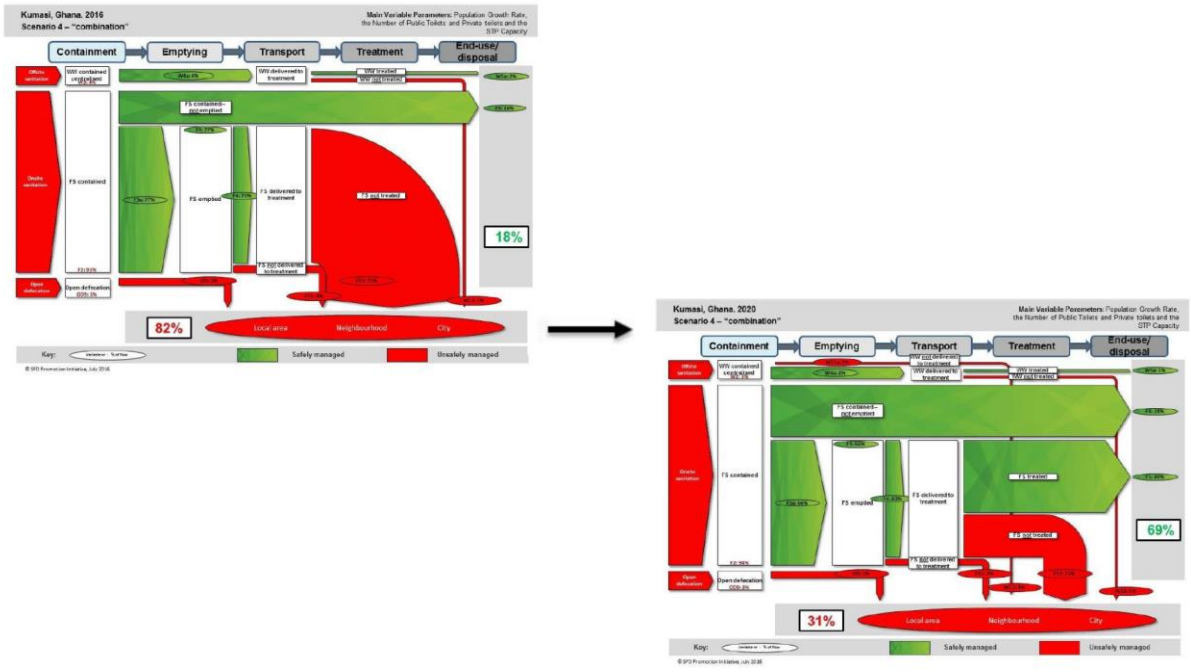
SFD Thinking

Spreading the knowledge through Scenario SFDs in Ghana



After exploring the potential of SFDs in predicting the impact of sanitation investment projects across the sanitation service chain, a new feature was developed called “trend graphs” or “Scenario SFDs”. It allows visualizing different scenarios and giving an outlook on what the situation could look like in the future and what could be achieved through specific investments or activities. The spreading of knowledge is crucial to make changes happen and Scenario SFDs can be a powerful tool to gain attention and generate awareness.

SFD Thinking: Spreading the knowledge through Scenario SFDs in Ghana

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Link to SFD report: http://sfd.susana.org/sfd-worldwide/cities/14

Introduction

In 2015, as part of the SFD Promotion Initiative, the SFD for Kumasi was developed by the Water, Engineering and Development Centre (WEDC) and the Kumasi Municipal Assembly (KMA) (Furlong, 2015). As a good relationship was established with KMA and thanks to the enthusiasm of stakeholders during the process, WEDC decided to continue working in Kumasi, based on the experience gained from the SFD process. The Master of Science dissertation "Using the SFD methodology for modelling future scenarios in Kumasi, Ghana", explored the potential of SFDs in predicting the impact of sanitation investment projects across the sanitation service chain. As a result, a new feature was developed called "trend graphs" (Fernandez-Martinez, 2016).

Different variations of Scenario SFDs predict the change in safely managed sanitation

Fernandez-Martinez created four different scenarios of trend graphs depending on the predicted project implementation.

The graphics below are one of the examples of a scenario-based analysis for year 1 (2016) in Figure 1 and year 5 (2020) in Figure 2. The scenario 4 is a combination of two scenarios, which were based on different project proposals. It is a combination of the project "A toilet in every compound" combined with "Rehabilitation of the Fecal Sludge Treatment Plant (FSTP)" and the "Public Toilet Project". The trend graph predicted for scenario 4 in 2020 shows a change in the amount of population who safely manage their excreta flow due to the functioning of the FSTP. This can be seen in the great change of the percentage of "fecal sludge (FS) delivered to treatment, but not treated". However, it was analyzed, that more FS will be contained, because the trucks do not have the capacity to meet the demand.

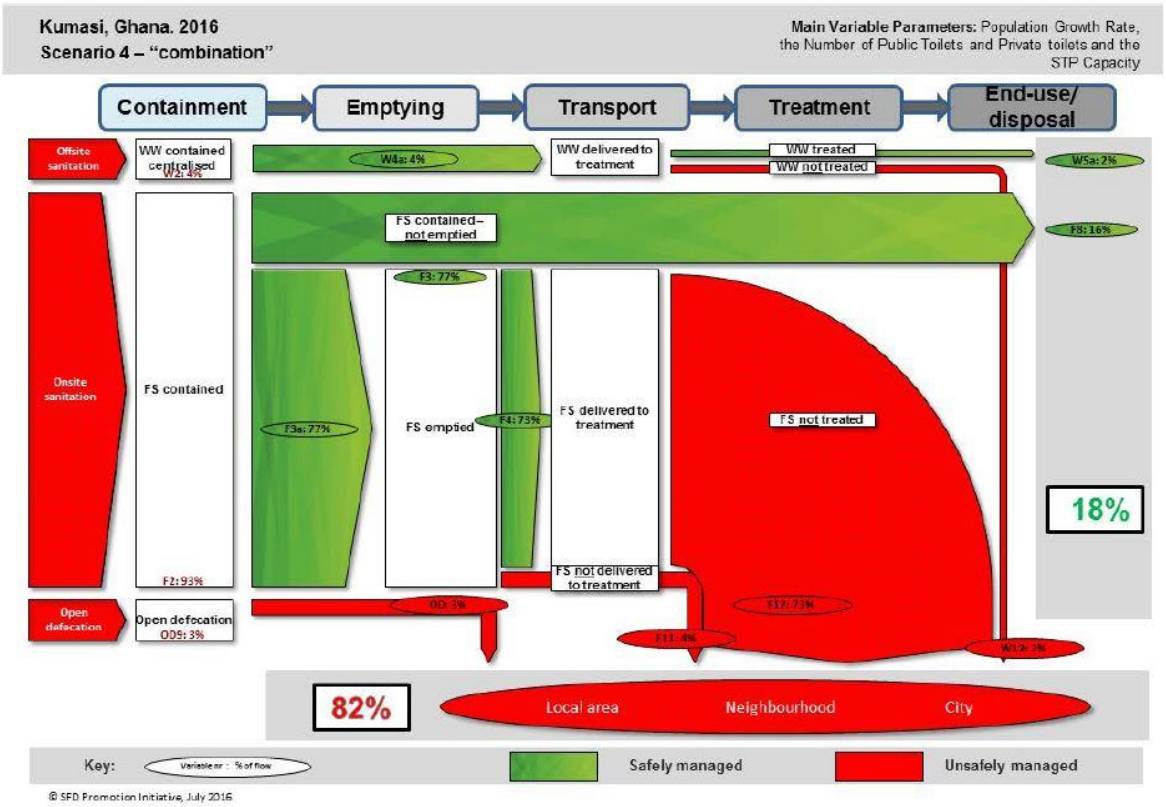

Figure 1: Scenario SFD for Kumasi – Scenario 4 for year 1 (2016) (Fernandez-Martinez, 2016).

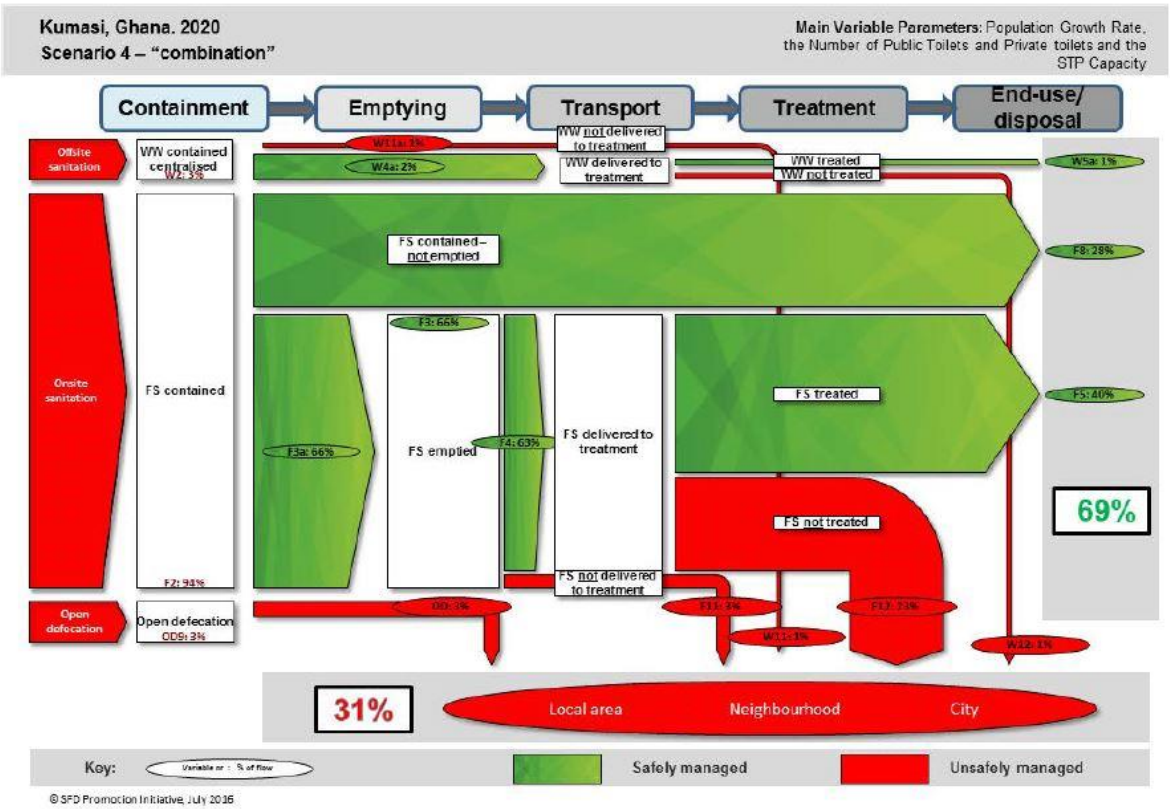

Figure 2: Scenario SFD for Kumasi – Scenario 4 for year 5 (2020) (Fernandez-Martinez, 2016).

The SFD report produced for Kumasi inspired WaterAid to include Kumasi as a case study in their report "A tale of clean cities: Insights for planning urban sanitation from Ghana, India and the Philippines". The main objective of their study was to identify the key drivers and factors that shape sanitation service in Kumasi (Tiberghien, 2016).

Additionally, during the time of developing these SFDs, the Manager of the Waste Management Department at KMA, with whom WEDC had worked extensively, moved to the Accra Metropolitan Assembly (AMA). From his involvement in the SFD process in Kumasi he was inspired to develop another SFD for AMA. This led to WEDC supporting a Public Health Engineer from AMA in producing an SFD for the AMA area and in testing the methodology developed to predict the impact of sanitation investment, which he is exploring in his MSc dissertation.

This case story highlights how the SFD process is being used by both academics and practitioners to visualize different sanitation scenarios, how its use is geographically spreading and how the reports, which have been developed, are used to inspire more research into city sanitation.

References

FURLONG, C., 2015. SFD Report Kumasi, Ghana, 2015. SFD Promotion Initiative.

FERNANDEZ-MARTINEZ, L., 2016. Using the SFD methodology for modelling future scenarios in Kumasi, Ghana. MSc Dissertation, WEDC, Loughborough, UK.

TIBERGHIEN, J.E., 2016. A tale of clean cities: Insights for planning urban sanitation from Kumasi, Ghana, India and the Philippines?. WaterAid, London, UK

The SFD Promotion Initiative collects examples and feedback on ways in which SFDs are used. These experiences are documented as the 'SFD Thinking'.

If you would like to tell us your story, send us a message: sfd@susana.org

SFD Thinking are available from: www.sfd.susana.org

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SFD Promotion Initiative