What is an SFD?

एस एफ डी क्या है ?

Online Training 'Offsite and Onsite Management of Sewage for Citywide Sanitation,
**13-14 January 2021**

The status quo (यथा स्तिथि)

- **Strong focus on sewerage** by IFIs and governments, but
  (सीवरेज सरकार का केंद्र बिंदु है)

- **Most urban dwellers with sanitation access use on on-site systems:** <30% of urban India has sewer access (शेहरो में मुख्या रूप से ऑनसाईट सैनिटेशन सिस्टम है)

- **On-site systems** are often seen as a temporary solution and therefore neglected by city authorities and poorly managed
  (ऑनसाईट सैनिटेशन सिस्टम को अस्थायी उपाय माना जाता है)

- **Data on sanitation not collected city-wide** so problems not properly identified and prioritized (पुरे शहर का सैनिटेशन डाटा कलेक्ट नहीं किया जाता है, जिससे समस्या का पता लगे)

- **Failure to manage the whole sanitation service chain**
 (सैनिटेशन सर्विस चैन का असफल प्रबंध)

  * A Review of Fecal Sludge Management in 12 Cities. Unpublished report, 2013 World Bank - WSP
** The Missing Link in Sanitation Service Delivery, 2014 World Bank - WSP

A Review of Fecal Sludge Management in 12 Cities

The Missing Link in Sanitation Service Delivery — A Review of Fecal Sludge Management in 12 Cities
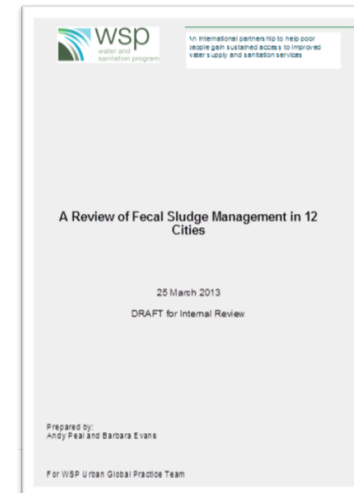
Overview

- What is an SFD? (एस एफ डी क्या है ?)
- Elements of a SFD (एस एफ डी के मूल तत्व)
- How to read an SFD (एस एफ डी कैसे पढें)
- How to prepare an SFD
- Practical applications of SFDs (एस एफ डी की उपयोगिता)
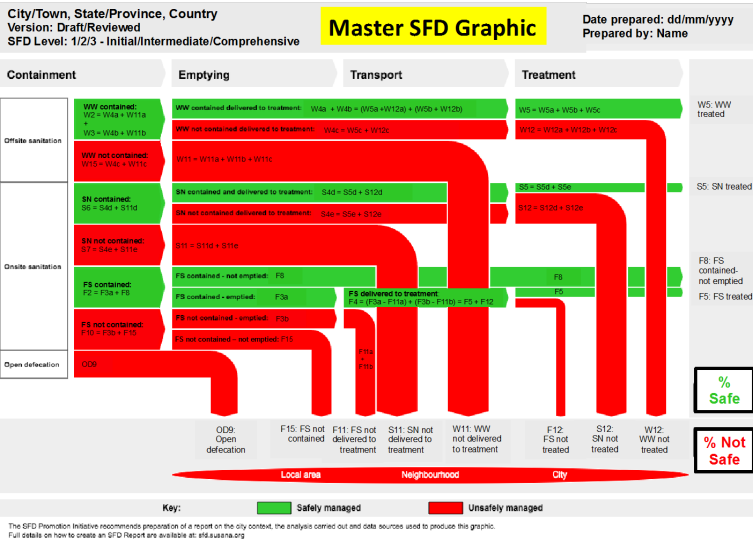
What is a SFD?

(एस एफ डी क्या है ?)

A **diagram** that shows the pathways from defecation to final fate

मलत्याग का अंतिम मार्ग तक का रेखा चित्र

A concise **narrative report** on the service delivery context

सैनिटेशन चैन सर्विस डिलीवरी की संशिप्त रिपोर्ट

A complete **record** of all the data sources

डाटा रिसोर्सेज का पूर्ण रिकॉर्ड

What is an SFD

- An effective communications and advocacy tool to engage city stakeholders like political leaders, sanitation experts and civil society organizations in a coordinated dialogue about excreta management. (एस एफ डी सभी हितधारको को संग्लन करने वाला एक प्रभावी संचार एवं पक्षपोषण साधन है)

- A tool for engineers, planners and decision-makers to inform urban sanitation programming. (एस एफ डी इंजीनियर्स, प्लंनेर्स और निर्णयकर्ताओं के लिए शहरी सैनिटेशन प्रोग्रामिंग बताने का साधन है)

- Based on contributing populations, it gives an indication of where their excreta goes (जनसंख्या संकेत देती है शहर का मल किधर जा रहा है)

- A representation of public health hazard (एस एफ डी सार्वजानिक स्वस्थ्य के जोखिम क प्रितिनिधित्व करता है)

- An overview from which to develop sanitation priorities

Practical applications: (एस एफ डी की उपयोगिता)

- ⃝ Initiate planning at city level (शहरों की योजना बनाने में सूत्रपात)

- ⃝ Pitch for financing sanitation infrastructure (सैनिटेशन इन्फ्रास्ट्रक्चर के लिए वित्त वयवस्था रूप रेखा देता है)

- ⃝ Gaining political support (राजनेतिक सहायता)

- ⃝ Stakeholder involvement (हित्कार्ताओ की भागीदारी)

- ⃝ Coordination of various actors (विभिन्न हित्कार्ताओ के बीच में समन्वय)

- ⃝ Establishing baselines and monitoring progress?? (आधार रेखाओ स्तापित करना और प्रगति की निगरानी)

- ⃝ Etc…

Advocacy at City, State and National level

Component of SFD Report (एस एफ डी के घटक)

Aspects to Assess	Objective	Output
Service Delivery Context **(सर्विस डिलीवरी संदर्भ)**	To identify the status of sanitation service delivery within the urban area (the enabling environment) (शहरों के सैनिटेशन सर्विस डिलीवरी की पहचान करना)	Narrative sections of the SFD Report
Management of excreta through the sanitation service chain **(मल प्रबंध सैनिटेशन सर्विस चैन के द्वारा)**	To identify the proportions of excreta that are safely or unsafely managed through the sanitation service chain (सुरक्षित अवं असुरक्षित मल निकासी की पहचान करना)	SFD Graphic

How to Read SFD..? (एस एफ डी कैसे पढ़ें)

Master SFD
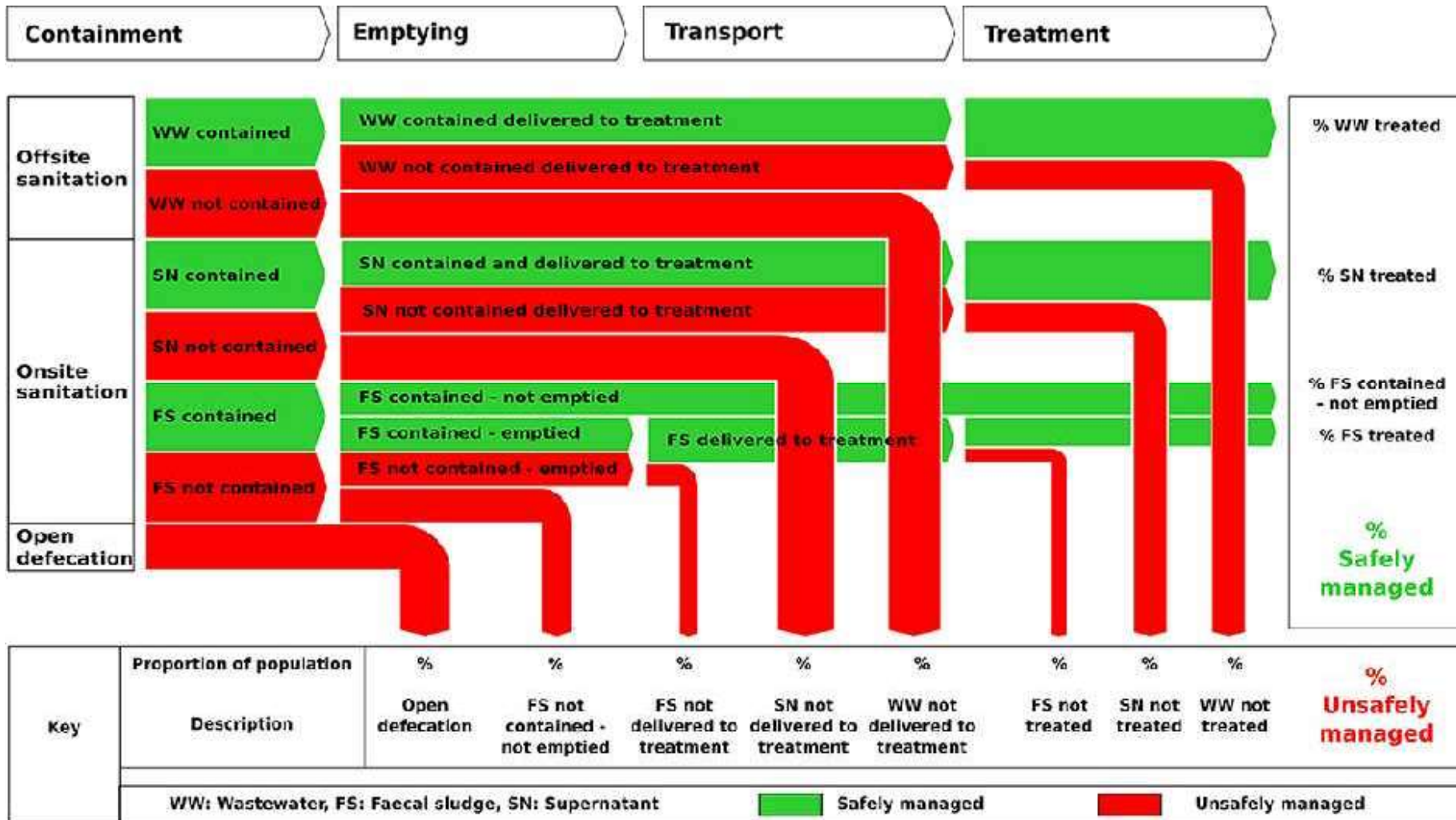
Cuttack, India– 28 July 2015
Version: Reviewed
SFD Level: 2

Date prepared: 28 July 2015
Prepared by: CSE

SFD

Name of City, version and level of SFD

| Containment | Emptying | Transport | Treatment |

Service chain

Offsite Sanitation

Offsite Sanitation

Percentage of population dependent on a sanitation system

Onsite Sanitation

Onsite Sanitation

Open defecation

Open Defecation

Local area   Neighbourhood   City

Key: Variable nr : % of flow   Safely managed   Unsafely managed

Date on which SFD was prepared, and by whom

Date prepared: 28 July 2015
Prepared by: CSE

SFD

| Containment | Emptying | Transport | Treatment |

Offsite Sanitation

Red or Green: Whether the arrows would be red or green is dependent on whether the system at that stage is contained or not.

Contained: Sanitation Technology and/or system which ensures safe level of protection from Excreta i.e. pathogen transmission to the user or general public is limited.

Onsite Sanitation

Not Contained: Sanitation technology and/or system which does not ensure safe level of protection from Excreta. i.e. pathogen transmission to the user or general public is likely.

Open defecation

WW: Waste Water
FS: Faecal Sludge
SN: Supernatant

| Local area | Neighbourhood | City |

Key: Variable nr : % of flow | | Safely managed | | Unsafely managed |

How to prepare a Shit Flow Diagram (SFD)?

Indian SFD Story SO far…
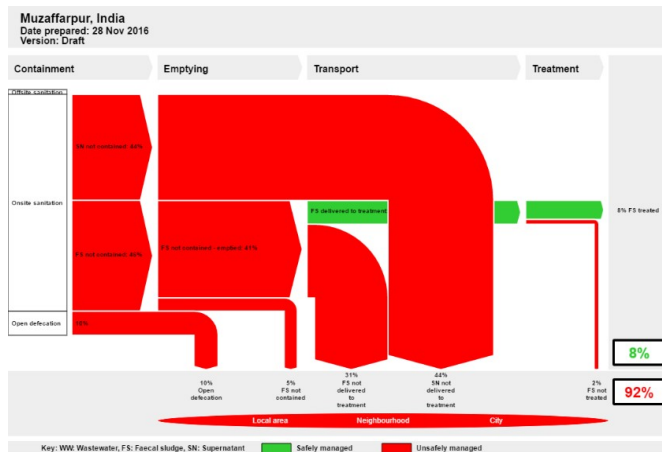### (इंडियन एसएफडी की अबतक की कहानी)

- Tested the methodology of data collection (डाटा कलेक्ट करने की कार्यप्रणाली का परीक्षण)
- More than 500 SFDs (different versions) developed in India, by various agents (भारत में 500 से अधिक एसएफडी विकसित किये गए विभिन एजेंट्स द्वारा)
- CSE developed more than 100 SFDs (सीएसई द्वारा 100 से अधिक एसएफडी विकसित किये गए)
- Used as an advocacy tool to sensitize the decision makers (निर्णयकर्ता के लिए पक्षपोषण करने वाला साधन)
- Done baseline study for developing City Sanitation Plans in Ganga basin (represents almost 40% Indian population) (गंगा बेसिन के शहरों की बेसलाइन स्टडी की गयी शहरव्यापी स्वच्छता योजना विकसित करने के लिए)
- Did analysis of sanitation in Urban Uttar Pradesh (most populous state in India) using SFDs of 66 major cities (शहरी उत्तर प्रदेश सैनिटेशन सैनिटेशन का विश्लेषण किया गया)
- Done baseline study of Hindon river basin through SFDs to decide on the relevant projects (हिंडन रिवर बेसिन की एसएफडी द्वारा बेसलाइन स्टडी की गयी)
- Used SFDs to monitor the progress of cities (एसएफडी द्वारा शहरों की प्रगति की निगरानी)

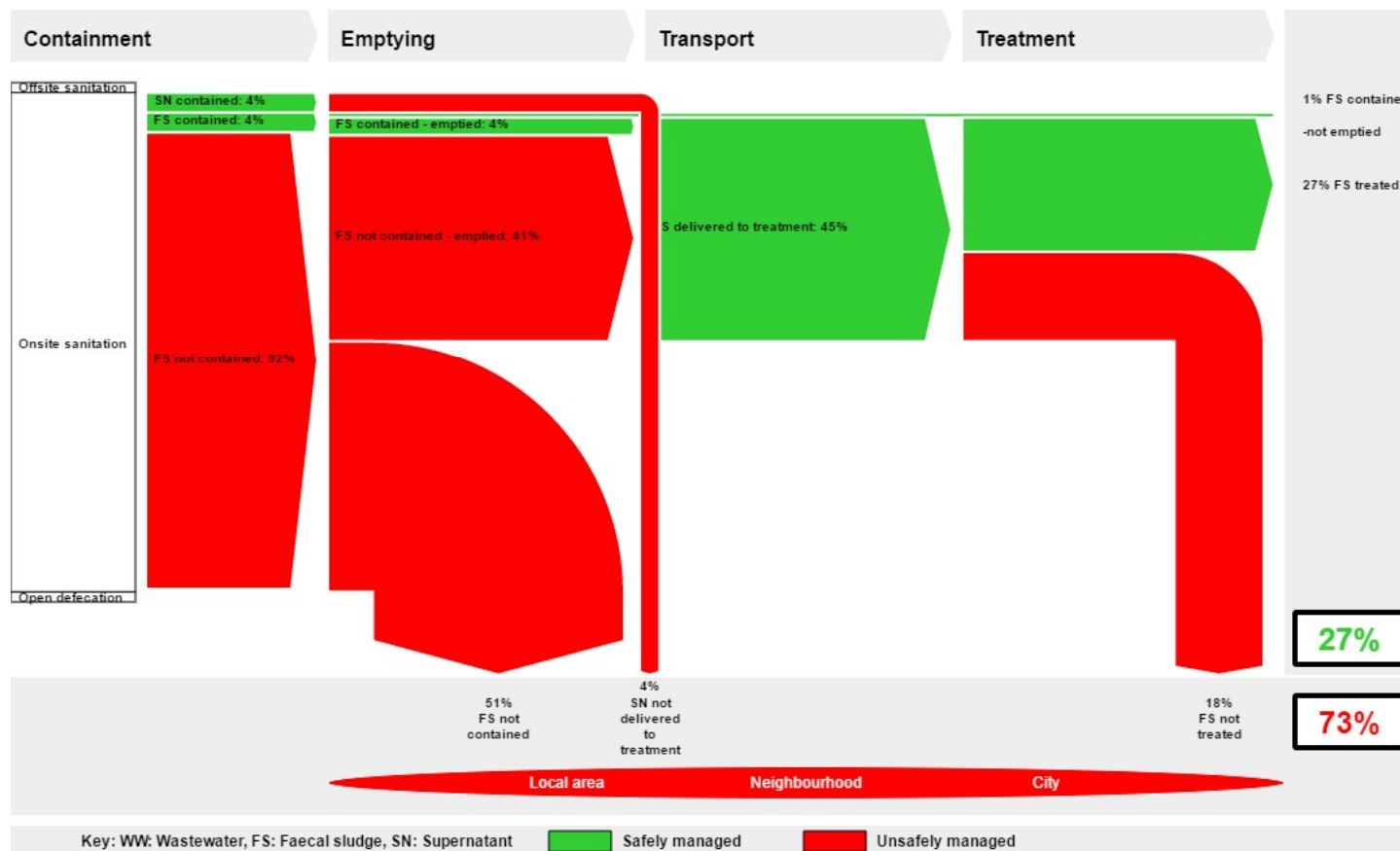# City Sanitation Plan in Ganga Basin Cities, CSE
गंगा बेसिन शहरों में शहरव्यापी स्वच्छता योजना, सीएसई

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.

सीएसई द्वारा गंगा बेसिन के दस छोटे और माध्यमिक शहरों की शहरव्यापी स्वच्छता योजना के लिए शमता निर्माण किया जा रहा है, सीएसई ने यूअलबी के साथ मिलकर शहरों के एसअफडी तैयार किये हैं शहरव्यापी स्वच्छता योजना के आरम्भिक स्टेज में

Bansberia, India
Date prepared: 02 Dec 2016
Version: Draft

| Containment | Emptying | Transport | Treatment |

Offsite sanitation

SN contained: 4%

FS contained: 4%

FS contained - emptied: 4%

1% FS contained
-not emptied

27% FS treated

FS not contained - emptied: 41%

S delivered to treatment: 45%

Onsite sanitation

FS not contained: 92%

Open defecation

51%
FS not
contained

4%
SN not
delivered
to
treatment

18%
FS not
treated

27%

73%

Local area   Neighbourhood   City

Key: WW: Wastewater, FS: Faecal sludge, SN: Supernatant   ▮ Safely managed   ▮ Unsafely managed
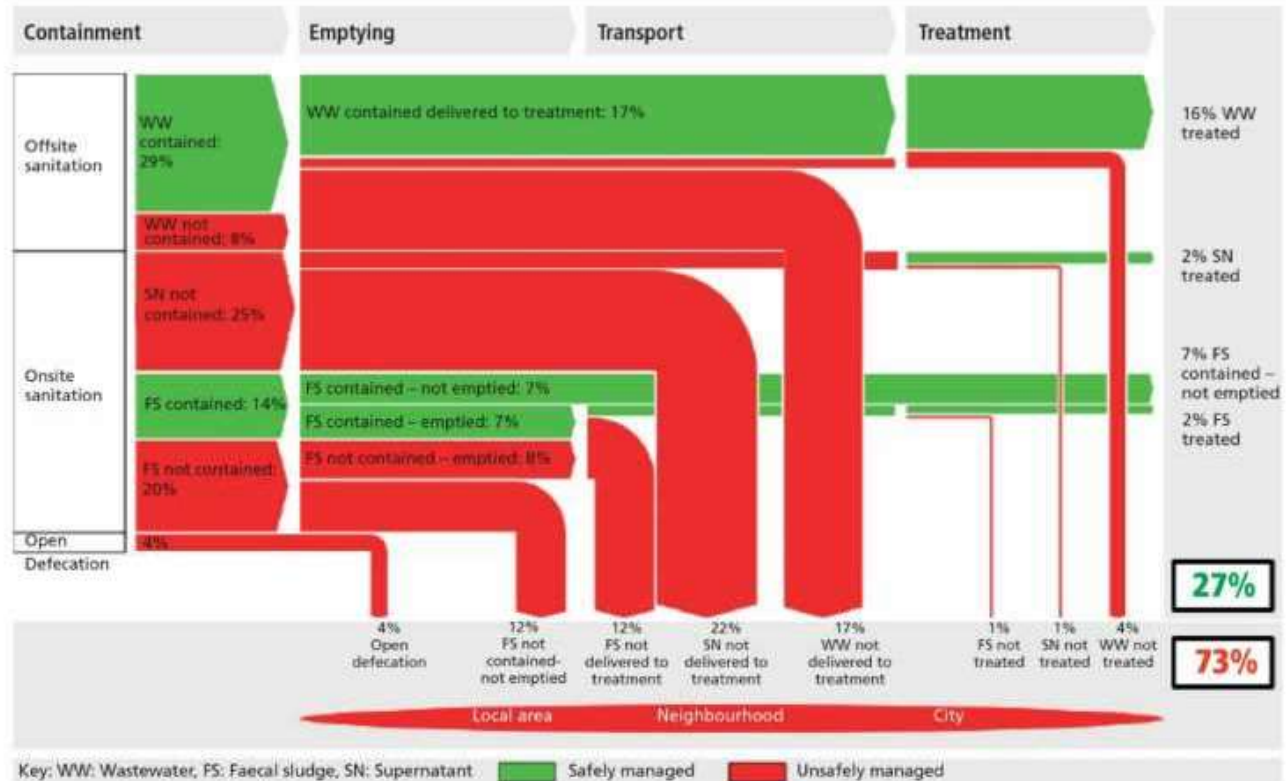
The SFD Promotion Initiative recommends preparation of a report on the city context, the analysis carried out and data sources used to produce this graphic.
Full details on how to create an SFD Report are available at: sfd.susana.org
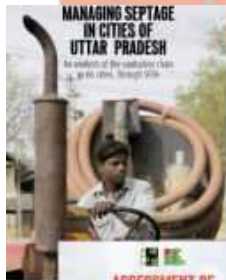
Uttar Pradesh (Urban), India
SFD Level: 2 - Intermediate SFD

Date prepared: 23 December 2018
Prepared by: CSE

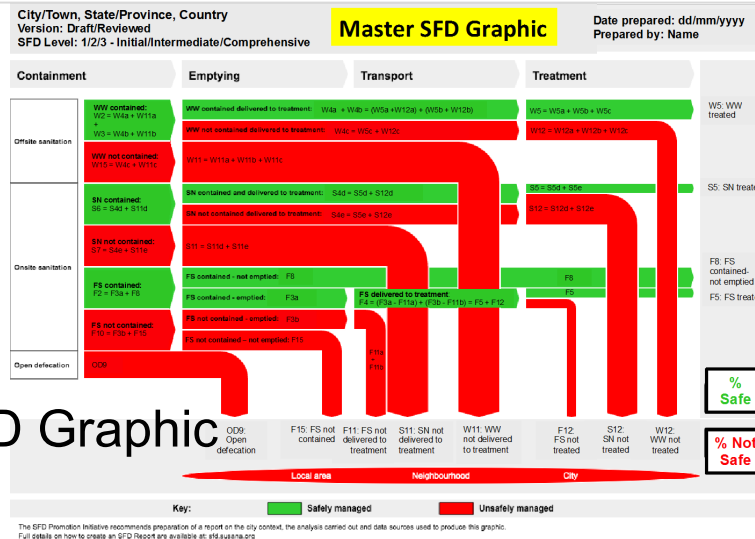CSE's analysis reports released by PS UD at State Workshop &
by the Secretary MoHUA and DG NMCG at SFD Week

SFD Graphic

SFD Report

The SFD helpdesk

sfd.susana.org
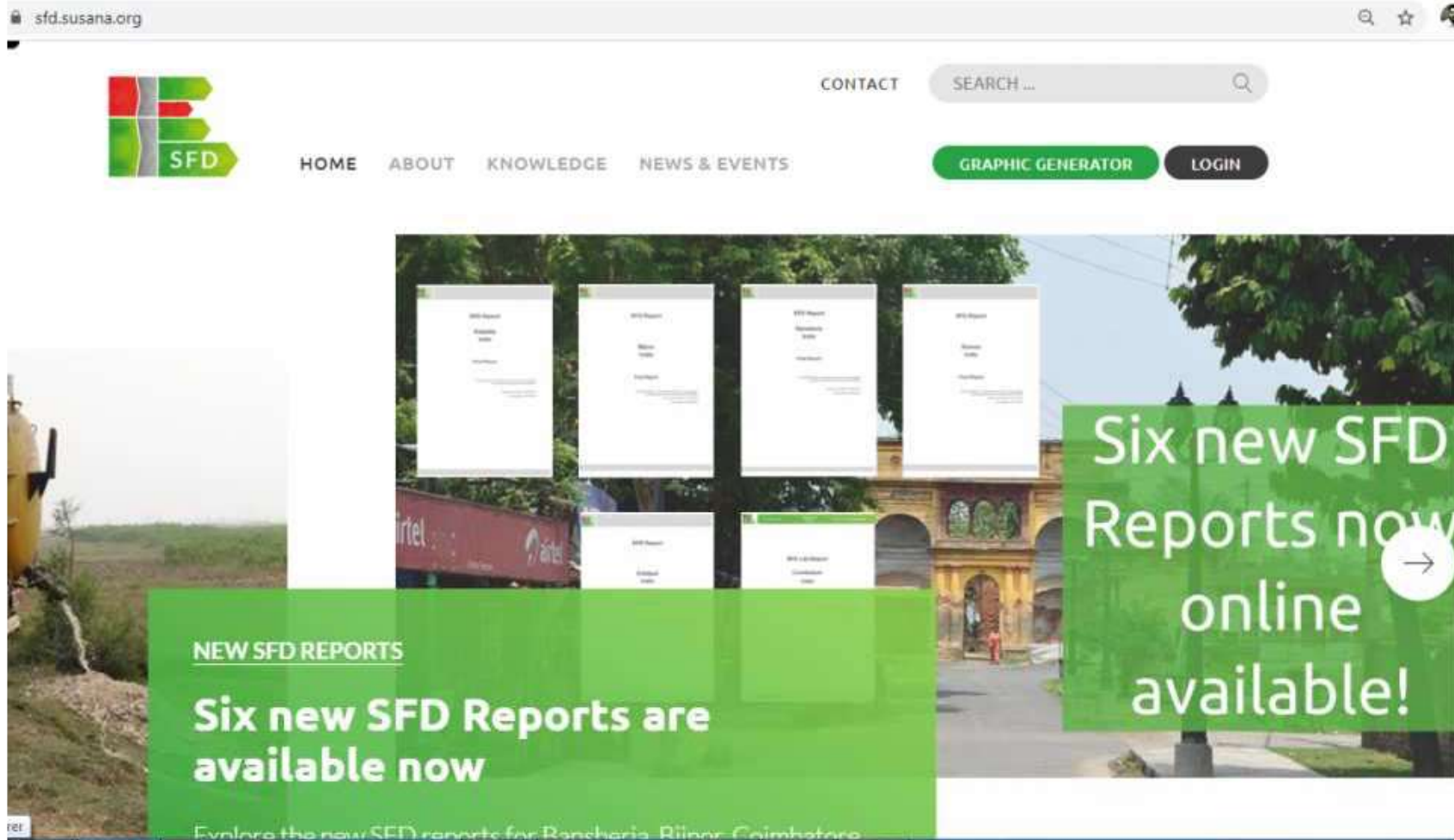
SFDs worldwide

Region	Reviewed SFD	Draft version available	Under preparation
	1	0	0
Asia & Pacific	78	4	2
North America	4	0	0
Latin America & Caribbean	5	2	3
Sub-Saharan Africa	13	0	11
Middle East & Northern Africa	17	3	5
Total	118	9	21

SFD Promotion Initiative – Consortium Partners