



Centre for Science and Environment

Promoting excreta flow analysis to inform urban sanitation programming at a city-wide scale in Africa and South Asia

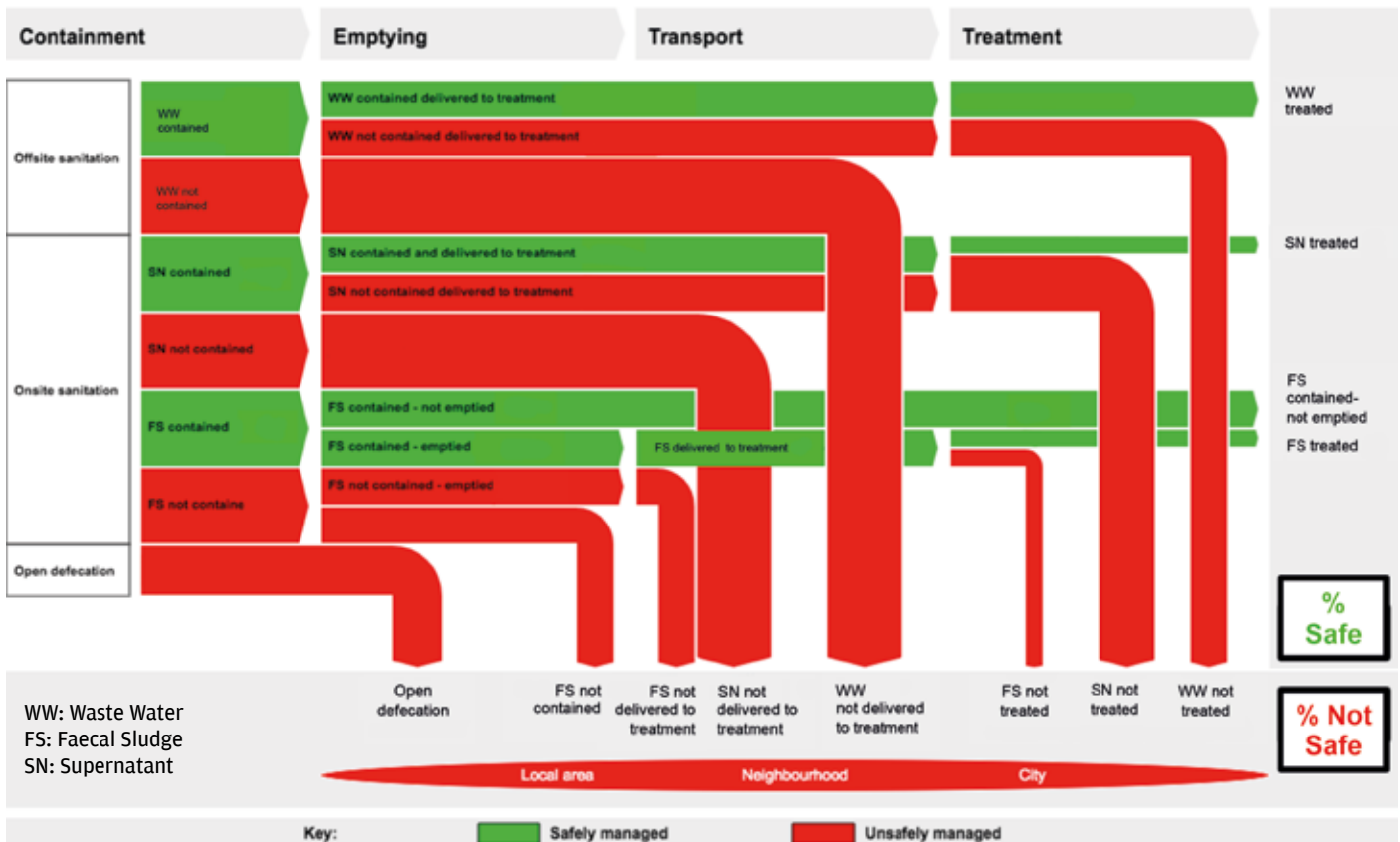


SFD- Shit Flow Diagram

City name and date of production

Desk based / Field based

SFD- Shit Flow Diagram



What is an SFD?

An excreta flow diagram (also often described as shit flow diagram, SFD) is a tool to readily understand and communicate how excreta physically flows through a city or town. It shows how excreta is or is not contained as it moves from defecation to disposal or end-use, and the fate of all excreta generated. An accompanying report describes the service delivery context of the city or town.

It is

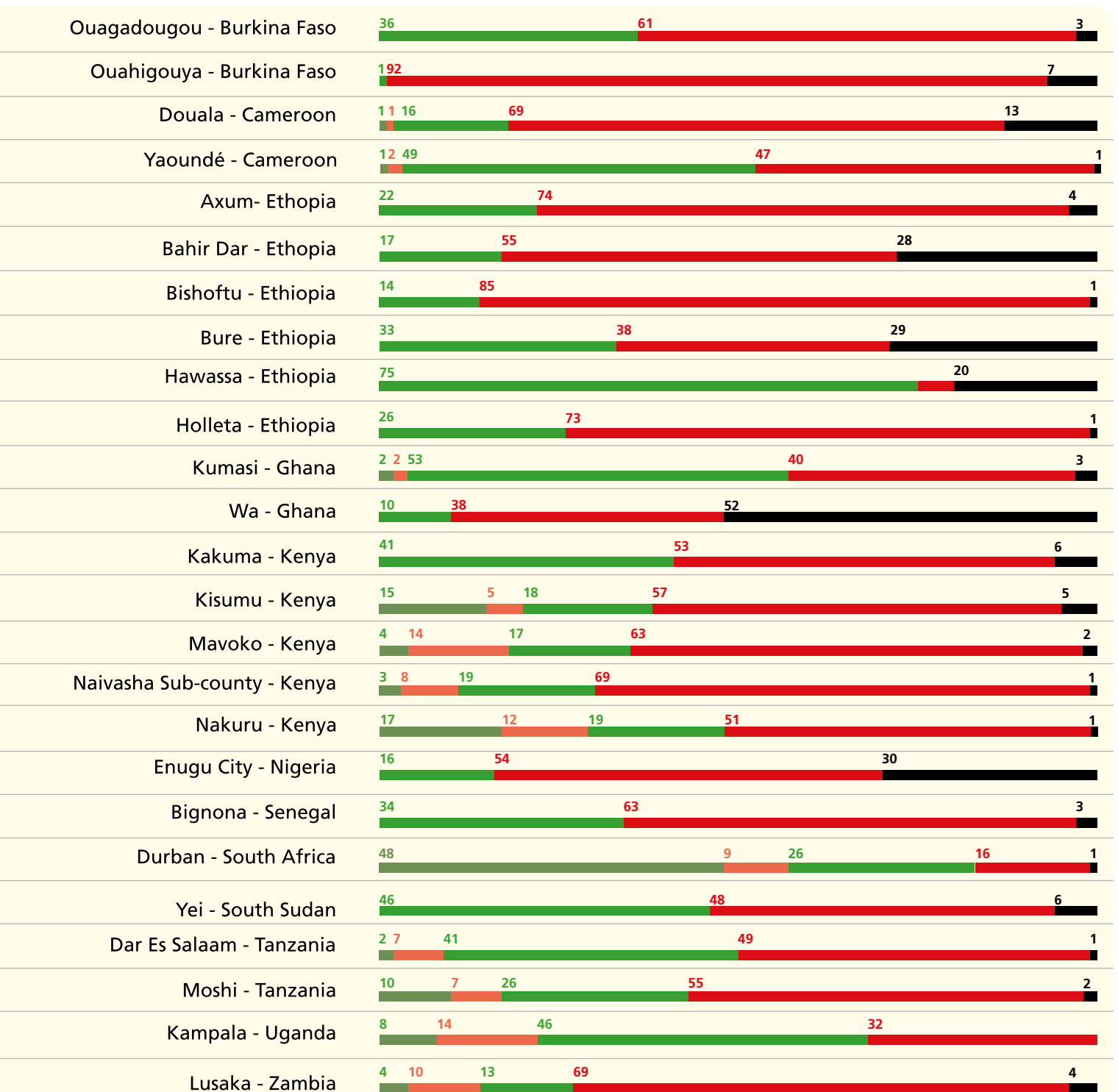
- A tool for engineers, planners and decision-makers
- Based on contributing populations and an indication of where their excreta (septage or sewage) goes
- A representation of public health hazard
- An effective communications and advocacy tool
- An overview from which to develop sanitation priorities

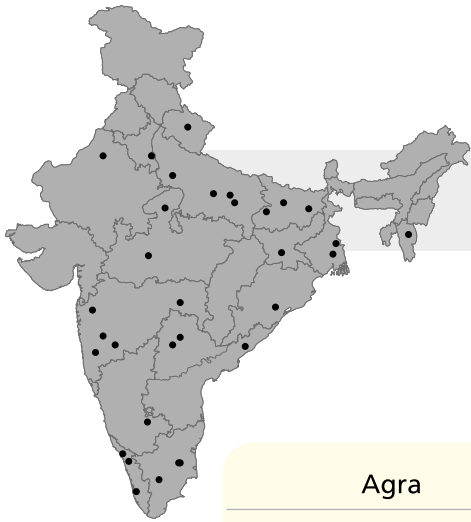
It is NOT

- 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



AFRICA





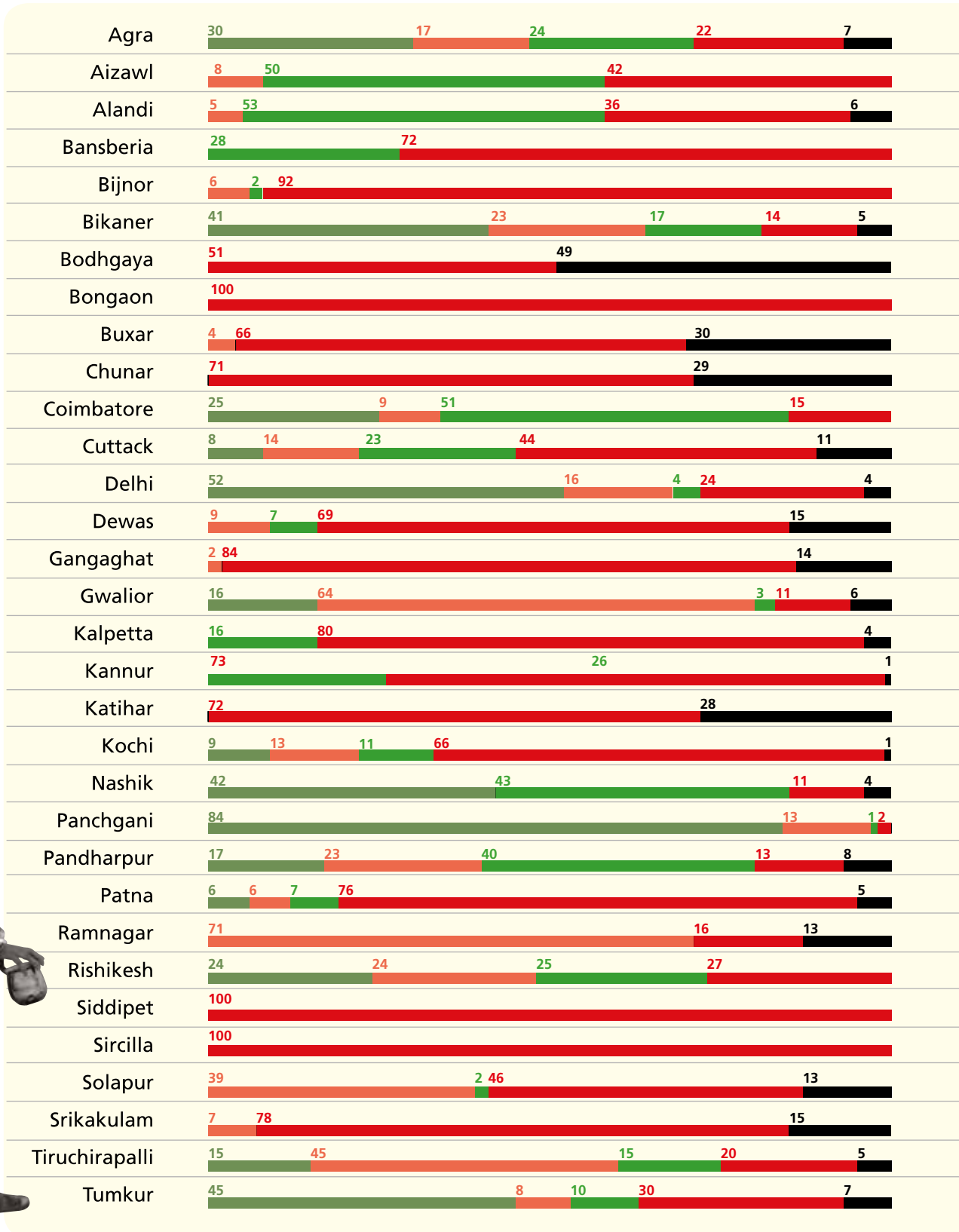
INDIA

Off-site sanitation systems
 ■ Safe disposal
 ■ Unsafe disposal

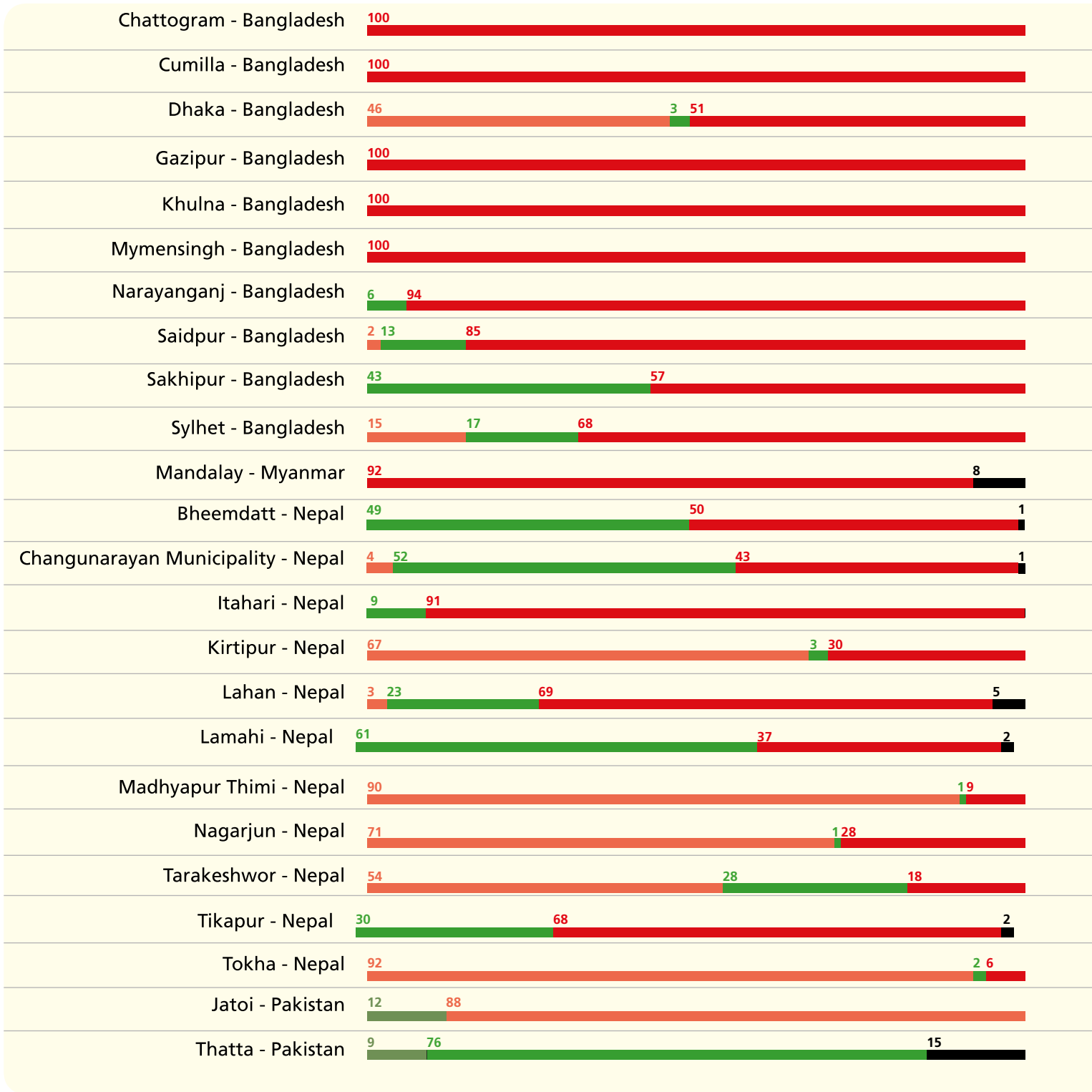
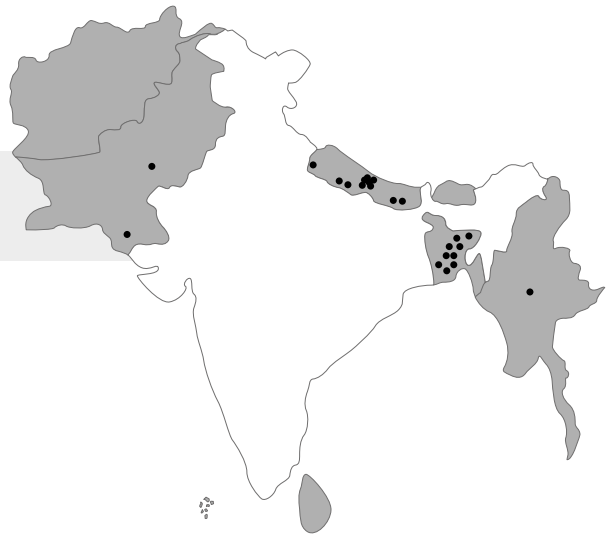
On-site sanitation systems
 ■ Safe disposal
 ■ Unsafe disposal

Open defecation
 ■ Unsafe disposal

All figures in %



SOUTH ASIA



Background

In 2012 -13 the Water and Sanitation Programme (WSP) of World Bank carried out an analysis of excreta management in 12 cities and developed new tools for assessing the context and outcomes relating to the flow of excreta through the city.

Building on this work the centre partnered with SFD PI partners (BMGF, EAWAG, GIZ, University of Leeds, WEDC, World Bank) to develop tools and methods for the production of SFDs and refinement based on feedback received from sector practitioners. The centre has prepared more than 100 SFDs (70 + in Ganga basin states & the rest for other cities in India) and also made a considerable contribution to support the production and review of good-quality SFDs as well as help train practitioners. A demonstrated impact is the uptake of the approach by local, regional and national organizations and governmental agencies – in particular in India, South Africa (WRC with CSE technical support launched a national campaign) and in state / cities in Africa and South Asia, where there is widespread use of SFDs for advocacy and as a tool to map progress across the sanitation value chain.

Purpose of an SFD

SFD is a useful tool to inform urban sanitation programming. It offers an innovative way to engage city



stakeholders like political leaders, sanitation experts and civil society organizations in a coordinated dialogue about excreta management. It is used for advocacy, planning, decision making and is being tried out for monitoring progress and ensuring equity in different parts of the world.

The SFD Promotion Initiative

The main objective of the SFD Promotion Initiative is to continue further development of the SFD approach. This approach includes standardized guidance – a methodology and tools - for the easy production of standardized SFDs, backed by a description of information sources and the enabling environment in the city concerned

The initiative in the last phase aims to bridge the existing gap in availability of data for monitoring safely managed sanitation (SDG 6.2) and for improved citywide sanitation planning and effective sanitation investments in urban areas. The focus will be on

catalysing long term sustainability of the SFD initiative, setting up off-site/remote 'helpdesk services (Africa, South Asia & India), field test & pilot / implement the upgraded SFD tools in selected cities. The result is disseminated via the SFD web portal hosted by the Sustainable Sanitation Alliance (SuSanA) platform (www.sfd.susana.org)

About CSE

Centre for Science and Environment (CSE) is New Delhi based independent public research and advocacy organization that researches into, lobbies for and communicates the urgency of development that is both sustainable and equitable. The centre was set up in 1980 and is globally acknowledged for its intellectual leadership, policy advocacy and capacity building. Some prominent domestic and international awards include Stockholm Water Prize 2005, the Prince Albert II of Monaco Foundation Water Award in 2008, and Indira Gandhi Prize for Peace, Disarmament and Development 2018.

In order to upscale the training and capacity building activities, CSE has established an Anil Agarwal

Environmental Training Institute (AAETI), Nimli at Alwar district of Rajasthan state in India. AAETI aims to strengthen capacities among state and non-state practitioners, and is supported by state-of-the-art research, information services and a platform to interact and exchange ideas on best practices.

Global Water Programme

The water programme of CSE has evolved to help in establish policy principles, innovative technologies and implementation strategies for water and wastewater management in India. CSE has been an important thought-leader in water management sector. It has already influenced global policies and strategies to focus on the need for technologies to augment water resources in a decentralised manner through rainwater

harvesting and to use that water to optimise on benefits.

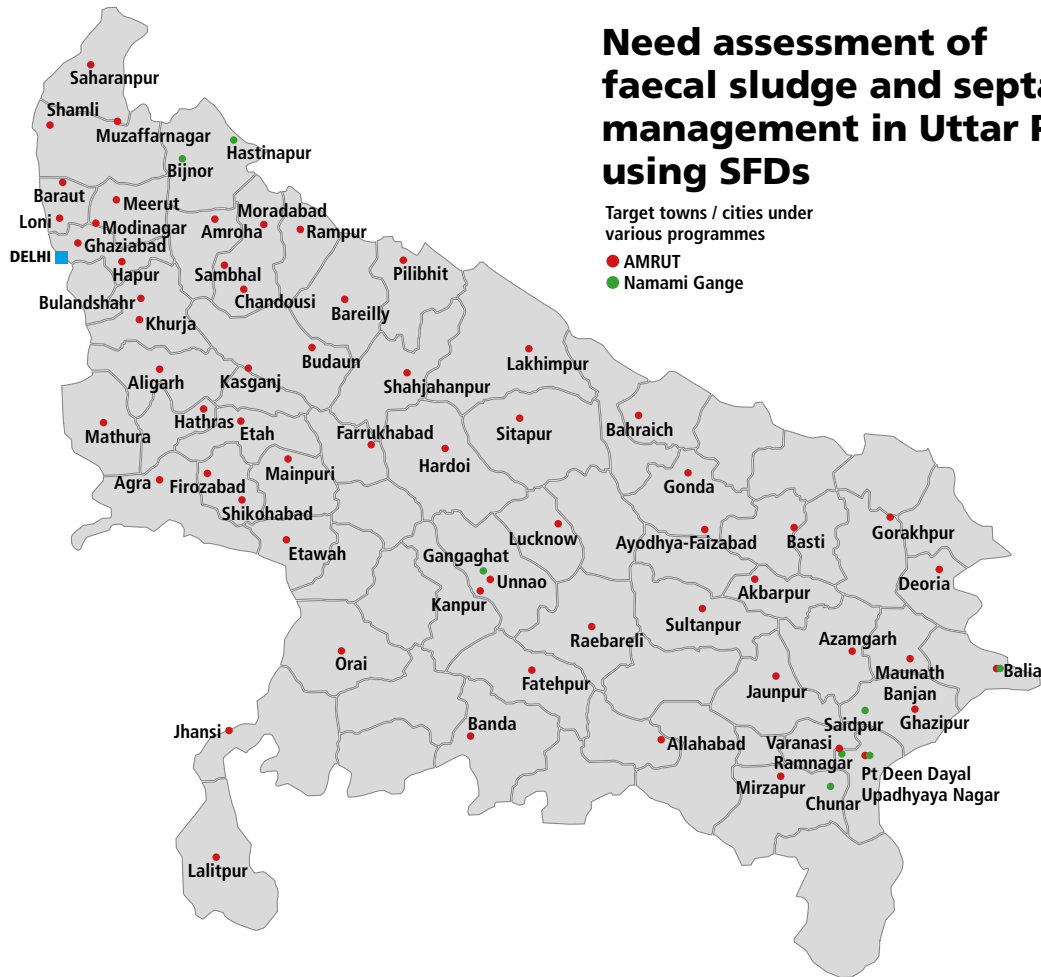
In 2012, CSE had published India's first and most comprehensive survey of water and sewage management titled – 'Excreta Matters'. The data and information was collected from over 71 cities in different agro-climatic zones on all aspects of water management which outlines an approach towards sustainable water and sewage management in Indian cities.

In coming years, the programme aims to share solutions with other countries in global south that are enjoined in a common struggle to find ways of meeting the needs of urban and rural populations in the current water and wastewater paradigm which are affordable and sustainable.

Need assessment of faecal sludge and septage management in Uttar Pradesh using SFDs

Target towns / cities under various programmes

- AMRUT
- Namami Gange



CSE signed an MoU with the state Government of Uttar Pradesh and National Mission Clean Ganga to provide technical support in implementation of faecal sludge management. To understand existing situation of excreta management of cities, CSE has developed SFDs for 66 major cities in U.P. An urban sanitation strategy was developed for improved river health.

PARTNERS:



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SUPPORTED BY:



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Contact for further information

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