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## THE FUTURE OF WATER, SANITATION AND HYGIENE: INNOVATION, ADAPTATION AND ENGAGEMENT IN A CHANGING WORLD

# Reconsidering shared sanitation facilities in Sub-Saharan African cities: example of Freetown, Sierra Leone

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Innovative sanitation programmes such as Community Led Total Sanitation (CLTS) or sanitation marketing concentrate on the development of individual sanitation. However such provisions are not always feasible in urban settlements due to economical and physical constraints. Urban dwellers are facing a limited range of sanitation options. Amongst them, shared facilities are often the only alternative to open defecation, however the implementers do not always consider all of the shared sanitation options available to them and their appropriateness from the user perspective. Based on examples from Freetown, this paper calls for a reconsideration of shared sanitation facilities by donors, urban planners and researchers. This reconsideration should take into account the acceptability and value of different sanitation facilities to the users through participatory methods, that acknowledge the range of shared options available to urban dwellers.

#### Introduction

Land tenure, space to build and low income are often recognized as barriers to the provision of private sanitation. The development of shared facilities appears to be one of the solutions to improving human waste management in informal settlements and high density contexts. The trend of people using shared toilets has increased during recent years in developing countries (WHO & UNICEF, 2008) and today more than 700 million people are sharing a toilet against 350 in 1990. More than half of the urban population in Freetown are sharing sanitation facilities (Atkins, 2008).

The study which this paper is drawn from aims to discuss the role of shared sanitation in Sub-Saharan African cities. Starting from the International debate on the improved status of shared sanitation, the study aims to reposition the debate between local implementers and users. This paper is based on both field observation and desk studies. The desk study covers the review of community surveys conducted in Freetown between 2006 and 2010, sanitation and infrastructure implementation plans and journal papers focusing on Freetown.

## Ambiguous state of shared sanitation

A lot of debates have occurred concerning shared sanitation during the last decade. The work of the Joint Monitoring Programme (JMP) has been questioned regarding the exclusion of shared facilities from the improved facilities category (van der Hoek et al., 2010). Different researchers argue that in many cases shared sanitation is the only technical and financial solution (Schaub-Jones et al. 2006; Mara & Alabaster, 2008). The JMP acknowledges the importance of such toilets compared to no facilities at all but does not categorize it as improved sanitation. In many cases, the risks of over use, bad management and low maintenance, result in unhygienic facilities and represent a health hazard (Allen et al. 2008) and a risk to the security of women and children (WHO & UNICEF, 2008).

The concept of sharing sanitation has several dimensions, most of which are context specific. These dimensions include management, the legal and institutional framework as well as socio-cultural norms and user behaviour.

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## Sharing sanitation in Freetown

Freetown is a coastal city and the economical and political capital of Sierra Leone. The 2004 Population and Housing Census indicates a Greater Freetown population of around 800,000 (Sesay et al., 2006) however the city has been experiencing significant population growth in recent years and this figure is likely to be too low. Freetown has expanded without adequate city planning leading to the formation of many low-income and informal settlements. In general the provision of water and sanitation services has not kept pace with the city's expansion (Parkinson, 2008).

Most urban dwellers rely on on-site sanitation, shared or not, improved or unimproved. As 75% of the population relies on pit latrines, management of faecal sludge is a major environmental and socioeconomical issue (Parkinson, 2008; Mikhael, 2010). Transport and treatment of faecal material is not the only concern; access to sanitation remains a daily issue for the 77% of the population who don't own an individual and private toilet (Atkins, 2008). Sharing sanitation remains as the only alternative to open defecation for nearly 80% of the dwellers.

#### What the surveys say

Sharing sanitation in low-income settlements can be accomplished through a large range of facilities from shared toilets at the neighbour level to communal blocks (Schaub-Jones et al., 2006; Mazeau & Reed, 2010). A sanitation improvement plan summarises different sanitation surveys carried out between 2004 and 2008; **Error! Reference source not found.** summarizes the inventory noted in the plan (Atkins, 2008).



- **Communal facilities:** most of them are managed by the Freetown City Council (FCC). A report counted 31 facilities located both in residential areas and in the town centre in 2008. Only half of them are open and not all of them are fully functional (Atkins, 2008). The surveys do not clearly state the difference between community blocks and public toilets. Observations from the field show that such a difference is rarely made by users and there is no correlation between the entity of the management structure and the level of cleanliness of the sanitation facility. However more recent experiences including toilet blocks built by GOAL that were not assessed at this time by the Atkins report, show that such blocks can be kept cleaner under community management.
- Neighbour shared: very little is known about the mechanisms of shared sanitation amongst neighbours. Given the low number of communal facilities, we can suppose that a high percentage of the population rely on neighbour-shared sanitation. This sharing can be organised between two households of up to 20 persons or more. It is reported that 20% of urban dwellers in Sierra Leone share sanitation facilities with more than five households (WHO & UNICEF, 2008); surveys do not specify the proportion of neighbour-shared and the proportion of communal toilets in this statistic.

#### What the surveys do not say

Validity of the results can be questioned as surveys are done by different teams in different locations. Yet results remain reliable when used as a snapshot to illustrate the sanitation challenge in Freetown.

However the surveys achieved up to date do not provide sufficient information for understanding and quantifying the practices of sharing sanitation. For instance, concerning shared sanitation at the neighbour

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level, data is often contradictory. A survey from GOAL concluded that around 60% of respondents own their latrines while 70% of the latrines are shared (Brown, 2010). Concerning a question focusing on toilet ownership, it was not clear whether the answer was "yes I own a toilet exclusively by myself" or "yes I have shared ownership of a toilet with another household". Responsibility for confusion can lie both with the interviewee and interviewer. It is likely that lack of time to conduct the survey, inappropriate training, but also difficulty of defining the concept of ownership and sharing in certain contexts led to such confusion.

Beyond the issues of reliability and validity of the surveys, the issue of heterogeneity of the results is often forgotten when reporting sanitation usages. In the case of Freetown the range of differences in sanitation practices can be identified as follow:

- Geographic differences: as already mentioned Freetown is characterised by topographic, geologic, and socio economic disparities. Sanitation coverage and practices varies from sector to sector. Access to piped sewerage covers almost only the central and business district area, while 20% of people in Kissy practise open defecation (Atkins, 2008). Disparities between the low-income settlements of Freetown show that there is a clear relationship between involvement of local communities, tariffs for access to the communal facilities and their cleanliness (ibid).
- Intra-household disparities: Children either use the few communal toilets that are free for them or defecate in the open. Women will often use shared facilities at dawn or hide. Men and women might also use the shared facilities depending on the share of the household income they have access to.
- Daily variations: a population that has very limited access to individual toilets is likely to use facilities in the late evening or early morning. This often leads to overcrowding of shared facilities and open defecation.
- Seasonality: it is reported that in some areas of Freetown open defecation in drainage channels is more often practised during the rainy season. This may be confirmed by the fact that certain communal facilities are emptied twice as often during dry season (Mikhael, 2010).

### Suggestions for knowledge improvement

This paper notes that a large proportion of the Freetown population do not use private sanitation or shared options provided by agencies and the government. Moreover in contexts where urban dwellers cannot access private sanitation due to lack of space or money, it is common that implementers opt for the development of toilets blocks, either communal or public.

On the other side of the service chain, the level of satisfaction amongst the users is uncertain, particularly when looking at vulnerable groups. For the dwellers that refuse to defecate in the open, they organise their access to sanitation facilities by sharing with neighbours, tenants or landlords. Such options are poorly investigated by researchers; and rarely considered by urban planners and sanitation implementers. Therefore the sanitation sector needs to determine:

- What is the proportional split of sharing (e.g. no sharing, neighbours, community,...) found in a given urban context made of specific heterogeneous individual and different physical and institutional characteristics?
- Which criteria do sanitation users consider to be important in evaluating which types of sanitation options are suitable for them?
- How to bridge the gap between the implementers sanitation options and user expectations?

Fieldwork research in general, and case study in particular will enhance the implementers awareness of acceptability factors and the range of sanitation option that may fulfil those criteria in a given context.

It is likely as seen in this paper that the notion of acceptability, sharing and ownership will be better defined by the dwellers themselves. Therefore one methodology to collect and analyse acceptability data may be the use of participatory methods (Mikkelsen, 2005; Chambers, 2008). There is a need to development and combination of participatory tools with more classic quantitative methods (e.g. satisfaction surveys used in this paper). This would permit the water, sanitation and hygiene sector to be able to better investigate the notion of user acceptability of different shared sanitation options in low income urban areas. It would also allow us to integrate that notion into the modification of existing approaches and development of new approaches towards better hygiene and sanitation facilities.

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