paid cleaner option. In some cases (especially in White Nile and Kisenyi zones), the designated users of a facility informally levied a fee or demanded other forms of incentives from users that were in need of a sanitation facility; a form of free riding. This culminated in many users unknown to each other with varying norms and cultures, reported at 9 percent. Dirty and unpaved surroundings became muddy once it rained making access and use of a latrine a mess reported at 6 percent. Lack of water to each other with varying norms and cultures, reported at 9 percent. Dirty and unpaved surroundings that were in need of a sanitation facility; a form of free riding. This culminated in many users unknown to each other with varying norms and cultures, reported at 9 percent. Dirty and unpaved surroundings became muddy once it rained making access and use of a latrine a mess reported at 6 percent. Lack of water and cleaning materials accounted for 5 percent of the cleaning challenges. Other cleaning setbacks related to padlocks on the latrine being broken at 3 percent, the initial number of users becoming uncontrollably high which invariably made cleaning a challenge at 2 percent).

Many users complicated user coordination and cooperation which are at the heart of free riding and misuse of shared (goods) sanitation facilities. The major problem was therefore lack of involvement and unaffordability by all users. Only few users contributed. A user narrated thus; “It is not easy to agree on how to contribute towards cleaning materials, so it’s only the few that are responsible that spend on cleaning”.

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Figure 1. Shared latrine cleaning challenges

Source: Author

Photograph 1. Poor environmental health in which most latrines are located

Source: Author
Other cleaning challenges related to a strong offensive smell and other forms of discomfort related to poorly used shared latrines. “Some latrines smell so much that the stench is unbearable. Even if you try cleaning, that stench cannot go away. As such, we gave up on cleaning the latrine” (Volunteer cleaner).

Another respondent reiterated thus; “When you become strict, people stigmatize you and start to call you names like ‘mukyala toilet’ literally meaning ‘madam toilet’ so you also give up” (Female tenant). Another challenge was the sense of apathy among majority of the sharing users especially the lack of interest in none survival needs.

One male tenant asserted; “Nzee najja kupangisa oba toilet weri oba teriwo”. This loosely translated meant that - ‘...I simply came to rent a place to sleep, with or without a latrine’. This situation was made worse by the lack of landlord non-involvement in shared sanitation facility cleaning efforts. Local leaders indicated that all that landlords want is their rent collections. One tenant asserted; “I have also learnt one big lesson; when I get a piece of land, I will simply build a house. The money and space for the latrine will be saved and used to build another rental room.”

A high number of users and uncooperative user practices led to lack of cleaning and maintenance misuse and abuse. Full and nearly full structures coupled with poor environmental sanitation discouraged cleaning. Key informants asserted that latrines were not emptied due to the high cost of emptying associated with difficulties of access, in addition to the low incomes among the users. Photo 1 shows some of the accessibility challenges in the study slum.

For such a neighbourhood, poor shared latrine use and cleaning followed from the general practices of indiscriminate waste disposal in the available space. For many slum dwellers, a sanitation facility and a latrine at that represented a place that is dirty. Cleanliness was subjective. There was a level where some people thought that it was ‘clean enough’. People did not want to ‘over clean’ latrines. This attitude was related to the environment in which people lived. In agreement with McGranahan, this sanitary challenge can be viewed as a spatially delimited public goods problem (McGranahan, G. 2013). This situation arises where individuals generally do not have the incentive to improve sanitary conditions. In many ways, this is a public good problem. People were in many ways used to the dirt due to poverty and a lack of means to afford better livelihood options. One user asserted; “Why do you want the latrine to be cleaner than where we live? A latrine is for dealing with filth and dirt” (Shared latrine user zone). This remark is a commentary on the wider environmental health and aesthetics in slums, where poor sanitation is the ‘norm’, if it can be called that.

People did not appreciate why a latrine ought to be treated in a special way when raw sewage, uncollected garbage and feaces were widely unattended. In such settings (clean) latrines were perceived as luxury items. Therefore, poverty alleviation, household welfare including environmental hygiene and sanitation ought to go hand in hand. This calls in place issues of garbage management and urban service delivery including the wider and complex governance issues.

Affordability and demand for better housing were in most cases at variance. The tenant-landlord nexus complicated the idea of a ‘suitable and affordable’ house and partly explains the prevailing poor sanitation situation in Kampala slums. Lack of planning enforcement has partly thrived on institutional failures within the city authority (Lwasa, 2007, Mukwaya et al., 2010, Goodfellow, 2013). For the slum house owner, the need for income was the overriding objective. House owners and landlords in Kampala slums knew that, it was not the quality of house in a slum that matters, but the number of rental rooms and therefore income that matter. This investment ‘art’ was acquired from the preceding landlords and other developments around the city. Such constitute the conundrum of poor slum (and social) service delivery in the city and indeed the slums of Kampala. Such slum ‘ethics’ and norms were inadvertently being passed on to the next generation of landlords and house owners through flouting public interest procedure in pursuit of an additional income outlay. Investment was structured to be cheap, but returns dear.

Slum living conditions leave slum dwellers with a high propensity to resist many forms of disgust, shock and shame. On account of this, merely cleaning one place (inside a latrine cubicle) did not mean much while the wider environment was rife with filth. Therefore, cleaning and improved sanitation ought to be ‘outside-inward’ / ‘outside in ward’ rather than the reverse of ‘in-ward-outward’/inside outward’. The implication here is that, once the wider slum environment becomes clean(er), then it would plausibly motivate residents to clean the inside of their sanitation facilities as opposed to privileging sanitation facility cleanliness at the expense of total cleanliness and sanitation in the slum. In the current slum conditions, the only right thing in slums cannot be latrine cleaning.
Conclusion
We cannot isolate sustainable sanitation from other aspects of slum life as well as the urban livelihood challenge. Failure to keep shared sanitation facilities in slums clean has many causes that must be addressed from their roots so as to avoid targeting symptoms. Sustainable sanitation is what is affordable, accessible and varied to meet the different needs from one place to another. Within urban settings there are wide sanitation variations that must be recognised, beyond individual motivations, structural and cultural factors are critical and these are variously mediated by ethnicity, gender and a wide array of motivations and perspectives. This reality makes sustainable sanitation a work in progress that draws a lot from community change and welfare dynamics.

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References
Mara, D., Lane, J., Scott, B., & Trouba, D., 2010 “Sanitation and health,” PLoS Medicine, vol. 7, no. 11, Article ID e1000363


MCGRAHANAN, G. 2013. Community-driven sanitation improvement in deprived urban neighbourhoods: meeting the challenges of local collective action, co-production, affordability and a trans-sectoral approach. SHARE.


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