

Using excreta flow diagrams (SFDs) as an integral part of city wide sanitation planning for Indian cities

NEED

Many cities of India don't have a City Sanitation Plan (CSP). The few CSPs that exist today are rarely implemented. One of the major reason for non-implementable CSP is the costly centralised sewerage systems proposed in the plans, despite high dependence of cities on onsite sanitation systems. Hence there is a need to examine the excreta management of the city before proposing any solution.

BRIEF SUMMARY

- » To understand the excreta management of 27 selected cities, SFDs (Shit Flow Diagrams) are developed and introduced at different stages of development of CSPs
- » In all three scenarios, SFDs clearly show high dependence of cities on onsite sanitation systems and extent of untreated waste ending up into the environment
- » CSTF (City Sanitation Task Force) or decision makers get a better understanding of sanitation scenario, based on the SFD



METHODOLOGY

The SFDs are developed for three different scenarios

SCENARIO 1 (S1):

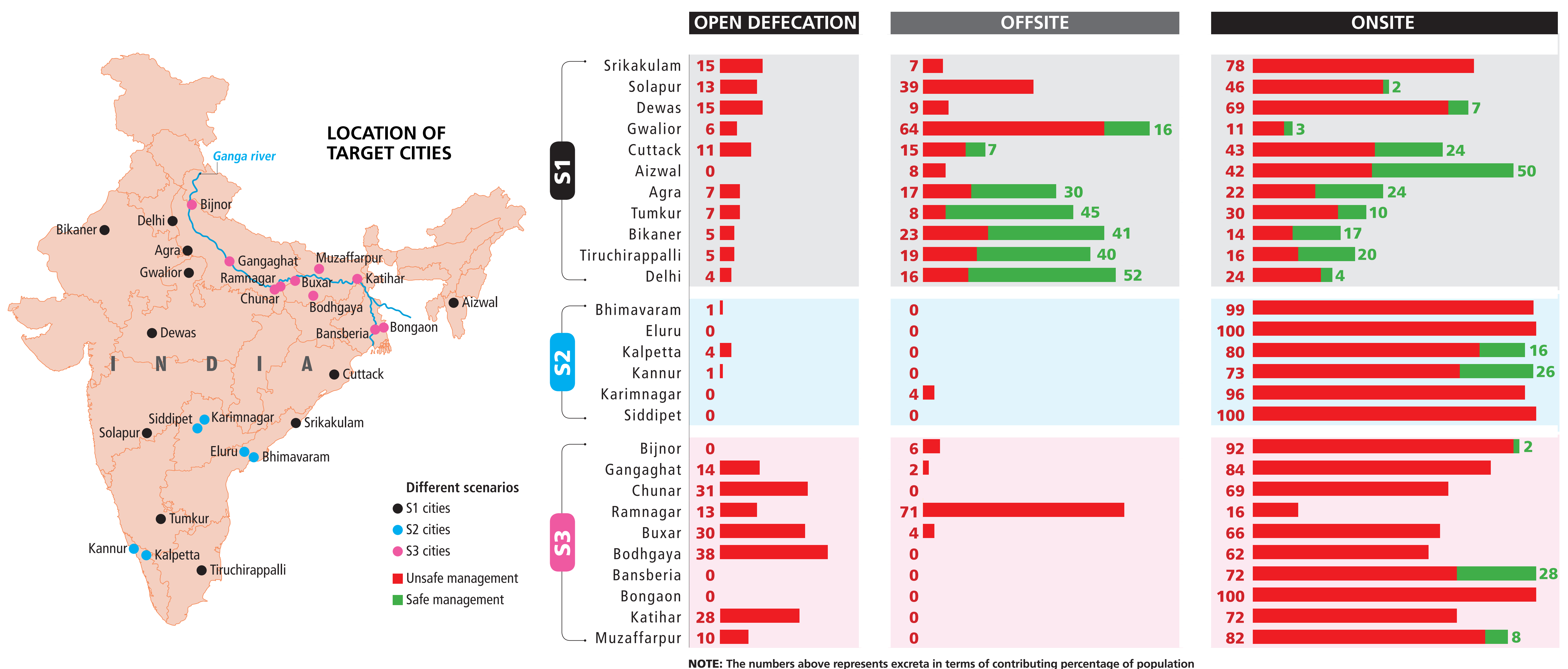
Eleven cities were chosen from different agro-climatic zones of India. Most of the cities already had the CSPs, and neither of them talked about FSSM in their plans

SCENARIO 2 (S2):

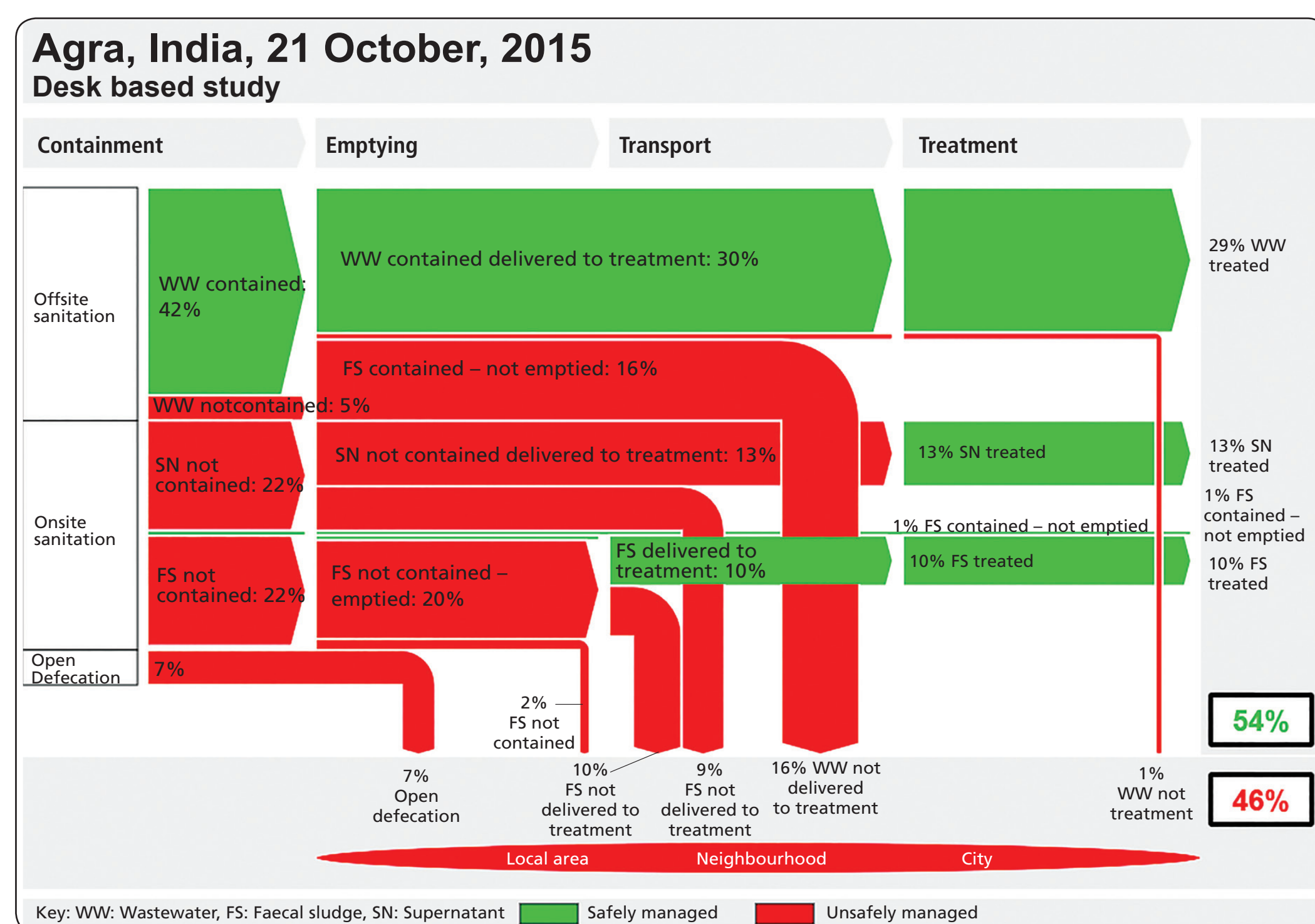
CSE in collaboration with GIZ India did capacity building of ULBs (Urban Local Bodies) for developing CSPs of cities from three southern states. Despite hand holding training none of the cities had FSSM in their plans, hence CSE helped six champion cities to develop SFDs before their CSPs are finalised

SCENARIO 3 (S3):

CSE is doing capacity building of ULBs for developing CSPs of ten small and medium cities in Ganga Basin. CSE in collaboration with the ULBs developed SFDs at the very initial stage of development of CSPs. SFDs are also presented in the CSTF meetings



NOTE: The numbers above represents excreta in terms of contributing percentage of population



WHAT IS AN SFD?

An excreta flow diagram (often described as shit flow diagram, SFD) is a tool to readily understand and communicate visualizing how excreta physically flow through a city. It shows how all the excreta generated is or is not contained as it moves from defecation to disposal/end-use. The SFD report describes the service delivery context of the city and presents the record of data sources used.

IT IS

- » A tool for engineers, planners and decision-makers
- » Based on contributing populations and an indication of where their excreta (septage or sewage) goes
- » A representation of public health hazard
- » An effective communications and advocacy tool
- » An overview to develop sanitation priorities

IT IS NOT

- » Based on actual volumes/mass – these are determined by other related factors
- » A representation of public health risk (risk = hazard x behavior)
- » A precise scientific analytical tool

OUTCOMES

- » SFD turns out to be a good advocacy tool, as the excreta management can be understood at a glance through one diagram
- » SFD along with report can help identify problems in the service delivery
- » The CSTF is already talking about FSSM (Faecal Sludge & Septage Management), in the third scenario, where the SFD is developed and shared at the initial stages of development of CSP
- » Possibility of FSSM to be included in CSP increases if it is based on an SFD



SFD Promotion Initiative - Consortium Partners



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