

High-quality shared sanitation: how can we define that?

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Quick read...

- Shared toilets are often dirty and poorly maintained: but for some slum-dwellers living in tiny dwellings, they're the only option. So what are the requirements for *high-quality* shared sanitation?
- This Policy Brief outlines a 3-country research project starting in October 2018 under the Urban Sanitation Research Initiative, aiming to identify trackable criteria for high-quality shared sanitation.
- This research will deliver detailed empirical assessment of the determinants of user experience, and analysis to identify criteria that enable definition of minimum standards for shared sanitation.

Background

Clearly, it's better to have a private toilet than to share a toilet with other households. Shared toilets are often dirty, and they may be unsafe for women after dark. But many slum-dwellers in Africa and South Asia live in tiny single-room dwellings with insufficient space for a toilet: for such people, shared toilets are the only viable option (short of rehousing) for improving sanitation (Mara 2016, Evans et al. 2017).

The relevant question is therefore: what are the minimum requirements for urban shared sanitation to be of *high quality* in terms of user experience and health? And once those minimum requirements are known: can we identify *proxy indicators* that enable monitoring protocols to distinguish between high- and low-quality shared sanitation with reasonable accuracy?



Shared toilets, Dhaka

Upcoming research

Against this backdrop, the Urban Sanitation Research Initiative has commissioned a research project which will be exploring these questions in 3 countries: Bangladesh, Ghana and Kenya.

This project (the QUISS project = Quality Indicators for Shared Sanitation) will be delivered by a team led by Christopher Lüthi of Eawag-Sandec. It will centre around large-scale survey of urban shared sanitation facilities and their users in slum locations in the 3 countries. This Policy Brief outlines the planned design of this research, and additionally presents our provisional (pre-research) recommendations on what minimum requirements for shared sanitation might look like.

Research design

Research design can be very briefly summarised as follows:

- **1.** Detailed literature review, and extensive consultation with key stakeholders including relevant specialists in the WHO/UNICEF Joint Monitoring Programme (JMP) team.
- 2. Focus group discussions with shared toilet users in low-income communities in cities in Bangladesh, Ghana and Kenya, exploring user perceptions of quality across dimensions including cleanliness, privacy and personal safety.
- 3. Extensive survey of shared facilities and their users in the 3 countries, with sample size per country between 500 and 1000. The focus here will be on observable indicators of quality (e.g. cleanliness) and quantifiable indicators of user perceptions of quality. Note that "quality" is certainly multidimensional, but that a unidimensional definition will need to be identified for the purposes of this research.
- **4.** Analysis of the data-set to identify determinants of quality as defined, potentially including number of users per toilet, access arrangements, and location within the compound (for useful existing research, see especially previous papers by members of the QUISS research team including Gunther et al. 2012 and Simiyu et al. 2017).
- 5. Multivariate statistical techniques and expert judgement will then be used to identify a cut-off between low and high quality: this can then provide a basis for identifying the most useful proxy indicators of shared sanitation quality, for use in large-scale monitoring processes and for generation of implementation guidelines.

References

Evans B et al. (2017) Limited services? The role of shared sanitation in the 2030 Agenda for Sustainable Development. J Water Sanit Hyg Dev 7 (3): 349-351. Gunther I et al. (2012) When is shared sanitation improved sanitation? - The correlation between number of users and toilet hygiene. Policy Brief, U-ACT. Mara D (2016) Shared sanitation: to include or to exclude? Soc Trop Med 110:265-267

Simiyu S et al. (2017) Determinants of quality of shared sanitation facilities in informal settlements: case study of Kisumu, Kenya. BMC Public Health 17:68

Provisional recommendations

Findings of this research will not be available until late 2019. In the interim, we (WSUP and the Urban Sanitation Research Initiative) make the following provisional recommendations:

- **1.** Funding agencies and national governments should invest where appropriate in shared sanitation, even though shared sanitation is not currently included within the WHO/UNICEF definition of "basic sanitation".
- **2.** Shared sanitation is an appropriate solution for people who live in dwellings which are too small for a private toilet. It should <u>not</u> be considered appropriate simply because it is cheaper: if dwelling/plot sizes are large enough, funders and governments should favour private toilets.
- 3. Shared sanitation facilities can be considered appropriate if they meet ALL of the following criteria:
 - The toilet is used by maximum 3 households and 20 people per seat
 - The toilet is located in a safe location (e.g. within locked compound)
 - The toilet is located no more than 20 m from the most-distant dwelling
 - The toilet is readily accessible to all users 24/7
 - The toilet is kept clean at all times
 - The septic tank will be emptied when full
 - In locations with electricity supply: the toilet has working electric light
 - In locations with piped water: running water is available for handwashing

These are the criteria provisionally proposed by WSUP and the Urban Sanitation Research Initiative: but the findings of this research may lead us to modify these criteria in future.

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Credits: This research was commissioned under the Urban Sanitation Research Initiative and will be led by Eawag-Sandec (lead: Christoph Lüthi). This Policy Brief was written by Guy Norman, WSUP, and Vasco Schelbert, Eawag-Sandec.

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