

BRIEFING NOTE

Sanitation and Hygiene Research Symposium

(30th July 2015, Malawi)



Acknowledgements

This policy briefing was written by:

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Summary

On 30th July 2015, the [Malawi Epidemiology and Intervention Research Unit](#) (MEIRU), the [University of Malawi](#) (Polytechnic and College of Medicine) and the UK Government-funded [SHARE Consortium](#) convened the Sanitation and Hygiene Research Symposium, a one-day event that brought together key stakeholders from Malawi's sanitation and hygiene sector to focus on three key objectives:

- Highlight challenges of meeting the post-2015 Sustainable Development Goals (SDGs)
- Highlight persistent knowledge gaps and national research priorities
- Strengthen SHARE's proposed MEIRU-led research in Malawi for 2015-2018.

The Symposium had 35 attendees, comprising of government officials, donors, international and local academics and non-governmental organisations (NGOs). Mrs Kate Harawa, Chairperson of the Water and Environmental Sanitation Network (WES NETWORK) and Country Director for Water for People (Malawi), expertly moderated 17 presentations focused on the three central objectives, each addressed by a plenary session (programme attached).

The first session set the scene, presenting the water, sanitation and hygiene (WASH) context in Malawi and the challenges facing the country post-2015. The second session drew on existing research and evidence to discuss the challenges of meeting the upcoming 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 highlighted, and the new proposed research project for Malawi funded by SHARE and led by MEIRU was presented for discussion.

Session 1: Setting the scene – A brief overview of the WASH sector in Malawi

The first session of the Symposium began after a warm welcome from Professor Moffat Nyirenda, Director of MEIRU, and a briefing of the day's events by Kate Harawa. Mrs Emma Mbalame, Deputy Director of Water Supply at the Ministry of Agriculture, Irrigation and Water Development (MoAIDW), delivered the keynote address and a brief presentation on the WASH context in Malawi. She outlined the strategies, policies and programmes implemented to date to achieve the sanitation targets of the Millennium Development Goals (MDGs), Malawi's Vision 2020 and Malawi's Growth Development Strategies (I and II). Emma Mbalame highlighted challenges to achieving these goals and those of the new SDGs, specifically: inadequate evidence/formative research to support policy formulation, lack of fora to share WASH-related research findings, and poor coordination of the WASH sector. She concluded by emphasising MoAIDW's commitment to supporting SHARE's vital work in Malawi.

Mrs Elizabeth Chingaibe, Principal Environmental Health Officer in the Ministry of Health and Acting Chairperson of the National Sanitation and Hygiene Coordination Unit, similarly explained that although there has been progress on increasing sanitation coverage and usage nationally, challenges – such as those elucidated by Emma Mbalame – remain. She particularly emphasised: the incomplete establishment and staffing of the Sanitation and Hygiene Department, insufficient mechanisms for coordinating WASH financing at district level, the need for appropriate and affordable technologies to take people up the sanitation ladder and sustainable approaches for improving sanitation, and the urgency for delivering the overdue Sanitation Policy and a new Open Defecation Free Strategy that both reflect post-2015 priorities. Elizabeth Chingaibe concluded by summarising the key changes the SDGs will entail (summarised in the section below) and by underlining the challenges these present for the WASH sector in Malawi.

Session 2: Meeting the SDGs using what we know

The evolving SDG framework¹, has three main new areas of focus compared to the MDGs:

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

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”
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).

This session was opened by Emma Mbalame who emphasised the crucial role research should play in improving sanitation and hygiene in Malawi post-2015. She called for research that can shape the SDGs and national WASH development strategies, and encouraged practitioners to use evidence from operational research when designing and implementing interventions. Emma Mbalame concluded by urging stakeholders to effectively communicate their findings more widely and to meet more frequently in similar such research fora to share knowledge and lessons learned.

The session then focussed on identifying what can be learned from existing research in Malawi (and further afield) to realise the three aforementioned focus areas for post-2015.

Sanitation and hygiene behaviour change

Presentations in this section covered sanitation and hygiene behaviour change, ranging from the traditional focus of hand washing campaigns to the relatively underexplored area of weaning food hygiene.

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. A similar approach to behaviour change was employed by [researchers in Nepal](#) who successfully changed the behaviours of mothers at critical transmission points by using a motivational package (based on emotional drivers) targeting five key food hygiene behaviours. Research conducted by University of Malawi on hand washing with soap (HWWS) showed that levels of intentional HWWS were higher in men than women, but women had greater unintentional contact with water and soap for other purposes (i.e. washing clothes, bathing child), and suggested that HWWS may be difficult to sustain when there is a lack of available water at household level.

Universal and equitable access: Sanitation marketing

Presentations in this session covered various aspects of sanitation marketing, ranging from microfinance for promoting sanitation as a business to bottom-up city-wide planning.

A [Water for People](#) and Opportunity Investment Bank of Malawi-run project promoting sanitation microfinance in the peri-urban areas of Blantyre revealed that community members look for value of a sanitation product and not merely direct health benefits. Understanding the income priorities of households is therefore central to such projects. It

also found that involving commercial partners in implementing sanitation marketing projects resulted in greater community willingness to pay back loans than if the projects were implemented by NGOs alone.

A SHARE-funded, [Mzuzu University](#)-led project researching [private sector participation in the delivery of sanitation and hygiene services](#) highlighted the importance of developing effective promotional materials/sanitation marketing for entrepreneurs and households, the need to link entrepreneurs to communities during CLTS triggering, and the vital role of entrepreneurs in expanding councils' sanitation initiatives through public-private partnerships.

Another SHARE-funded project, led by [CCODE](#), demonstrated how bottom-up, community-led processes can be used to provide practical solutions to the challenges associated with urban sanitation. This action-research [city wide sanitation](#) project in Blantyre resulted in EcoSan public toilets being constructed in market places.

Finally, findings from a Research Institute-led study on water pricing strategies for low-income urban areas in Malawi emphasised the important role that Water User Associations can play in ensuring universal access thanks to a favourable regulatory/policy framework at the national level.

Universal and equitable access: Innovation and technology development

Presentations in this session underlined the importance of innovation and technology for achieving universal and equitable access targets.

SHARE-funded, [Lilongwe University of Agriculture and Natural Resources](#)-led research into faecal sludge management (FSM) in peri-urban areas found that bicycles/tricycles were cost-effective means of transporting sludge and recommended that equal consideration should be given to the practicalities of toilet-emptying as to the superstructure at design stage. Similar findings were noted by researchers from the [University of Malawi \(Polytechnic\)](#) whose [Water Research Commission](#)-funded study found that FSM practices in unplanned settlements were rudimentary. Likewise, SHARE-funded, [National Commission for Science and Technology](#)-led (NCST) research on solid waste management (SWM) in Malawian cities stressed the need to explore low-cost technologies that include workable public-private partnerships and engage residents to actively participate in SWM.

Sanitation and hygiene beyond the household

The last presentation of this session featured research on settings outside the household. [A collection of SHARE-funded papers](#) has provided much-needed new evidence on the vital role that WASH can play on improving maternal and new-born health outcomes globally. This body of research has underpinned a [prominent cross-sectoral call to action](#).

Session 3: Defining What We Don't Know

The final session of the day included presentations on national sanitation and hygiene research priorities, and [WES NETWORK](#)'s involvement in research development and dissemination nationally, and concluded with an interactive workshop on SHARE's proposed MEIRU-led research in Malawi.

NCST summarised the research priorities identified by the Government of Malawi in its National Health Research Agenda (2012-2016), which include amongst others nutrition, food safety and hygiene, and communicable disease control.

Mr Asayire Kapira, WES NETWORK, outlined the role of the network of civil society organisations in providing a platform for sharing research findings with key WASH players in Malawi and in highlighting existing research gaps to researchers.

The final activity of the day was a presentation by Mr Kondwani Chidziwisano, the University of Malawi (Polytechnic), on plans for a new 3-year research programme, in collaboration with MEIRU, which seeks to determine the effectiveness of combining WASH and food hygiene interventions on the incidence of diarrhoeal disease in children under the age of five. The study will entail developing, implementing and evaluating an integrated community-based WASH and food hygiene intervention in Chikwawa District, Malawi. It is designed as a randomised control trial (with two treatment groups and a control group) and, as well as being informed by formative research, will build on [previous successful SHARE projects](#).

Moffat Nyirenda then facilitated break-out sessions for small groups to broadly discuss proposed plans, providing feedback on how to increase the effectiveness and goals of the interventions and research. Comments from the groups included:

- When selecting the study area, there is a need to consider poverty levels, eating patterns of communities and current health data.
- Caution should be exercised when developing a model for Malawi that will be based on findings from previous SHARE-funded complementary food hygiene studies conducted in Mali, Bangladesh and Nepal. It must be adapted to the local context.
- When developing the model, there is a need to consider other existing community models that are being used to promote sanitation and hygiene in Malawi. The team may incorporate some of the elements of the existing models.
- Sustainability of the model should be considered from the outset.
- There is a need to develop 1 or 2 interventions. Multiple interventions should be avoided.

The overall consensus from Symposium participants was that the day was a huge success. The SDGs evidently present new challenges for policymakers, practitioners and academics alike; inherently, research should be directed towards national knowledge gaps, and policy-making must be evidence-driven. Fora such as the Symposium will be integral to ensuring continued engagement between WASH stakeholders and those from related sectors, and for generating plans to overcome challenges to progress towards the new post-2015 goals for sanitation.

AGENDA: Malawi Sanitation and Hygiene Research Symposium

Venue: Lilongwe Hotel, Lilongwe, Malawi

30th July 2015

TIME	TOPIC	MODE	RESPONSIBLE
9:00 – 9:10	Welcome	Address (10 mins)	Professor Moffat Nyirenda, Director – Malawi Epidemiology and Intervention Research Unit (MEIRU)
9:10 – 9:15	Introduction to day's proceedings	Address (5 mins)	Symposium Moderator: Mrs Kate Harawa, Country Director – Water for People Malawi & WESNET Chairperson
9:15 – 9:25	Keynote address	Address (10 mins)	Mrs Emma Mbalame, Deputy Director of Water Supply – Ministry of Agriculture, Irrigation & Water Development (MoAIDW)
	SESSION 1: SETTING THE SCENE <i>A brief overview of the WASH architecture in Malawi</i>		<i>Facilitated by the Symposium Moderator</i>
9:25 – 9:35	The WASH context in Malawi • From MDGs to SDGs – what has changed for sanitation and hygiene?	Presentation (10 mins)	Mrs Emma Mbalame, Deputy Director of Water Supply – MoAIDW
9:35 – 9:45	• Challenges facing the WASH sector	(10 mins)	Mrs Elizabeth Chingaipe, Principal Environmental Health Officer – Ministry of Health
9:45 – 9:50	• Questions and discussion	Plenary (5 mins)	All participants

	SESSION 2: MEETING THE SDGS USING WHAT WE KNOW <i>Critical assessment of the three main elements that distinguish the SDGs from the MDGs, evaluation of the possible challenges that these represent to the sector, and how research can help overcome them</i>		<i>Facilitated by the Symposium Moderator</i>
9:50 – 9:55	The salience of research to meeting the SDGs	Presentation (5 mins)	Mrs Emma Mbalame, Deputy Director of Water Supply – MoAIDW
9:55 – 10:40	Sanitation and hygiene behaviour change – What can we learn from existing research? <ol style="list-style-type: none"> 1. SuperAmma handwashing with soap campaign 2. Weaning food hygiene 3. Handwashing with soap 	(10 mins presentation plus 5 mins Q&A each)	<ol style="list-style-type: none"> 1. Dr. Jeroen Ensink, Senior Lecturer Public Health Engineering – London School of Hygiene & Tropical Medicine (LSHTM) 2. Dr. Jeroen Ensink, Senior Lecturer Public Health Engineering – LSHTM 3. Mr. Save Kumwenda, University of Malawi (Polytechnic)
15 mins	COFFEE BREAK		
10:55 – 11:55	Sanitation marketing – What can we learn from existing research and experiences? <ol style="list-style-type: none"> 1. Micro-financing sanitation – lessons from peri-urban Blantyre 2. Water pricing strategies 3. City wide sanitation – ECOSAN 	(10 mins presentation plus 5 mins Q&A each)	<ol style="list-style-type: none"> 1. Mr. Muthi Nhlema, Monitoring and Communications Manager – Water for People 2. Mr. Austine Jere, Research and Communications Officer – The Research Institute 3. Ms Mariana Gallo, Knowledge Management

	4. Private sector participation in the delivery of sanitation and hygiene services		Officer – Centre for Community Organization and Development 4. Associate Professor Dr. Victor Kasulo – Mzuzu University
11:55 – 12:40	Innovation and technology development – What can we learn from existing research? <ol style="list-style-type: none"> 1. Pit emptying and faecal sludge management in peri-urban Blantyre and Lilongwe 2. Pit Sludge Management, Sludge Biochemical Degradation, & Impacts on Public Health in Unplanned Settlements of Malawi 3. Solid waste management in Malawian cities 	(10 mins presentation plus 5 mins Q&A each)	<ol style="list-style-type: none"> 1. Dr. Wilfred Kadewa, Lilongwe University of Agriculture and Natural Resources 2. Dr. Benard Thole, University of Malawi (Polytechnic) 3. Mr. Fredrick Munthali, Chief Research Services Officer – National Commission for Science and Technology (NCST)
1 hour	LUNCH		
13:40 – 13:55	Sanitation and hygiene beyond the household – What can we learn from existing research? <ol style="list-style-type: none"> 1. WASH as an entry point for improved maternal and newborn health and infection prevention and control 	(10 mins presentation plus 5 mins Q&A)	<ol style="list-style-type: none"> 1. Dr. Catherine Kahabuka, CEO & lead Consultant – CSK Research Solutions
	SESSION 3: DEFINING WHAT WE DO NOT KNOW <i>Identification and discussion of persistent knowledge gaps</i>		
13:55 – 14:05	National research priorities for Malawi	Presentation (10 mins)	Mr Mike Kachedwa – NCST
14:05 – 14:15	The role of WESNET in research development and dissemination	Presentation (10 mins)	Mr Asayire Kapira, WESNET Secretariat

14:15 – 14:30	<p>Discussion on the way forward for role of research, dissemination and research into use around:</p> <ul style="list-style-type: none"> • <i>Integrating research in intervention development and M&E programmes</i> • <i>How to really get effective feedback into policy development and scale-up</i> 	Plenary (15 mins)	<p>All participants</p> <p>Facilitated by the Symposium Moderator</p>
15 mins	COFFEE BREAK		
14:45 – 15:00	University of Malawi/SHARE's research proposal 2015-2018	Presentation (15 mins)	Mr. Kondwani Chiziwisano, University of Malawi (Polytechnic)
15:00 – 16:00	<p>Questions and discussion – <i>Constructive feedback on the relevance and rigour of the proposed research by the University of Malawi with SHARE funding, around the following:</i></p> <ul style="list-style-type: none"> • Linkages and lessons learned from previous work and existing studies • Methodology • Relevance to sector priorities • Other small research areas which should be aligned and explored based on the morning's discussions 	Group work (1 hour)	Facilitated by Professor Moffat Nyirenda, Director – MEIRU
16:00 – 16:10	Wrapping up and next steps	Address (10 mins)	Symposium Moderator
16:10 – 16:20	Closing remarks	Address (10 mins)	Professor Moffat Nyirenda, Director – MEIRU

Participant List

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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