

82. Comparative analysis of excreta pathways in view of sanitation investment for the period 2018 to 2023. a case study of Naivasha Sub-County, Kenya

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Abstract

Shit Flow Diagrams (SFDs) have been used as decision-making tools to not only help manage large volumes of excreta in cities and towns but also to accelerate the achievement of universal access to safely managed sanitation. This study aimed to employ the use of an SFD to evaluate the influence of sanitation projects done over 6 years (2018 - 2023) in Naivasha Sub-County on the excreta flows. An SFD done in 2017 showed that only 22% of excreta in the sub-county was safely managed. Since then, several sanitation projects such construction of new toilets and the upgrading of the existing sewer system. have been implemented in the region, but there is a lack of understanding of the current excreta management practices, as well as the impact of sanitation investment projects on excreta pathways. Conducted in Naivasha Sub-County, a rapidly growing town in Nakuru County with over 350,000 residents, this study employed a descriptive comparative research design. Data was collected through desk research, field observations, key informant interviews, and household surveys involving a sample of 365 households. The data was used to prepare an updated SFD illustrating the current excreta pathways in the sub-county. The results were then compared to the 2017 baseline SFD to identify changes resulting from the sanitation projects. The updated 2024 SFD shows improvements in faecal sludge and wastewater management, with 25% now safely managed – an improvement of 3% from the 22% safely managed in 2017. This improvement can be attributed to investments in the containment, emptying, and transport stages of the sanitation service chain. However, the relationship between the amount invested and the change in pathways is not direct. This highlights the need for balanced investments across all stages of the sanitation service chain to achieve overall sanitation goals. Naivasha Sub-County's progress, though notable, shows that if the trend in sanitation investments continues as business-as-usual, the target of achieving SDG 6.2 by 2030 will not be achieved, let alone reaching the projected global sanitation coverage of 67%. This, therefore, underscores the need for accelerated efforts and increased investments to achieve the universal access to sanitation, in line with the UN recommendations.

Keywords: Sanitation investments, Shit Flow Diagrams (SFDs), Excreta management, Naivasha Sub-County, Sustainable Development Goals (SDG) 6.2