How we define ‘safely managed’ and why it matters for FSM

Freya Mills[1], Juliet Willetts[1] and Antoinette Kome[2]
[1] Institute for Sustainable Futures, University of Technology Sydney
[2] SNV Netherlands Development Organisation

Safely managed – a common goal but different objectives

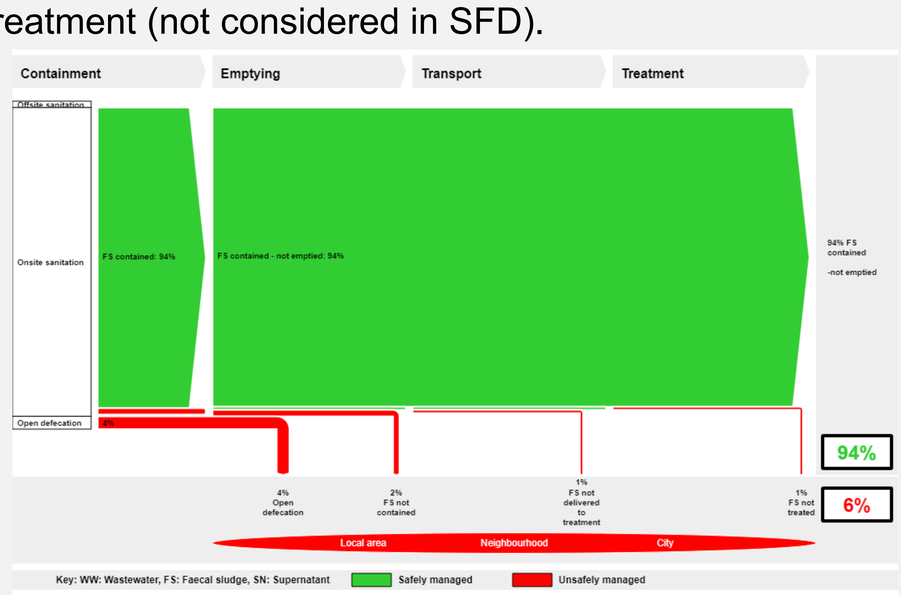
’Safely managed’ sanitation is central to the SDGs, however in many cities deciding on appropriate investments to move from ‘basic’ to ‘safely managed’ is challenging and confusing. One reason is that **‘safely managed’ can be interpreted from different perspectives, namely health, environmental or service delivery**. This choice influences the scope, assumptions, assessment and outcome. This is particularly important for FSM, as not all typically implemented improvements necessarily increase ‘safe management’. For instance, common FSM service improvements such as shifting from manual to mechanical emptying; improving health and safety practices; and increasing emptying frequency; are unlikely to directly impact the current assessments of ‘safe management’.

This poster shares the underlying principles, approach and conclusions of the different interpretations of “safely managed” considered in the JMP ladder, the shit-flow diagram (SFD) and SNV’s impact assessment frameworks. It aims to raise discussion on **assumptions embedded in these assessments with regards to FSM, and how they influence prioritisation and investment in sanitation improvements.** To provide an example of the impact of these different perspectives and underlying assumptions of “safely managed” sanitation, **the baseline data from a city in Africa was analysed with the three different approaches resulting in the varied outcomes below**. Data collected by SNV in the USHHD programme in 2018.

The varied interpretations of safe

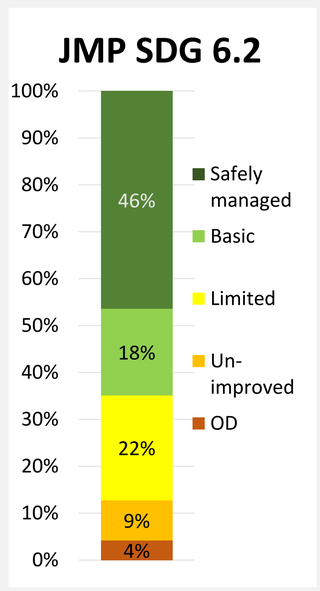
SFD – Environmental perspective

An assessment of the flows of faecal waste and whether they are discharged untreated to the environment = unsafe; or **contained, conveyed and treated (or safely disposed/covered pit) = safe.** It is focused on an environmental perspective rather than access or health. The following are not considered: shared or private access, unimproved superstructure (slab, access to flies), frequency or safety of emptying, exposure to treated wastewater. For on-site sanitation, the groundwater risk assessment is influential in the overall score for many cities. While the example below shows a very safe score due to particularly deep groundwater despite only 1% of containments every emptied and no treatment plant. Other cities had very unsafe scores when >25% households use groundwater for drinking despite use of protected bores and potential pre-drinking treatment (not considered in SFD).



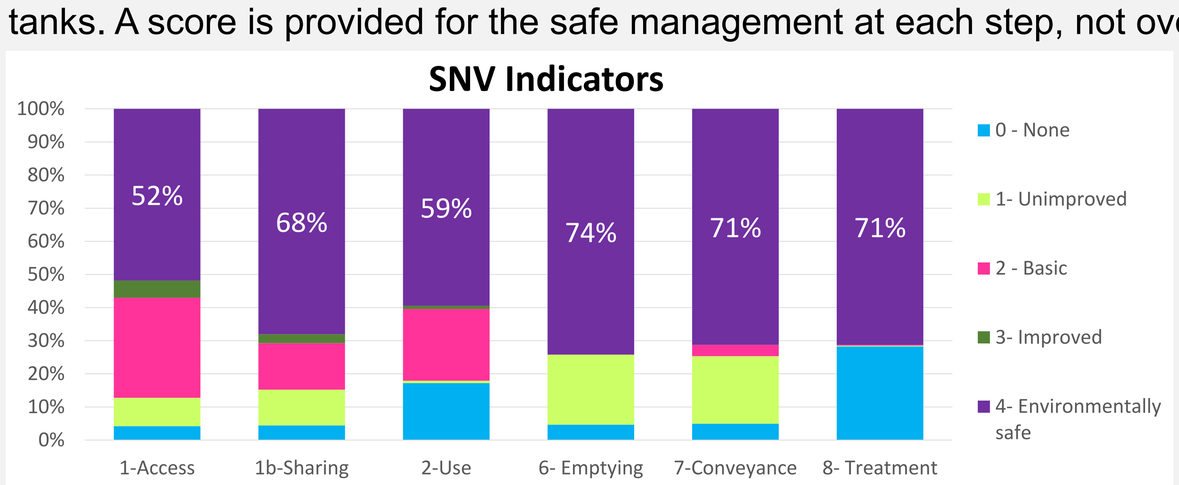
JMP – Access to toilet and treatment

The JMP ladder is based on achieving the human right to sanitation, which at a base level is private access to “improved” sanitation, which considers the toilet user interface and sharing (WHO and UNICEF 2018). The highest objective of **safe management requires that faecal sludge is disposed in-situ or emptied and delivered to treatment off-site, with both solid and liquid fractions treated**. It does not consider the function or safety of systems and services (e.g. manual emptying). Use of shared sanitation resulted in a reduced proportion of safely managed than the SFD, this provides little incentive to improving safe management in these areas as well as other concerns raised by the sector on shared (e.g. Evans, 2017; Kempster, 2018.)



SNV Monitoring - Services and safe practices

Designed to monitor a city’s status and each step of the sanitation service chain, SNV’s urban sanitation monitoring framework includes consideration of **functionality, use, health and safety aspects** (SNV, 2018). It considers if containments are emptied in a timely manner, rather than only if sludge is ever emptied, allowing for an assessment of the emptying market and service gaps and identification of pollution risks from unemptied septic tanks. A score is provided for the safe management at each step, not overall.



Example: Treatment exists and receives flows but not functional

What this means for FSM in practice?

These different assessments of “safely managed” could drive different investment and prioritisation in sanitation improvements, often without full consideration of the assumptions and perspectives behind them. As discussed in Kempster (2018), **assessments and targets can be perverse incentives – driving change to primarily achieve the benchmarks set for monitoring purposes, and risking leaving certain populations or service improvements behind in favour of those that will lead to improved scores**.

This is particularly important for FSM as many best practice solutions will not necessarily result in improved monitoring scores. Caution is therefore needed, since the SDGs and the SFD diagram may appear to present ‘truths’, and ideally the embedded assumptions should be more clearly discussed and considered in their use. In addition, **understanding what is ‘safe’ is particularly important in the assessment and improvement of containments, consideration of groundwater risk and effluent exposure, emptying practices and frequency, and final treatment and disposal.**

Credits

Institute for Sustainable Future
University of Technology Sydney
PO Box 123 Broadway, NSW, 20
Australia
www.isf.edu.au
Contact: Juliet.willetts@uts.edu.au

SNV Netherlands Development Organisation
Parkstraat 83, 2514 JG The Hague, Netherlands
www.snv.org/
Contact: akome@snv.org

The work is a collaborative project between SNV and the Institute for Sustainable Futures of the University of Technology, Sydney. It was developed, as part of the WASH SDG programme, with funding from the Dutch Ministry of Foreign Affairs.

KEY REFERENCES

Evans, B.; Hueso, A.; Johnston, R.; Norman, G.; Pérez, E.; Slaymaker, T.; Trémolet, S. Limited services? The role of shared sanitation in the 2030 Agenda for Sustainable Development. J. Water Sanit. Hyg. Dev. 2017, 7, 349–351.

Kempster, S. and Huesco, A., 2018. Moving Up the Ladder: Assessing Sanitation Progress through a Total Service Gap Water 2018, 10(12), 1735;

SNV, 2018. SNV USHHD Program Baseline Reports: Bangladesh, Nepal, Indonesia, Tanzania, Zambia. SNV, Den Haag.

WHO and UNICEF, 2018. JMP Methodology 2017 Update and SDG Baselines. WHO, Geneva.