

This Guidance was developed as part of WABES Integrate.

About WABES Integrate:

Water, Behaviour Change and Environmental Sanitation (WABES) is a collaborative research project between Makerere University (Uganda) and the Swiss Federal Institute of Aquatic Science and Technology, Eawag (Switzerland). A key aim is to develop an integrated planning approach for water, sanitation and solid waste, since they are closely linked basic services. This integrated project focusses on two towns in Uganda, Wobulenzi and Kakooge, to analyse these services and their influencing factors. The learnings from this project are documented to support wider efforts in other relevant contexts.



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Introduction

This guidance document presents a comprehensive overview of an integrated sensitisation campaign with key messages based on detailed assessments done across the water, sanitation, and solid waste sectors in the two towns in Uganda between 2023-2025. While the specific results from these assessments are particular to the selected towns, they have lessons for several other small towns in the region, and beyond that, share these challenges of basic service provision, due to limited prioritization, resource constraints, and siloed planning leading to negative interlinkages.

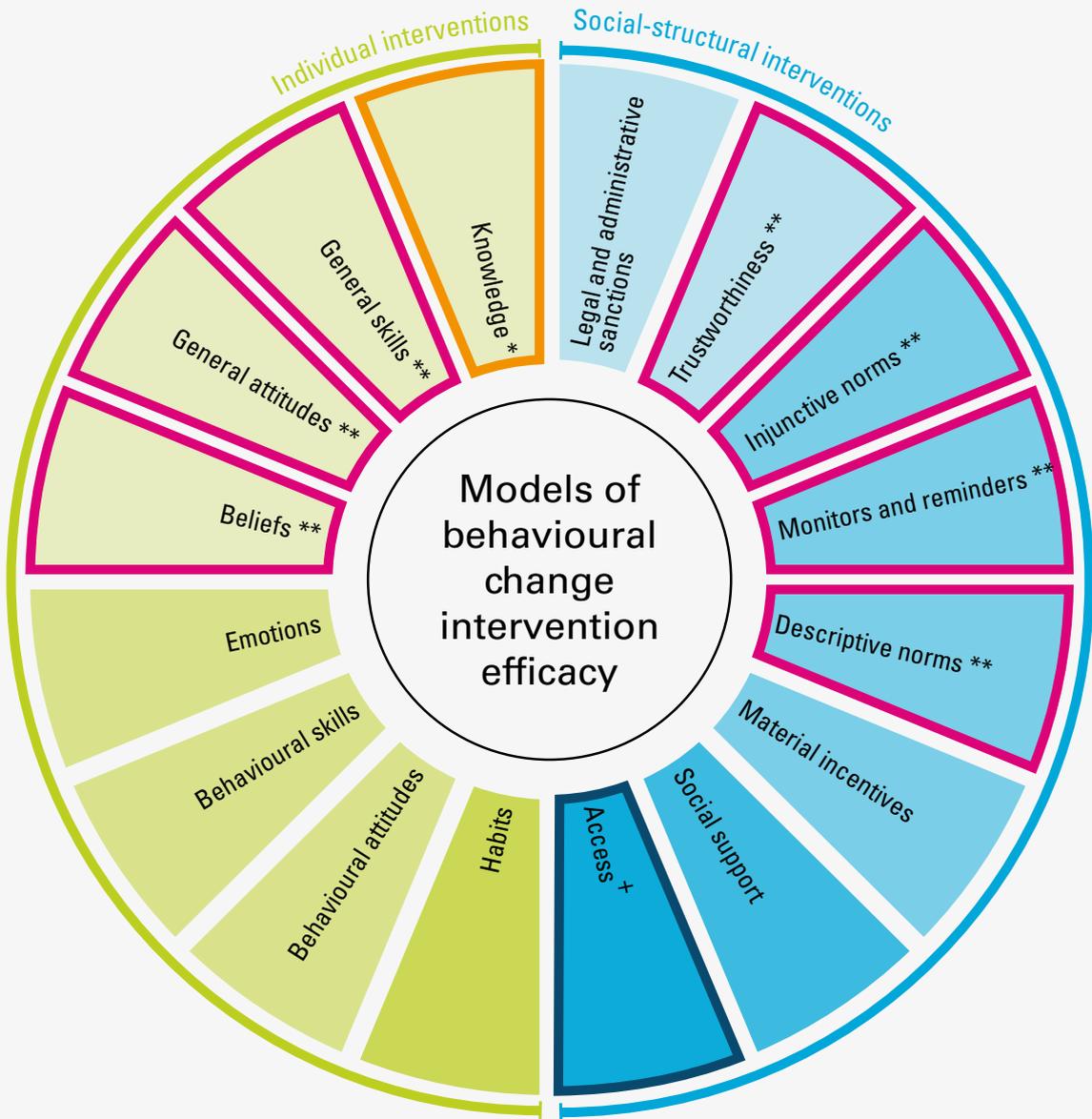
The integrated baseline assessments included methods of household surveys, interviews, water quality assessments, sanitary inspections, solid waste characterization, photovoice, and sectoral flow diagrams, among others. Key challenges identified include contamination of non-piped water sources, poor hygiene and sanitary cleanliness, unlined pit latrines, inadequate waste management at the household and system level, and the interlinkages of groundwater contamination, dumping in waterbodies and pits, all of which pose risks to public health and the environment.

Evidence from these scientific assessments and community-based activities were presented at a stakeholder led Roadmapping Workshop in March 2025, where the challenges were prioritized and solution profiles were co-created. Several of these challenges led to solutions that involved awareness and sensitization. Therefore, they were merged and coordinated to create an integrated sensitization campaign to address integrated challenges.

In general, individual behaviour towards public services such as water, sanitation, and solid waste is shaped by factors including knowledge, behavioural and general attitudes, norms, emotions, skills, access, habits, and beliefs (Box. 1). Behaviour change programs are complex, requiring extensive interventions that address multiple behavioural determinants, and therefore hold much higher potential for results. In contrast, sensitization campaigns, such as this one, are simpler and can only target certain behavioural determinants as levers of change. As a result, their effects are likely to be negligible to small, and they do not achieve the same outcome potential as comprehensive behaviour change programs. It is therefore important to note that targeted outcomes require a more in-depth design of behaviour change interventions. Nonetheless, sensitization campaigns combined with interventions improving access may have larger impacts on service reception and quality. Notably, several key challenges identified in baseline assessments—particularly concerning water contamination—were linked to knowledge factors. Within this document, the integrated sensitization campaign is designed to focus on specific behavioural determinants, primarily knowledge, but also attitudes, beliefs, and emotions, depending on the format of communication.



Box 1. Theoretical Model



Meta-analysis summary of behavioural determinants and their proven results as levers of change. Adapted from Albarazin et al. (2024),

Effects



Levers



Colors in Box 1 do not carry forward through the rest of the document.

Design Approach

This guidance document was designed based on a three-step process:

1. Formulation of key messages based on collected primary scientific evidence.
2. Contextualisation of messages at a national expert workshop (in Kampala, Uganda).
3. Fine-tuning and execution planning by stakeholders in the Town Councils.

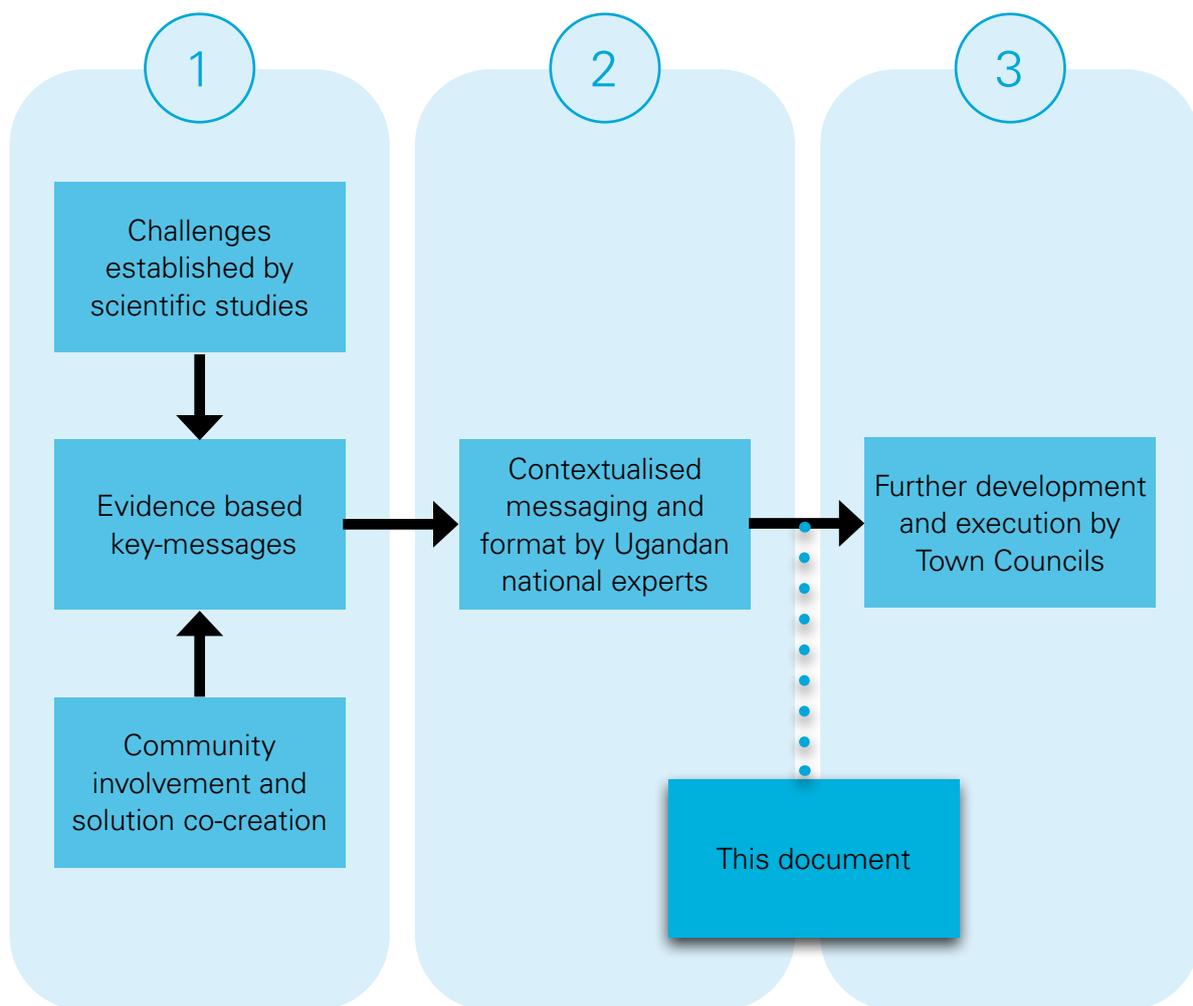


Figure 2. The process of designing this guidance document for an integrated sensitization campaign.

Each key message is mapped to specific problems attributed to clear evidence from scientific studies conducted in the aforementioned small towns. Key messages also include a knowledge component, recommended wording, including in the local language – Luganda. Furthermore, the target audience and knowledge objectives are clarified. The document also considers potential unintended consequences and risks, offering mitigation strategies to ensure effective and sustainable outcomes. This document also serves as a guide for the implementation through the recommended dissemination formats such as community meetings, posters, school events, and engagement through local leaders and health workers, to build trust, increase awareness, and encourage community participation in improving water safety, sanitation, and waste management services.

What this document is:

- » Guidance for an integrated sensitisation campaign
- » Key messages for sector-specific and integrated challenges (based on evidence from two towns)
- » Recommended formats for each of the key messages
- » Example posters and references for further reading

What this document is not:

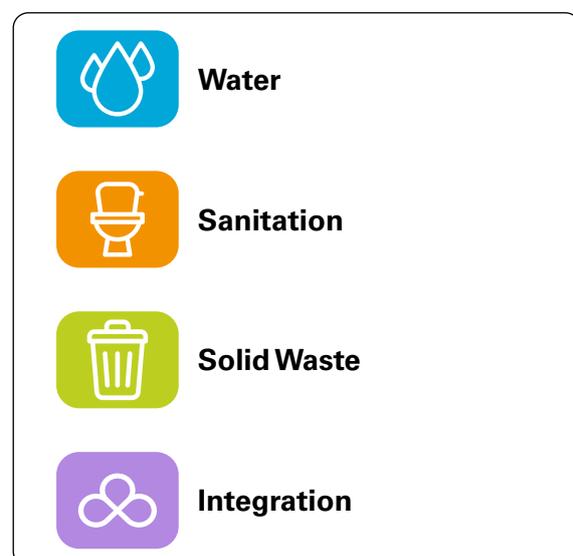
- » Guidance for a comprehensive behaviour change intervention
- » Recommendations for interventions that directly change service provision in all contexts

For implementing a successful sensitization campaign:

- Key messages must be simple
- Key messages have a target audience and an objective
- Key messages and associated knowledge are in the local language
- Transmitted by trustworthy/credible people
- A wide range of formats and platforms is used (e.g., Posters, Community health teams, Radio, and Town Crier, Local political, religious, and cultural leaders, School and Town events)
- Messages indicate sustainable alternatives that are tangible and practical

For successful sensitisation to result in behaviour change:

- Designers must be aware of drivers and barriers for existing behaviours
- Alternatives (as action potential) to certain behaviours exist
- Alternative behaviours are sustainable and do not create unintended consequences



Overview of Key Messages

	Problem identified	New Message	Format(s) & Platforms
1	Contamination of non-piped water is higher. Piped water is safer.	« Treatment through chlorine and boiling makes water safe to drink. Treat your water through chlorine and by boiling. »	1. Poster with key messages for market places, restaurants, and households 2. Community meetings 3. School events
2	Unclean storage containers lead to drinking water recontamination.	« Keep your water storage containers covered and use clean hands to fetch water from them. »	1. Churches and cultural place 2. Community meetings 3. Poster
3	Household sanitation facilities are not clean and lack handwashing facilities	« Keep your toilet clean and wash hands with soap for a healthy and dignified life. »	1. Poster with key messages 2. Village Health Teams (VHTs) 3. School events
4	Households are not constructing lined pits.	« Unlined pits put germs in groundwater. »	1. Town crier 2. Poster
5	Households are not emptying their filled latrine pits	« Empty your pits safely using cesspool trucks or gulpers so that your latrine is reusable and your environment is protected. »	1. Longer message 2. Community meetings 3. Town crier 4. Megaphone
6	The town council can't provide waste services to everyone currently. Household treatment contributes to waste management.	« Waste is a shared responsibility. Majority 7/10 waste can be composted at home. Then our community would be clean. »	1. VHTs 2. Political leader messaging 3. Community meetings
7	Lack of cost awareness of collection services.	« My waste is my responsibility. So I have to pay for waste services and I have to pay xx shilling. »	1. Radio messaging 2. Town crier 2. Political leader messaging
8	Litter practices are widespread especially in the commercial areas.	« Good waste services need community effort. To keep your town clean, don't litter. »	1. Skits / street play for relaying this message
9	Unsafe Sanitation leads to Water Contamination.	« Avoid germs in your water, 1. Construct lined pits 2. Store water in clean and covered containers 3. Keep drinking water away from animals 4. Wash hands with soap 5. Don't throw rubbish in water sources. »	1. Poster with key messages 2. Political and cultural leader messaging 3. VHTs 4. School events

Key Message 1

Treatment through chlorine and boiling makes water safe to drink

Treating drinking water with chlorine or by boiling is crucial for making it safe, especially for households using non-piped sources, which are more likely to be contaminated. Evidence shows that piped water, when properly chlorinated, meets safety standards and is less likely to contain harmful bacteria. Promoting the use of chlorine and boiling helps protect families from waterborne diseases and builds trust in safe water sources.

Sector

Water

Key Messages

« Untreated non-piped water is a health risk. Treatment through chlorine/ boiling works. Chlorine in piped water ensures that the water is safe for drinking. »

Contextualised Messages

« Treatment through chlorine and boiling makes water safe to drink. Treat your water through chlorine and by boiling. »

Local Language (Luganda)

« *Okuyonja amazzi nga okozesa Kuloriine oba okugafumba kifuula amazzi okuba amayonjo okunywa. Amazzi go gayonje nga okozesa kuloriine oba nga ogafumba* »

Suggested Format(s) and Platforms

1. Poster for market places, restaurants, and households
2. Community meeting
3. School event

Problem Identified

Contamination of non-piped water is higher. Piped water is safer.

Target Audience

Households

Knowledge Objective

Increased understanding of how to treat water to keep water safe.
More trust in chlorinated piped water/water utilities and increased willingness to pay.



Evidence

Recent data suggests that 2.1 billion people worldwide still lack access to safely managed drinking water (JMP, 2025).

Our research in Uganda demonstrates the following. The analysis of water quality at household level showed that 84.3% of households had drinking water contaminated with faecal bacteria (*E.coli*), although 66% of respondents reported that they treated their water by boiling. Also, the water supply system in one of the towns faces the challenge of inadequate chlorine dosing leading to *E.coli* contamination, recontamination due to dirty storage containers despite boiling, and perceived unpleasant taste attributed to chlorine in the piped water system. (WABES Integrate, 2023).

These challenges are not unique to Uganda. Studies in other low-income settings have shown similar patterns. For example, Gundry et al. (2014) found widespread microbial contamination in drinking water across multiple regions, highlighting that recontamination at the point of use is a common barrier to achieving safe water.

Unintended Consequences

Source switching to piped water.

If chlorine is not available locally, people might access unsafe alternatives, or improperly dose their water

Risk and Mitigation Strategies

Currently low risk, as chlorine dosing at the household level is not common. Retail chlorine products come with instructions.

Notes / References

- Taste of piped water (chlorine) is an acceptability issue
- Target emotions
- Chlorine message: through VHTs
- Storage messaging with poster

Key Reading

Centre for Affordable Water and Sanitation Technology (CAWST). Chlorine Disinfection of Household Drinking Water. washresources.cawst.org/en/resources/017b655b/chlorine-disinfection-of-household-drinking-water

Centers for Disease Control and Prevention (CDC). Communication Resources for Safe Water Use. cdc.gov/water-emergency/communication-resources/index.html

Gundry, S. W., J. A. Wright, and R. M. Conroy. "A Systematic Review of the Health Outcomes Related to Household Water Quality in Developing Countries." *Journal of Water and Health* 12, 1 (2014): 1–13. doi.org/10.2166/wh.2004.0001

Video

CAWST. Boiling. washresources.cawst.org/en/resources/85c9a7a1

Key Message 2

Keep your water storage containers covered and use clean hands to fetch water from them

To keep drinking water safe, it is important to regularly clean storage containers and always keep them covered to prevent contamination from dust, animals, and unclean hands. Using clean hands when fetching water and avoiding unsafe cleaning practices helps maintain water quality and protects your family's health.

Sector

Water

Key Messages

« Regular cleaning of the inside of drinking water containers (e.g., bleach or ash or detergent) avoids recontamination of safe water.

Safe storage also includes preventing animals, unclean hands and dust entering storage containers. »

Contextualised Messages

« Keep your water storage containers covered and use clean hands to fetch water from them. »

Local Language (Luganda)

« *Kontayinazo ezi terekebwamu amazzi gokunywa zikuume nga zibikkibwa era kozesa engalo enyonjo okusenamu amazzi.* »

Suggested Format(s) and Platforms

1. Churches and cultural place
2. Communities meetings
3. Posters

Problem Identified

Unclean storage containers lead to drinking water recontamination.

Target Audience

Households

Knowledge Objective

Increased understanding of the impact of dirty drinking water containers on the safety of water and of how to store drinking water containers to keep water safe.



Evidence

Recent data suggests that 2.1 billion people worldwide still lack access to safely managed drinking water (JMP, 2025).

Our research in Uganda demonstrates the following. The water supply in both towns faces recontamination due to dirty storage containers despite boiling, and chlorine dosing. Detailed analysis of 19 households revealed recontamination between water source and consumption in 68% of cases, with an average increase in *E. coli* levels, and this is attributed to poor storage practices, animal interaction and poor hygiene. (WABES Integrate, 2023).

These issues are common in other low- and middle-income settings as well. Research has shown that even when water is treated, contamination often occurs during storage and handling at the household level. For example, studies by Wright et al. (2015) and Gundry et al. (2013) demonstrated that unclean storage containers and poor hygiene practices significantly contribute to recontamination, while proper chlorination can reduce this risk. These findings underscore that recontamination between source and point of use is a widespread challenge, not limited to Uganda.

Unintended Consequences

Households clean drinking water containers with pebble stones, leading to increased biofilm buildup on the container surface. Incorrect use of bleach, soap can lead to chemical contamination.

Risk and Mitigation Strategies

This is indeed risky. Mitigation - do not mention stones as a cleaning option in the poster. Talk about safe cleaning options in the VHTs, and other dissemination.

Notes / References

Warn about cleaning with stones - they may cause damage to inner lining promoting more bacterial growth and microplastics.

Further Reading

CDC. Safe Water Storage (2024) [cdc.gov/global-water-sanitation-hygiene/about/about-safe-water-storage.html](https://www.cdc.gov/global-water-sanitation-hygiene/about/about-safe-water-storage.html)

Meierhofer, R., B. Wietlisbach, and C. Matiko. "Influence of Container Cleanliness, Container Disinfection with Chlorine, and Container Handling on Recontamination of Water Collected from a Water Kiosk in a Kenyan Slum." *Journal of Water and Health* 17, 2 (2019): 308–319. doi.org/10.2166/wh.2019.282

Key Message 3

Clean toilets and handwashing facilities are necessary to maintain a healthy and dignified life

Clean toilets and accessible handwashing facilities with soap are essential for maintaining a healthy and dignified life. Despite many households having toilets, over half lack proper handwashing stations, and soap availability is very low, increasing the risk of disease. Improving the cleanliness of toilets and ensuring regular handwashing can greatly enhance hygiene and well-being. Encouraging households to invest time and resources in maintaining sanitation facilities supports better health outcomes and dignity for all family members.

Sector

Sanitation

Key Messages

« Clean toilets and handwashing facilities are necessary to maintain a healthy and dignified life. »

Contextualised Messages

« Keep your toilet clean and wash hands with soap for a healthy and dignified life. »

Local Language (Luganda)

« *Kuuma kabuyonjo yo nga nnyonjo era onaabe mu ngalo ne ssabbuuni okufuna obulamu obulungi era obw'ekitiibwa* »

Suggested Format(s) and Platforms

1. Poster for market places, restaurants, and households
2. VHTs messaging
3. School event

Problem Identified

Household sanitation facilities are not clean and lack handwashing facilities.

Target Audience

Households

Knowledge Objective

Increased understanding of the importance of clean toilets and handwashing facilities / washing hands with soap



Evidence

According to the latest data, 3.4 billion people still lack safely managed sanitation services worldwide and 1.7 billion people lack basic hygiene services (JMP, 2025).

Our research in Uganda demonstrate the following. Regarding sanitation and hygiene, over half of toilets were low on cleanliness, and town council members reported this as a major issue. Hand washing facilities are lacking for half of respondents, although where they are available, they are mostly functional. Overall, soap was consistently available in 23.2% of households, while the majority (73.1%) had no access to soap. (WABES Integrate, 2023)

Such gaps in sanitation and hygiene remain a widespread public health challenge across low- and middle-income countries. The Global Burden of Disease study on WASH practices (Wolf et al., 2023) highlighted that inadequate sanitation, lack of handwashing facilities, and insufficient access to soap continue to contribute substantially to diarrhoeal diseases and other infections worldwide. This global evidence reinforces the urgent need to improve both the availability and consistent use of basic hygiene services.

Unintended Consequences

Increased financial burden on low income households

Risk and Mitigation Strategies

It was noted in community workshops, that this was a matter of priority. In the Integrated baseline assessment, even higher income households often did not have clean toilets.

Notes / References

Simple messaging: A clean toilet contributes to a healthy, happy life

Further Reading

Wolf J., et al. "Burden of Disease Attributable to Unsafe Drinking Water, Sanitation, and Hygiene in Domestic Settings." *The Lancet* 401,10393 (2023): 2050-2071. [doi.org/10.1016/S0140-6736\(23\)00458-0](https://doi.org/10.1016/S0140-6736(23)00458-0)

Key Message 4

Unlined pits put germs in groundwater

Unlined pit latrines, common in many areas, can spread germs into groundwater used for drinking. Promoting lined pits helps protect water sources and public health. Raising awareness and affordable technologies can encourage safer sanitation investments.

Sector Sanitation

Key Messages « Unlined Pits contaminate groundwater, which is then used for potable purposes. »

Contextualised Messages
Local Language (Luganda) « Unlined pits put germs in groundwater. »
« Kabuyonjo ezitali nziimbe kuwa wansi ziteeka obuwuka mu mazzi agali wansi w'ettaka. »

Suggested Format(s) and Platforms
1. Town crier
2. Poster

Problem Identified Households are not constructing lined pits.

Evidence According to the latest JMP report, in 2024, 3.4 billion people still lack safely managed sanitation services.
The risks posed by unlined pit latrines to groundwater quality have been widely documented elsewhere, with Graham & Polizzotto (2013) showing consistent evidence of microbial and chemical leaching into groundwater, and studies from India (Patil et al., 2011) confirming measurable impacts of on-site sanitation on water contamination.

Target Audience Households, Leaders (political, religious, community), Constructors and masons

Knowledge Objective People understand importance of lining and invest in lined pits.

**Unintended Consequences**

Financing is a challenge. Further information on the financing is needed.

Problems of continued usage of existing pits exist since the rehabilitation of unlined pits is difficult.

Risk and Mitigation Strategies

Increased financial burden.

Several local banks offer such loans that are made accessible to the town residents.

Notes / References

This may be a big investment. People need information on how to manage that.

Information on standard size of pits needs to be conveyed.

Further Reading

Graham, J. P., & Polizzotto, M. L. (2013). "Pit latrines and their impacts on groundwater quality: a systematic review." *Environmental Health Perspectives*, 121(5), 521–530. doi.org/10.1289/ehp.1206028

Patil, R. S., Kapadia, M., & Joshi, S. (2011). "Assessment of the impact of on-site sanitation systems on groundwater pollution in India." *Environmental Monitoring and Assessment*, 184, 4829–4836. doi.org/10.1007/s10661-011-1965-2

Video

CAWST. How to Line a Latrine Pit: Rebar Reinforced Fabric Lining. washresources.cawst.org/en/resources/e0e55c33/how-to-line-a-latrine-pit-rebar-reinforced-fabric-lining

Key Message 5

Empty your pits safely using cesspool trucks or gulpers so that your latrine is reusable and your environment protected

Safely emptying pit latrines with cesspool trucks or gulpers is crucial for reusable toilets and environmental protection, as many unlined and lined pits are not emptied due to service, equipment, and financing limitations. Promoting safe emptying prevents pollution and maintains safe sanitation.

Sector Sanitation

Key Messages « Emptying pits leads to usable and safe toilets. »

Contextualised Messages « Empty your pits safely using cesspool trucks or gulpers so that your latrine is reusable and your environment is protected. »

Local Language (Luganda) « *Jamu obukwafu nga okozesa ebimotoka bya kazambi oba empiira ezinuunamu obukwafu olwo kaabuyonjo yo esobole okuddamu okukozesebwa n'obutonde bwoensi nga bukuumibwa. »*

Suggested Format(s) and Platforms

1. Longer message
2. Community meetings
3. Town crier
4. Megaphone

Problem Identified Households are not emptying their filled pits

Target Audience Households

Knowledge Objective People empty their pits using emptying services and understand why it is important.



Evidence

According to the latest JMP report (2025), 3.4 billion people still lack safely managed sanitation services worldwide. Among the key challenges is pit emptying: hundreds of millions of latrines and septic tanks require regular desludging, yet in many low-income settings this is still done manually and unsafely, exposing workers and communities to serious health and environmental risks (Graham & Polizzotto, 2013).

Our research in Uganda shows a significant reliance on pit latrines, with limited safe emptying practices and frequent abandonment of filled pits, reflecting the scarcity of lined systems that can be properly maintained (WABES Integrate, 2023).

These challenges are not unique to Uganda: studies from other low-income settings confirm that safe and systematic pit emptying can reduce health risks and extend the lifespan of sanitation infrastructure, with Semiyaga et al. (2015) highlighting how improved technologies and service models can substantially enhance public health outcomes.

Unintended Consequences

Emptying into unsafe places.

Risk and Mitigation Strategies

This is low risk in one of the towns since a Faecal Sludge Treatment Plant (FSTP) is within the vicinity. In other locations, this risk exists regardless. Need a wider sector strategy for overcoming this.

Further Reading

Capone, D., et al. "Impact of an Intervention to Improve Pit Latrine Emptying Practices in Low-Income Urban Neighborhoods of Maputo, Mozambique." *International Journal of Hygiene and Environmental Health* 226 (2023): 113548. doi.org/10.1016/j.ijheh.2020.113480

Video

Semiyaga S., et al. "Decentralized options for faecal sludge management in urban slum areas of Sub-Saharan Africa: A review of technologies, practices and end-uses" *Resources, Conservation and Recycling* 104A: 109-119 doi.org/10.1016/j.resconrec.2015.09.001

Centre for Affordable Water and Sanitation Technology (CAWST). The PuPu Pump: A Kenya User Experience. washresources.cawst.org/en/resources/45393518/the-pupu-pump-a-kenya-user-experience

Key Message 6

Waste is a shared responsibility. The majority (7/10) of waste can be composted at home.

Waste management is a shared responsibility, and 70% of household waste is organic, composting at home can significantly reduce the burden on town council services and help keep the community clean. Currently, formal waste collection covers only part of the town, with many households lacking proper waste containers and much waste remaining unmanaged. By treating organic waste at the household level, residents can contribute to better waste management while the town council works to improve and expand collection services.

Sector

Solid Waste

Key Messages

« Did you know that 70% of household waste is organic waste? If you can treat it at home, waste collection services could be expanded! »
The town council is working to improve and expand waste services.

Contextualised Messages

« Waste is a shared responsibility. Majority 7/10 waste can be composted at home. »

Local Language (Luganda)

« *Kasasiro buvunaanyizibwa bwe tukwatira ewamu. Kasasiro asinga obungi 7/10 asobola okola nakavudira ewaka.* »

Suggested Format(s) and Platforms

1. VHTs
2. Political leader
3. Community meetings

Problem Identified

The town council can't provide waste services to everyone currently. If people can treat their waste at the household level - it helps contribute to waste management.

Target Audience

Households

Knowledge Objective

Knowledge that they can manage large proportion of waste at home.
More trust in the Town Council of one of the towns that they are actively working in improving services. Reduction of «complaints»



Evidence

According to the World Bank (2022), nearly 44% of global municipal solid waste consists of food and organic materials. Much of this waste could be composted at home, reducing landfill pressure and pollution, yet many households still lack the systems or awareness to do so (What a Waste 2.0).

Our research in Uganda shows that while the Town Council of one of the towns collects waste weekly, much of the remaining mixed waste is disposed of in uncontrolled dumpsites, and over half of households lack proper containers for storage (WABES Integrate, 2023).

Of the total waste generated, 61% is unmanaged, 3% is sorted for recovery and the remaining is retained at disposal site. Regarding plastics, 50% is collected by formal service providers, while 9% is collected through informal value chain collection methods. The uncollected plastics are dumped in landfills, while the collected plastics are mainly dumped in water bodies, incinerated, or end up in drainage systems.

Similar challenges are reported elsewhere: global studies show rising urban waste and identify composting as a key management strategy, with recent evidence from Iran demonstrating that home composting can significantly reduce municipal waste burdens (Jalalipour et al., 2024; Cao et al., 2023).

Unintended Consequences

This message could be used politically. The residents may want details about what the local government is doing and want to have clear answers.

Risk and Mitigation Strategies

High risk of unintended consequences, especially if alternative is not provided or is unsustainable. The intention is only to make the households be aware of the ability to manage at home. Behaviour change requires more efforts and longer interventions.

Notes / References

Requires additional information on organic waste composting

Further Reading

World Bank. What A Waste 2.0: A Global Snapshot of Solid Waste Management to 2050 (2022) datatopics.worldbank.org/what-a-waste

Jalalipour, S., et al. "Social, Economic and Environmental Benefits of Organic Waste Home Composting in Iran." Waste Management & Research, 2024. doi.org/10.1177/0734242X241227377

Cao, Y., et al. "Municipal Solid Waste Compost: Global Trends and Biogeochemical Cycling." Science of The Total Environment, 2023. doi.org/10.1016/j.seh.2023.100038

Key Message 7

My waste is my responsibility. So, I have to pay for waste services and I have to pay xx shillings

Most households don't pay for waste collection and lack awareness of its costs. Promoting the message that waste management is a personal responsibility and that paying fees supports a cleaner, healthier environment can increase willingness to pay and acceptance of service charges. Clear communication through trusted channels helps manage expectations and reduce complaints.

Sector

Solid Waste

Key Messages

« Good waste services are worth paying for. »

Contextualised Messages

« My waste is my responsibility. So I have to pay for waste services and I have to pay xx shilling. »

Local Language (Luganda)

« *Kasasiro wange buvunaanyizibwa bwange. Kale nnina okusasula obuweereza bwa kasasiro era nnina okusasula XX shilling. »*

Suggested Format(s) and Platforms

1. Radio
2. Town crier
3. Political leader (most important)

Problem Identified

Lack of cost awareness of collection services.

Target Audience

Households

Knowledge Objective

Increased willingness to pay for services that reduce health risks and improve environment.

Larger acceptance when new service elements (like service fee) are introduced.



Evidence

According to the World Bank (2022), proper municipal solid waste management requires both community participation and individual accountability, with households that pay for waste services contributing to cleaner and more sustainable systems. Yet in many low- and middle-income countries, limited payment compliance and insufficient funding remain major challenges.

Our research in Uganda shows that most households (89%) do not pay for waste collection, and those that do face fees between UGX 1,500 and 10,000 per month. Collection is further hindered by irregular payment to workers and difficulties in segregating waste during collection (WABES Integrate, 2023).

According to the World Bank (2022), effective solid waste management requires both community participation and individual responsibility, yet in Uganda most households do not pay for collection, a challenge also seen in Ethiopia where willingness to pay exists but is underutilized (WABES Integrate, 2023; Chernet et al., 2022).

Unintended Consequences

Complaints about the increased financial burden for public services

Risk and Mitigation Strategies

There is a risk of misunderstanding. The messaging is meant to convey the shared responsibility and value of waste services.

Notes / References

Communities tend to ask and require improved services, without acknowledging that those improvements come with costs. The budgets of Town Councils are not able to cover everything by themselves and need additional revenue to meet costs.

Further Reading

World Bank. What A Waste 2.0: A Global Snapshot of Solid Waste Management to 2050 (2022) datatopics.worldbank.org/what-a-waste

Chernet, T., et al. "Willingness to Pay for Improved Solid Waste Management and Associated Factors among Households." *Frontiers in Sustainability*, 2024. doi.org/10.3389/frsus.2024.1463777

Key Message 8

Good waste services need community effort. To keep your town clean, don't litter

Keeping the town clean requires community effort, especially to reduce widespread littering in commercial areas. While some households dispose of waste properly, a significant portion still litters or dumps waste improperly, which hampers effective waste collection and harms the environment. Encouraging better litter practices among businesses and customers supports improved waste services and a healthier, cleaner town.

Sector

Solid Waste

Key Messages

« Good waste services need community effort. »

Contextualised Messages

« Good waste services need community effort.
To keep your town clean, don't litter. »

Local Language (Luganda)

« *Empeereza ennungi eya kasasiro yeetaaga kawefube w'abantu.
Okukuuma ekibuga kyo nga kiyonjo, tosuula kasasiro.* »

Suggested Format(s) and Platforms

1. Skits or street play

Problem Identified

Litter practices are widespread especially in the commercial areas.

Target Audience

Commercial establishments and their customers.

Knowledge Objective

Better litter practices.



Evidence

According to the World Bank (2022), effective municipal waste management relies heavily on both adequate services and active community participation. Communities that engage collectively—by avoiding littering, segregating waste, and supporting local collection systems—significantly reduce environmental pollution and maintain cleaner urban spaces (What a Waste 2.0, 2022).

Our research in Uganda demonstrates the following. Transect walks conducted in July 2023 covered multiple points over 2.5 kilometers. Approximately 29% of the observed waste was organic, highlighting the need for effective strategies to manage biodegradable materials, particularly in the main commercial area (WABES Integrate, 2023).

These challenges are not unique to Uganda. Studies from other low- and middle-income settings show that community engagement is critical for effective waste management; Nguyen et al. (2023) documented experiences from Vietnam, showing that social structures motivate and shape waste behaviours into regular practices and habits. A recent literature review also highlights the important norms and beliefs that shape waste management practices (Sunarti et al. 2021).

Unintended Consequences

Increased dumping in newly introduced community bins.

Risk and Mitigation Strategies

Introduction of public waste bins may cause further issues of dumping if not properly planned and managed.

Notes / References

This message can be combined with the other two SWM messages often. Prevention of littering needs public effort.

Further Reading

World Bank. What A Waste 2.0: A Global Snapshot of Solid Waste Management to 2050 (2022) datatopics.worldbank.org/what-a-waste
Nguyen

Sunarti, J.H. et al. "Increasing resident participation in waste management through intrinsic factors cultivation" *Global Journal of Environmental Science and Management* 7,2 (2021): 287-316. [doi.10.31219/osf.io/s4nft](https://doi.org/10.31219/osf.io/s4nft)

Nguyen, A. T. et al. "Residents' waste management practices in a developing country: A social practice theory analysis" *Environmental Challenges*, 13, Article (2023) 100770. doi.org/10.1016/j.envc.2023.100770

The following lead to health risks from water contamination: unlined pits, unclean hands, unclean water storage, and animal interaction

Health risks from water contamination arise mainly due to factors like unlined pit latrines leaking faecal bacteria into groundwater, unclean hands spreading germs, dirty water storage containers, and animals interacting with water sources. These conditions increase the transmission of diseases such as diarrhoea, cholera, dysentery, and hepatitis A, which are linked to unsafe water and poor sanitation. Effective prevention includes constructing lined pits, maintaining clean and covered water storage, practicing good hand hygiene, keeping animals away from water, and avoiding dumping waste into water sources. These measures are vital to reduce waterborne illnesses and protect community health.

Sector Integrated

Key Messages « The following leads to health risks from water contamination
 - Unlined Pits
 - Unclean hands
 - Unclean storage
 - Animal interaction »

Contextualised Messages « Avoid germs in your water,
 1. Construct lined pits
 2. Store water in clean and covered containers
 3. Keep drinking water away from animals
 4. Wash hands with soap
 5. Don't throw rubbish in water sources. »

Local Language (Luganda)
 « *Weewale obuwuka mu mazzi go nga*
 1. *Ozimba okuva wansi mu kabuyonjoyo*
 2. *Kumira amazzi mu konteyina enyonjo era nga mbikeko*
 3. *Tereka amazzi gyokunywa ebisolo webitatuuka*
 4. *Naaba mu ngalo ne ssabbuuni*
 5. *Tosuula kasasiro mu mazzi* »

Suggested Format(s) and Platforms

1. Poster message. Do's / Don't poster
2. Cultural and political leaders
3. VHT's
4. School

Problem Identified Unsafe sanitation leads to water contamination.

Target Audience Households

**Knowledge Objective**

Better hygiene practices and more investments in lining of pits, cleaning of containers and safe storage.

Evidence

According to a comprehensive review by Narayan et al. (2020), improper sanitation practices, such as the use of unlined pits, contribute to groundwater contamination and increase the risk of waterborne diseases, while inadequate hygiene practices, including unclean hands and improper water storage, exacerbate these risks. The study emphasizes the importance of integrated approaches to water, sanitation, and solid waste management in low- and middle-income countries.

Our research in Uganda demonstrates the following. About 60% of households inappropriately dispose of solid waste into toilets or pits, creating contamination and making it difficult to empty pits. Animal interactions with sanitation facilities and water storage, leaks from unlined pits, and poor hygiene—including young children contaminating storage containers—further increase *E. coli* presence. Direct dumping of sanitation waste during rain events, storm drain pollution (7% of households), and leachate from landfills add to water contamination, although no elevated pollutants were found in ponds near one of the towns dumpsite (WABES Integrate, 2023).

These challenges are not unique to Uganda. Evidence from low- and middle-income countries shows that water, sanitation, and solid waste are closely interconnected, and integrated management covering safe sanitation, hygiene practices, and proper solid waste disposal can substantially reduce waterborne disease risks and improve overall community health outcomes (Narayan et al., 2020).

Unintended Consequences

Increased fear and paranoia on water safety.

Risk and Mitigation Strategies

There is a risk of being alarmist. The message needs to be worded for caution and not sound alarmist.

Notes / References

Emphasise clearly the strategies to avoid contamination and health risks from negative interlinkages.

Further Reading

Narayan, A. S., Marks, S. J., Meierhofer, R., Strande, L., Tilley, E., Zurbrügg, C., & Lüthi, C. (2020). "Advancements in and Integration of Water, Sanitation, and Solid Waste for Low- and Middle-Income Countries. *Annual Review of Environment and Resources*", 45, 1–26. doi.org/10.1146/annurev-environ-030620-042304

Video

Sandec-Eawag. "Advancements In and Integration of Water, Sanitation and Solid Waste." Video. youtube.com/watch?v=LaS5yksjnfI

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- Jalalipour, S., et al. "Social, Economic and Environmental Benefits of Organic Waste Home Composting in Iran." *Waste Management & Research*, 2024. doi.org/10.1177/0734242X241227377
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- Meierhofer, R., B. Wietlisbach, and C. Matiko. "Influence of Container Cleanliness, Container Disinfection with Chlorine, and Container Handling on Recontamination of Water Collected from a Water Kiosk in a Kenyan Slum." *Journal of Water and Health* 17, 2 (2019): 308–319. doi.org/10.2166/wh.2019.282
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Annexes

SAMPLE POSTERS

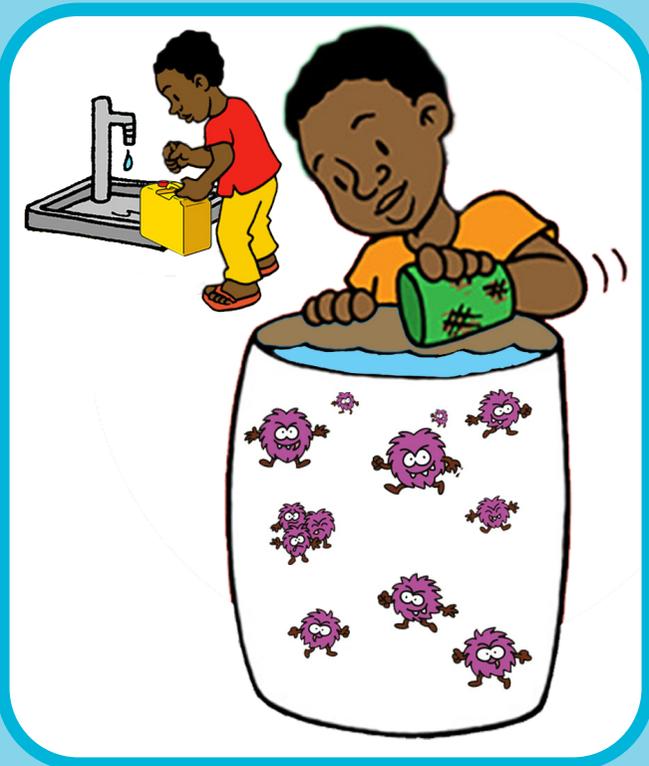
These posters were developed as part of the integrated sensitisation campaign activities of the WABES Integrate project in Wobulenzi and Kakooge, Uganda. Each poster features a core message and its visual at the center, flanked by brief instructive text in both English and Luganda on either side. They are intended as illustrative examples rather than universal recommendations. The posters may serve as inspiration for similar sensitisation campaigns in other areas and should be adapted to suit specific contexts.



Reuse of annexed posters must include CAWST's logo. CAWST's imagery used with permission.



Don't re-contaminate your safe water.



Toddamu kukyafuwaza amazzi go amayonjo

CLEAN
Clean your water containers weekly. (inside and outside)



COVERED
Keep your water containers covered.



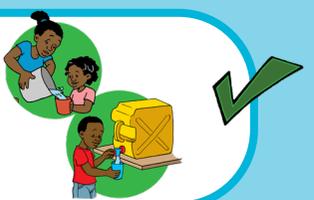
RAISED
Store your water container in a clean, elevated area, away from animals.



EXCLUSIVE USE
Use a separate container for drinking water.



UNTOUCHED
Use clean, undamaged cups, caps and utensils.



Treat your water before using it:

- chlorination
- boiling



Yonja
Yonja munda wa konteyinayo buli wiiki.



Bikkako
Kuuma ebidomola byo nga bisanikireko



Okussa wagulu
Teeka kontayina mukifo ekitukula, wagulu ewatatuuka bisolo.



Enkozesa ey'eyawulidde
Kuuma kontayina ya amazzi gokunywa yokka.



Tokwata munda
Kozesa ebikopo n'ebiyombo ebinyonyo.



Engeri yokulongosa mu amazzi

- okugafumbako
- okozesa kulolini





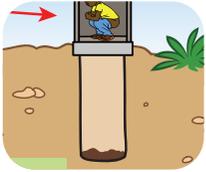
Don't contaminate your well with your pit.



Tokyafuuwaza luzzi lwo n'ekabuyonjoyo.

3 METERS MAX

Dig all latrine pits a maximum of 3m deep.



LINE

Line all latrine pits



EXCLUSIVE USE

Don't throw rubbish in the pit.



EMPTY

Empty the pit safely when its full.



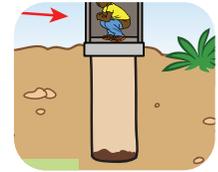
CLEAN

Clean the latrine regularly.



Obutasukka Mita 3

Sima ekinya ekitasukka mita 3.



Okuzimba mu kinya

Zimba munda mu kinya kya kabuyonjoyo.



Enkozesa ey'eyawulidde

Tosuula kasairo mu kabuyonjoyo.



Okununamu Obukyafu

Nuna mu kabuyonjo ng'ejjudde.



Yonja

Yonja kabuyonjoyo buli kadde.





**Waste is a shared responsibility.
Majority of 7/10 waste can be
composted at home.**



**Kasasiro buvunaanyizibwa bwe
tukwatira ewamu. Kasasiro
asinga obungi 7/10 asobola okola
nakavudira ewaka.**

**Don't mix kitchen waste
and keep it covered.**



**Animals can eat
kitchen waste.**



**Organic waste can be
composted outdoors.
(Wet waste = kitchen,
food, garden waste)**



**Compost is a great
fertilizer for your
garden.**



**Reducing organic
waste can let the truck
go to more houses.**



**Togataka kasasiro
wamukiyungu ne
kasasiro omula, Kasasiro
womukiyungu mukkume
nga omubiseeko.**



**Ebisoro bisobola okulya
kasasiro avude mu
kiyungu/e fumbiro.**



**Kasasiro avunda asobola
okolwamu nakavundira
(mw'oyo kasasiro mulimu
= ow'efumbiro, emere,
n'ebyumunimiro).**



**Nakavundira kijimusa
kilungi nyo eri enimiroyo.**

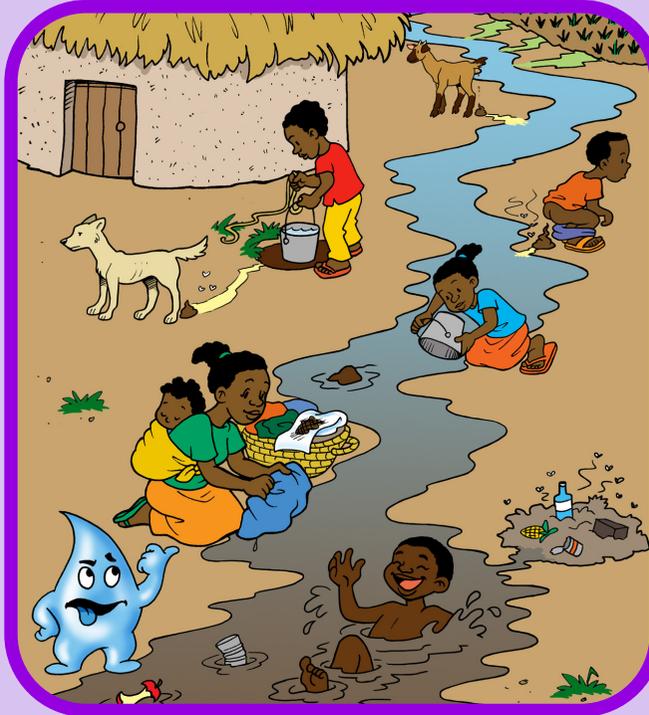


**Okukeendeza ku kasasiro
avunda (nga tumukozesa)
kisobozesa ab'emotoka
etwala kasasiro okugenda
ku nyumba nyinji.**





Avoid germs in your water ...



Weewale obuwuka mu mazzi go nga ...

Construct lined pits



Store water in clean and covered containers



Keep drinking water away from animals



Wash hands with soap



Don't throw rubbish in water sources



Ozimba okuva wansi mu kabuyonjoyo



Kumira amazzi mu konteyina enyonjo era nga mbikeko



Tereka amazzi gyokonywa ebisolo webitatuuka.



Naaba mu ngalo ne ssabbuuni



Tosuula kasasiro mu mazzi



WABES
integrate