



Barriers and Motivators: sanitation behaviours in urban households in Nepal

The impact of water, sanitation, and hygiene (WASH) facilities and practices depends on the behaviour of the people who use them. A rapid formative study conducted by SNV in Nepal sought to understand the barriers and enablers for three sanitation behaviours in three WASH SDG Programme cities and found varying levels of sanitation access and knowledge across the groups surveyed.

Nepal was declared Open Defecation Free (ODF) in 2019. SNV in Nepal has been working in four major cities of Nepal to improve the health and quality of life of communities through access to improved water supplies and enhanced sanitation and hygiene practices. The key components of SNV in Nepal's work are behaviour change and awareness, sanitation service delivery, governance and financing, and treatment and disposal, with gender equity and social inclusion as a cross-cutting theme. This learning brief shares the findings from a study into the

barriers and motivators for three key sanitation behaviours in disadvantaged urban communities in three cities in Nepal:

- Toilet access and use
- Faecal Sludge Management (FSM)
- Solid Waste Management (SWM)

The rapid formative study engaged with a range of stakeholders in local urban contexts in Birendranagar (Surkhet district), Nepalgunj (Banke district) and Khadak (Saptari district).

Approach

SNV in Nepal used a SaniFOAM (Sanitation - Focus, Opportunity, Ability, Motivation) framework (Figure 1)¹ to understand sanitation behaviours in target groups. The framework was used as a guideline to structure research questions and analyse findings.

The study used purposive sampling among disadvantaged communities with low access to sanitation facilities in the three municipalities. The team selected diverse groups representing different demographic characteristics² and livelihoods³ to understand local realities and complexities around sanitation behaviours.

In total, 145 people from 70 municipal wards participated in a range of in-depth interviews, key-informant interviews and focus group discussions. The team also held a series of consultations with local stakeholders, including development partners, government agencies and local community-based groups. The study focused on the poor and vulnerable, such as marginalised ethnic groups, Dalit, Muslim and low-income families, and residents of informal settlements.

Key findings

Toilet access and use

Toilet access is a key requirement to declare a country ODF. Despite Nepal's 2019 declaration, toilet access remains a challenge for the poorest households, and those without access use neighbouring toilets or practice open defecation.

The study found that although most participants had a toilet facility, access and use was affected by several aspects:

- Some toilets were inaccessible for the elderly and people with disabilities. In these instances, relatives had to support them to defecate and urinate, or they practiced open defecation. There was a lack of awareness around their requirements. People with disabilities were not consulted during construction on what would be needed to enable them to take care of their personal hygiene needs independently. Study participants also felt that building user-friendly toilets would incur excessive costs and that they had no technical knowledge on how to build accessible toilets.

Clean water and sanitation for all

The Constitution of Nepal enshrines access to clean water and sanitation for all citizens as fundamental rights. The country's 'Sustainable Development Goals Status and Roadmap: 2016-2030' envisages access to adequate and equitable sanitation and hygiene for all and the end of open defecation. It commits to improved on-site sanitation services and faecal sludge management to achieve optimum public health status and maintain a clean environment, with a particular focus on the poor and those in vulnerable situations.

Nepal endorsed the Total Sanitation Guideline 2017, which aims to sustain ODF, upgrade facilities and hygiene behaviour, and achieve sanitation for all and forever by 2030. The guidelines include institutional strengthening, capacity development, participatory formulation of WASH Plans, construction and maintenance of WASH facilities and promotion of hygiene behaviours, including FSM, as an indicator for total sanitation.

Despite these commitments, the WASH sector has received little attention due to a poor understanding of faecal sludge/septage, a lack of proper technical expertise, inadequate resources, and a shortage of skilled human resources.

1 Devine, J. (2009), Introducing SaniFOAM: a framework to analyze sanitation behaviors to design effective sanitation programs, Water and Sanitation Program, WSP, Washington, DC, USA, 28 p

2 Such as gender, age, literacy, and socio-economic backgrounds

3 Including homemakers, farmers, slum dwellers, daily wage laborers, entrepreneurs, development practitioners, educators, students and municipality and government officials



FIGURE 1: SANIFOAM FRAMEWORK

Focus	Opportunity	Ability	Motivation
Target population	Access/availability	Knowledge	Attitudes and beliefs
Desired behavior	Product attributes	Skills and self-efficacy	Values
	Social norms	Social support	Emotional/physical/ social drivers
	Sanctions/ enforcement	Roles and decisions	Competing priorities
		Affordability	Intention
			Willingness to pay

* Devine, J. (2009), Introducing SaniFOAM: a framework to analyze sanitation behaviors to design effective sanitation programs, Water and Sanitation Program, WSP, Washington, DC, USA

■ Gender roles in sanitation were highly separated. Women bear most of the responsibilities related to cleaning and emptying. In large households with frequent toilet use, confusion around cleaning

responsibilities was a major barrier for a clean and functional toilet, with regular cleaning necessary to maintain hygiene. Findings also demonstrate nominal cases in some wards of the Terai region where daughters-in-law are



not allowed to use the same toilet as their father-in-law or brother-in-law. However, this barrier to access has decreased significantly over recent years with shifting social norms.

- Unclean toilets are one of the key reasons some people still prefer to defecate in the open. Seeing households with toilets continue to defecate in the open worked as a determinant for households not motivated to build toilets themselves. Many participants believed that having and using their own toilet is key to household sanitation and were aware of the importance of toilet emptying. Most said that every user should clean the toilet after every use. Despite having toilet cleaning kits, failure exists to translate knowledge into practice.

The study found that the primary motivator for building a toilet was the feeling of dignity and pride associated with using one's own facilities in private, without facing humiliation while heading to a river or farms for open defecation. Participants also mentioned the safety and security of women, avoiding the risk of snake bites or attacks by animals at night, and avoiding the risk of physical injuries while going out in the dark, as motivators.

Faecal Sludge Management

A major challenge in urban sanitation is the collection, treatment and disposal or reuse of faecal sludge. Adequate facilities and services for the collection, transportation, treatment, and disposal of faecal sludge do not exist in most Nepalese cities and towns. Most on-site sanitation systems (OSS) are emptied manually, or they overflow into drains, risking environmental and public health.

FSM practices and OSS can be better supported by understanding the behavioural determinants and consumer preferences for these services. The study found several barriers related to FSM, including the unaffordable cost of desludging services, a lack of desludging providers, and a lack of technical knowledge on pit emptying and safe FSM practices.



What is Faecal Sludge Management?

Faecal Sludge Management (FSM) is the process by which faecal sludge is contained, collected, transported, treated, and then safely disposed of or reused. In urban cities, people are dependent on on-site sanitation facilities like pit latrines and septic tanks. In rapidly growing cities, FSM is a growing challenge, generating significant negative public health and environmental risks if not managed and treated properly before disposal. FSM must be an integral part of every city sanitation plan.

- The study found both a lack of knowledge on the safe way to empty pits, and proper kits or equipment for desludging. In large family households, where septic tanks filled quickly, only a few used professional desludging services to empty them. Some households used traditional methods to empty their pits, using buckets to extract sludge to carry over their heads, and dispose of nearby (such as on farms, open spaces, water bodies, or open drains), or employed traditional emptiers (manual scavengers). Others dug an additional pit, letting the older (full) pit dry to be used as soil conditioner, or used kerosene

to dry out the sludge to then dispose of. In some cases, the container was not filled after 10 to 15 years of use because sludge was absorbed underground in a pit latrine.

- The study also found issues with availability and access as well as the unaffordability of professional desludging services. Participants indicated that the process for commissioning them was lengthy, involving a visit to the municipality office to place a request, deposit cash in advance, and then get the service provider's contact details. Only once the service was confirmed could they be in the queue for scheduling. Participants believe that private operators are easier to deal with, but the cost of services are much higher. Once confirmed, the service was not prompt nor completed satisfactorily, with pits not completely emptied.

Respondents were motivated by value and dignity to clean and empty pits regularly and use professional desludging services. They stated that professional desludging services could create *model neighbourhoods* without foul smells and free them from shame. They also highlighted that safe desludging could prevent any potential health risk and disease spread.



What is Solid Waste Management?

Solid Waste Management (SWM) is the collection, treatment, and disposal of solid material that is discarded because it has served its purpose or is no longer useful. Improper disposal of municipal solid waste can create unsanitary conditions, and these conditions in turn can lead to pollution of the environment and to outbreaks of vector-borne disease.

Solid Waste Management

Managing solid waste is a major challenge of urbanisation. The absence of facilities such as garbage containers can cause people to engage in unsafe waste disposal in rivers, forests, and secluded roads.

The study found that the benefits of segregating mostly determined the behaviours of waste separation.

- In farming communities, waste was separated to use as compost, and participants knew about segregating organic from inorganic waste. For instance, they saw biodegradable kitchen waste as useful for the households

engaged in farming.

- In urban market areas, waste was not separated due to a lack of space and interest. However, in these areas, there was an interest in collecting solid waste, particularly recyclables such as bottles and plastics, to sell to commercial waste collectors popularly known as Khaali Sisi (empty bottle collectors).

In general, the study found that municipal offices were responsible for the regular collection and transport of the waste, particularly in market areas. Households had certain expectations of municipal solid waste management services, some of which they felt were not being met. Alongside regular collections, they expected abundant waste bins, designated dumping sites, better road access for collection vehicles and regular street cleaning services. In semi-urban areas, solid waste collection was not as frequent as in main market areas due to less waste volume. The study found that municipality officials believed that enough bins were provided, and collection was consistently done.

Participants indicated that proper solid waste management helped them to keep their houses clean and lead healthy lives. As well as reliable services from the municipality and emptiers, other factors would motivate them to be more



organised about solid waste management, including:

- Proper training on how to separate waste to help participants understand what they need to do
- Abundant waste bins in neighbourhoods to help people safely dispose of their waste
- Regular cleaning campaigns, organised by municipality and ward offices, and other organisations, to bring the community together and motivate households.
- Involve or consult people with disabilities when building or improving toilet facilities to ensure toilets are user-friendly and comfortable for everyone.
- Maintaining, cleaning, and improving toilets should be everyone's responsibility, to maintain the health, comfort, privacy, safety, and social respect of all.
- Pits should be emptied every three to five years, even if they are not full, to maintain hygiene and avoid desludging difficulties such as hardened sludge.
- Municipalities should organise cleaning campaigns and training for effective SWM and encourage communities to come together to keep their environment healthy and clean.
- Service providers should provide high-quality, affordable pit emptying services accessible to all.

Participants demonstrated their willingness to pay for their expected solid waste management, including regular, scheduled solid waste collection and the provision of public bins, if the cost was affordable.

Next steps

Based on the findings of the study, the below recommendations should be considered to support sanitation behaviours on the access and use of toilets, FSM and SWM at the household level:





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In Nepal, within the programme SNV is promoting city-wide inclusive development so that WASH facilities will be safe, accessible, and usable by everyone.

SNV

SNV is a not-for-profit international development organisation that makes a lasting difference in the lives of people living in poverty by helping them raise incomes and access basic services. Focusing on three sectors – Agriculture, Energy and Water, Sanitation and Hygiene (WASH) – SNV has a long-term, local presence in over 25 countries in Asia, Africa and Latin America.

Photos © Geruwa, Nepalgunj

- P1:** Small group meeting with communities
- P2:** Demonstration of hand washing
- P3:** Hygiene kit distribution in Nepalgunj
- P4:** Door-to-door BCC visits
- P5:** Door-to-door monitoring visit
- P6:** Sharing household level sanitation indicators in a Nepalgunj community
- P7:** Toilet monitoring
- P8:** Street drama on World Toilet Day
- P9:** Infection prevention BCC meeting in Nepalgunj

For more information

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