



Identifying the last 10% of households practising open defecation in rural Tanzania

Summary

Since 2017, SNV and the Government of Tanzania have been implementing the Sustainable Sanitation and Hygiene for All (SSH4A) programme in eight Tanzanian districts. To date, the number of households that use toilets has increased to 90%. In the period March-April 2019, SNV Tanzania undertook a household survey in the eight project districts to identify the 10% of households still practising open defecation or sharing toilets despite the concerted government and SNV sanitation interventions. The findings show the majority of the households still practising open defecation and sharing latrines in the rural districts of Tanzania are not those commonly cited by the literature and sanitation programming - the people in poverty, the elderly people, people with disabilities, and those with other specific vulnerabilities. The majority in 'the last mile' are: 1) the 'defiant' households that have the socio-economic resources to build themselves latrines but prefer to practise open defecation or share toilets; 2) the socially isolated households that do not have a financially able family member who can support them; and 3) the geographically isolated households that are far from information centres. The SNV study also revealed a relatively high percentage of households headed by single mothers and those living in difficult terrains as part of the last mile. Furthermore, the study identified opportunities to increase access to sanitation among the last mile groups. These are: 1) introduction of behaviour change re-enforcement interventions tailored to different target groups; 2) promotion of context-specific sanitation technologies; and 3) introduction of community-led 'social exclusion' strategies.

Introduction

Tanzania has set a goal of achieving open defecation free status by 2021. Since January 2017, SNV together with the Government of Tanzania have been implementing the Sustainable Sanitation and Hygiene for All (SSH4A) programme in eight districts (Arusha Rural, Hanang, Itilima, Maswa, Misungwi, Monduli, Msalala-Kahama and Shinyanga). The SSH4A programme integrates best practices in sanitation demand creation, supply chain strengthening, behaviour change communication, and governance, with the objective of enabling all rural households in the project districts to eliminate open defecation and practise handwashing at critical times (SNV, 2017).

A household survey undertaken in September 2018 in the eight SSH4A project districts showed 10% of households – over 90,000 people – were still practising open defecation or sharing toilets. This last 10% poses a big challenge if the project districts are to achieve and sustain open defecation free status. To develop more effective interventions that target this 10% of households (known as 'the last mile'), SNV carried out a study to investigate the characteristics of the households still practising open defecation or sharing toilets despite the massive campaigns by the Government of Tanzania and other stakeholders to eliminate open defecation.

Besides identifying the last mile in rural Tanzania, the study also investigated the possible reasons why these groups were behind in sanitation, and the opportunities for increasing their access. The complexity, variety and cross-cutting dimensions of the last mile groups are highlighted in this report.

The study methods

Data collection and validation to understand the last mile groups

To identify the last mile and the opportunities to increase their access to sanitation, SNV conducted a household survey in 1,624 households in eight SSH4A project districts (Arusha Rural, Itilima, Maswa, Misungwi, Moduli, Msalala-Kahama, Mwanza and Shinyanga). The survey used the Akvo FLOW tool, where a questionnaire is uploaded onto cell phones and interview data relayed directly into a central database, where it is later analysed.

The survey questions focused on **social variables** (gender, age, disabilities, vulnerabilities and traditional beliefs of the household head); **economic variables** (wealth status, presence of a financially able family member who can provide support, type of house – block, mud, and so on – and ownership of the house – own or rent); **environmental variables** (compact soil, collapsing soil, swampy area, flooding area, and so on); and **sanitation knowledge variables** (proximity of the household to information facilities – schools, health centres, markets and village offices within a 5km radius – and households having received information on sanitation and handwashing in the last 12 months).

To validate and seek explanations of the survey findings, SNV facilitated two workshops in Hanang and Misungwi project districts. The validation workshop in Hanang captured the views of the participants in the northern zone project area of Arusha Rural, Hanang and Monduli, while the validation workshop in Misungwi captured the views of the participants in the lake zone project area of Itilima, Maswa, Misungwi, Mwanza, Msalala-Kahama and Shinyanga.

Local government authority staff (ward executive officers, ward environmental health officers, village executive officers, and the district sanitation team), local community leaders (village

chairpersons and Jirani – neighbour – sanitation group representatives) and heads of households were invited to the validation workshops. The heads of households invited were from four target groups previously identified through the household survey: 1) marginalised households practising open defecation; 2) marginalised households sharing toilets; 3) marginalised households owning a toilet; and 4) 'defiant' households with the socio-economic resources to own a toilet but preferring to practise open defecation or share toilets. The four groups were invited to the workshops to provide explanations and an understanding of why these specific groups were practising open defecation or sharing toilets. The marginalised group that had constructed and were using their own toilets shared their experiences on why and how they were able to do so.

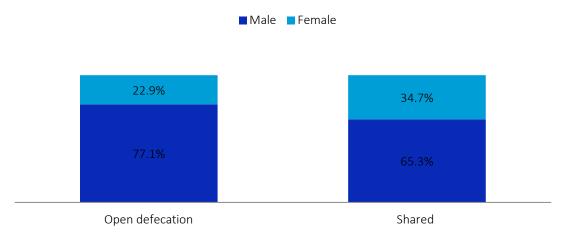
During the validation workshops, the study findings were presented and discussed by each of the four groups. In the discussions, the participants were shown the study findings and asked if they found the results surprising, and, if so, to explain what the reasons behind them could be. Those without a household toilet talked about the challenges they faced in accessing sanitation, their reasons for not having a toilet or sharing one, their sanitation aspirations, and the opportunities available for constructing and using their own toilet. Participants with toilets discussed the reasons why they built their own toilets, how they went about it, and their aspirations and opportunities for moving up the sanitation ladder. The groups presented the outcomes of their discussions in plenary, where further discussion was held and conclusions made.

Main findings from the household survey and validation workshops

Social variables

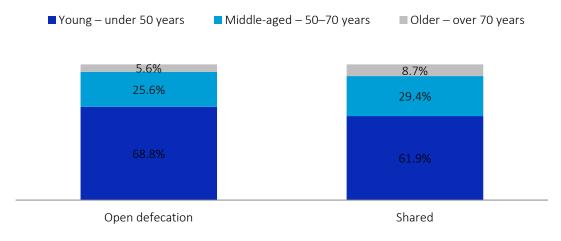
The first key finding from the study was the majority of households practising open defecation and sharing toilets (77.1% and 65.3%, respectively) were male headed (Figure 1). This finding was similar across the eight project districts. The finding was unexpected based on what is cited in the literature (CLTS Knowledge Hub 2018a; 2018b; Pedrajas and Choritz, 2016; Routray et al., 2017) and the expectations of community members who participated in the validation meetings. The expectation was households headed by women would be least likely to have a toilet due to gender power relations that constrain women's participation in the sanitation decision-making process, women not having the physical strength or manual skills to dig and build latrines, and women lacking time as they are kept busy as mothers and caregivers. The consensus from the discussions at the validation workshops was women more often understand the importance of having sanitation facilities to improve the health and wellbeing of their children and households. When they are in charge as heads of households, they are more conscious and invest in sanitation.

Figure 1. Gender of the head of the household (total districts)



The second key finding relates to the age of the head of the household. Across the eight project districts, the majority of the households practising open defecation and sharing toilets (68.8% and 61.9%, respectively) were headed by people younger than 50 years old (Figure 2). The percentage of households headed by middle-aged people practising open defecation and sharing toilets was 25–29%. The proportion of households headed by people over 70 years old practising open defecation and sharing latrines was very low (5.6% and 8.7%, respectively). The literature (CLTS Knowledge Hub, 2018b; Pedrajas and Choritz, 2016) and workshop participants expected households headed by older people to be the majority practising open defecation and sharing toilets due to physical and economic limitations in building and maintaining their latrines.

Figure 2. Age of the head of the household (total districts)



Source: SNV, 2019

When age was discussed at the validation workshops, the young heads of households explained the younger generations do not spend much time at home due to heavy workloads outside their homes and socialising with peers after work (mainly associated with young men playing games and

drinking until late at night). Because they do not spend many hours at home to use their home toilets, they do not give much attention or priority to owning a household toilet as they mostly use toilets in places where they socialise or work. By contrast, the older generations spend most of their time at home. A toilet provides comfort in everyday life, so they try their best to own and improve their toilets. Furthermore, older people are more likely to be embarrassed about defecating in the open. This finding suggests it is the young and the middle-aged heads of households who should be targeted in the last mile in rural Tanzania.

A third key finding is related to any disability or vulnerability of the head of the household. From the literature (CLTS Knowledge Hub, 2018a; 2018b; Haaij, 2018; Pedrajas and Choritz, 2016), the last mile in sanitation tends to be associated with those having a disability or being vulnerable in some way. The findings from the study showed the majority of households practising open defecation (87.9%) or sharing a toilet (85.7%) were headed by people without a disability – hearing, mental, physical, physical due to old age, or visual (Figure 3). Household heads with a physical disability accounted for 9% and the percentage was particularly low for other disabilities. In the validation discussions, the participants attributed this unexpected finding to the fact that people with a disability or social vulnerability receive support from their family or community to build their toilets. The community support is mainly through labour to dig toilets and/or the provision of local construction materials. Besides contributing with labour and materials, support from family members can also be in the form of financial support through the provision of capital. This finding suggests that when local communities and family members are sufficiently mobilised, they can ensure people with disabilities and social vulnerabilities within their communities are supported to construct and use toilets.

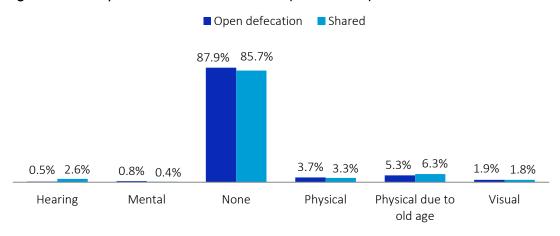


Figure 3. Disability of the head of the household (total districts)

Source: SNV, 2019

The findings also showed a similar trend regarding the vulnerability of the head of the household. 75.5% of the household heads who practise open defecation and 77.2% of those sharing toilets did not face any vulnerability, in terms of being an excessive drinker, having no children or family members, being a single mother, terminally ill, or a widower (Figure 4). Among the vulnerabilities,

the one with a relatively high value, and worth specifically considering and targeting, were single mothers, with 12.3% practising open defecation and 15.3% sharing toilets.

75.5% 77.2%

12.3% 15.3%

3.1% 1.9% 2.1% 0.4%

Alcoholic No family None Single mother Terminally ill Widower

Figure 4. Vulnerability of the head of the household (total districts)

Source: SNV, 2019

A fourth key finding was that 78.4% of the households practising open defecation and 65.7% of those sharing toilets did not have any family member capable of providing financial support (Figure 5). The households were asked whether they had any family member who was employed, farming or had a business. During the validation discussions, many participants from marginalised households that had toilets explained they received financial support to construct their toilets from family members who were working. This finding suggests that if households have family members capable of financially supporting others, their family members in employment should be approached and mobilised to help in the construction of toilets.

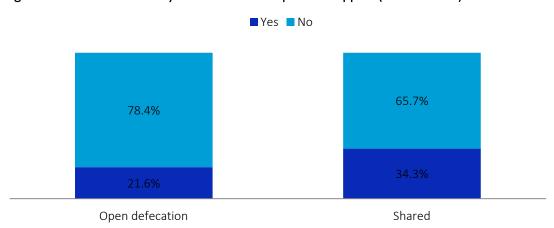


Figure 5. Presence of a family member who can provide support (total districts)

Source: SNV, 2019

Economic variables

The fifth finding relates to the wealth of the household. The literature indicates that the poorest households do not build or are forced to share toilets because they lack the financial means (CLTS Knowledge Hub, 2018a; 2018b; GIZ, 2015; Haaij, 2018; Pedrajas and Choritz, 2016). However, the findings across the eight project districts showed the middle to high income households are the ones that account for the largest percentage of open defecation and sharing of toilets (70.4% and 80.1%, respectively). The poor households accounted for only 29.6% and 20% of those practising open defecation and sharing toilets, respectively (Figure 6). Although the poor households in the last mile account for only 30% of the sample, they require a targeted approach, as community support mechanisms may not be enough to support all of them.

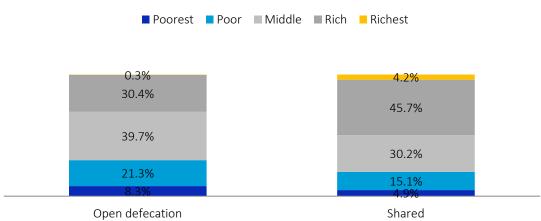


Figure 6. Wealth of the household (total districts)

Source: SNV, 2019

The findings also showed 90.4% of those practising open defecation and 87.5% of those sharing toilets live in their own houses (Figure 7). This finding counters the expectations that people living in rental houses would be inclined to share toilets because landlords are not willing to construct a toilet for every rental room. Rental houses represent only 10% of the households practising open defecation and sharing toilets. The household survey also found that 55.5% of people practising open defecation and 73.9% of those sharing toilets lived in good quality houses – block and mud houses with an iron roof (Figure 8).

90.4% 87.5%
90.6% 12.4%
Open defecation Shared

Figure 7. Ownership of the house (total districts)

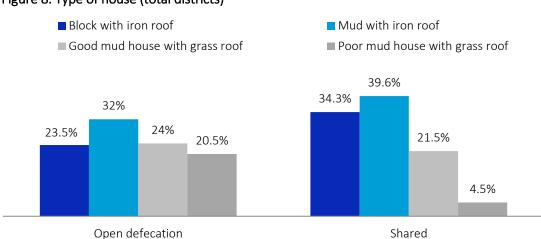


Figure 8. Type of house (total districts)

Source: SNV, 2019

Overall, the findings on economic variables show the majority of the households that practise open defecation and share toilets are wealthy and own their homes, with 30% in block houses. These findings were unexpected based on the literature (CLTS Knowledge Hub, 2018a; 2018b; GIZ, 2015; Haaij, 2018; Pedrajas and Choritz, 2016) and the observations of the validation workshop participants.

Discussions during the validation sessions revealed the wealthier households know about the importance of building toilets but do not construct them because they prioritise building good quality houses that improve their social standing. Since a toilet does not contribute to social status, it is often neglected or constructed later. It was also mentioned by the workshop participants that the wealthier households are not worried about government sanctions or fines because they have enough resources to pay the fines levied for not having a toilet. On the contrary, the majority of

the poorest households are more likely to be scared of having to pay fines, and consequently tend to build toilets when confronted by government officers.

This 'defiant' group (those with the socio-economic resources to construct their own toilets but practising open defecation or sharing toilets instead) also mentioned that traditional toilets do not match the style of their houses; they do not consider basic pit latrines as an option when building their homes. The fear of flies, a bad smell inside the toilet, and the possibility of pit collapse were concerns raised by participants regarding pit latrines. Based on the findings, the 'defiant', who represent the majority in the last mile, require specific interventions adapted to their situation and motivations.

Environmental variables

Another key finding was, across the eight districts, 65.6% and 67.6% of the households living in solid compact soils practise open defecation or share toilets (Figure 9a). However, 34.2% and 29.8% of the households that practise open defecation and share toilets are in collapsing and rocky soil environments (Figure 9a). The impact of the soil condition on access to sanitation varies among the districts, being very high in Misungwi (64%) and relatively high in Masalala-Kahama and Shinyanga (Figure 9b). The households living in difficult terrains also require specific interventions to accelerate their access to sanitation.

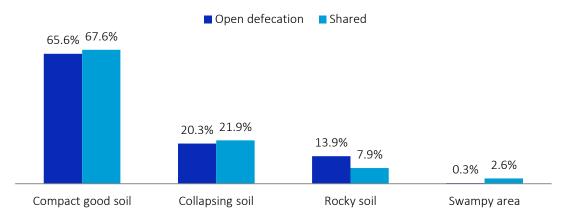
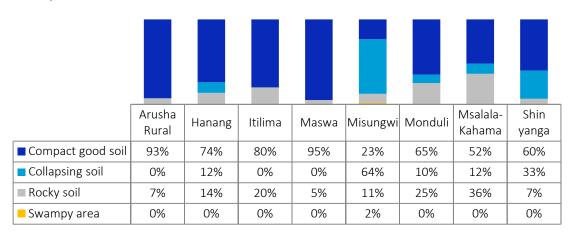


Figure 9a. Environmental conditions at the household (total districts)

Source: SNV, 2019

Figure 9b. Influence of environmental conditions on households practising open defecation (by district)



Sanitation knowledge variables

The findings showed that 82.5% of households practising open defecation and 92.7% of those sharing toilets had received information about sanitation through several channels, including community meetings, religious institutions and schools, over a period of 12 months (Figure 10). The results also showed 69% and 80.3% of those practising open defecation and sharing toilets live far away from information centres, such as health centres, schools, markets and village offices. These two findings suggest sanitation knowledge alone is not enough for households to construct and use toilets. Many households that have knowledge but live far from information centres tend not to have toilets. There was consensus from the validation meetings that behaviour change requires continuous reinforcement messages and that geographical isolation, in terms of living away from information institutions, limits households' continuous exposure to follow up behaviour change communications, awareness and government monitoring activities. Furthermore, in some cases, being far from sanitation markets makes it costly and time consuming for households to purchase and transport construction materials or get updates on the sanitation technologies available.

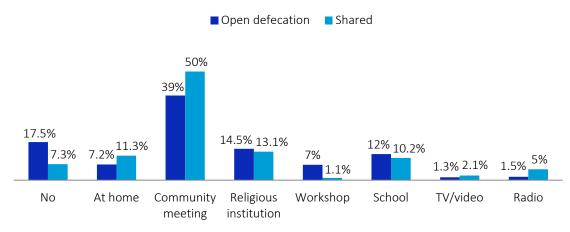


Figure 10. Sanitation knowledge and sources (total districts)

Traditional beliefs have very often been cited in the literature as a factor contributing to low adoption and use of toilets (CLTS Knowledge Hub, 2018a; 2018b; Hanchett et al., 2011; Thys et al., 2015). In rural Tanzania, during community meetings, people say fathers and mothers-in-law should not share the same toilet with their sons and daughters-in-law. This is often cited as a factor contributing to low construction and use of toilets. The findings from this study do not confirm this perception. 91.7% of households practising open defecation and 90.9% of households sharing toilets do not believe that sons and daughters-in-law should not share the toilet with their parents-in-law. This traditional belief is not a significant factor that limits the construction and sharing of toilets in the project districts.

Key last mile groups in the SSH4A project areas in rural Tanzania

From the household survey findings and discussions at the validation workshops, the last mile groups in sanitation in rural Tanzania that should be targeted are:

1. The 'defiant' households that have the socio-economic resources to build their latrines but prefer to practise open defecation or share toilets – this includes young and middle-age-headed households. The 'defiant' are the majority group to be targeted. For this group, a toilet is not considered an asset that can add to the social status of the household, and pit latrines are not an option. The introduction of more desirable toilet options should be considered to make toilets suitable and acceptable.

- 2. The socially marginalised households that do not have any family capable of providing financial support. The single mother-headed households and households headed by the poorest people also fit into this group and require targeted approaches.
- 3. The geographically isolated households in terms of proximity to information centres and those living in difficult terrains.

Opportunities and ways forward

The findings of the household survey and validation workshops highlight the importance of developing sanitation programmes that accurately recognise who the last mile groups are, and their context-specific challenges and aspirations. From the discussions with the workshop participants, three possible opportunities were identified.

Firstly, the analysis of the households' sanitation knowledge and proximity to information centres showed raising awareness once is not sufficient. Strong re-enforcements of behaviour are needed together with repeated awareness raising of key desired sanitation behaviours based on communication strategies tailored to the different target groups in the last mile.

Secondly, the analysis of the wealth of households, the type of house and environmental conditions showed the importance of making context-based and more desirable sanitation options available, especially for households that have the means to build a toilet but do not want to build a traditional pit latrine, those who do not feel safe using a pit, and those who live in difficult terrains. During the discussions with the communities, the question of how to make a toilet socially desirable was raised repeatedly, as many community members mentioned that having a toilet was not a priority (even though they aspired to build offset VIP latrines and pour-flush toilets to avoid bad smells, flies and the need to stand on a pit, which for many was not considered safe). The idea of making people aware of the various technology options at the village level through demonstrations is one to explore. Having masons presenting different technologies with attributes that are pre-approved by the community members can incentivise people to own toilets adapted to their types of houses, needs and wants.

Thirdly, having behaviour re-enforcements and re-awareness coupled with sanitation options adapted to the needs and aspirations of households might not be enough for those households that prefer to continue practising open defecation or sharing toilets. Exploring 'social exclusion' strategies, through community-led regulations and sanctions, could have potential for encouraging households to build and maintain their facilities in the long term. As workshop participants mentioned, people are afraid of being rejected by their communities for not having toilets. Government fines have proven to be ineffective for wealthier households, who can continuously

pay their penalties, or for the poorest households opposed to the idea of the government taking money that could be used to build latrines instead. Involving the traditional police at the village level (known as 'sungu sungu') could contribute to making community regulations and sanctions acceptable.

Conclusion

The SNV study found in rural Tanzania the last mile – the 10% of households still practising open defecation and sharing toilets – are the 'defiant' households – those that have socio-economic resources to build their latrines but prefer to practise open defecation or share toilets instead – and households that are socially and geographically isolated.

When focusing on improving sanitation for these groups, it is necessary to fully understand their contexts, limitations, needs and aspirations by listening to them. The reality has proven to be sometimes contrary to what can be estimated by the literature and sanitation programming conventions. The last mile have varied and overlapping dimensions that should be carefully acknowledged by quantitative and qualitative research to plan for specific – but flexible – sanitation programmes, monitoring and follow ups. Behaviour re-enforcements, re-awareness and demonstrations of different sanitation technology options, coupled with community-led regulations and sanctions, could prove valuable in encouraging last mile households to permanently change their sanitation situation.

The building of toilets is a matter of knowledge, enforcement and priority. Having sanitation policies and programmes based on the understanding of the last mile complexities, and that adapt to changing needs and aspirations, is crucial to achieve and sustain inclusive and equitable access to sanitation and hygiene for all.

References

CLTS Knowledge Hub (2018a) *East and Southern Africa regional workshop*. Learning brief. Available at www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/ESA%20workshop%20brief%20FINAL.pdf

CLTS Knowledge Hub (2018b) West and Central Africa regional workshop. Learning brief. Available at

www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/WCA%20workshop%20brief%20FINAL.PDF

GIZ (2015) Closing the last mile for millions. Sharing the experience on scaling up access to safe drinking water and adequate sanitation to the urban poor. Available at www.oecd.org/water/Background-Document-OECD-GIZ-Conference-Closing-the-Last-Mile-for-Millions.pdf

Haaij, S. (2018) Approaching the 'last mile'. *IRC Water Special 2018*. Available at www.ircwash.org/sites/default/files/vv18waterspecial en07 achtergrondsarah 0.pdf

Hanchett, S., Krieger, L., Kahn, M.H., et al. (2011) *Long-term sustainability of improved sanitation in rural Bangladesh*. Washington, D.C.: World Bank. Available at www.openknowledge.worldbank.org/handle/10986/17347

Pedrajas, M. and Choritz, S. (2016) *Getting to the last mile in least developed countries*. UNDP and UNCDF. Available at www.undp.org/content/dam/undp/library/SDGs/English/getting-to-the-last-mile-oct-2016.pdf

Routray, P., Torondel, B., Clasen, T., et al. (2017) Women's role in sanitation decision making in rural coastal Odisha, India. *PLoS ONE* 12 (5): e0178042. Available at www.journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0178042&type=printable

SNV (2017) *SSH4A-RP extension phase factsheet, Tanzania*. Available at www.snv.org/public/cms/sites/default/files/explore/download/tanzania extensionbrief 20180130 .pdf

Thys, S., Mwape, K.E., Lefèvre, P., et al. (2015) Why latrines are not used: Communities' perceptions and practices regarding latrines in a Taenia solium endemic rural area in Eastern Zambia. *PLoS Negl Trop Dis* 9(3): e0003570. Available at www.ncbi.nlm.nih.gov/pmc/articles/PMC4352092/pdf/pntd.0003570.pdf

Acknowledgements

This report was written by María Florencia Rieiro, reviewed by Jackson Wandera and edited by Richard Steele in June 2019.

For more information, please contact Jackson Wandera, SSH4A Project Manager.

