

# BRIEFING NOTE

## Sanitation Research Symposium

(30th April 2015, Kenya)



### Summary

At the end of April 2015, [Great Lakes University Kisumu](#) (GLUK) and the [SHARE Consortium](#) convened the Sanitation Research Symposium, a one-day event that brought together key stakeholders from Kenya's sanitation sector to focus on challenges of post-2015 Development Goals. The Symposium was part of the 12th Annual International Conference hosted by GLUK's [Tropical Institute of Community Health and Development](#) (TICH) near Kisumu in western Kenya.

The Symposium had 260 attendees, with about 50 SHARE-sponsored sanitation stakeholders from key national and county-level government agencies, international and local academic institutions and non-governmental organisations (NGOs). Dr Yolande Coombes, Senior Sanitation & Hygiene Specialist (WSP, World Bank), expertly moderated 20 presentations focused on three central aims, each addressed by a plenary session.

### Acknowledgements

This policy briefing was written by:  
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We are very grateful for the contribution of:  
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**Photo Credit:**

*Belen Torondel/LSHTM*

The first session set the scene, presenting national post-2015 water, sanitation and hygiene (WASH) targets as well as the county-level equivalent targets in Kisumu. The second session drew on existing research and evidence to discuss the challenges of meeting upcoming Sustainable Development Goals (SDGs) on sanitation and hygiene – with their new focus on universal and equitable access, behaviour change and service provision beyond the household. In the final session persisting knowledge gaps and research priorities were drawn out, and the new proposed research project funded by SHARE and led by GLUK was presented for discussion.

## Setting the scene: A brief overview of the WASH architecture in Kenya

The first session of the symposium began after a warm welcome from Professor Dan Kaseje, Vice Chancellor of GLUK, and a briefing of the day's events by Yolande Coombes. Mr Jackson Muriithi, newly appointed Deputy Director of the Ministry of Health delivered the keynote address, outlining the history of the Millennium Development Goals (MDGs) in Kenya with a focus on the sanitation sector. He presented examples of policy efforts to mainstream MDGs in past and current national initiatives including Medium Term Plans I & II and Kenya Vision 2030. National goals from these policies included 100% of the population having access to a minimum WASH package by 2030 and declaring 75% of communities open defecation free. Major challenges to achieving these goals in the context of the newly devolved government are: inadequate WASH financing, inclusion of WASH indicators such as hand washing in monitoring framework, addressing equity in access and shortages of technical staff.

Arthur Shikanda, the Kisumu County Public Health Officer (PHO), provided an overview of county-level initiatives and challenges, emphasising that sanitation coverage is lagging in Kisumu County, resulting in large economic and health costs. He highlighted countywide Community-led Total Sanitation (CLTS) efforts, with training of many PHOs and county health staff leading to introduction of CLTS in 483 villages and a sub county declared open defecation free. However, progress towards county goals could be accelerated with an increase in the financial resources committed to improving sanitation and meeting current goals.

## Preparing for post-2015: Using what we know

The post-2015 global architecture for WASH, through the [evolving SDG framework](#)<sup>1</sup>, has three main new areas of focus compared to the MDGs:

1. **Hygiene behaviour change** – while MDG target 7.c. focused on access to safe drinking water and basic sanitation, proposed SDG target 6.2. commits to achieving access to “adequate and equitable sanitation and hygiene...”. The latter can only be achieved through sustainable behaviour change
2. **Universal and equitable access** – the focus of MDG target 7.c. was on proportional increase of access to water and sanitation, while SDG target 6.2. commits to achieving “adequate and equitable sanitation and hygiene for all”

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<sup>1</sup> Zero draft of the outcome document for the UN Summit to adopt the Post-2015 Development Agenda

3. **Sanitation provision and hygiene beyond the household** – the MDG target was monitored through an assessment of household coverage levels. In the proposed SDG framework water, sanitation and hygiene would also be assessed in schools (as part of target 4.a. to build/upgrade education facilities that are inclusive, safe and effective) and health facilities (as part of target 3.8. on universal health coverage and access to quality essential health-care services).

Whilst laudable, these proposed post-2015 commitments present new challenges to the WASH and related sectors. The second session of the Sanitation Research Symposium identified what can be learned from existing research in the region to realize these three focus areas for post 2015.

### **The central role of research in improving WASH access and use**

Professor Mohamed Karama who serves both as the Principle Research Officer at the [Kenya Medical Research Institute](#) (KEMRI) and as the chair of the Policy, Research, and Advocacy Technical Working Group (TWG), emphasized the crucial role research must play in improving sanitation sector performance. He called for research into cost-effective sanitation solutions that are scalable and can be adaptable to specific geographic, social and ecological settings. He highlighted the importance of clear translation and communication of research evidence to policy, practitioner and user communities. He outlined key research priorities in Kenya, including traditionally neglected aspects of WASH, such as menstrual hygiene, and integration of WASH efforts across sectors, such as Education and Child and Maternal Health. Professor Karama concluded by affirming that the key to turning the tables on sanitation lies in effective communication of research and implementation of programs in the newly devolved government that transfers sanitation responsibilities to the counties.

### **Sanitation and hygiene behaviour change – beyond hardware**

Presentations in this section covered sanitation and hygiene behaviour change, ranging from hand washing campaigns (the traditional focus) to menstrual hygiene management (MHM) (an area of continued taboo).

In the [SuperAmma handwashing with soap](#) campaign, stylistic design of messages that evoke and appeal to natural emotions of nurture and disgust were very effective in media that triggered significant improvements in hand washing at target events. Ongoing research from the [WASH Benefits](#) project showed early indications of increases in community knowledge and intervention uptake through behaviour change messages conveyed by local community members. Presentation of the [Systematic review of research into the health and social effects of MHM](#) emphasized the vital importance of tackling this issue head-on for improving hygienic behaviour among women. It also revealed very few studies presenting evidence assessing the impact of poor MHM on women's health and highlighted that effective interventions must combine hardware and software improvements for MHM and be context specific. Research from The Water and Sanitation Programme (WSP) of the [World Bank, East Africa](#), stressed the need to invest in the sustainability of behaviour change triggered but not always maintained by CLTS. The approach combines CLTS, which focuses on placing a household on the first rung of the sanitation ladder, with sanitation marketing, which encourages suppliers to increase household demand for moving up the sanitation ladder towards more sustainable solutions.

## Universal and equitable access

Presentations in this second section can be loosely grouped into two categories: concrete examples of how to focus scarce resources on areas that can provide the greatest impact in terms of increased access rates; and broadening definitions of improved access.

Two projects highlighted the importance of focusing resources on reaching those who are most in need (peri-urban, informal settlements) and who service provision efforts have traditionally marginalized in terms of coverage and health outcomes. The WASH Disparities project, a SHARE-funded collaborative project between GLUK, KEMRI, LSHTM, and University of Florida, highlighted some of the key issues associated with poor WASH in such informal settlements and how these might be overcome. The project is carrying out an in-depth assessment of the social and economic factors influencing key community to household exposure pathways causing childhood diarrhoeal disease in peri-urban Kisumu, which in a second phase will inform the tailored design of a WASH intervention. [Sanergy](#) then presented its service model, which lends itself well to traditionally neglected, informal settlements. The model offers solutions for faecal sludge management by providing hygienic, safe improved sanitation, economic opportunity for community members, daily pick-up and safe composting of waste marketed as affordable fertilizer.

WSP presented its methods for [benchmarking all counties in Kenya](#) for assessment and monitoring of areas of the enabling environment (policies and strategies, the institutional framework, human resource capacity, financing, etc.). This work offered a practical tool for counties to identify where they may most usefully focus scarce financial and human resources to see the greatest improvements in sanitation and water service provision.

Finally, research from LSHTM around the shared sanitation facility classification, highlighted the need for continued discussion in this area. The recent [systematic review](#) addresses shared sanitation and universal coverage dilemma asks the basic question: Is shared sanitation an improved form of sanitation, or not? Results stress the need for more rigorous evidence on the health impacts of shared sanitation before a serious consideration of changes in definitions. However, the discussion also highlighted how heavily such a definition change, if ultimately justified by evidence, would influence the sanitation outlook for Sub-Saharan Africa and South East Asia. If criteria expand to include some shared facilities, it could considerably increase estimates of access to safe sanitation.

## Sanitation provision and hygiene beyond the household

The final section of this session featured research on settings outside or influencing household WASH issues. Work by WASH United highlighted the importance of placing the school community at the centre of any plan for interventions in order to provide a sense of ownership and drive sustainability of efforts. The WASH United model involves engaging the school governance committee from the outset in [efforts to introduce software interventions](#). Researchers at Innovations for Poverty Action) in turn stressed that hardware interventions must be tailored to the specific setting that they are targeting if behaviour change and uptake is to be achieved. Through an iterative, collaborative human-centred design process they have developed an appealing, affordable and resource efficient [soapy water hand washing station, also known as Povu Poa](#), featuring a foaming soap dispenser that school children and health facility patients will enjoy using and that schools and dispensaries will install and maintain. This work is in a similar vein to the [work on designing handwashing stations](#) in the

household led by WSP. The final presentation on research from Stellenbosch University described landlord-tenant financial relationships in peri-urban Kisumu, specifically how access to more private sanitation facilities correlated with improved housing conditions and higher rent payments. These results indicate higher willingness-to-pay for private sanitation in these communities with the consequence that higher costs lock out poorer tenants.

## Defining What We Don't Know

The final session of the day included updates on national knowledge gaps and research needs for improving WASH sector performance, the harmonization of data collection and monitoring and evaluation efforts in Kenya and an interactive workshop on the new SHARE-funded research led by GLUK in Kisumu. Professor Karama presented the research priorities identified by the Government of Kenya's (GoK) Policy and Research and Advocacy TWG. These included MHM, Neglected Tropical Diseases, and solutions that work in all regions and cultural contexts in Kenya and the need to increase demand beyond that created by CLTS.

Mr Benjamin Murkomen, the PHO on Monitoring and Evaluation (M&E) from the Ministry of Health presented on the Ministry-led efforts to harmonise WASH definitions and data collection to minimize duplication of efforts and enable cross-source analysis. In particular he highlighted the numerous demands on GoK's M&E department, including responding to AfricaSan and Sanitation and Water for All commitments, as well as the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water report on sector inputs and the Joint Monitoring Programme's efforts to capture sector outputs. GoK offers a good example within East Africa in terms of successful coordination of these data requirements and streamlining of data collection. However, variations in WASH definitions and exchanging information across different agencies continue to challenge M&E efforts. He encouraged the creation of informative and useful policy briefs from researchers and M&E that can be readily accessed by county governments through an existing briefing database.

The final activity of the day included a presentation by Dr Jane Mumma, director of GLUK-TICH on plans for a new 3-year research programme, in collaboration with KEMRI, including research-guided intervention studies addressing four main areas of diarrheal disease research:

1. Nutritional status and sanitation
2. Oral vaccine effectiveness and WASH conditions
3. Food and water contamination
4. WASH knowledge of caregivers

Prof Dan Kaseje facilitated the forum where audience members broke out into small groups to broadly discuss proposed plans, providing feedback on how to increase the effectiveness and goals of the interventions and research. Feedback included comments on challenges of having a broad scope for this research and that topics needed to be further elucidated to specific and operationalized research aims. Design suggestions included a two-year cohort study to follow changes in nutritional status and vaccine effectiveness and consideration and integration with the existing Water and Sanitation Service Improvement Project in Kenya.

Finally, building on earlier presentations from national representatives, groups called for a need to link study goals to the national priorities presented through the day.

The overall consensus from Symposium participants was that the day was a huge success. Later presentations included references to lunchtime discussions of new potential collaborations, invitations for presenters to submit policy briefs for distribution to government stakeholders and agencies, and a national level system for identifying knowledge gaps and corresponding research needs and guiding universities towards these. Clearly, the new SDGs present new challenges to timely monitoring and evaluation, connecting research to policy-making and directing research to policy gaps Kenya. However, Symposium participants demonstrated the value in creating forums like these for networking and generating plans to overcome challenges to progress towards the new post-2015 goals for sanitation.



## Participant List

Name	Organisation
Ndinya James Owade	Ack Namasole Health Centre
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Nancy Madigu	Ministry of Health
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Atieno Celestine Owira	Packard
Mekomen Dessie Ayaleco	Packard
Otieno Stephen Onyango	Packard
Asman Omulisia	Saipah
Shitawa Gideon Kutando	Saipah

Wangoli Micheal Wangara	Saipenh
Lebu Sarah Atieno	Sanergy Ltd
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Atogo Carolyne Aoko	Simavi
Bellah Alga Adhiambo	Simavi
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Bernice Undisa	Simavi
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Edward Okoth Owiwa	Simavi
Katiba Cecilia Atieno	Simavi
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Odero Nancy Akoth	Simavi
Ogwanga Michelle Akinyi	Simavi
Onyango Linder Aluoch	Simavi
Oria Kevin Ochola	Simavi
Owino Dickson Ouma	Simavi
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Awino Pauline Akinyi	Wofak
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Arogo Evans Omondi	Youth Health Volunteer Oyugis
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## Research for sanitation and hygiene solutions

The SHARE Research Consortium comprises eight organisations that have come together to generate rigorous and relevant research for use in the field of sanitation and hygiene. The purpose is to join together the energy and resources of the five partners in order to make a real difference to the lives of people all over the world who struggle with the realities of poor sanitation and hygiene.

SHARE is led by the London School of Hygiene and Tropical Medicine (LSHTM) and includes the following partners:

- Centre for Infectious Disease Research, Zambia
- Great Lakes University of Kisumu, Kenya (GLUK)
- International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)
- International Institute for Environment and Development (IIED)
- Mwanza Interventions Trial Unit, Tanzania
- Shack/Slum Dwellers International (SDI)
- University of Malawi (College of Medicine and Polytechnic)
- WaterAid

The SHARE core team work from LSHTM.

**September 2015**