

NO 29

November 2025



Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

RESEARCH
AGENDA

Key words:

public health

sanitation workers

water

sanitation and hygiene (WASH)

behavioural science

dignity

identity

motivation

Author affiliations:

[1-6] Busara

Conflicts of interest:

There are no conflicts of interest to declare for this study.

Copyedited by:

Michael Onsando

Designed by:

Lynette Gow

Abbreviations and acronyms

A-REACH Acceptability, Relevance, Ease of understanding,
Appeal, Clarity, and Human-centeredness

DALYs Disability-Adjusted Life Years

PPE Personal Protective Equipment

SDG Sustainable Development Goal

SSA Sub-Saharan Africa

WASH Water, Sanitation, and Hygiene

WHO World Health Organization

Acknowledgement and non-author contributions

This research was funded by TRANSFORM, a joint initiative between Unilever, the UK Government's Foreign and Commonwealth Development Office, and EY. We extend our sincere gratitude to TRANSFORM for their support and valuable feedback on the project.

Table of contents

Executive summary	4
Introduction	6
<i>Research questions</i>	8
Methods	9
<i>Research design</i>	9
<i>Sampling approach</i>	9
<i>Data collection and analysis in the formative stage</i>	10
<i>Participatory co-design workshops</i>	11
Results	12
<i>Barriers to dignity, identity, and motivation</i>	12
<i>Enablers of dignity, identity, and motivation</i>	15
<i>Outputs: Behavioral prototypes for worker dignity, identity, and motivation</i>	17
From prototypes to practice: A research agenda for scaling behavioral solutions	22
<i>Next steps: Testing and customizing prototypes</i>	22
<i>Emerging questions</i>	23
<i>Partnerships and implementation pathways</i>	24
Conclusion	25
References	26
Appendices	27

Tables

Table 1: List of prototypes	18
Table 2: Prototypes main themes	20



Executive summary

Sanitation workers are central to public health, yet across Sub-Saharan Africa, they continue to face stigma, unsafe working conditions, and low pay despite their essential role in preventing disease and supporting sustainable cities. While sanitation research has traditionally emphasized infrastructure and technology, this study examines the behavioral and social dimensions that shape workers' dignity, identity, and motivation.

Using a qualitative, participatory research design, the study engaged workers, managers, and sanitation consumers in Kenya, Ghana, and South Africa through qualitative participatory methods. We selected urban locations as they offer diverse sanitation systems and have a high demand for sanitation services. The findings highlight three main barriers. Public stigma and social exclusion diminish workers' dignity and contribute to internalized shame. Low and inconsistent pay signals social undervaluation and undermines motivation. Unsafe working conditions and inadequate protective equipment expose workers to significant health and psychological risks. Nonetheless, workers consistently demonstrate pride, commitment to community health, and strong peer solidarity. Positive interactions with managers and consumers, as well as moments of recognition, serve as powerful motivators that reinforce identity and purpose.

Through participatory co-design, the study generated twelve behavioral intervention prototypes aimed at strengthening dignity, identity, and motivation. These prototypes fall into four thematic areas: recognition and stigma reduction, worker well-being and support systems, professionalization and empowerment, and community engagement.

Together, they offer a practical starting point for reshaping public perceptions, improving working conditions, and elevating sanitation work as a respected profession.

This groundwork set the foundation for future research to test and refine developed prototypes across contexts using mixed-methods and implementation research. Priorities include assessing effectiveness, understanding contextual variation, and identifying pathways for scaling and institutional integration. Partnerships among governments, private operators, civil society, and research institutions will be essential.

Strengthening dignity, identity, and motivation is both a moral and operational imperative. Embedding behavioral and participatory approaches within sanitation programs provides a pathway to more resilient, equitable, and human-centered sanitation systems.



Introduction

Sanitation work is very crucial for public health. Poor sanitation can lead to the transmission of diseases and ultimately result in death. According to the [World Health Organization \(WHO\) \(2023\)](#), access to safe Water, Sanitation, and Hygiene (WASH) services prevents 1.4 million deaths worldwide annually. Further, proper sanitation can add disability-adjusted life years (DALYs) each year ([World Health Organization \(WHO\), 2023](#)). Increased urbanisation demands more sanitation work to maintain a hygienic environment ([Adujna, 2023](#)).

Sanitation workers play a crucial role towards achieving Sustainable Development Goals (SDGs) 6 on clean water and sanitation, SDG 8 on decent work and economic growth, SDG 3 on good health and well-being, and SDG 10 on reduced inequalities. Despite their critical role, they are among the most undervalued workforce members in Sub-Saharan Africa ([Philippe et al., 2022](#)). These workers encounter numerous challenges, including health-related risks, low compensation, legal vulnerability, and social stigma. Research in Burkina Faso, Nigeria, Tanzania, and Zambia has reported that informal workers engaged in manual emptying are the most vulnerable ([Philippe et al., 2022](#)). These challenges highlight structural and policy gaps, as well as the behavioral and social dynamics that influence how sanitation work is regarded and supported.

Research has previously focused on improving sanitation outcomes through infrastructure, technology, and regulatory interventions. However, recently, research on sanitation work has increasingly focused on both structural and human factors (psychosocial and behavioral). Although structural measures are helpful, they fail to address workers' well-being, which impacts service delivery adequately (Njee et al., 2022).

Understanding sanitation workers' perspectives on dignity, identity, and motivation, as well as the interplay among these factors, provides a behavioral lens that can help design and implement systemic change. Dignity primarily focuses on the respect (from self and others) and self-worth that sanitation workers experience in their role (Kristen, 2017). Workplace identity is the self-concept individuals form based on their affiliation and role within an organization and occupation, guiding their behavior and sense of belonging at work (Walsh and Gordon, 2008). Motivation encompasses both internal drivers (such as pride and social contribution) and external factors (including fair and consistent pay and job security) that sustain workers' engagement. Together, these factors influence both worker retention and the quality of sanitation services.

This study was conducted in Kenya, Ghana, and South Africa, representing diverse sanitation systems and the underexplored social and behavioral aspects of sanitation work. In Kenya, sanitation work is decentralized, largely informal (Ngatia et al., 2023). On the contrary, South Africa is predominantly formal through the municipal model; however, informal employment also exists (Philippe et al., 2022). Meanwhile, Ghana's mix of Metropolitan Assemblies (public) and private operators illustrates a mixed system (Mansour and Esseku, 2017). Across these contexts, sanitation workers continue to operate under conditions that undermine their social and psychological well-being. Yet, despite these challenges, they consistently demonstrate resilience, pride, and solidarity. These adaptive strengths are not just coping mechanisms; they represent powerful entry points for change. When harnessed through participatory approaches, these attributes can form the foundation for sustainable improvements in dignity, motivation, and working conditions.



This paper presents insights from a participatory behavioral research study conducted across three countries that explored the barriers and enablers to sanitation workers' dignity, identity, and motivation. The research combined qualitative diagnostics with co-design workshops involving workers, managers, and community representatives. It generated a set of intervention prototypes, ranging from public recognition campaigns to managerial accountability tools, aimed at improving worker well-being and social status. These findings provide a foundation for a research agenda to test and adapt these behavioral prototypes across varied contexts. By integrating behavioral science and participatory design, the study contributes to a growing effort to reimagine sanitation work as a dignified, respected, and sustainable profession essential to public health.

Research questions

The study aimed to answer one central question:

How can participatory behavioral research inform interventions that enhance the dignity, identity, and motivation of sanitation workers in Sub-Saharan Africa?

The secondary research questions for the study were:

1. *What behavioral barriers and enablers affect worker well-being?*
2. *How can co-design methods generate actionable intervention prototypes?*

Methods

Research design

In this study, we used a qualitative, participatory research design to understand the behavioral, social, and emotional experiences of dignity, identity, and motivation among sanitation workers in Kenya, Ghana, and South Africa. We chose qualitative and participatory methods because they allowed participants to speak in depth about their lived experiences, reveal nuances that structured research tools often miss, and directly shape the direction of the inquiry. By integrating behavioral science principles with co-design workshops, the study not only explored daily realities but also enabled participants to generate and refine solutions rooted in their own contexts.

The research was conducted in urban areas across the three countries, where sanitation systems differ significantly, from informal to formal municipal models. Urban locations were selected not only to capture diverse institutional arrangements and worker experiences, but also because rapid population growth creates a high demand for sanitation services and a concentrated workforce. Comparing these settings helped reveal how local environments shape workers' well-being and highlighted opportunities for participatory, behaviorally informed interventions to strengthen dignity, recognition, and motivation.

Sampling approach

We engaged three levels of respondents based on their interaction with the sanitation ecosystem: sanitation workers (who directly handle waste and



cleaning-related activities), sanitation managers (who supervise sanitation operations performed by the workers), and sanitation consumers (individuals and households that use sanitation services). The research employed a combination of two sampling methods: stratified random sampling and snowball sampling, to ensure both diversity and relevance of perspectives. Through identified subgroups, this approach fostered engagement with individuals who regularly interact with sanitation systems in various capacities, thereby capturing the distinct social and behavioral dynamics within each group.

Each country had 70 respondents, comprising 30 sanitation workers, 30 consumers, and 10 managers, resulting in a total sample of 210 participants across the three countries. Participant selection prioritized diversity in gender, job role, and work context, aiming to generate rich, comparative insights rather than statistical representation.

Data collection and analysis in the formative stage

In the formative qualitative research stage, we conducted in-depth interviews with sanitation workers, managers, and consumers. In this phase, we explored participants' perceptions of dignity, identity, stigma, motivation, and recognition in sanitation work, identifying the barriers and enablers that influence worker motivation and well-being. We analyzed the qualitative data inductively to identify emerging patterns across roles and geographies. We developed personas and journey maps to represent archetypal sanitation workers, managers, and consumers, illustrating the lived experiences and behavioral drivers shaping sanitation work.

Examples of emerging themes included emotional stress, identity negotiation, and coping mechanisms. To enhance validity, we triangulated perspectives across stakeholder groups, focusing on the interplay between dignity and identity and its implications for workers' morale. Participation in the research was voluntary, and confidentiality was maintained throughout the study.

Participatory co-design workshops

Following the diagnostic phase, we shared the findings through participatory validation and co-design workshops involving sanitation workers, managers, behavioral scientists, implementing partners, and external partners. In these workshops, participants engaged in validation, brainstorming, prioritization, and prototype generation sessions guided by behavioral science principles (e.g., social norms, feedback loops, and motivation framing). This iterative process yielded 12 interventions focused on stigma reduction, structural incentives, community engagement, and managerial accountability.



Results

Barriers to dignity, identity, and motivation

Stigma and social exclusion hinder the dignity and identity of sanitation workers across Kenya, Ghana, and South Africa. These were deeply rooted in cultural and work-related hierarchies. Sanitation workers were frequently looked down upon, with their work often perceived as a low-status, dirty job, leading to negative stereotypes and social stigma, despite its crucial role in public health. This resulted in deteriorating worker morale and low worker retention, which in turn affected the quality of service. In Kenya, workers, especially pit emptiers, reported that they get excluded from community gatherings and are avoided in public spaces due to perceptions that their work is dirty or shameful.

“This person deals with waste, so somehow he/she isn’t okay; something is wrong with the person.”

28 year old, sanitation logistics supervisor, male, Kenya

In Ghana, sanitation workers are looked down upon and sometimes even mocked and called names like ‘selem piagra’ (toilet washer) by children.

“Oh, I’m mistreated here. I’m suffering in people’s hands. A whole lot of verbal abuse, I get it here. Just that I’m used to that, and I don’t mind them. I just decided to ignore their negativity, or else I would go through a lot here.”

30 year old, sanitation worker, male, Ghana

In South Africa, sanitation work is seen primarily as a male-dominated environment, and for people from low educational backgrounds, with societal expectations making it uncommon to find women in these roles.

“I often get the impression that most people despise us. Initially, when I was younger, it really used to get to me. Now that I am older, it doesn’t particularly upset me because I am clear about my goals and why I am here. I do believe that these misconceptions stem from a lack of knowledge.”

35 year old, municipal supervisor, female, South Africa

The negative public stigma stemming from society’s attitude, beliefs, and lack of knowledge about sanitation work results in lower self-stigma. This means workers internalise public stigma, which lowers self-esteem and self-worth, and creates a belief that they are inherently flawed. Such challenges can lead to feelings of shame and isolation, as observed in both Kenya and Ghana, where workers engage in alcohol abuse. With low respect and recognition and a lack of a sense of belonging, the workers are demoralized.

Low pay and inconsistent income consistently undermined workers’ morale across all contexts. Sanitation workers frequently face delayed or missed payments, which can impact their financial stability. Many workers emphasised the importance of permanent employment, higher salaries, and comprehensive insurance coverage as key factors that would enhance their well-being and ensure they are treated with dignity and respect.

“The government should recognize the sanitation workers and offer us permanent jobs where we get to earn better pay.”

29 year old, sanitation worker, female, Kenya



“Some people have told me they wouldn’t do a challenging job for such a low salary. If there were a salary increase or any other help to make the job more appealing, I believe more people would join us. Many people look down on us because of our low wages and often mention that other jobs pay more daily than what we earn.”

35 year old, sanitation worker, male, Ghana

Low remuneration is interpreted not only as an economic issue but as a form of social undervaluation, reinforcing the belief that sanitation work “does not deserve” respect or fair compensation.

Unsafe and undignified working conditions, exposure to waste, inadequate protective equipment, and lack of sanitation facilities while working create unsafe environments that affect both physical and psychological well-being. In Kenya and Ghana, workers often lack the necessary gear, including personal protective equipment (PPE), which poses significant health risks. In South Africa, the lack of sufficient shower facilities and access to clean protective gear makes it challenging for workers to maintain hygiene, which, in turn, affects public perceptions of them.

“Providing them with proper gear, like coveralls, face masks, and gloves, will make their work more efficient and flexible. They won’t have to wait until midnight to start their tasks if they are well-equipped. When they wear the appropriate protective clothing, they can work more comfortably and at any time.”

45 year old, sanitation manager, male, Ghana

Enablers of dignity, identity, and motivation

Pride in work, fostered by strong family responsibilities and a sense of purpose and commitment, motivates workers. They take pride in maintaining cleanliness and public health, often setting personal standards for their work. Workers felt proud to contribute to community cleanliness and environmental improvement.

“It helps me to cater for my own needs and also pay bills.... When you remove the waste, the toilets become clean, and that reduces the risk of diseases.”

30 year old, sanitation worker, male, Kenya

“Yes, I have established my own guidelines. Even if I don’t receive formal appreciation from the assembly, I take pride in making the facility look good.”

24 year old, sanitation worker, male, Ghana

“Dignity is important because if I do my work and keep doing it well, making sure that communities are clean all the time, when people see us sanitation workers, they respect us because they know that we respect our job/work.”

35 year old, sanitation worker, male, South Africa

Social support from sanitation managers and consumers played a crucial role in encouraging workers to take pride in their work and improving their performance.



“As I see it, people take it as good work, as it has its benefits. They’ve prevented people from getting sick and from living in a dirty environment because we have people who take this work seriously. So they nicely perceive them, they’re welcoming to them because they know that they’re coming to help them with their lives.”

49 year old, consumer, male, Kenya

Recognition provides psychological resilience and a sense of belonging, countering broader social exclusion.

“What can we do? People will talk, but you have no choice. Some people respect us while others do not. For instance, someone who recognized my hard work and sacrifice even bought me a mobile phone as a reward for the good work I am doing.”

49 year old, sanitation worker, female, Ghana

“I always feel that I am helping them when I remove that thing there, and it brings happiness to my heart because that person has paid me, but on the other hand, those people can also stay in a good place when that thing has gone down, and the flies are also not there, and the environment is also good.”

50 year old, sanitation worker, male, Kenya

Outputs: Behavioral prototypes for worker dignity, identity, and motivation

We translated the qualitative insights into opportunities for behaviorally informed intervention design through insights validation. Using a human-centered, co-design approach rooted in empathy and collaboration, we held workshops in Kenya and South Africa. These sessions were conducted in participants' preferred languages, documented through notes and recordings, and upheld voluntary participation and confidentiality.

Participants produced more than 100 raw ideas, which we clustered into thematic groups using affinity mapping. Through multiple rounds of synthesis and review, we condensed the ideas into 66 refined concepts, which we evaluated against the Acceptability, Relevance, Ease of understanding, Appeal, Clarity, and Human-centeredness (A-REACH) criteria. From these, we prioritized 12 prototypes for further refinement and validation (on the following page). More details on the prototypes can be found in the appendix.



Table 1. List of prototypes

#	Prototype title	Description / Core features
1	Leveraging Trusted Messengers as Sanitation Advocates	Community leaders host forums and “Sanitation Champion Day” events to build respect for sanitation workers by leveraging authority, social capital, and effective framing.
2	Campaigns Driving Sanitation Dignity	Community-driven initiatives, such as “Sanitation Spotlight Mapping,” that respect pledges and use visual scorecards help counter stigma and elevate pride.
3	Loss Framing Awareness Campaigns	Visual art and interactive dashboards highlighting costs of poor sanitation (e.g., health, economy) to increase urgency and respect.
4	Championing Sanitation at Home	Certification and recognition for households demonstrating good sanitation practices, leveraging pride and social norms.
5	Stepping Into Sanitation Workers’ Shoes	Empathy-building campaigns using PhotoVoice, gratitude walls, and VR/AR booths to highlight workers’ lived experiences.
6	Faces of Sanitation: Visual Storytelling	Worker-created photo stories, videos, and exhibitions to humanize sanitation work and shift perceptions.
7	Improved Sanitation Worker Training Modules	Skills training on communication, safety, and digital literacy, with certification as a sanitation worker.
8	Supportive Supervision for Sanitation Workers	Mentorship and reflection circles to boost morale, peer learning, and motivation.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

#	Prototype title	Description / Core features
9	Support Network for Sanitation Workers	"Care Cards," PPE distribution, and mental health services to promote well-being and community support.
10	Building Sanitation Worker-Led Groups	Savings groups, financial literacy sessions, and cooperatives to enhance economic security and advocacy.
11	Empowering Sanitation Management	Joint committees and communication platforms (e.g., WhatsApp, noticeboards) to foster accountability and collaboration.
12	Rethinking Formalisation of Sanitation Work	Uniforms, ID cards, certifications, and access to social protection/microfinance to legitimize workers.

They were subsequently grouped into four thematic areas, each targeting dignity, identity, and motivation through specific behavioral drivers.



Table 2. Prototypes main themes

Themes	Example prototypes	Core behavioral focus	How it operates across prototypes
1 Recognition and Stigma Reduction	Faces of Sanitation, Stepping into Sanitation Workers' Shoes, Campaigns Driving Sanitation Dignity	Empathy, visibility, and reframing of sanitation work to shift public perception and enhance worker pride.	Public acknowledgment and storytelling normalize respect for sanitation workers (recognition & visibility). Visual and emotional tools humanize sanitation work and reduce stigma (empathy & storytelling)
2 Worker Well-being and Support Systems	Supportive Supervision, Support Network, Worker-Led Groups	Emotional support, peer belonging, and safety reinforcement are key elements to improve morale and retention.	Peer and worker-led initiatives build social identity and pride (belonging & solidarity).
3 Professionalization and Empowerment	Training Modules, Formalization of Sanitation Work, and Empowering Sanitation Management	Skill-building, certification, and formal recognition to elevate professional identity and legitimacy.	Training, certification, and formal identity enhance legitimacy and self-efficacy (professionalization).
4 Community Engagement and Collaboration	Trusted Messengers as Advocates, Championing Sanitation at Home, Loss-Framing Awareness Campaigns	Strengthening community responsibility and social respect for sanitation services.	Supervisory and community reinforcement sustain motivation (support & feedback).

Together, these prototypes represented a structured approach to restoring the social, psychological, and institutional foundations of sanitation work. Each prototype uniquely reinforces dignity (through respect and recognition), identity (through belonging and self-worth), and motivation (through engagement and pride) by leveraging behavioral drivers such as recognition, empathy, a sense of belonging, and feedback. Two low-fidelity prototypes were rapidly tested in Kenya through focus group discussions with consumers, which emphasized the need to consider contextual adjustments before pilot testing.

The cross-country analysis reveals that although the forms of stigma and undervaluation differ across Kenya, Ghana, and South Africa, the underlying behavioral mechanisms remain consistent. Workers' dignity and motivation are influenced mainly by three factors: recognition (the visibility and social validation of their contributions); reciprocity (the degree to which institutions and communities acknowledge and respond to their efforts); and respect (the fairness and empathy reflected in managerial and social interactions). Through participatory co-design, workers were able to articulate these mechanisms in their own terms, generating contextually grounded solutions that integrate behavioral principles, such as social norms, feedback, and identity framing, with broader system-level reforms.

Across Kenya, Ghana, and South Africa, sanitation workers' experiences reveal a shared struggle for recognition and security amid diverse institutional contexts. Stigma, low pay, and unsafe conditions remain key barriers, while pride, solidarity, and community contribution serve as enduring motivators. The prototypes developed offer a practical roadmap for testing behavioral interventions that strengthen dignity and motivation, laying the groundwork for a more inclusive and resilient sanitation workforce across Sub-Saharan Africa.



From prototypes to practice: A research agenda for scaling behavioral solutions

Next steps: Testing and customizing prototypes

The formative research and participatory stages of the study generated twelve behavioral prototypes that address the main barriers to dignity, identity, and motivation, namely stigma, poor working conditions, and inconsistent pay. The focus of the research moving forward should be testing, refining, and adapting these prototypes across diverse sanitation contexts.

Experimental studies should assess whether combined interventions yield better outcomes in terms of dignity, identity, and motivation, for example, recognition campaigns, peer support circles, or managerial accountability frameworks. Field implementation should adopt an iterative testing approach, combining rapid-cycle experimentation with structured pilot evaluations to ensure effective implementation. This would allow for real-time learning and adaptation, ensuring that behavioral insights remain grounded in local realities.

Future research should employ a mixed-methods approach that combines behavioral science with implementation research to evaluate the impact of interventions on sanitation workers' well-being. Quantitative measures can track shifts in motivation, dignity, identity, and job satisfaction, while qualitative methods capture the lived experiences and contextual factors that

shape change. Small-scale randomized or quasi-experimental pilots can test causal impacts, complemented by longitudinal qualitative studies to examine how dignity and identity evolve. Embedding participatory evaluation frameworks, in which workers help define what “success” and “respect” mean in their own contexts, and integrating behavioral metrics such as recognition perception or social norms indicators will strengthen comparability and ensure that findings remain both rigorous and grounded in real-world practice.

Emerging questions

Key questions from this groundwork study include:

1. **Scalability:** *How can dignity-enhancing interventions, such as public recognition campaigns or peer networks, be scaled across cities or regions without losing authenticity?*
2. **Sustainability:** *What institutional arrangements are needed to embed these behavioral interventions into existing sanitation programs and budgets?*
3. **Context variation:** *How do cultural norms, gender, and employment structures influence the effectiveness of behavioral interventions in different urban settings?*
4. **Policy integration:** *How can findings inform broader frameworks on decent work, occupational safety, and public health outcomes in the sanitation sector?*

Answering these questions will require collaboration across research, policy, and implementation ecosystems to ensure that behavioral approaches transition from pilot innovations to systemic practice.



Partnerships and implementation pathways

Advancing this research agenda will require strong, multi-level collaboration across policy, practice, and research. Governments and municipal authorities should lead the integration of dignity and motivation initiatives into sanitation workforce programs and urban development strategies. Private sanitation firms and social enterprises can pilot and scale behavioral prototypes, particularly those that promote recognition, professional growth, and peer support. Civil society organizations and worker associations play a key role in facilitating participatory engagement, amplifying worker voices, and sustaining advocacy for systemic change.

At the research and funding level, coordinated partnerships among development agencies, behavioral science labs, and implementation partners will ensure that prototype testing generates rigorous, policy-relevant evidence. The long-term goal is to generate evidence and knowledge on the well-being of sanitation workers, fostering collaboration and shared learning across Sub-Saharan Africa.

This research agenda positions dignity, identity, and motivation as core components of adequate and equitable sanitation systems. Testing the behavioral prototypes developed through this participatory process offers an opportunity to move beyond descriptive evidence toward actionable change. By embedding learning within partnerships and policy systems, future research can transform sanitation work from a stigmatized need into a respected profession that upholds human dignity while advancing public health.

Conclusion

Sanitation workers are the backbone of urban hygiene and disease prevention, yet their work remains undervalued and stigmatized. Strengthening their dignity, identity, and motivation is not only a moral imperative but also a practical necessity for building effective, resilient sanitation systems. When workers feel recognized, respected, and supported, service quality improves, communities engage more positively, and public health outcomes are sustained.

This study demonstrates the value of using participatory and behavioral approaches to surface the lived realities of sanitation workers and co-create solutions that address the social and psychological barriers underlying their challenges. Moving forward, multi-level collaboration: spanning local governments, private enterprises, civil society, and research institutions, is essential to test, refine, and scale these behavioral prototypes. Such collaboration can generate robust evidence on what drives dignity and motivation in different institutional and cultural contexts.

Embedding these efforts within broader WASH and decent work agendas offers a pathway to reframe sanitation not as a low-status occupation but as a dignified public service. By integrating behavioral science with participatory practice, future initiatives can ensure that those who sustain our cities every day are afforded the recognition, safety, and respect they deserve.



References

1. Adugna, D. (2023) "Challenges of sanitation in developing countries - Evidenced from a study of fourteen towns, Ethiopia," *Heliyon*, 9(1), p. e12932. Available at: <https://doi.org/10.1016/j.heliyon.2023.e12932>.
2. Kristen, L. (2017) "Workplace Dignity," in. Available at: https://www.researchgate.net/publication/314756086_Workplace_Dignity (Accessed: October 19, 2025).
3. Mansour, G. and Esseku, H. (2017) "Situation analysis of the urban sanitation sector in Ghana."
4. Ngatia, A.M. et al. (2023) "Situational analysis of occupational safety, health, and dignity of sanitation workers: a case of Mukuru kwa Reuben Slums, Nairobi, Kenya," *African Journal of Science, Technology and Social Sciences*, 2(2), pp. 138–154. Available at: <https://doi.org/10.58506/ajstss.v2i2.169>.
5. Njee, R. et al. (2022) "Assessment of the Health, Safety and Dignity of Sanitation Workers in Dar es Salaam, Dodoma and Arusha, Tanzania."
6. Philippe, S. et al. (2022). *Challenges Facing Sanitation Workers in Africa: A Four-Country Study*. Available at: <https://www.susana.org/knowledge-hub/resources?id=5253#> (Accessed: October 18, 2025).
7. Walsh, K. and Gordon, J.R. (2008) "Creating an individual work identity," *Human Resource Management Review*, 18(1), pp. 46–61. Available at: <https://doi.org/10.1016/j.hrmr.2007.09.001>.
8. World Health Organization (WHO) (2023). *Burden of disease attributable to unsafe drinking-water, sanitation and hygiene: 2019 update*. Available at: <https://www.who.int/publications/i/item/9789240075610> (Accessed: October 18, 2025).

Appendices

Sanitation worker prototypes

Prototype	Faces of Sanitation: Visual Storytelling
Details	<p>This intervention focuses on amplifying sanitation workers' voices through storytelling platforms, enabling them to share their personal experiences with employers, colleagues, and the community. This is to highlight their lived experiences, foster empathy, and build respect across workplaces and communities.</p> <p>Behavioral focus: Stigma, low public awareness, and limited self-advocacy platforms</p> <p>Intended outcomes: Humanize sanitation workers and build public respect and worker pride</p> <p>Behavioral mechanisms: Empathy activation; social norms change; positive framing</p>



Photo stories and portraits
Workers document and share their own stories through photography, photo stories, and art that highlight their daily lives, challenges, and contributions to sanitation.

These stories can be shared across various platforms (Facebook, Twitter, Instagram, YouTube) using hashtags like #SanitationHeroes and #OurStories to amplify their voices and increase public visibility.

Image created by Midjourney V7, Photoshop & Illustrator 2025





Image created by Midjourney V7, Photoshop & Illustrator 2025

Short videos and documentaries

Workers create short videos and mini-documentaries that offer an authentic glimpse into their lives and the essential work they do in sanitation.

These visual stories can be shared across social media platforms using campaign hashtags such as #BehindTheClean and #WorkersWithPride to foster public recognition and build empathy.



Image created by Midjourney V7, Photoshop & Illustrator 2025

Blogs and written stories

Individuals can craft written stories or blog posts to highlight workers' lived experiences, challenges, contributions, and aspirations.

These narratives can be published on digital platforms such as websites or e-magazines, and shared on social media using hashtags like #WorkersWithWords or #ReadOurReality to foster empathy and public recognition.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Prototype	Improvised Sanitation Worker Training Modules
Details	<p>This intervention aims to strengthen public perception and sanitation uptake by enhancing sanitation workers' professional identity, building on existing training structures to ensure low cognitive effort and minimal opportunity cost for participation.</p> <p>Behavioral focus: Low professional recognition and skills development opportunities Intended outcomes: Professionalize sanitation work and strengthen dignity and motivation Behavioral mechanisms: Identity reframing; peer influence; visible signaling</p>



Structured modules covering respectful communication, service quality, and community interaction to improve how sanitation workers engage with the public.

Improved engagement with community members is likely to enhance workers' reception, cooperation, and motivation.





Official certification is displayed on vehicles using stickers to help the community identify workers who have received training.

This helps to build credibility and trust within the community while recognising workers' efforts and qualifications after training.



Provide formal certification for workers who have undergone training (in safety, digital literacy, and financial planning) to establish sanitation work as a career path rather than informal labour.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Prototype	Support Network for Sanitation Workers
Details	<p>This intervention aims to improve the effectiveness, motivation, and public image of sanitation workers by introducing structured mentorship and supportive supervision, enabling them to deliver services with confidence, consistency, and community trust.</p> <p>Behavioral focus: Poor working conditions and limited social support Intended outcomes: Strengthened worker well-being and community solidarity Behavioral mechanisms: Collective efficacy; trust; reciprocity norms</p>

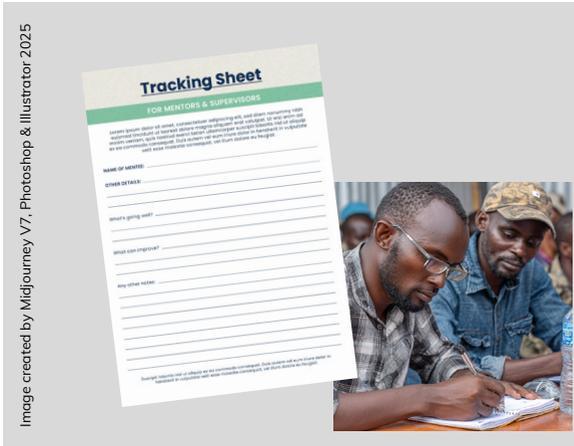


Supervisors guide/manual designed to help supervisors learn how to recognise good work, get feedback, and problem solve. This will support trained supervisors (Sanitation Support Leads) during regular field visits, helping maintain open communication between workers and the communities they serve, fostering respect, and improving services.





Reflection sheet/guide to be used by workers in a monthly Reflection Circle where they can safely share their experiences, challenges, and ideas. This can help to improve learning and support among workers.



Simple feedback tracking sheet such as this, can be used on either paper or mobile devices to track each worker's progress, identify any needs, and provide timely feedback.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Prototype	Building Sanitation Worker-Led Groups
Details	<p>This intervention aims to establish partnerships with local businesses, community members, non-profit organisations, and civil society organisations to provide more direct support to sanitation workers.</p> <p>Behavioral focus: Financial instability and low resilience Intended outcomes: Enhanced financial security and collective advocacy Behavioral mechanisms: Commitment devices; goal gradient effect; social proof</p>

Image created by Midjourney V7, Photoshop & Illustrator 2025

Communication materials on care events
Promotional materials to communicate about monthly care events, locations, and dates.

These events can be held at accessible community venues where workers can collect protective equipment (such as gloves, masks, and soap) and access services like on-site health check-ups, counselling, and financial literacy workshops.



Image created by Midjourney V7, Photoshop & Illustrator 2025



Care event materials

Materials to be used at care events to facilitate activities on-site.

These include banners, volunteer badges/buttons, sign-in sheets, simple handouts, and care cards.

Image created by Midjourney V7, Photoshop & Illustrator 2025



Tokens and coupons for services and goods available at local shops and businesses to support sanitation workers.

Sanitation manager interventions

Prototype	Empowering Sanitation Management
Details	<p>This intervention aims to highlight sanitation managers' roles as community connectors and advocates, enabling communities to participate in identifying and solving sanitation challenges.</p> <p>Behavioral focus: Weak accountability and limited community collaboration</p> <p>Intended outcomes: Increased managerial accountability and community trust</p> <p>Behavioral mechanisms: Collective efficacy; social identity; feedback loops</p>



Formation of joint committee

Establishing inclusive committees of sanitation workers, residents, and local leaders to support managers in identifying and escalating sanitation issues. These committees serve as an essential link between communities and municipal authorities, fostering regular dialogue, co-developing local solutions, addressing grievances, and promoting a deeper mutual understanding of on-the-ground challenges.



Image created by Midjourney V7, Photoshop & Illustrator 2025



Communication channels

Setting up community WhatsApp groups, noticeboards, and other accessible platforms to report and track sanitation issues, share real-time updates, and foster transparency. These channels enhance accountability, keep residents informed, and encourage ongoing community engagement in sanitation efforts.

Image created by Midjourney V7, Photoshop & Illustrator 2025



Sanitation guidelines

Developing and disseminating government-mandated sanitation guidelines, bylaws, and codes of conduct through local media and community groups. These resources establish clear expectations for both workers and residents, fostering respectful collaboration and promoting consistent sanitation practices.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Prototype

Rethinking Formalisation of Sanitation Work

Details

This intervention focuses on improving consumer respect, sanitation uptake, and worker dignity by visibly formalizing sanitation work through flexible, phased recognition strategies that signal value and promote trust.

Behavioral focus: Informality; low status; lack of social protection

Intended outcomes: Visible legitimization of sanitation work and access to benefits

Behavioral mechanisms: Social signalling; reciprocity and trust; identity reframing

Image created by Midjourney V7, Photoshop & Illustrator 2025



Identity and recognition materials

Distribute personalized ID cards, uniforms, and badges with names and dignity-affirming messages (e.g., “My name is Samuel. I keep your streets clean”). These visible cues promote public recognition, signal official status, and strengthen respect for sanitation workers. Color-coded uniforms or tools can further help distinguish their role in the community.



Image created by Midjourney V7, Photoshop & Illustrator 2025



Certificates

Offering optional or mandatory training on safety, sanitation standards, and community engagement. Provide certificates or local permits upon completion to validate skills, and publicly recognize certified or long-serving workers during community events or public holidays, enhancing their professional identity and social status.

Storyboards

Illustrated storyboards depicting a sanitation worker's journey from an informal status to becoming certified, highlighting key milestones such as training and certification. These storyboards help normalize formalization, make the process more relatable, and demonstrate tangible benefits, such as improved status, respect, and opportunities, for both workers and the wider community.

Image created by Midjourney V7, Photoshop & Illustrator 2025



Sanitation consumer interventions

Prototype	Leveraging Trusted Messengers as Sanitation Advocates
Details	<p>This intervention focuses on identifying influential community members, well-known figures, and leaders as advocates through church groups, school governing bodies, teachers, respected elders, or local businesses to help reinforce respect messages and encourage broader community support.</p> <p>Behavioral focus: Lack of awareness and respect for sanitation workers Intended outcomes: Broader community engagement and respect for workers Behavioral mechanisms: Authority bias; social capital; collective action</p>



Image created by Midjourney v7, Photoshop & Illustrator, 2025

Dialogue forums

This is to engage the community leaders, sanitation workers, and other community members to promote positive community values and hygiene-related behaviors, encourage the sharing of local grievances and concerns about sanitation and public health, and foster inclusive dialogue that supports mutual accountability, trust-building, and collective action toward cleaner, safer environments.

These stakeholders play a key role in reinforcing norms, mobilizing community efforts, and ensuring that interventions are culturally appropriate and sustainably adopted.



Image created by Midjourney V7, Photoshop & Illustrator 2025



Promotions

Promotions led by trusted messengers to elevate the value of sanitation work and workers: These initiatives can include symbolic events, such as a Sanitation Champions Day, in which respected local leaders temporarily assume the roles of sanitation workers to demonstrate appreciation and model positive sanitation behaviors.

Such activities not only raise awareness but also help to reduce stigma, promote dignity, and build community-wide respect for sanitation workers, reinforcing their essential role in public health.

Image created by Midjourney V7, Photoshop & Illustrator 2025



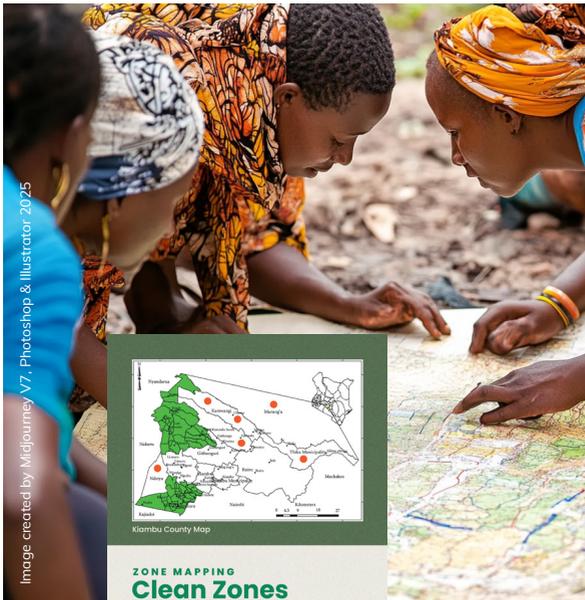
Posters

Posters and visual materials featuring community leaders demonstrating proper sanitation practices step-by-step: These materials serve as practical guides that households can easily model at home, while also reinforcing the message of shared responsibility for maintaining cleanliness and hygiene.

To strengthen this message, community leaders and sanitation workers can be shown collaborating and participating in public events together—promoting unity, mutual respect, and collective action in improving sanitation standards.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Prototype	Campaigns Driving Sanitation Dignity
Details	<p>This intervention focuses on transforming societal attitudes by embedding messages of respect, dignity, and pride in local awareness campaigns, shifting how communities perceive and value sanitation work and those who perform it.</p> <p>Behavioral focus: Stigma and negative attitudes toward sanitation work Intended outcomes: Shifted public narrative toward pride and dignity in sanitation Behavioral mechanisms: Framing and emotional appeals; social norm activation</p>



Sanitation map

Through participatory mapping exercises, community members highlight “clean zones” or “improvement zones”, areas where visible progress has been made in sanitation and hygiene. These maps are displayed in public spaces to foster community pride, promote peer learning, and explicitly acknowledge the vital contributions of sanitation workers.

By making improvements visible and traceable to collective effort, this approach reinforces shared responsibility and motivates sustained engagement in cleanliness practices.

Image created by Midjourney V7, Photoshop & Illustrator 2025

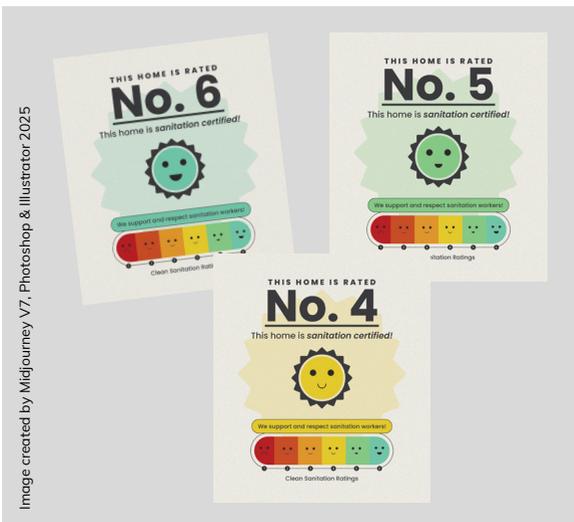




Respect/pledge boards

Community members are encouraged to sign pledge boards displayed in high-traffic areas such as marketplaces, health centers, and community halls. These pledges act as behavioral nudges and social contracts, fostering public accountability and reinforcing collective values of dignity, fairness, and inclusion for sanitation workers.

In addition to raising awareness, this mechanism can be used to initiate broader dialogue on labor rights, health, and equity in sanitation.



Scorecards

These scorecards provide households with ratings based on cleanliness, waste management practices, and respectful engagement with sanitation workers. Visible on gates, doors, or communal bulletin boards, they encourage positive peer pressure, healthy competition, and a culture of pride in maintaining high sanitation standards. The inclusion of criteria related to respectful treatment of sanitation workers further normalizes dignity and accountability at the household level.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Prototype	Loss-Framed Awareness Campaigns
Details	<p>This intervention focuses on boosting community sanitation uptake and deepening respect for sanitation workers by emotionally engaging the public with loss-framed messaging, visual storytelling, and relatable narratives that make sanitation work visible, valued, and urgent.</p> <p>Behavioral focus: Low perceived urgency for sanitation issues Intended outcomes: Increased awareness and motivation for sanitation action Behavioral mechanisms: Loss framing; emotional salience; visualization of consequences</p>



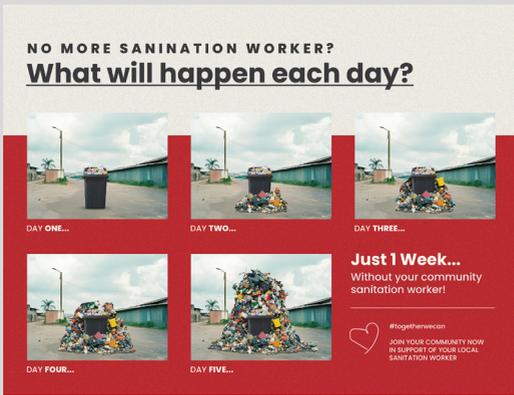
Art-based visual experiences/installations
These interactive experiences, such as simulated trash pile-ups, blocked drains, or overflowing toilets, allow community members to witness what a single day, week, or month without sanitation services would look like.

The aim is to make the often-invisible work of sanitation workers visible and emotionally resonant. Such installations can be displayed in marketplaces, schools, or community centers, provoking conversation, reflection, and a deeper appreciation of sanitation workers' essential contributions to public health and community well-being.

Image created by Midjourney V7, Photoshop & Illustrator 2025



Image created by Midjourney V7, Photoshop & Illustrator 2025

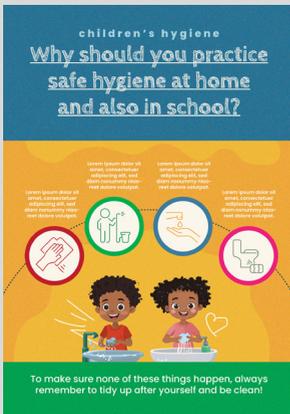


Posters

These materials can include visual simulations of trash accumulation, blocked infrastructure, and health hazards that emerge when sanitation work is absent, even temporarily.

By making these losses visible, the posters help connect the value of sanitation work with everyday outcomes that affect households and local economies.

Image created by Midjourney V7, Photoshop & Illustrator 2025



Leveraging culturally relevant humor, language, and storytelling, these materials are especially effective in schools and youth programs. Recognizable local figures or beloved fictional characters can deliver messages about hygiene, waste management, and respect for sanitation workers in memorable, relatable ways.

This approach helps to break stigma, encourage behavioral change, and make sanitation messaging more appealing to younger audiences and broader community segments.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa

Image created by Midjourney V7, Photoshop & Illustrator 2025

ECONOMIC LOSS Caused by poor sanitation practices

MORE THAN **350 MILLION**

LOSS DUE TO POOR GARBAGE DISPOSAL

MILLIONS EACH YEAR

ENVIRONMENT

- 18% Litter (Spain)
- 23% Suspended (Spain)
- 10% Litter (Spain)
- 15% Suspended (Spain)
- 11% Litter (Spain)

ECONOMIC LOSS Caused by poor sanitation

These include medical bills, school days lost due to illness, work days lost, child mortality, among many when proper sanitation measures are neglected.

Infographic posters

These visuals illustrate how poor sanitation contributes to increased healthcare expenses, reduced school attendance, and lost productivity due to illness. Charts and statistics, such as the number of days of school missed, hospital visits, or income loss, make the abstract consequences of poor sanitation concrete.

Strategically placed in clinics, schools, and public buildings, these visuals can serve as powerful tools for advocacy, awareness-raising, and engaging policymakers.



Prototype	Championing Sanitation At-Home
Details	<p>This intervention aims to empower community members to take responsibility for household and neighborhood sanitation by providing skills training, public recognition, and identity-building tools, reinforcing positive norms that frame sanitation as a shared and valued community duty.</p> <p>Behavioral focus: Low household accountability for sanitation upkeep Intended outcomes: Stronger household ownership and community-level sanitation norms Behavioral mechanisms: Social proof, identity and pride, and behavioral capability</p>

Image created by Mifajourney V7, Photoshop & Illustrator, 2025



The image shows two items: a certificate and a sticker. The certificate is titled 'Certificate of achievement' and is presented to 'Jane Wafula' for completing community household sanitation training. The sticker is titled 'THIS HOME IS RATED No. 5' and features a green smiley face icon. Below the sticker is a row of five smiley faces in different colors (red, orange, yellow, green, blue) representing clean sanitation ratings.

Certificates and signs

Participants who complete sanitation training and successfully implement key hygiene practices receive official certificates and public recognition from local health authorities or community leaders. Households that meet specific cleanliness criteria may display a “This Home is Sanitation Certified” sticker or sign, promoting pride, peer motivation, and community-wide accountability.

This approach elevates sanitation as a community value and encourages sustained behavior change through recognition and social proof.

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa



Image created by Midjourney V7, Photoshop & Illustrator 2025

Checklists serve as practical household tools that promote routine behaviors such as handwashing, safe waste disposal, toilet cleaning, and water safety.

Designed with accessible language and visuals, they help reinforce consistent habits and can be posted in visible household areas (e.g., kitchens, bathrooms). Child-friendly versions can include stickers or coloring elements to increase engagement and family participation.

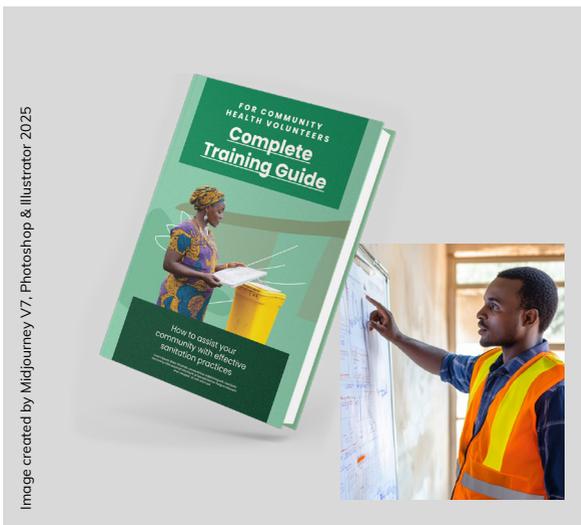


Image created by Midjourney V7, Photoshop & Illustrator 2025

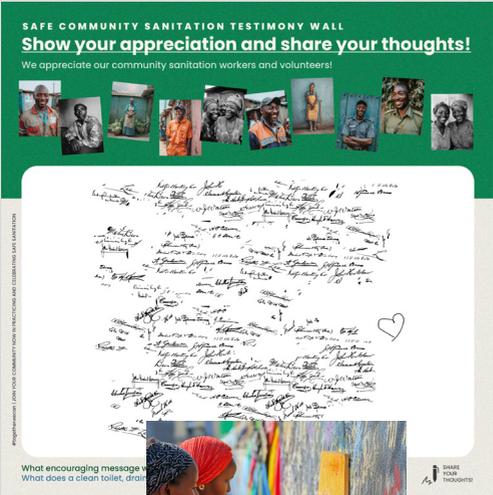
Training aids

These sessions focus on demonstrating adequate sanitation and hygiene behaviors in a relatable, accessible way.

Held in schools, community centers, or during household visits, the training encourages active participation through demonstrations, role-play, and problem-solving exercises. Monthly follow-up visits by CHVs or sanitation officers help reinforce lessons, provide troubleshooting support, and strengthen the link between training and real-world application.



Prototype	Stepping into the Sanitation Workers' Shoes: A Multi-Sensory Public Campaign
Details	<p>This intervention aims to shift public perceptions of sanitation work, reduce stigma, increase respect and empathy toward sanitation workers, and motivate better sanitation behavior in the community through emotionally resonant, sensory-rich experiences.</p> <p>Behavioral focus: Disrespect and low empathy toward sanitation workers</p> <p>Intended outcomes: Greater empathy and public appreciation of sanitation workers</p> <p>Behavioral mechanisms: Sensory engagement, reflection, and commitment cues; social recognition</p>



Testimony wall

These can take the form of whiteboards, chalkboards, murals, or designated poster walls placed in high-footfall areas such as marketplaces, clinics, schools, and community centers. Monthly rotating prompts like “What does a clean toilet mean to you?” or “Write a thank you note to someone who keeps your neighborhood clean” encourage people of all ages to participate through drawings, short notes, or photos.

Portraits and quotes from sanitation workers can be featured alongside each other, fostering a deeper public connection to their contributions and reinforcing civic pride in sanitation services.

Image created by Midjourney V7. Photoshop & Illustrator 2025

Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa



Image created by Midjourney V7, Photoshop & Illustrator 2025



Displays

Mounted flip boards, placards, or rotating display stands are installed in visible community locations, such as health posts, bus stops, or schools. These features feature photographic evidence of improvements, such as cleaned alleyways, refurbished toilets, or newly managed waste points, alongside captions and testimonials from sanitation workers.

By highlighting fundamental local transformations, these displays visually demonstrate impact, encourage community ownership, and emphasize the importance of ongoing care and respect for shared spaces.



Sensory experiential booths

These booths feature paired scent stations, utilising jars or enclosed containers, such as “Freshly Cleaned Toilet” (soap and disinfectant) versus “Unkempt Toilet” (fermented rice and garbage scent). Visitors are guided through the experience using written or audio prompts, such as “What does this smell remind you of?” or “Would you want your child using this space?”

The goal is to create a visceral contrast between sanitary and unsanitary environments, provoking reflection on hygiene practices and motivating behavior change at both individual and community levels.



Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa



Image created by Midjourney V7, Photoshop & Illustrator 2025



Bingo game cards

Sanitation-themed Bingo cards incorporate images and terms related to hygiene, waste management, clean water, and respectful sanitation behavior. In addition, interactive corners offer hands-on activities, such as scrubbing mock toilet surfaces, using magnetic boards to sort recyclable and non-recyclable waste, and short VR or AR experiences that simulate a day in the life of a sanitation worker.

These activities aim to promote empathy, raise awareness, and reinforce key messages through gamification and immersive learning, particularly effective for youth and families.



About Busara

Busara is a research and advisory organization, working with researchers and organizations to advance and apply behavioral science in pursuit of poverty alleviation. Busara pursues a future where global human development activities respond to people's lived experience; value knowledge generated in the context it is applied; and promote culturally appropriate and inclusive practices. To accomplish this, we practice and promote behavioral science in ways that center and value the perspectives of respondents; expand the practice of research where it is applied; and build networks, processes, and tools that increase the competence of practitioners and researchers.

About Busara Groundwork

Busara Groundwork lays the groundwork for future research and program design. As think pieces, they examine the current state of knowledge and what is needed to advance it, frame important issues with a behavioral perspective, or put forward background information on a specific context.

How to cite:

Acholia, Pragma; Aanchal Sharma; Justin Kinyera; Lewin Kemunto; Rowan Harrity; Wanjiku Kiarie. Towards dignity in sanitation work: A research agenda for testing behavioral and participatory prototypes in Sub-Saharan Africa. *Busara Groundwork No. 29 (Research Agenda)*. Nairobi: Busara, 2025. DOI: doi.org/10.62372/VYMO1378

38 Apple Cross Road,
Lavington, Nairobi, Kenya
www.busara.global

