



# Journey of SFD in Uttar Pradesh

**SARIM**  
**CSE**

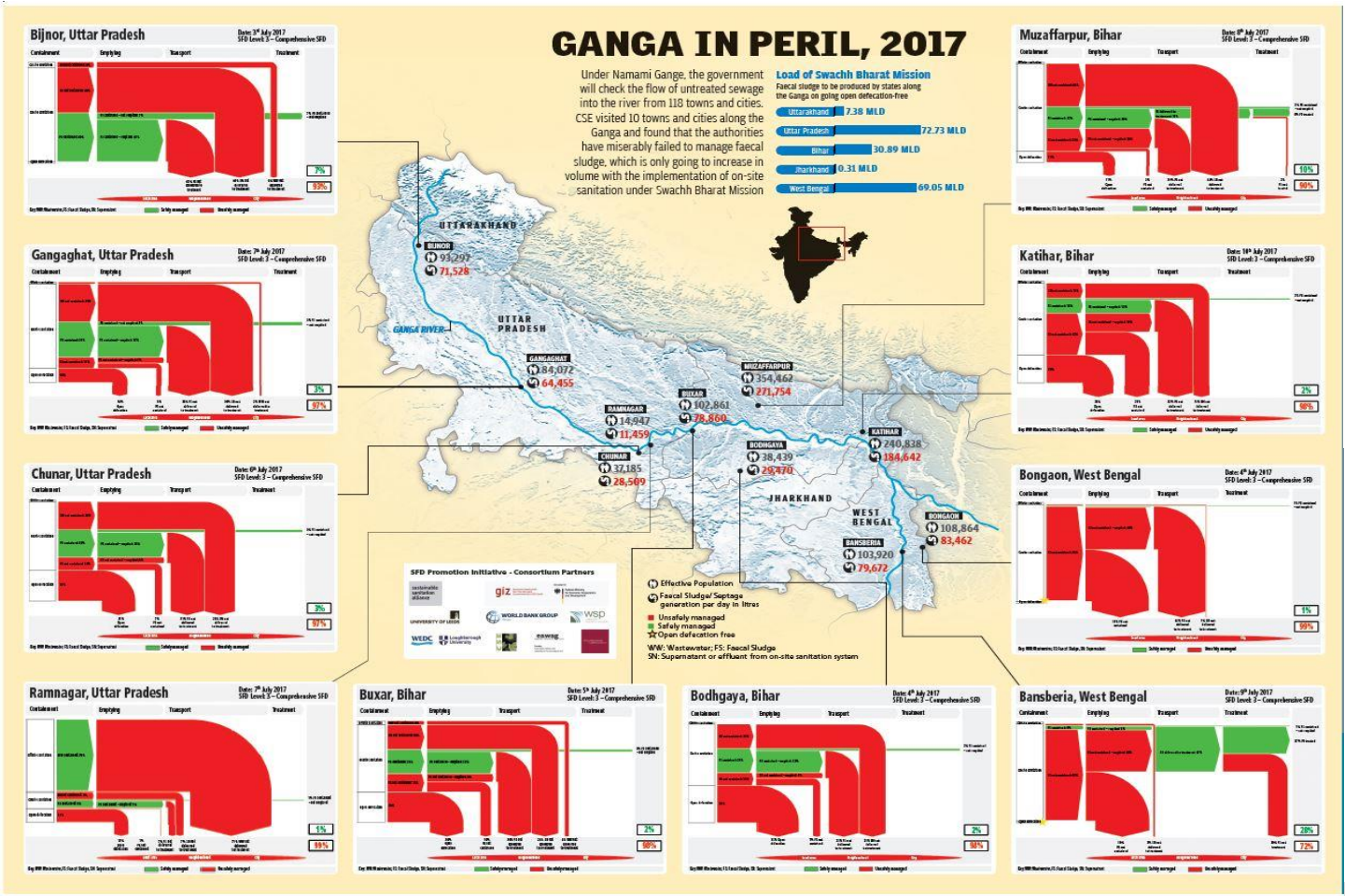




# Genesis



CSE did 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. 4 cities of UP (Bijnor,Chunar, Gangaghat and Ramnagar) were chosen.



## SFD Promotion Initiative - Consortium Partners



# Catalyst



Strengthen capacities of UP state and city officials to implement city wide effective **Fecal Sludge and Septage Management (FSSM)**

MEMORANDUM OF UNDERSTANDING (MoU)

BETWEEN

DEPARTMENT OF URBAN DEVELOPMENT  
GOVERNMENT OF UTTAR PRADESH  
LUCKNOW, INDIA

AND

CENTRE FOR SCIENCE AND ENVIRONMENT  
NEW DELHI, INDIA

ON

“SUPPORT FOR EFFECTIVE SEPTAGE  
MANAGEMENT IN UTTAR PRADESH”

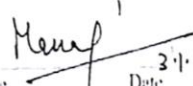
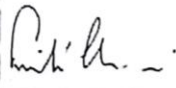
ARTICLE 10: COMMUNICATION AND REPORTING

All correspondence in connection with this MoU must be addressed to the following:

Principal Secretary Department of Urban Development, Government of Uttar Pradesh, 8 <sup>th</sup> Floor, Bapu Bhawan, Lucknow - 226001 Phone: 0522-2239467, 2214751	Director General Centre for Science and Environment 41, Lughlakabad Institutional Area New Delhi - 110062, India Phone: 011-29955124, 29956110, 29956394, 29956399
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IN WITNESS WHEREOF, the foregoing represents the understanding reached between the Parties on the matter as referred to in this MoU and does not create any legally binding obligations upon the Parties, and the duly authorized representatives of the Parties affix their signatures below.

Signed in on this 3<sup>rd</sup> day of January, 2018 for and on behalf of:

Department of Urban Development Government of Uttar Pradesh	Centre for Science and Environment
 Signature Date <u>3.1.18</u>	 Signature Date <u>07.12.17</u>
Principal Secretary	Director General
Witness VIVEK KR GUPTA	Witness TANUL JHA
H.S.N TIWARY	S. Sarasi

**CSE - DoUD,  
– MoU  
Jan 2018**



# Milestones in Uttar Pradesh's journey towards effective FSSM

MOU Signed  
between CSE and  
DoUD U.P.

Jan 2018

Attended by 20 officials from  
Uttar Pradesh Jal Nigam (UPJN),  
Municipal Engineers, Jal Kal,  
SMCG



Training was attended by Engineers and PMU staff  
from UP (UPJN, PDMC, AMRUT, SMCG).

**Exposure Visit** to Odisha by 17 officials from UP.

**Key Resource Persons:** Mr P K Mohapatra, Project  
Director, OWSSB; Mr Sarith Sasidharan (E&Y TSU);  
Mr K C Rao (former IWMI); Ms Upasana Yadav  
(CEPT University); Tide technocrats

**Field Visit** to FSTP in Bhubaneswar & Co-Treatment  
of FS in Puri

● Activities  
★ Milestones



22 engineers and advisors from Uttar Pradesh Jal Nigam, Urban Local Bodies, National Mission for Clean Ganga attended the training.  
Exposure visit to FSTP in Bhubaneswar and Co-treatment unit in Puri, Odisha



July 2019

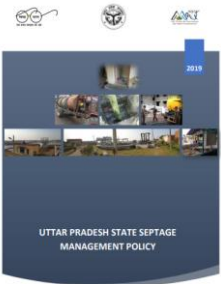
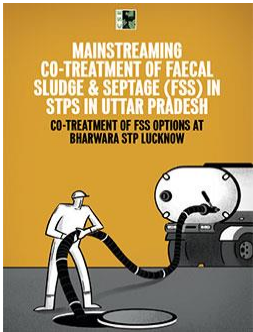
Advanced Training cum exposure visit on Planning and Designing for FSS

State Level Consultative Meeting for Co-Treatment of FSS in STPs

Aug 2019



CSE-PSU team presented its Draft Report on Mainstreaming Co-Treatment of Faecal Sludge in STPs across UP and Ganga Basin for abatement of river pollution. State agreed for pilot Co-Treatment in 4 to 5 locations.



Uttar Pradesh issued State Septage Management Policy vide govt. order dated 30.10.19

Oct 2019

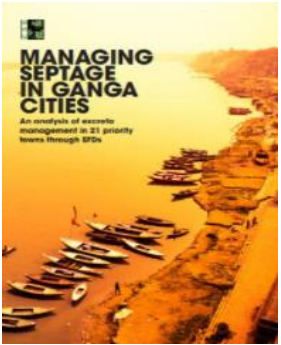
State Septage Management Policy

Tender for 31 FSTPs and 21 Co-treatment floated under AMRUT

Dec 2019

Advocacy around FSSM using SFDs-66 town report and Co-treatment report triggered govt. to take the step

Assessment of 21 priority Ganga towns through SFDs



Nov 2020

Managing Septage in Ganga Cities

Mapping inequities in select focus towns

2022

Study on inequities within cities done using SFD

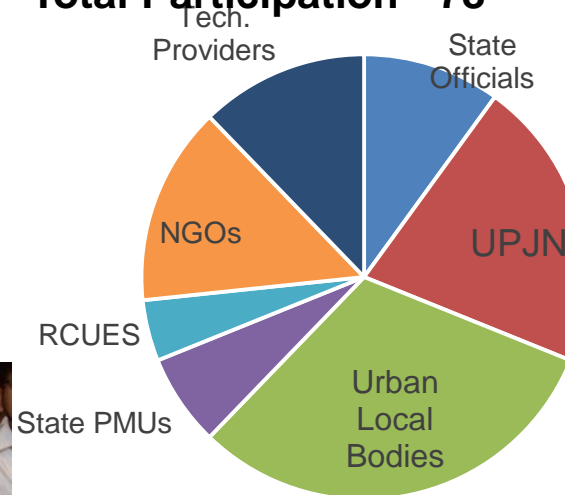




# State Workshop FSSM in Lucknow Oct'18



## Total Participation - 78



## Key Note Speakers

Shri Manoj Kumar Singh	PS, DoUD
Ms Sunita Narain	DG, CSE
Shri G S Priyadarshi	SMD, AMRUT
Ms Madhu Krishna	Country Lead, BMGF



## Launch of Reports & Tools

**SANi-KiT**  
PREPARING A CITY SANITATION PLAN





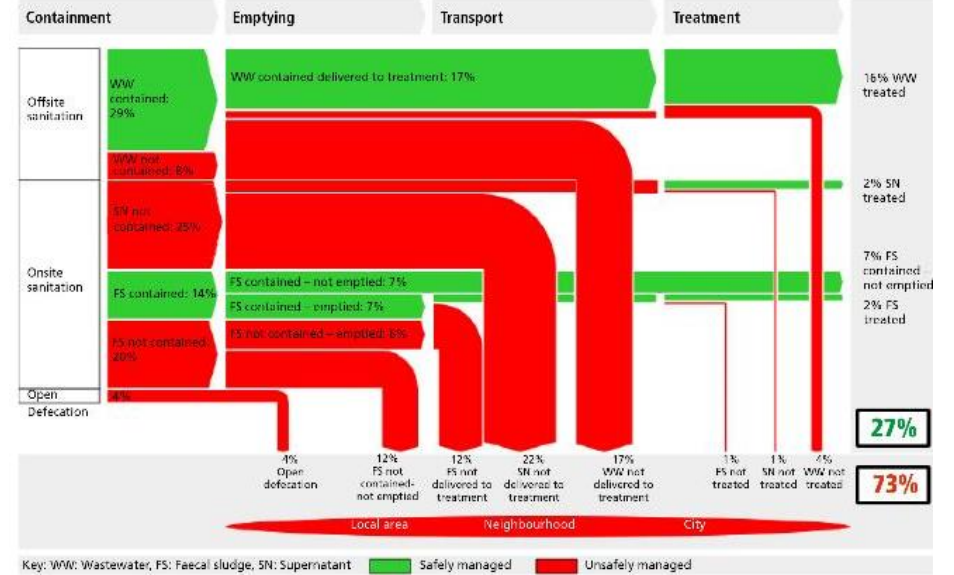
# Assessment of Excreta Management 66 Cities in U.P.



To understand the gaps in sanitation across Ganga basin, **Shit Flow Diagram for 66 major cities** in the state of Uttar Pradesh are developed

Uttar Pradesh (Urban), India  
SFD Level: 2 - Intermediate SFD

Date prepared: 23 December 2018  
Prepared by: CSE



**ASSESSMENT OF EXCRETA MANAGEMENT**  
SFD factsheets for 66 cities in Uttar Pradesh

**MANAGING SEPTAGE IN CITIES OF UTTAR PRADESH**  
An analysis of the sanitation chain in 66 cities, through SFDs

More than **60%** of the total population is dependent on onsite sanitation systems like septic tank and pit latrine. Out of which, the excreta of 4% of the population is treated

Septic tank effluent (overflow) of **50%** of the population is discharged in open drains, of which, 2% is treated by tapping of nullahs and drains

**29%** of the population is connected to sewerage network. Of which, sewage of 16% of the population is treated

More than **80%** of the sewerage network in state is found in 7 cities (out of 635)

Sanitation provision through sewer system increases with the increase in population of cities

Excreta of **8%** of the population is discharged directly in open drains

**4%** of the population still defecates in the open

Excreta of **27%** of the total population is safely managed. 7% of which is safely stored in containment systems

No city is **100%** sewered

\*This study is done based on data collected by CSE in October, 2018

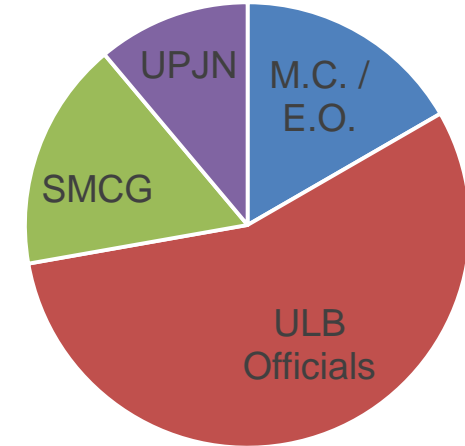
# International Knowledge Conclave: SFD Week (April'19)



## Key Note Speakers:

- Durga Shankar Mishra, Sec, MoHUA
- Rajiv Ranjan Mishra, DG, NMCG
- Kala Vairavamoorthy, ED, IWA
- Dhesigen Naidoo, CEO, WRC
- Stefan Reuters, Director, BORDA
- Arne Panesar, Head of Prog., GIZ
- Madhu Krishna, Country Lead, BMGF
- Sunita Narain, DG, CSE

## U.P. Participation - 18

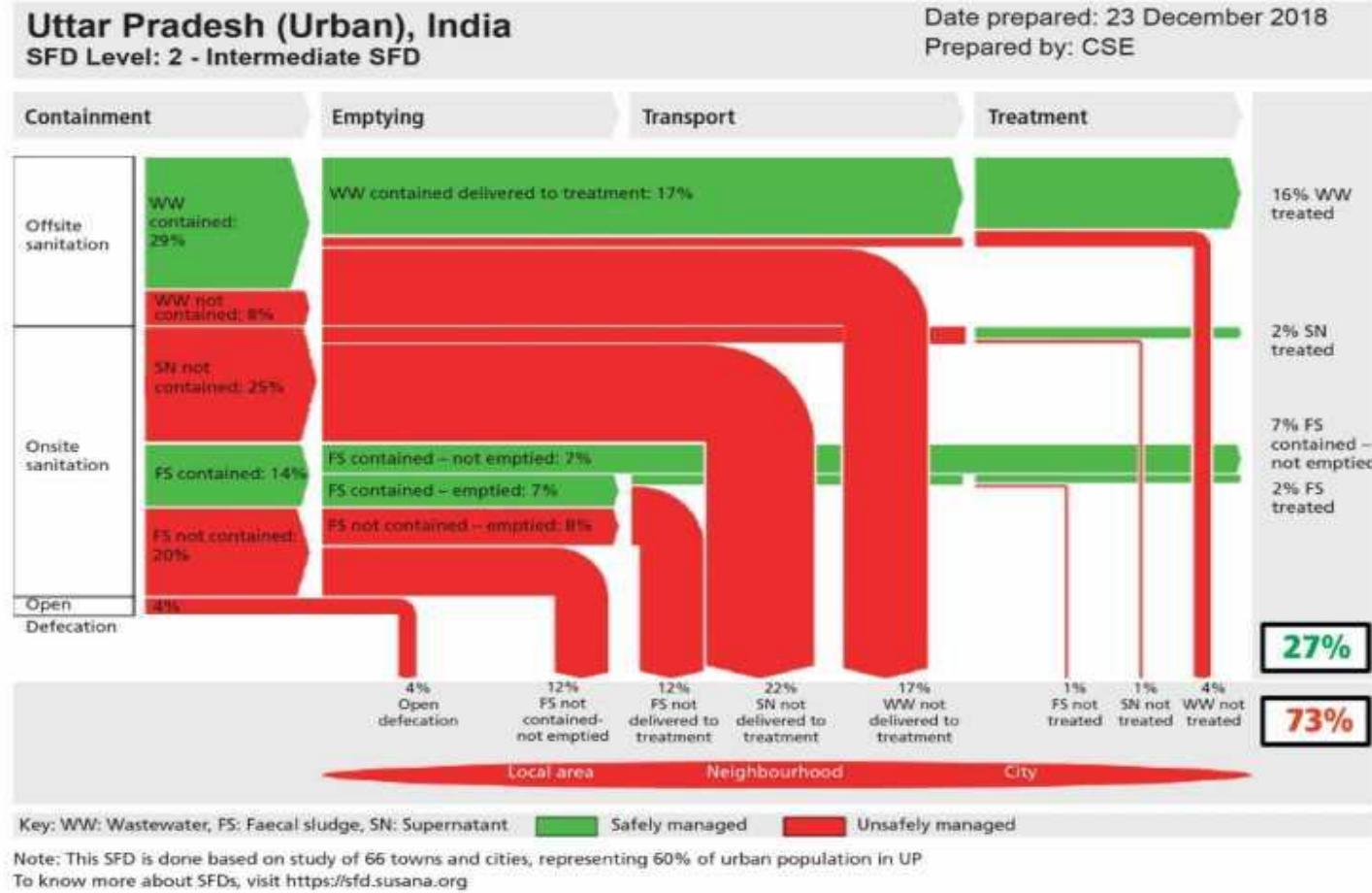
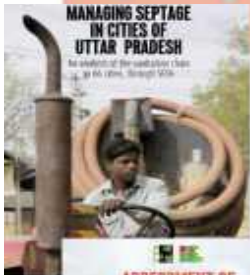


**Experts from  
Water Research Commission  
(S. A.), Columbia University  
(USA), Lancaster University  
(U.K),  
IIT Kharagpur as well as  
practitioners from Ghana,  
Senegal, South Africa, USA &  
Malaysia**





# SFD of Urban Uttar Pradesh

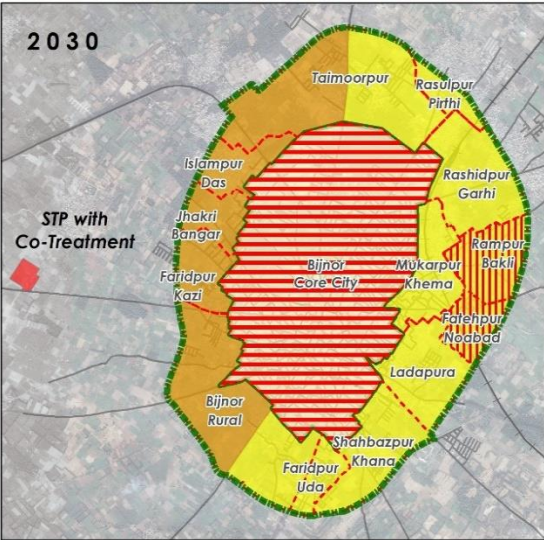
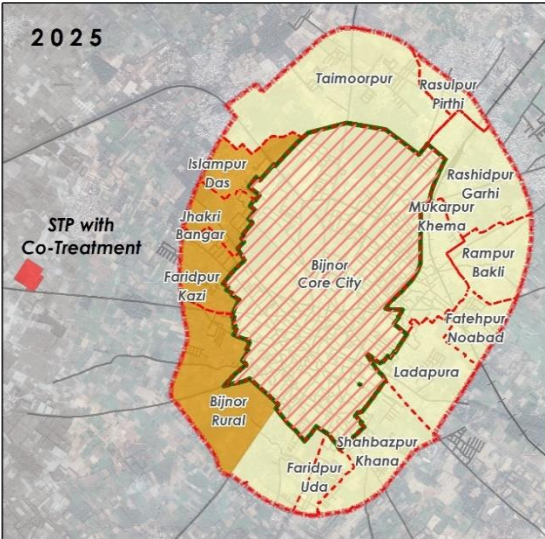
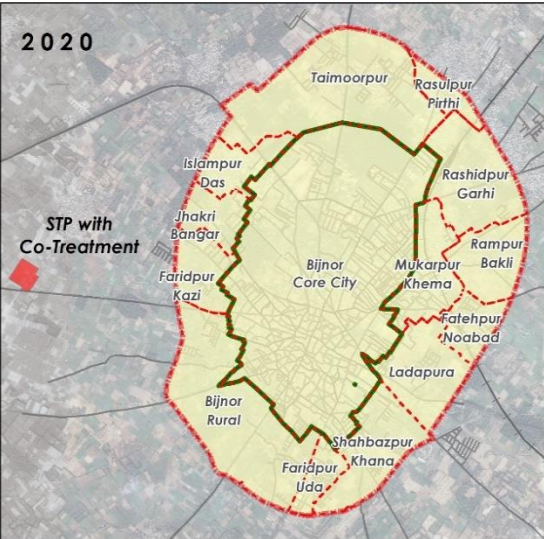


**UP got limelight of the international audience and prompted state officials to take up FSSM initiatives in UP**

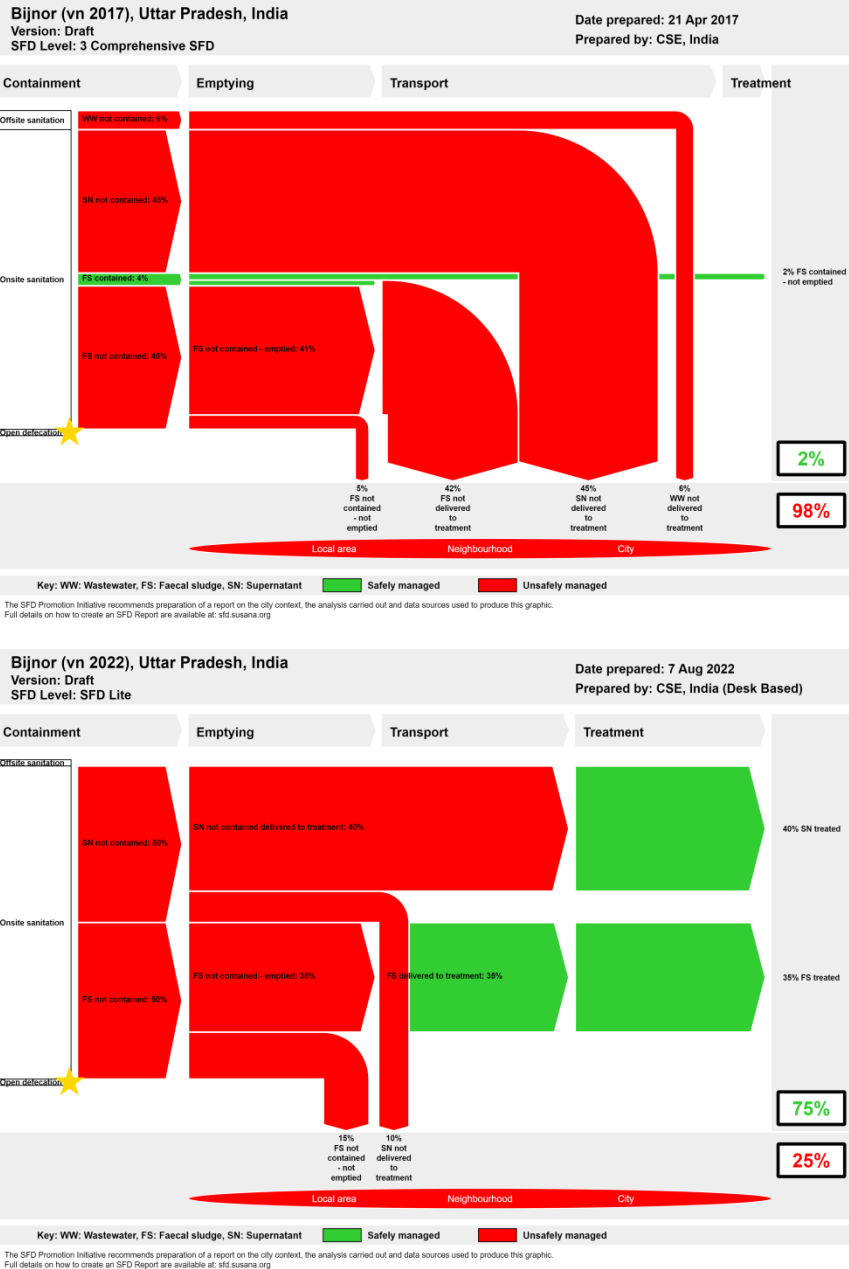
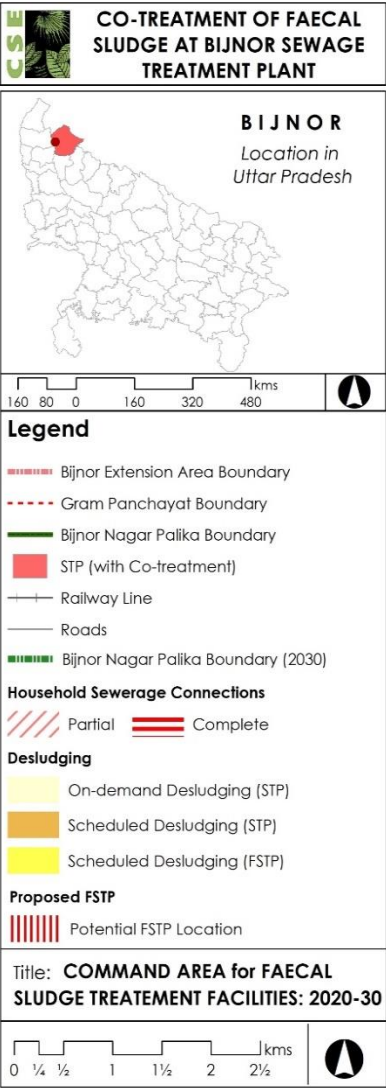
**CSE's analysis reports released by PS UD at State Workshop & by the Secretary MoHUA and DG NMCG at SFD Week**



# As a Planning & Monitoring TOOL

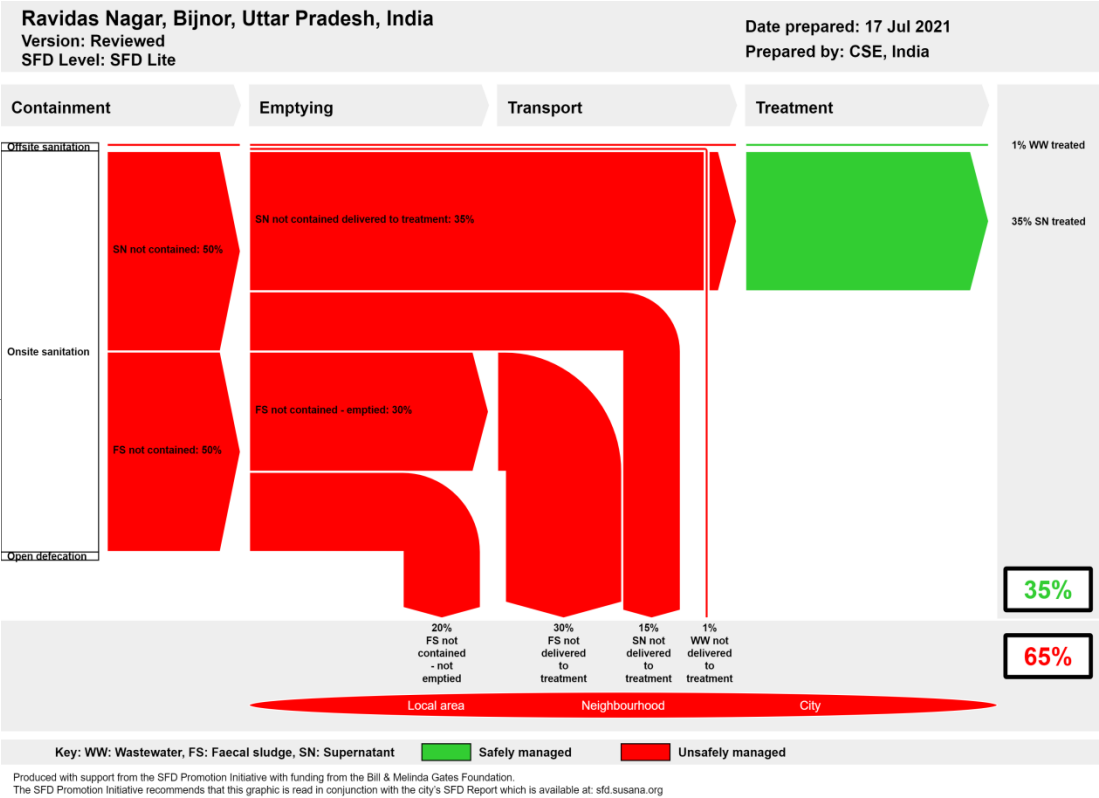
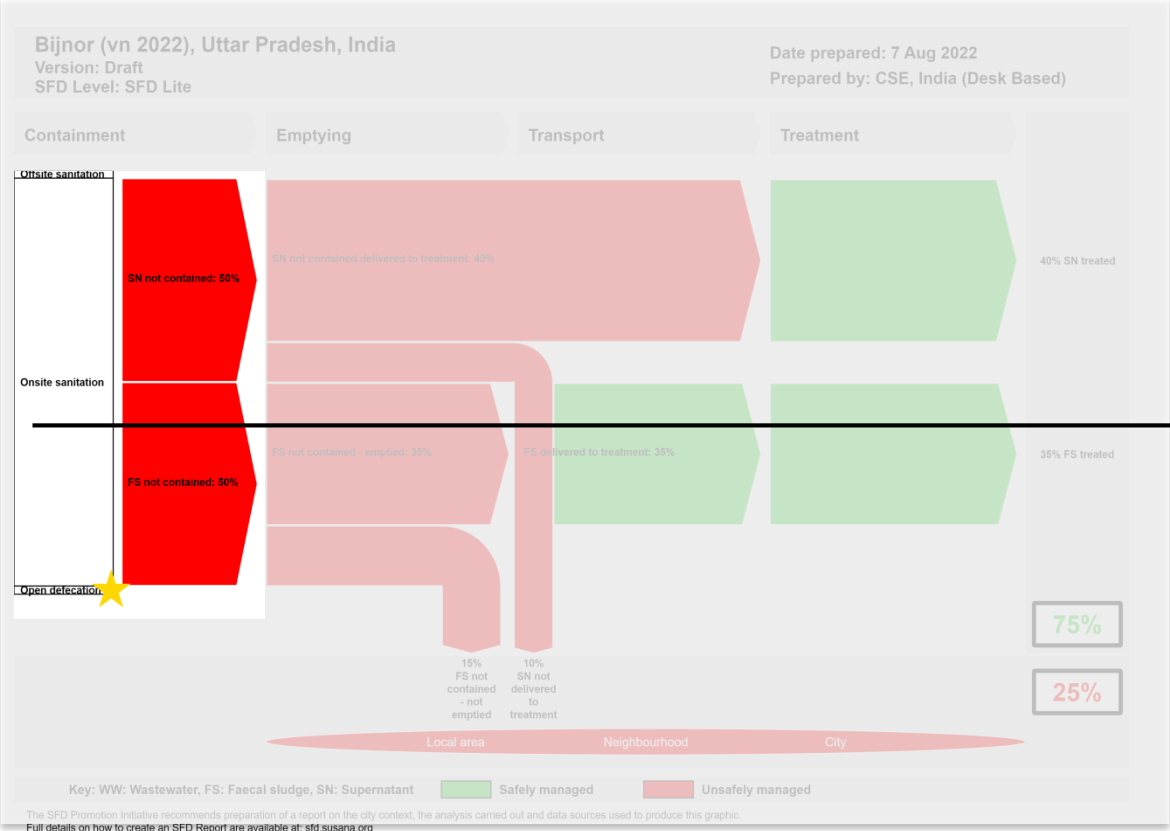


- NOTES:**
- 2020**
1. Total faecal sludge treated through co-treatment facility at existing STP: 20 KLD.
  2. On-demand desludging from core city and Bijnor Ext. Area
- 2025**
1. Scheduled desludging on pilot basis in Bijnor Ext. Area.
  2. Expected drop in demand for desludging from core city due to partial sewerage connections.
- 2030**
1. FSTP of 24 KLD capacity is commissioned.
  2. No demand for desludging from core city due to complete sewerage connections.
  3. Municipal Boundary is extended to cover Bijnor Ext. Area
  4. Scheduled desludging from eastern parts for FSTP
  5. Scheduled desludging from western parts for co-treatment
  6. Total faecal sludge treated: 44 KLD  
- 20 KLD in co-treatment facility | 24 KLD in FSTP





# MAPPING (IN)EQUITY in class I & II towns





SFD was used understanding the following in Uttar Pradesh:

- ✓ Advocating and pushing FSSM/DEWATs in the state through reports/workshops
- ✓ Enlightening city officials about the sanitation status of the town
- ✓ As a monitoring tool to assess the sanitation situation (before and after)
- ✓ As a baseline for advocating developing CSPs of towns
- ✓ As a baseline for pre-assessment/feasibility studies in a town
- ✓ Filling data in MOUNT collected during the field visits