

Creating Demand for Peri-Urban Sanitation Framing Workshop

11th and 12 May 2016
Lusaka, Zambia

Report by CIDRZ/LSHTM

Introduction

In Zambia, according to the 2010 Central Statics Office (CSO) report, about 70% of the urban population lives in informal peri-urban settlements where inadequate toilets and open defecation, poor drainage, chronically mismanaged solid waste and poor hygiene are a daily reality. Unless improvements in sanitation access significantly pick up pace, they will likely fail to keep up with rapid urbanization, threatening a deteriorating, rather than improving, picture for the future in these areas.

However, progress on sanitation has been slow for many reasons. Household level demand for sanitation is one important determinant of increased access and use, but few urban sanitation solutions to date have given much attention to creating consumer demand; their focus instead has largely been on hardware provision for water and sewerage.

With this background, the Centre for Infectious Disease in Zambia (CIDRZ) partnered with the London School of Hygiene and Tropical Medicine (LSHTM) Hygiene Centre with support from Sanitation and Hygiene Access Research for Equity (SHARE) to begin addressing the issue of sanitation demand in peri-urban areas.



Figure 1: A poorer-quality toilet in peri-urban Lusaka.

Framing Workshop Activities

The two-day SHARE 'Creating Demand for Sanitation' project Framing Workshop was held on the 11th and 12th of May 2016 and the Centre for Infectious Disease Research in Zambia (CIDRZ) together with their London School of Hygiene and Tropical Medicine (LSHTM) counterparts

facilitated it. This project, dubbed “San-Dem”, aims to establish the role demand creation can play in solving the problem of access to improved sanitation in peri-urban Lusaka, Zambia.

The workshop is the first step in the SHARE research project. The objectives of the framing workshop were to:

- engage stakeholders
- understand the current sanitation landscape in peri-urban Lusaka
- determine what remains to be learned about the sanitation situation
- develop hypotheses about how demand might be triggered through an intervention

The workshop set the stage for the process of designing a state-of-the-art behaviour change intervention to enhance demand for sanitation which is the first of the five steps in the “Behaviour Centred Design” (BCD) process, namely: Assess, Build, Create, Deliver and Evaluate (Aunger and Curtis, in press).

In workshop attendance were representatives from the 12 key players and stakeholders in the sanitation sector, including representatives from the Ministry of Local Government and Housing, Ministry of Health, Lusaka Water and Sewerage Company, University of Zambia Water Institute, World Bank Sanitation Programme, UNICEF, USAID, National Water and Sanitation Council, Water and Sanitation Association of Zambia, Millennium Challenge Account Zambia, Water and Sanitation for the Urban Poor, and Toilet Yanga (*see attached list of attendees*). The highly interactive and participatory workshop was characterized by discussions and presentations from participants.



Figure 2: Workshop attendees listen to project overview

The workshop opened with CIDRZ and LSHTM introducing their two organizations and a background to their involvement in Water, Sanitation and Hygiene (WASH) related projects. Then, some detail about the ‘Creating Demand for Sanitation’ project was provided. Next, presentations were made by Lusaka Water and Sewerage Company (LWSC), Toilet Yanga, UNICEF, Millennium Challenge Account-Zambia (MCA-Z), World Bank Sanitation Programme and Water and Sanitation for the Urban Poor (WSUP) concerning what the Lusaka sanitation landscape looks like. Each of the stakeholders shared what they are working on or their planned agenda and activities.

Lusaka Water and Sewerage Company, the utility company with the mandate to provide water and sanitation services for Lusaka, presented their current Lusaka Sanitation Project (LSP) and the master plan to achieve universal coverage by 2030. The master plan directs the majority of



Figure 3: LWSC presents findings from recent water and sanitation assessments in peri-urban areas

resources to providing sewered sanitation infrastructure, but it also includes the construction of household sanitation facilities and sanitation/hygiene promotion in many peri-urban areas.

Toilet Yanga, a private company with a focus on sanitation, also made a presentation with emphasis on the business side of the sanitation problem and stated the value demand creation will add to enterprises like theirs. Their interest is to see people get up the sanitation ladder past pit latrines.

UNICEF shared their WASH work on the community and school led total sanitation projects they are involved in across different rural communities and selected schools working to contribute to achieving Social Development Goals (SDGs) focusing on access for all to sanitation by 2030. They also expressed an interest in increasing their work in peri-urban areas in Zambia as they observed the scope of the problem.

MCA-Zambia presented on their Sanitation Connection Action Plan (SCAP) in Lusaka’s Mtendere compound, working closely with LWSC, with the aim of having 9,400 sewer connections and rehabilitating and construction of sewer ponds in Kaunda Square compound among other related projects. WSUP also gave a brief description of their pilot projects in Faecal Sludge Management (FSM) in Kanyama and Chazanga compounds as well as their plans on upcoming sanitation projects.

The World Bank reported on their significant, long-term activities in Lusaka on WASH, including the Kalingalinga project, Water Sector Improvement Project, and now the Urban sanitation project. There was an open admission that ‘the Bank does not currently have a proposal for how to improve household-level sanitation in Lusaka district’, given institutional capacity and other constraints.

The rest of the participants gave brief descriptions of their organization’s activities in the sanitation sector.

The workshop then switched to group work activities where attendees engaged to refine the definition of the project target behaviours, the target populations, the drivers of sanitation demand and defining the potential touch points for programme activities. This was aimed at broadly defining project parameters to guide the development of the intervention with strong involvement of these key players and stakeholders.

Outputs

1. Agreement on need for demand creation

The workshop produced a number of outputs, in line with its objectives. First, there was general consensus among attendees that demand creation is an important factor and first step in improving acquisition of latrines for peri-urban areas and one that has been largely neglected in Lusaka.

2. Agreed definition of the target behaviour

'To acquire and use a Zambia-standard toilet'. There was much debate about the definition of an adequate toilet internationally and in Zambia. However, it was in the end agreed that a Zambia standard toilet was one with **secure superstructure, connected to a sewer or lined sub-structure**.

The process of getting a toilet was described as follows:

Step 1: Contact:

- Make a visit to an experienced neighbour
- Go to a site where a latrine is being built, or
- Mason comes to your door advertising services

Step 2: Select mason

- Validate quality of work by visiting previous latrines or through a trusted neighbour or friend testimony

Step 3: Reach agreement about verbal contract

- Who does what (typically homeowner gets bricks, concrete, etc; mason does construction; can save money if dig own hole)
- Milestones (because often households don't have all necessary funds up front, so need stages of payment which can lead to process taking long time or even never being completed)
- Costs and agreement on plan for payments

Step 4: Installation

- Materials brought to site and mason begins to work
- Inspection and completion of work

3. Agreed target population

Discussion of the appropriate profile for the target population included the following candidates:

- Landlords: absent (caretaker) or resident
- Men: do the building, not at home

- Women: sometimes save money to build, or decide what should buy, women know more about domestic environment
- Home-owners with no renters (called 'landlords' too)
- Local authorities/community leaders: Political 'cadres', district councils, WDCs, clinic/health centre, EHTs.



Figure 4: A pit in peri-urban Lusaka with solid waste visible. The pit has sat filled and the toilet unused for several months.

Final selection of the target audience was left to be decided after the formative research is undertaken. Early visits to our likely site suggest that most landlords are residents themselves.

4. Agreed touch points:

Group work identified a large number of potential contact-points for programme activities (* indicates particularly relevant/important):

- MEDIA:
 - WhatsApp
 - Facebook
 - SMS
 - TV
 - Komboni Radio (in car)
 - *Mobile phone
 - Billboards
 - Newspapers
 - Loudspeakers
 - No: letters/notices
- PLACES:
 - *At premises, or at tenant's place
 - *Church
 - Markets/shops (might be shop-owners)
 - Hairdressers/barbers
 - *Office/canteen
 - Garage/mechanic
 - Public transportation:
 - Cash machine
 - Health centres
 - Restaurants
 - Schools
 - *Zesco (Electric company)
 - *Local council
- PEOPLE:
 - Children
 - Friends
 - Tenants
- EVENTS
 - Resident meeting

5. Location of the project:

Attendees also gave the SHARE project direction on which peri-urban areas to prioritize for its work to avoid duplication of efforts or working in areas with planned sanitation upgrades. A number of potential peri-urban areas were identified and suggested and were to be subjected to further evaluation by the CIDRZ/LSHTM project team before selecting one for the project. Criteria included areas where large WASH projects are not already planned, where there is sufficient population for the study, and which the project can meaningfully reach.

Remaining gaps in knowledge:

The BCD Checklist was used (*see tables below*) to indicate areas where knowledge obtained from literature reviews and the framing workshop were good, but also where gaps remain. The behaviors targeted by the intervention were divided into improving the interface (roof, walls, slab, seat, ventilation) and the containment/transport (pit, emptyability).

Behavior: Improving toilet interface components

		Current Status/Behaviour	Desired Status/Behaviour	Change Strategy
State of the world	Aim	High diarrhea incidence in peri-urban Lusaka	Reduced diarrhea morbidity/mortality	Not yet known
	Objective	Poor sanitation status	Increased sanitation status	Not yet known
Behaviour	Target Behavior	Sanitation status is stagnant and not a major concern	Increasing sanitation status becomes a regular process within plots through improving superstructure, slab, and substructure; regular cleaning; and HWWS	Not yet known
	Who does it?	Some landlords	Landlords and tenants working together	Intervention targeting both landlords and tenants encouraging discussion and cooperation
	When do they do it?	Haphazardly in response to full or collapsed pits or damaged hardware	Deliberately through planned improvements at the end of each rainy season	Not yet known
	Where do they do it?	Toilets often improved in place over time, though new facilities are constructed when unemptyable pits fill	A permanent toilet with emptyable containment pit and adequate hygiene facilities	Not yet known
Environment	Physical	Limited access to water or sewage connections; Inadequate superstructure size and quality	Improved superstructures and slabs; Handwashing facilities	Referral to skilled masons and existing distribution channels?
	Biological	Contamination within toilet due to inadequate cleaning and in environment due to child feces; presence of pathogens with epidemic possibilities (cholera)?	Reduced environmental contamination due to improved clean superstructure and slab-- more cleanable and accessible to all	Intervention to increase collective efficacy of rotas and cooperation between tenants and landlords
	Social	Desire for toilets by tenants but without high requirements; Social exclusion?	Creating a social norm of increased sanitation status	Marketing campaign to created desire/willingness to pay in tenants

Brain	Executive	Haphazard improvements in response to unanticipated events	Regular planning and discussion of improvements	Commitment pledges? Scheduled community reminders?
	Motivated	Disgust (sight/smell of feces)?	Disgust (sight/smell of feces), Status (level of sanitation), Affiliate (caring for community's health), Comfort (interface quality)?	Marketing campaign to attach additional motivations to potential behaviors
	Reactive	Not yet known	Not yet known	Not yet known
Body	Traits	Conscientiousness? Agreeableness? Neuroticism?		Not yet known
	Physiology	Gender, Age, Weight (mobility)		Not yet known
	Senses	Smell?		Not yet known
Behaviour Setting	Stage	Marketplace	Discussions within the plot	Intervention targeting both landlords and tenants encouraging discussion and cooperation
	Roles	Landlords, Tenants	Co-residents	Cooperation and identity-change
	Routine	Identifying builder and then allowing them to manage construction	Same?	Not yet known
	Script	How they go about seeking builder	More efficiently seeking skilled builder	Providing access routes to information
	Norms	Increased sanitation status is not expected	Increased sanitation status expected by tenants	Plot-level intervention focusing on justice motive
	Props	Raised seat, soap and water setup, cleaning products, odor reduction technology	Adding any of raised seat, soap and water setup, cleaning products, odor reduction technology not already present	Demand-creation marketing messages
	Infrastructure	Facility (door, walls, roof, lock); Plot layout	Safe and secure toilets located on each plot	Demand-creation marketing messages
Intervention	Touchpoints	Plot, Church, Zesco (Electric company), Mobile Phones, Local Councils		
Context	Programmatic	No known past or planned interventions or infrastructure projects in target area		
	Political	Government recognizes need for on-site sanitation; Large external resources dedicated to improving on-site sanitation, especially demand creation		
	Economic	Economy not growing and cost of living rising may make affordability an issue		
	Social	Sense of community within peri-urban areas largely unknown		

Behavior: Improving containment and emptying components

		Current Status/Behaviour	Desired Status/Behaviour	Change Strategy
State of the world	Aim	High diarrhea incidence in peri-urban Lusaka	Reduced diarrhea morbidity/mortality	Not yet known
	Objective	Poor sanitation status	Increased sanitation status	Not yet known
Behaviour	Target Behavior	Sanitation status is stagnant and not a major concern	Increasing sanitation status becomes a regular process within plots through improving containment, emptyability, and achieving regular emptying	Not yet known
	Who does it?	Some landlords	Landlords working together	Intervention targeting landlords encouraging discussion and cooperation
	When do they do it?	Haphazardly in response to full or collapsed pits or damaged hardware	Deliberately through planned improvements at the end of each rainy season	Not yet known
	Where do they do it?	Often toilets are not emptyable in place and so additional pits are dug and toilets constructed on the plot if space is available	A permanent toilet with emptyable containment pit and adequate hygiene facilities	Not yet known
Environment	Physical	Limited space within plots; Water table issues?; Limited access to water or sewage connections; Inadequate superstructure size and quality	Improved substructures	Referral to skilled masons and existing distribution channels?
	Biological	Contamination in environment due to child feces and poor containment; presence of pathogens with epidemic possibilities (cholera)?	Reduced environmental contamination due to improved substructure	Intervention to increase collective efficacy and promote cooperation cohesion between landlords in a community
	Social	Lack of social influence on hidden infrastructure and understanding of community effects of sanitation; Social exclusion?	Increased social visibility and recognition of improvements that benefit the community	Recognition and "regulation" derived from the mobilized community

Brain	Executive	Not yet known	Regular planning and discussion of improvements	Commitment pledges? Scheduled community reminders?
	Motivated	Disgust (sight/smell of feces)?	Disgust (sight/smell of feces), Status (level of sanitation), Affiliate (caring for community's health)?	Marketing campaign to attach additional motivations to potential behaviors
	Reactive	Not yet known	Not yet known	Not yet known
Body	Traits	Conscientiousness? Agreeableness?		Not yet known
	Physiology	Volume of fecal matter production?		Not yet known
	Senses	Smell?		Not yet known
Behaviour Setting	Stage	Marketplace	Community and plot discussions	Intervention targeting both landlords and tenants encouraging discussion and cooperation within and between plots
	Roles	Individual landlords	Community members	Cooperation and identity-change
	Routine	Identifying builder or emptier and allowing them to manage process	Same?	Not yet known
	Script	How they go about seeking builder or emptier	More efficiently seeking builders or emptiers with higher skills	Providing access routes to information
	Norms	No norm regarding containment or emptyability for community benefit	Creating norm about emptyability and containment	Multi-plot level intervention targeting affiliate motive
	Props	Buckets, Shovels	None - done by professionals	Not yet known
	Infrastructure	Difficult to empty pits	Offset tanks; Wall access points and plots accessible to emptying services	Demand-creation marketing messages
Intervention	Touchpoints	Plot, Church, Zesco (Electric company), Mobile Phones, Local Councils		
Context	Programmatic	No known past or planned interventions or infrastructure projects in target area		
	Political	Government recognizes need for on-site sanitation; Large external resources dedicated to improving on-site sanitation, especially demand creation		
	Economic	Economy not growing and cost of living rising may make affordability an issue		
	Social	Sense of community within peri-urban areas largely unknown		

Subsequent activities

Following the framing workshop, CIDRZ and LSHTM personnel conducted further discussions with LWSC and made site visits to proposed areas that included the Bauleni, Linda, and Jack compounds. Based on the multiple criteria of having adequate population size to support a trial, significant sanitation needs, as well as lack of recent on-site sanitation interventions, the team selected **Bauleni** as the most appropriate compound for the project and LWSC endorsed this.



Figure 5: Bauleni Compound

Next steps

At the end of this exciting and informative workshop, CIDRZ and LSHTM were in position to move forward with designing the Formative Research protocol and seeking ethical clearance from Zambian authorities as well as the LSHTM Ethics Committee.