



Planning FSSM – A City Sanitation Approach Case of Uttar Pradesh, India

Suresh Kumar Rohilla, Senior Director, CSE
06th July 2021

‘ Moving beyond ODF - Preparing NGOs on Fecal Sludge & Septage Management (FSSM)’
An Online training organized by Water, Sanitation and Hygiene (WASH) Institute July 05-09, 2021

How CSE started engaging on Citywide Sanitation & FSSM in India and particularly in Uttar Pradesh ?

National Urban Sanitation Policy (NUSP)

Developing State / Distt strategies and
City Sanitation Plans (CSPs)

Sanitation is a local subject and requires strong city level institutions and stakeholders. Each state and city to formulate its own sanitation strategy and their respective city sanitation plans.

Each **state/city can institute a state rewards scheme**, in order to mobilize cities and promote healthy competition.

Govt. / Central authority will support states/cities in developing sanitation strategies / sanitation plans.

Others : Centre Issues Technical Advisory and has a Manual to guide planning, designing and implementation for Sewage and Sanitation and develops standards (BIS)

Central Public Health & Environmental Engineering Organisation (CPHEEO) Sewerage Manual 2013

Provides design standards and norms for sanitation including decentralized wastewater treatment

NUSP explicitly states that cities and states - must issue policies and technical solutions that address onsite sanitation, including the safe confinement of faecal sludge

Major initiatives - Timeline

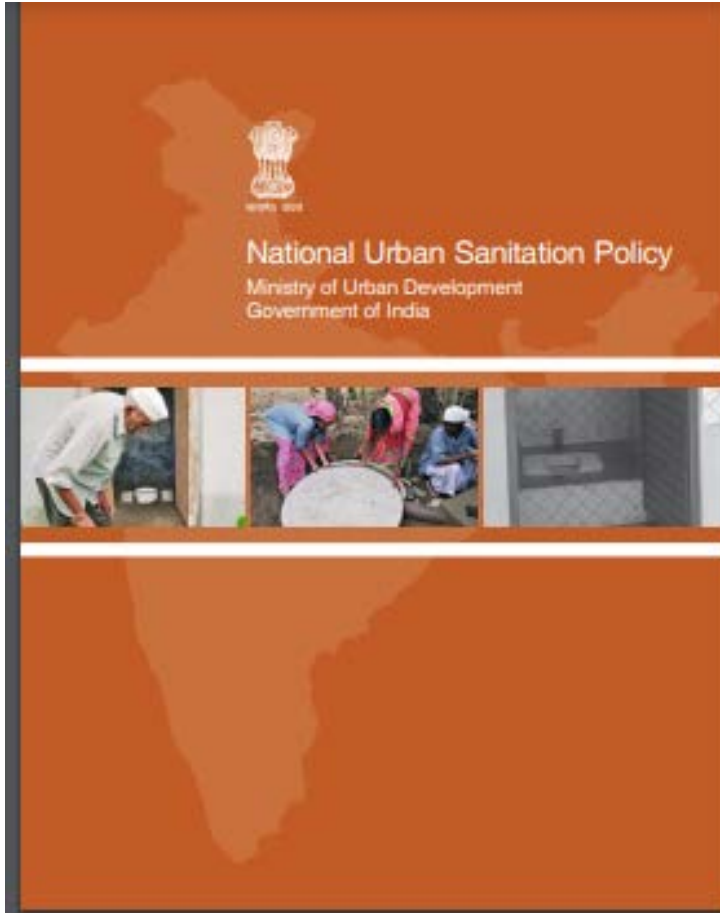
- 2008 - Release of the National Urban Sanitation Policy
 - **Service level benchmarking** : benchmarks adopted in six critical areas incl. WS and Sewerage etc.
- 2009 - Capacity building schemes for ULBs – supported by creation of CoE at nine reputed institutions
- **2010 - Ranking of 436 Class I cities in 2010 under NUSP**



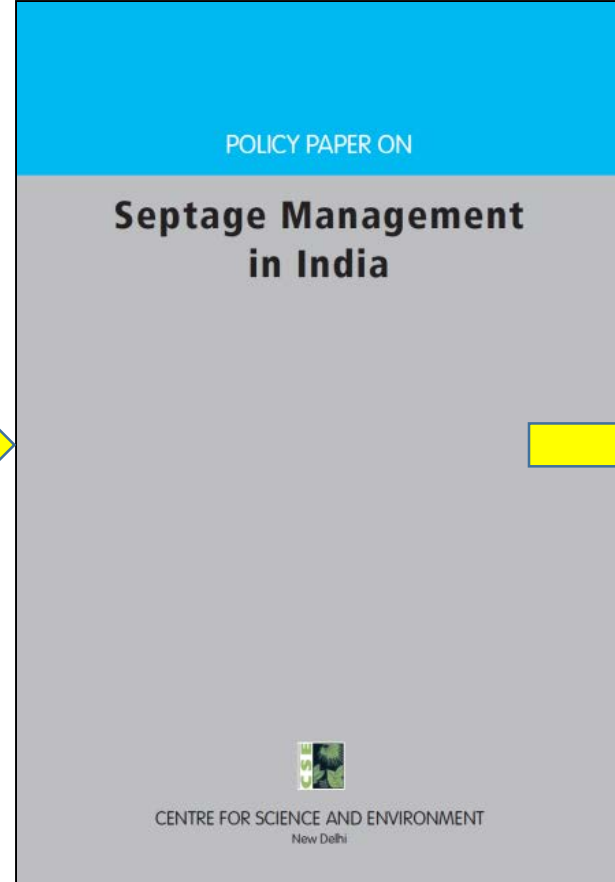
- 2011 – CSE Policy paper on Septage Management



- 2013 – MoUD Released **Advisory** on Septage Management **to ULBs**

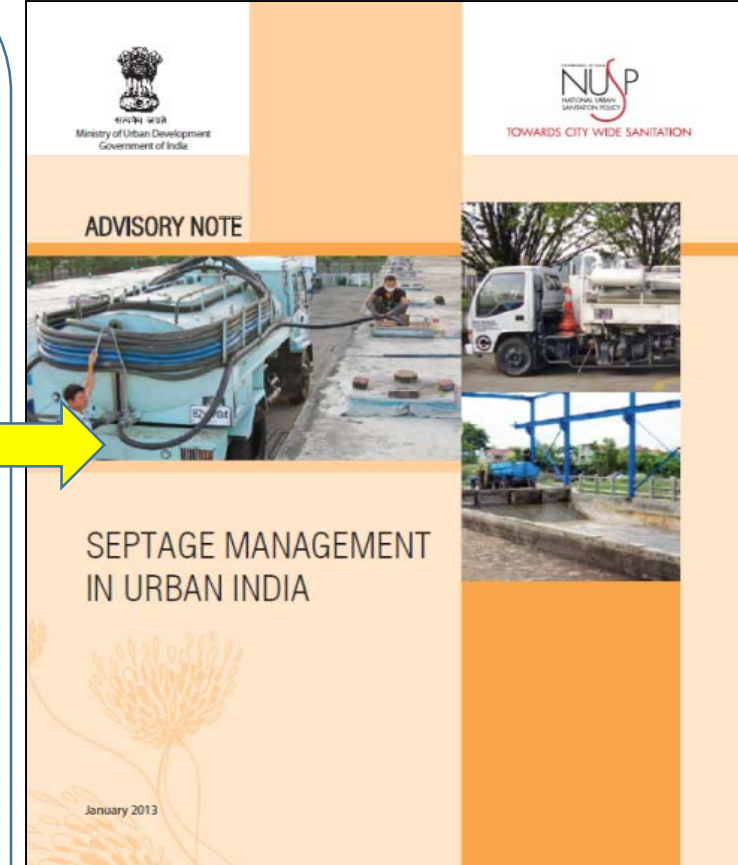


2008



2011

**CSE as Centre of Excellence
– MoUD, GoI**



2013

CSE Published – Excreta Matters



Partial treatment = pollution

“Cities do not control pollution” and Cost of building system is high

- City can build **sewerage system** for **few** not all
- Spends on building pipes, repair and energy costs of pumping to treatment plant of this waste of some **few**
- Spends to treat waste of some **few**
- Treated waste of **few** gets mixed with **untreated waste of majority**

• The result **is pollution**

The current paradigm – water supply

More water supplied = More waste water generated = more costs for treatment = Unsustainable

Report released by Hon'ble Vice President of India

Dwells on how urban India is soaking up water, polluting rivers and drowning in its own waste (296 pages) - detailed survey of 71 cities, and presents an assimilation of the survey's results (496 pages).

Water = Wastewater

Cities plan for water, forget waste

- 80% water leaves homes as sewage
- More water = more waste
- Cities have **no accounts** for sewage
- Cities have **no clue** how they will convey waste of all, treat it, clean rivers
- Cities **only dream** of becoming New York or London

Major initiatives - Timeline

- Mizoram, Agartala, Tamilnadu, Karnataka **states issued notification / policy** on septage management **including pilot projects.**



- **2014/15** – Swacch Bharat (U/R), Smart Cities – 100 no.s , AMRUT – 500 no.s cities & NMCG – 118 town / cities along river Ganga



All national flagship programmes and states now focusing on sanitation focusing on solid and liquid waste management **incl. septage management.**

CSE a recognized Centre of Excellence of MoHUA & Key Resource Centre of MoDWS for policy research, sustainability of reforms agenda and capacity building of state / municipal functionaries

CSE working with GIZ on support to implement NUSP – Capacity Building of ULBS in A.P (10 no.s) , Telengana (10 no.s) & Kerala (10 no.s) in preparation of City Owned Sanitation Plans with active City Stakeholder Task Forces signed by to reform agenda.

CSE Global initiative Since 2009 – started working in South Asia & Africa : feeding national and local learnings into global processes & dialogues

CSE joins NFSSM Alliance (formed in 2017) as Core Member

New Water Paradigm Guiding Principles –

- 1) Cut / Reduce the length of pipeline
- 2) **Water frugality is not poverty** (prudent / wise use must be promoted)
- 3) Design systems for affordability and legal rights to 'clean' water for all
- 4) **Design to treat all waste** (do not wait to build all drains)
- 5) Treat waste to recycle and reuse water and excreta (treat waste to generate wealth - not use water as carrier for waste disposal)
- 6) **Treat waste locally so that reuse is possible locally** (cut costs of pumping / piping, treat decentralized, treat to reuse, not to waste)

India's First Practitioner's Guide on Septage Management Launched by JS - SBM (Eng. + Hindi) in 2017



Prepared by CSE – CoE in Sustainable Water Management Area assisting MoUD/ MoHUA

National Policy on Faecal Sludge and Septage Management (FSSM) was issued by Ministry of Urban Development in February 2017
with support and inputs from the NFSSM Alliance, where CSE was also a member.

Excreta Matters II

Connecting dots : Water-toilet-septage / faecal sludge -sewage-treatment-reuse

Sewerage to Sanitation...
and Excreta Management



Citywide Sanitation

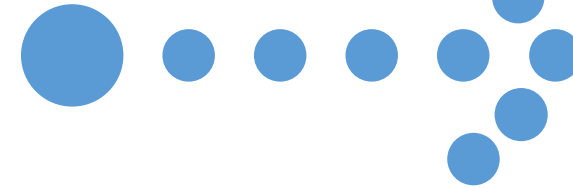
Funding Support/action
plan for Cities



Administrative /
coordination
support in cities



Model documents for
Cities in implementing
FSSM



**CSP for
City-wide
Sanitation
incl.
effective
FSSM**

Snapshot of CSE journey in Uttar Pradesh ...

Phase 1

Capacity Building of State and Non-State Actors in Ganga Basin 10 cities (4 non AMRUT cities in U.P) for **City Sanitation Planning (2016-2018) & SFD Phase 1 initiative supported by BMGF**

Phase 2

Capacity Building on **Citywide Water and Small Scale Sanitation Systems** and Programme **Support to Uttar Pradesh & Bihar** incl. School of Water & Waste & India's first FSM lab

- Partnership with DoUD (U.P.) in Effective **Faecal Sludge and Septage Management** for Citywide Sanitation **(Jan 2018 - Apr 2020)** involving **State Level Programme Support and Technical cum Knowledge Support in Bijnor & Chunar**



State Level
Programme
Support: PSU

Deep-dive
Tech. Support
City-level in
Chunar and
Bijnor - TSU

Capacity
building –
Trainings,
Workshop &
Exposure Visits



CAPACITY BUILDING OF URBAN LOCAL BODIES ON **WATER AND WASTE IN GANGA BASIN CITIES**

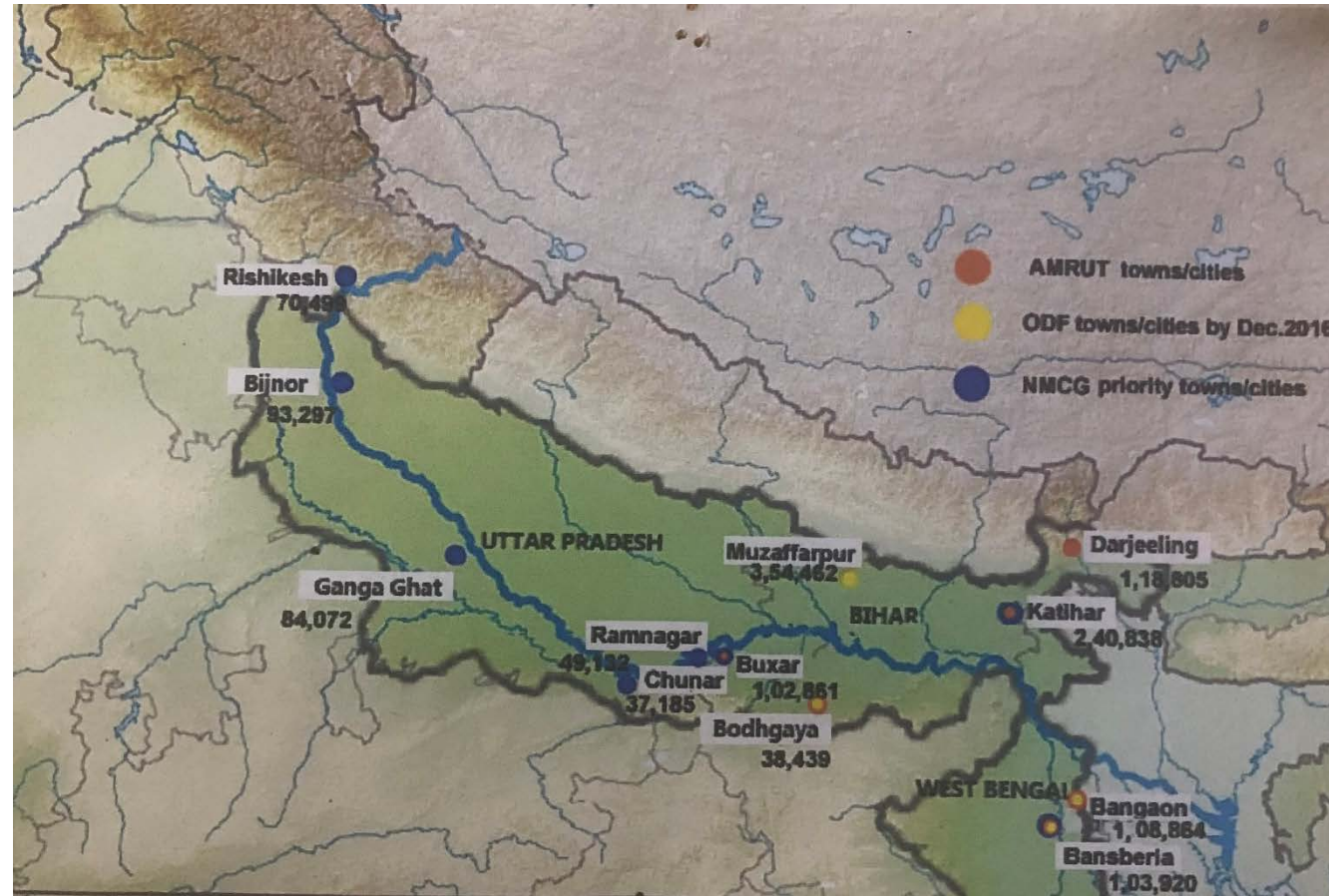
PROJECT TITLE: "Capacitating urban local bodies and other stakeholders in the Ganga basin on small scale, on-site wastewater and septage management systems".

DURATION OF PROJECT: Designed as a two-year kick-start phase for an overall 5-year process.

PROJECT HIGHLIGHTS

- Develop and refine the necessary tools as well as quality checks and contextual research.
- Initiate city level engagement with Urban Local Bodies and city stakeholders to both, plan for city-wide sanitation including non-sewered areas, and identification of demonstration projects for effective wastewater treatment and FSM.
- Designed to find sustainable and affordable wastewater and septage management solutions and to put together evidence-based results for rapid uptake and mainstreaming, with an emphasis on cities in a river basin.
- Improve the sanitation situation of poor urban dwellers as well as improve the public health and environmental status of the city.
- For this, CSE will work in close coordination with the Bill & Melinda Gates Foundation capacity building hub at National Institute of Urban Affairs (NIUA), Swacch Bharat Mission and National Mission for Clean Ganga for wider outreach in the Ganga basin.

Phase 1 :



PHASE I (2015-17)

Key Elements of the Project



Capacity Building

Measure to provide training and handholding support to local ULB's and stake holder. Cover 10 small / medium-sized cities in the Ganga basin in preparing City Sanitation Plan (CSP) with decentralised wastewater treatment, septage management.



Research based solutions

Research and documentation on technology menus
Disseminating method validation and testing protocols for waste/ faecal sludge management
Supporting the implementing of demonstration projects



Laboratory

Establish a state-of-art, referral monitoring laboratory with capability of developing testing protocols, input-output analysis and method validation to testing wastewater and faecal sludge.

Phase 1 :Key Elements of Project

HANDHOLDING PROCESS FOR PREPARATION OF CITY SANITATION PLAN

CSP Sensitisation Workshop



1st Handholding training

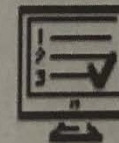


CSTF Formation



Status report preparation

2nd Handholding training



Demand supply gap analysis and key issue prioritisation

3rd Handholding training



Review of key issues.
Sectoral strategies, recommendations and action plan

CSP Review Workshop



Programme Objective:

Strengthen capacities of UP state and city officials to implement city wide effective **Fecal Sludge and Septage Management (FSSM)** through **State Level Programme Support Unit** and **City Level Technical Support Unit (2 – Deep-dive Cities)**

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 th 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 30 day of January, 2018 for and on behalf of:

Department of Urban Development Government of Uttar Pradesh Signature <u>[Signature]</u> Date <u>30.1.18</u> Principal Secretary नगर विकास, नगर सज्जाम एवं शरीर नम्र, काठमाडौं विभाग उत्तर प्रदेश सरकार Witness VIVEK KR GUPTA H.S.N TIWARI	Centre for Science and Environment Signature <u>[Signature]</u> Date <u>07.12.17</u> Director General Witness TANUL JHA J. Barasi
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CSE & DoUD
– MoU
Jan 2018

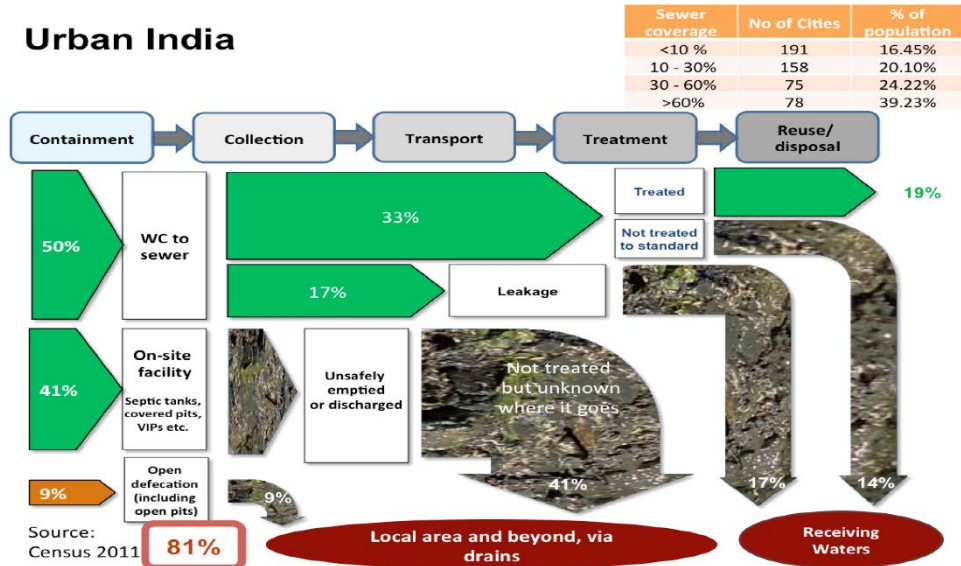
Other – CSE NMCG MoU &
MoUs with Bijnor &
Chunar ULBs

Key activities in support of FSSM for Citywide Sanitation in Uttar Pradesh

**Advocacy & Capacity Building at City, State and National level as well as
Programme cum Technical Support to State of U.P and two target cities – Bijnor &
Chunar**

Excreta Flow : Comparison to National Average

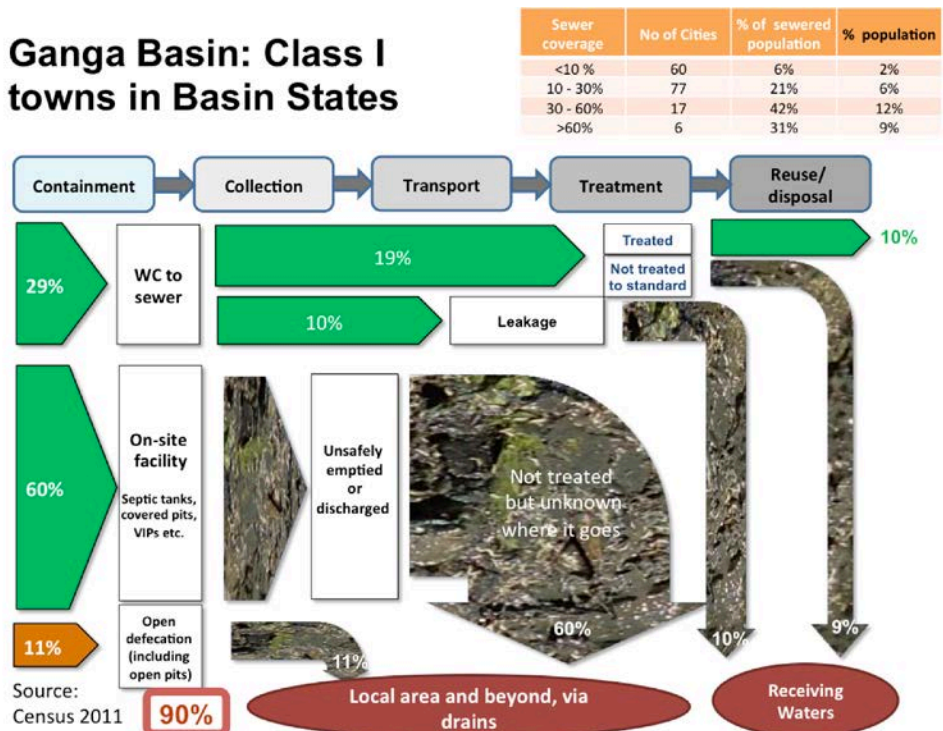
Urban India



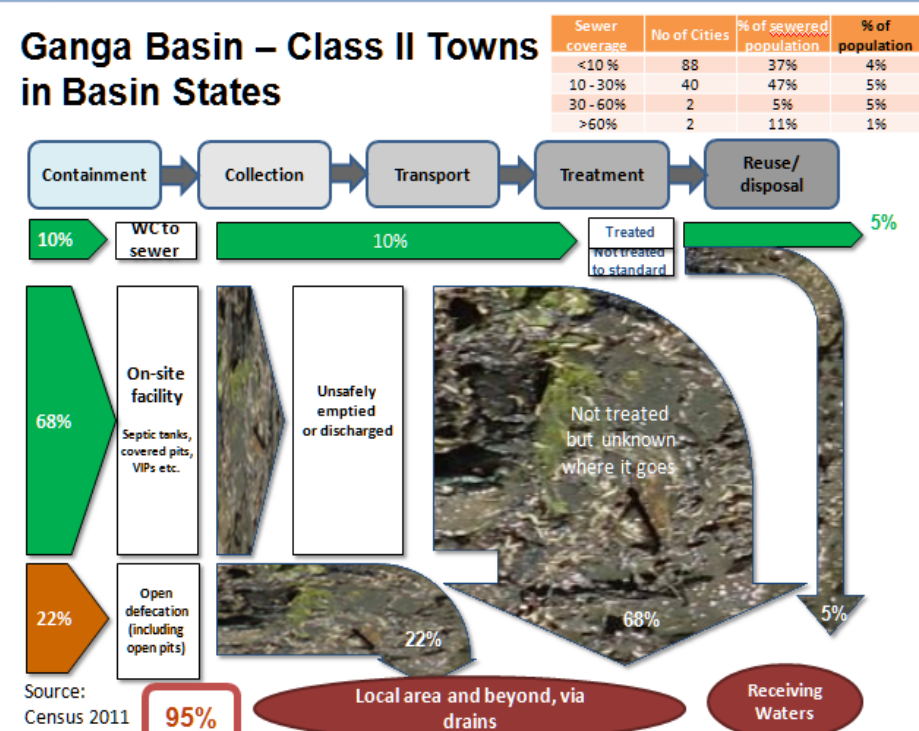
Excreta Flow - unsafe disposal in **Ganga Basin states is 90-95 %** as higher compared to 81 % national average

SBM lists 400 town /cities to be declared **ODF** have **only 8 cities** from Ganga basin

Ganga Basin: Class I towns in Basin States

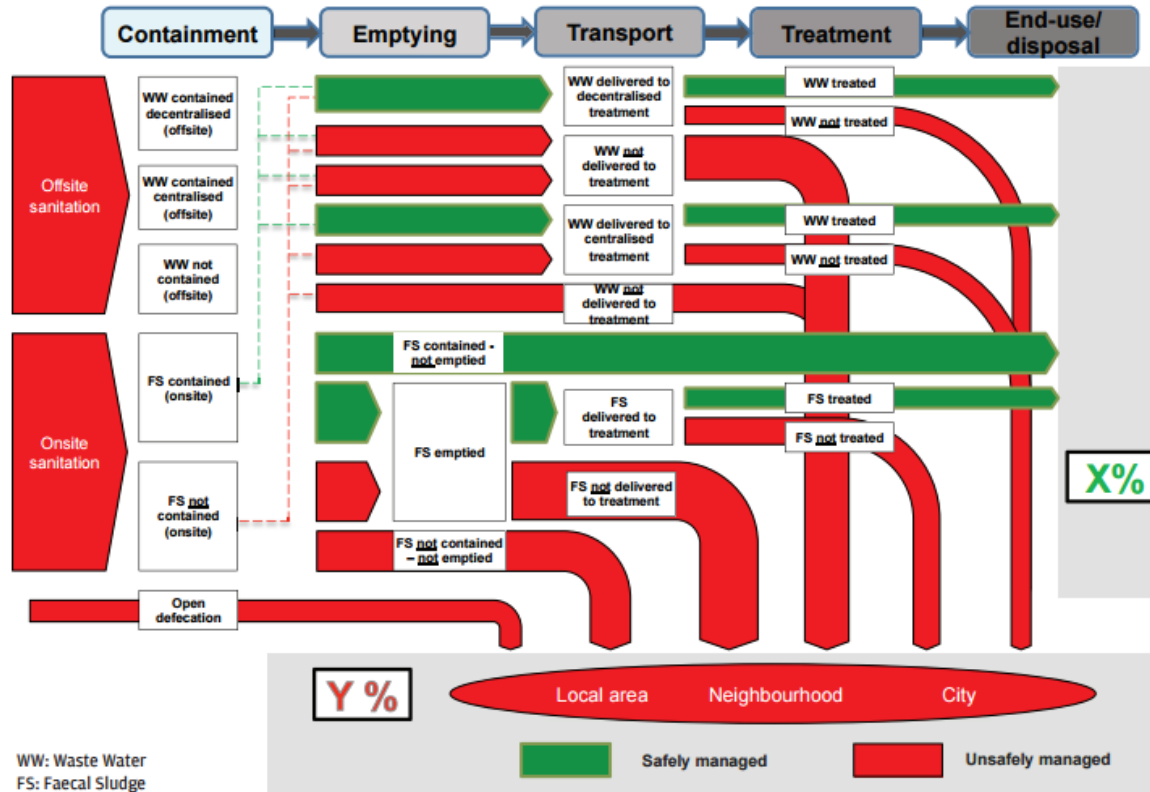


Ganga Basin – Class II Towns in Basin States



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 visualizing how excreta physically flow through a city or town. It shows how excreta are 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

SFD Promotion Initiative - Consortium Partners

SFD Promotion Initiative
sustainable sanitation alliance

UNIVERSITY OF LEEDS

WEDC

Loughborough University

WORLD BANK GROUP

CSE

eawag

Sanitation, Water and Solid Waste for Development

wsp

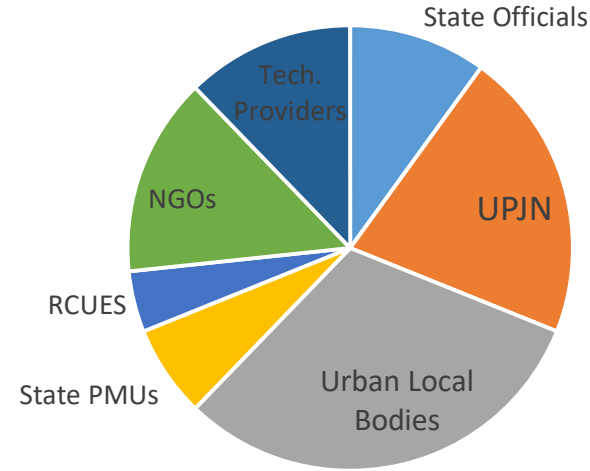
PAUL & MARYAM

PAUL & MARYAM

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

Guest Speakers / Resource Persons

CEO WaterAid India, Rep. WaterAid Bangladesh, IWMI Sri Lanka, Technology Providers in FSSM, Remote session: IWK, Malaysia, BWD, Philippines, Rep. ASCI – supporting A.P.

Launch of Reports & Tools

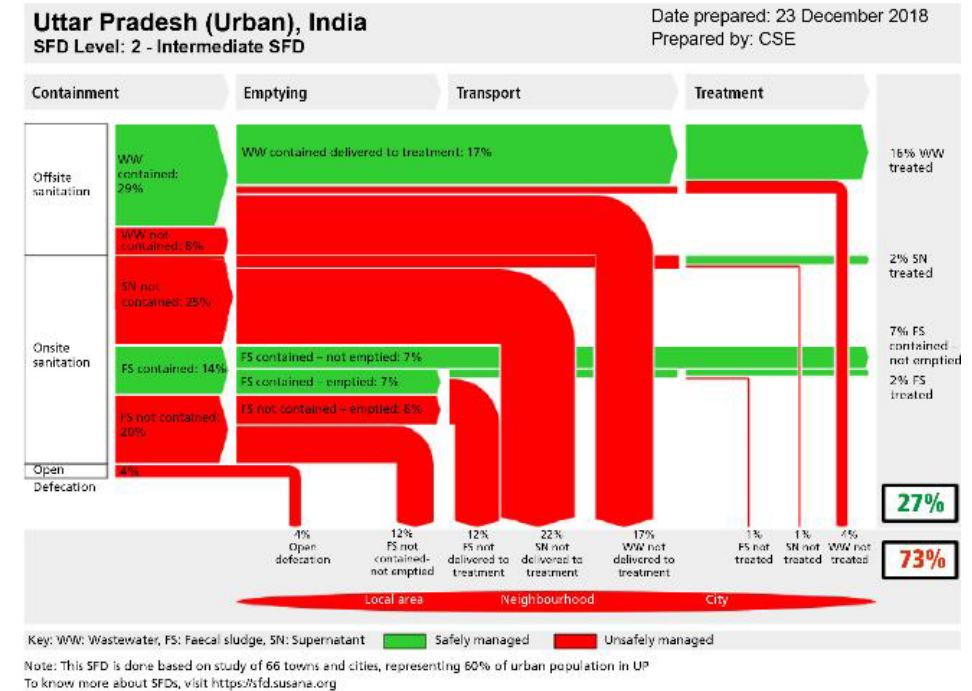


SANi-KiT
PREPARING A CITY SANITATION PLAN



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
- These SFDs are used to develop the **state level SFD** and **basin level SFD**



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

STATE LEVEL SUPPORT:

- Septage Management policy issued on Oct'19

1 - State Trainings (July'19),
Visit to Odisha (July'19) and
Training cum Exposure Visit to Bangladesh (Feb'19)

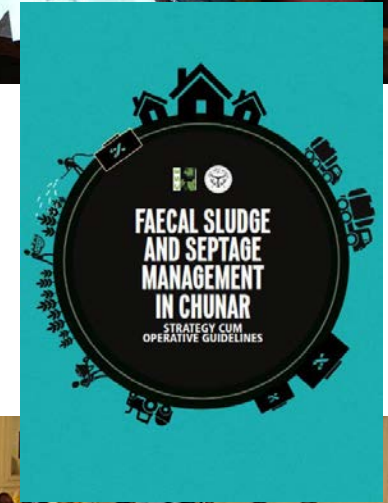
1 - **National Exposure**
1 – **International**

3 – training under AMRUT capacity building initiative
Orientations to ~60 municipal functionaries through
Directorate of Local Bodies.

Report of Co-Treatment of FSS in STP presented to PS DoUD in
Aug 2020. **Co-Treatment tendered in 21 cities** and CSE Lab
testing initiated at STP in **Bharwara, Lucknow** to assess impact
of FS on STP.

'Alliance for Urban Transformation' formed. First meeting held
on 13th Feb 2020.

Second virtual meeting held in April 2020 for collaborative
support for COVID-19



Supporting UPJN in FSTP implementation

- **Consultation with Private Sector** for participation in FSTP tenders.
- **Inputs to the tender documents** for increasing participation.
- **Support in lab testing of operationalized FSTPs** including FSTP in Unnao, Jhansi and Co-Treatment of FS in STP in Bharwara (Lucknow) – (as per of Lab Study evaluating FSTP performance across India)

FS TP in Loni under construction

*FS Co-Treatment at STP in Modinagar
under construction*

*CSE lab testing at Unnao FSTP; operationalized
since Oct 2019 (1st through AMRUT)*

Report for Mainstreaming Co-Treatment of Faecal Sludge in STPs in Uttar Pradesh

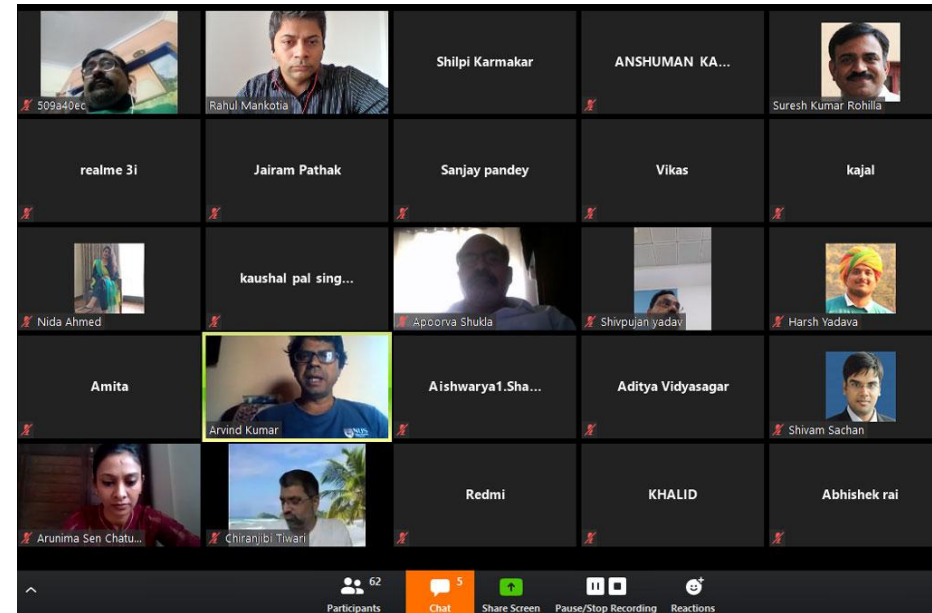
- Presentation to PS DoUD for 'Mainstreaming of Co-Treatment of FSS in STPs'
- The report recommended different **pre-treatment modules** (Solid-Liquid separation) for faecal sludge before being discharged in STP.
- Decision taken to implement Co-Treatment with **Solid-Liquid separation STPs including Bharwara STP Lucknow.**



‘Alliance for Urban Transformation’:

A Platform of Collaboration and Convergence at Department of Urban Development (U.P.)

- Inaugural Meeting held on **13th Feb 2020**, PS DoUD, SMD AMRUT and Director, Directorate of Local Bodies with 15 Development Partners.
- 2nd Meeting held virtually with Agenda for collaborative support for COVID-19 response.



Radio sessions with Radio Mirchi: Awareness generation FSSM in urban U.P.

Theme of the talk: **'Toilet Ke Baad Kya'**
focusing on FSSM

Highlighting issues like:

- **Impact on Public health and River Pollution due to improper disposal of Faecal Sludge.**
- What is a proper septic tanks and why we need to build properly designed septic tanks.
- **CSE's initiatives and support to cities for mainstreaming effective FSSM.**

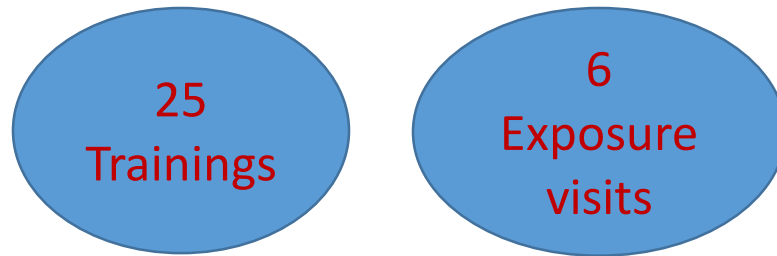
Deeper engagement for **FSSM** with
'MalAsur' or **'Demon of Defeca'** proposed
in coming period



Trainings and Exposure Visits

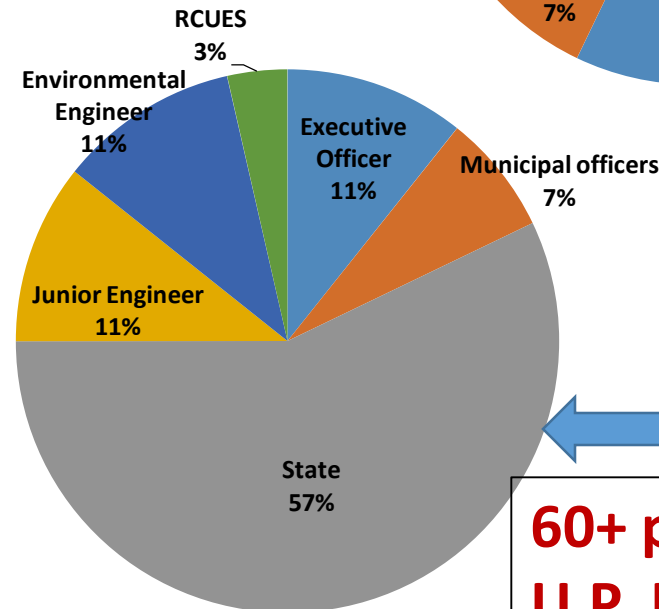
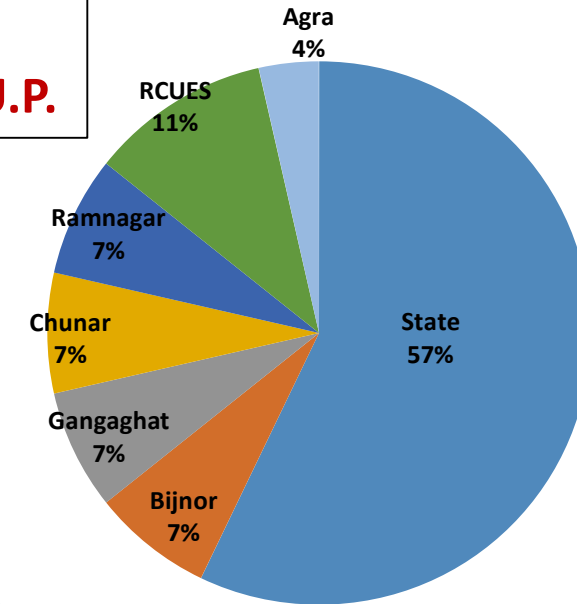
Capacity Building Activities in Uttar Pradesh

(Trainings and Exposure Visits 2016- 20)



More than 300 participants from U.P.

Participation from Uttar Pradesh (Sept 2016-Apr 2018)



Diversity of Participation from Uttar Pradesh (Sept 2016-Apr 2018)

60+ participants from U.P. Jal Nigam

Phase 1

Phase 2 Ongoing



Training cum Exposure Visit to FSTPs in Odisha for FSSM July 2019

- The training target 20+ engineers from UP Jal Nigam involved in FSTP implementation.
- Field visit to Faecal Sludge Treatment Plants in Odisha.
- **Master trainers with FSSM experience from Malaysia and Philippines.**



International Training cum Exposure Visits: FSSM in Bangladesh

8-12 February 2020

‘Knowledge sharing between participants from Bangladesh, Nepal and India’



U.P. participants supported by CSE

1) Shri Shiv Pujan Yadav	Addl. Commissioner attached to Directorate of Local Bodies. U.P.
2) Shri Durgeswar Tripathi	Executive Officer, Bijnor Nagar Nigam
3) Shri Anand Kumar Dubey	Project Manager, GPCU, Prayagraj, U P Jal Nigam
4) Shri Afzal Khan	Project Manager, GPCU, Mirzapur, U P Jal Nigam
5) Sudhansu Kumar	Project Engineer, GPCU, Lucknow, U P Jal Nigam
6) Shri Mohit Vikram Singh	Assistant Engineer, Bijnor, U P Jal Nigam

NMCG Officials supported by CSE

1) Shri Saumyasib Mukhopadhyay	Senior Environmental Specialist, NMCG
2) Shri Vijay Kumar Yadav	Assistant Civil Engineer, NMCG

Training under AMRUT capacity building initiative

- Trainings (**Capsule I, II and III**) held Sept'19, Jan'20 and Feb'20
- 20 participants attended each of the three capsules



AMRUT Capsule III: Training Programme on Integrated Wastewater and Faecal Sludge Management for Municipal Functionaries of Uttar Pradesh
26-28 February, 2020 • CSE, 41-Tughlakabad Institutional Area, New Delhi



Orientation of Municipal Functionaries on FSSM through Local Bodies Directorate

- 5 session - **60 + municipal functionaries** .
- **‘Knowledge Resource Centre’** at Directorate Local Bodies, Gomti Nagar Office. With **guidelines and IEC material for Municipal Functionaries**.



City-Level Programme Support in Bijnor & Chunar

Regular City Sanitation Task Force Meetings

Based on the **City Sanitation Plan process**, a CSTF was constituted in Bijnor and Chunar to develop and implement a city sanitation plan/city FSSM guidelines through stakeholder approach. The **CSTF actively meets** and **take informed decisions with respect to sanitation in the cities**.

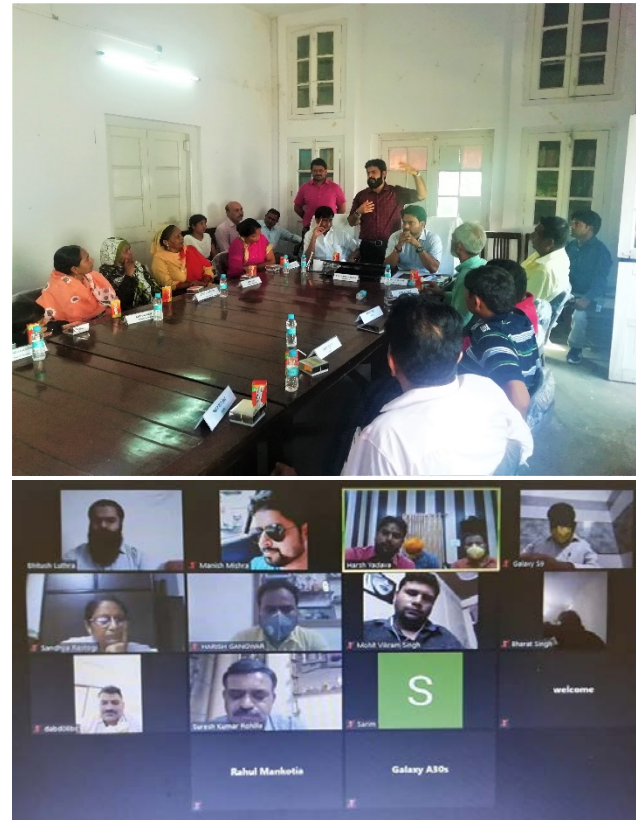


CITY SANITATION TASK FORCE BIJNOR NAGAR PALIKA PARISHAD

STAKEHOLDERS

- Medical Representative
- Political Representative
- Administrative Staff
- Technical Stakeholders
- CSE Technical Support Unit
- Media Representative
- Social Worker or NGO
- Youth worker

 Mrs. Rakshana Parveen Chairman, BPP	 Sangeeta Kumar Tripathi Executive Officer, BPP	 Mr. Shamsud Ahmed Anwar Political and Social Worker, BPP	 Mr. Anil Gouham Jr. Engineer, BPP
 Mr. Yashwant Kumar Jr. Engineer Civil, BPP	 Mr. Gaurav Singh Choudhary Sanitation and Food Inspector, BPP	 Mrs. Sandhya Rastogi Trustee Anand Charitable Trust, Bijnor	 Mr. Wassem Akhtar Reporter Zee News, Bijnor
 Mr. Jyoti Sharma Editor Press, Rashtriya Sahara	 Mr. Wassem Akhtar Assistant Engineer, UP	 Mr. Mohd Vikram Singh Assistant Engineer, UP & Pogram Bijnor	 Dr. Shaleesh Jain Assistant Chief Medical Officer, CHD-Bijnor
 Harsh Yadava Research Associate, TB-Bijnor, CSE			





CITY SANITATION TASK FORCE NAGAR PALIKA PARISHAD CHUNAR

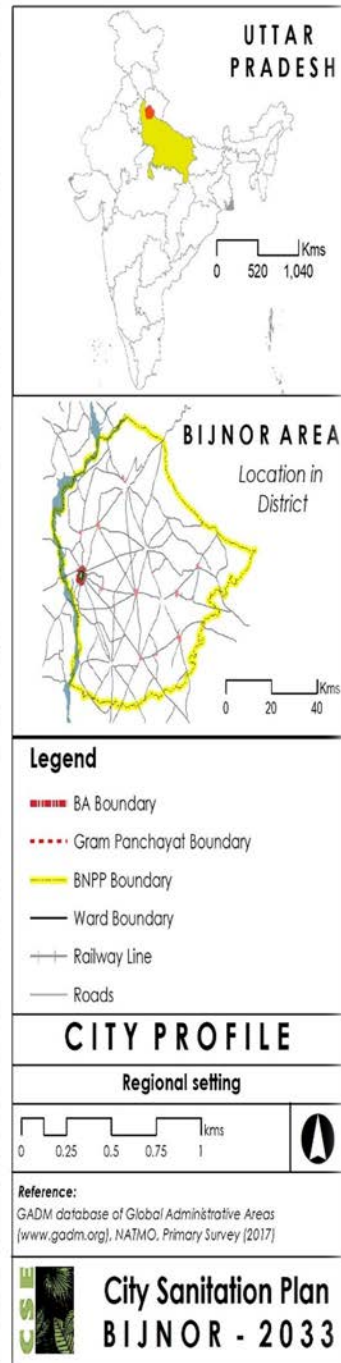
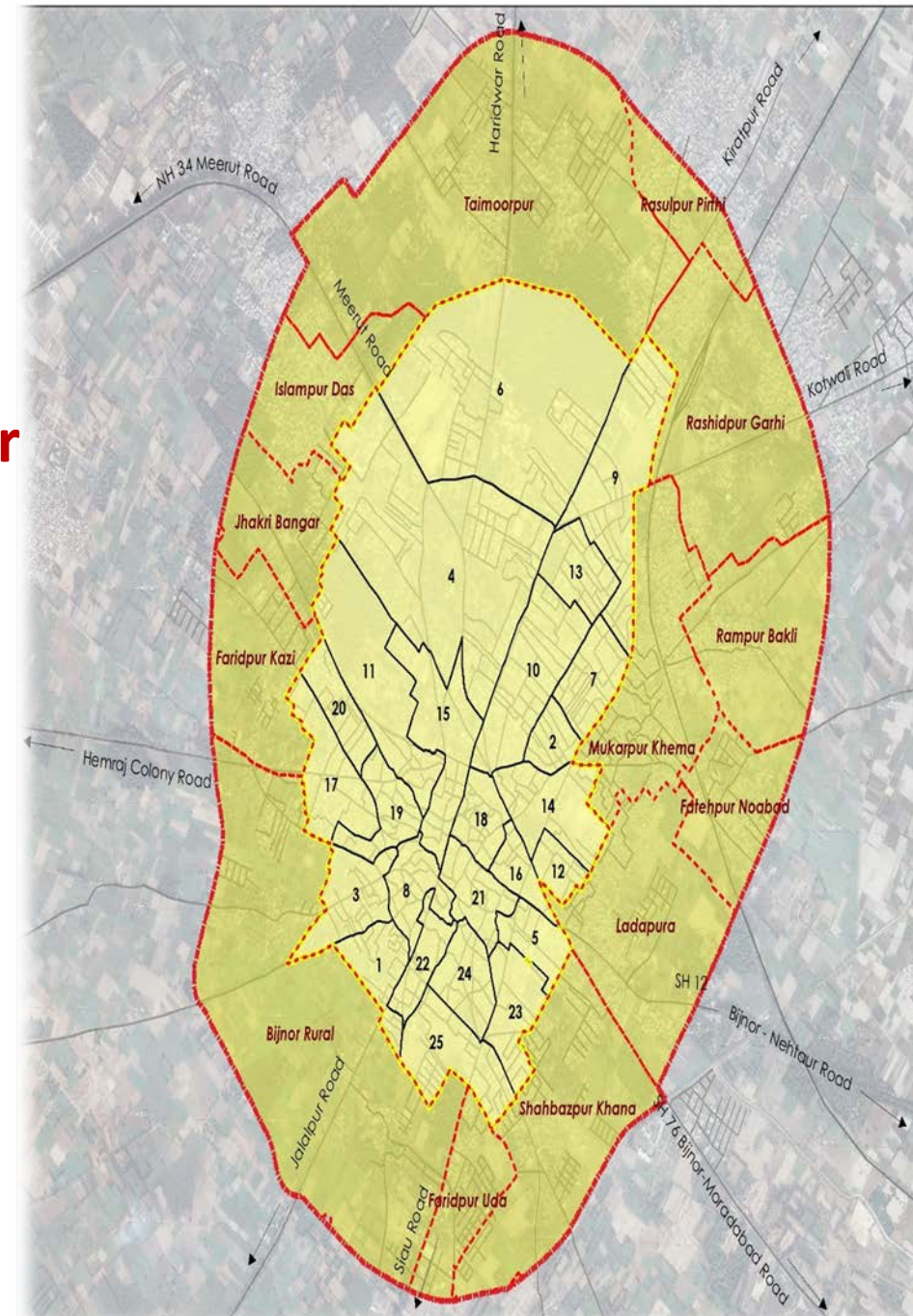
STAKEHOLDERS

- Academic Stakeholder
- Medical Representative
- Political Representative
- Administrative Staff
- Technical Stakeholders
- CSE Technical Support Unit
- Social Worker or NGO
- Helping hand

 Mr. Mansoor Ahmad Chairman, NPPC	 Prabha Singh Executive Officer, NPPC	 Mr. Mithalesh Kumar Sanitation & Food Inspector, NPPC	 Mr. Shamsud Singh Account Officer, NPPC
 Mr. Saurabh Prakash Singh Jr. Jalka, NPPC	 Mr. Shaleesh Kumar Yadav Computer Operator/Typist, NPPC	 Mr. Deepak Kumar Computer Operator/Typist, NPPC	 Mr. Shamsud Singh Account Officer, NPPC
 Mrs. Kusum Social Worker (Chunar), Prapatti Brahmuni Sahasra University	 Dr. S.K. Verma Medical Officer, Primary Health Centre Chunar	 Mr. Jyoti Prakash Ex. Ward Member, Nagar Palika Parishad Chunar	 Mr. Lalmani Yadav Sanitation And Food Inspector, NPP Chunar
 Major Kripa Shankar Singh Ret. Principal POND College, Chunar	 Mr. Sarvesh Singh Health Officer, Primary Health Centre Chunar	 Manish Mishra Research Associate TSU Chunar, CSE	

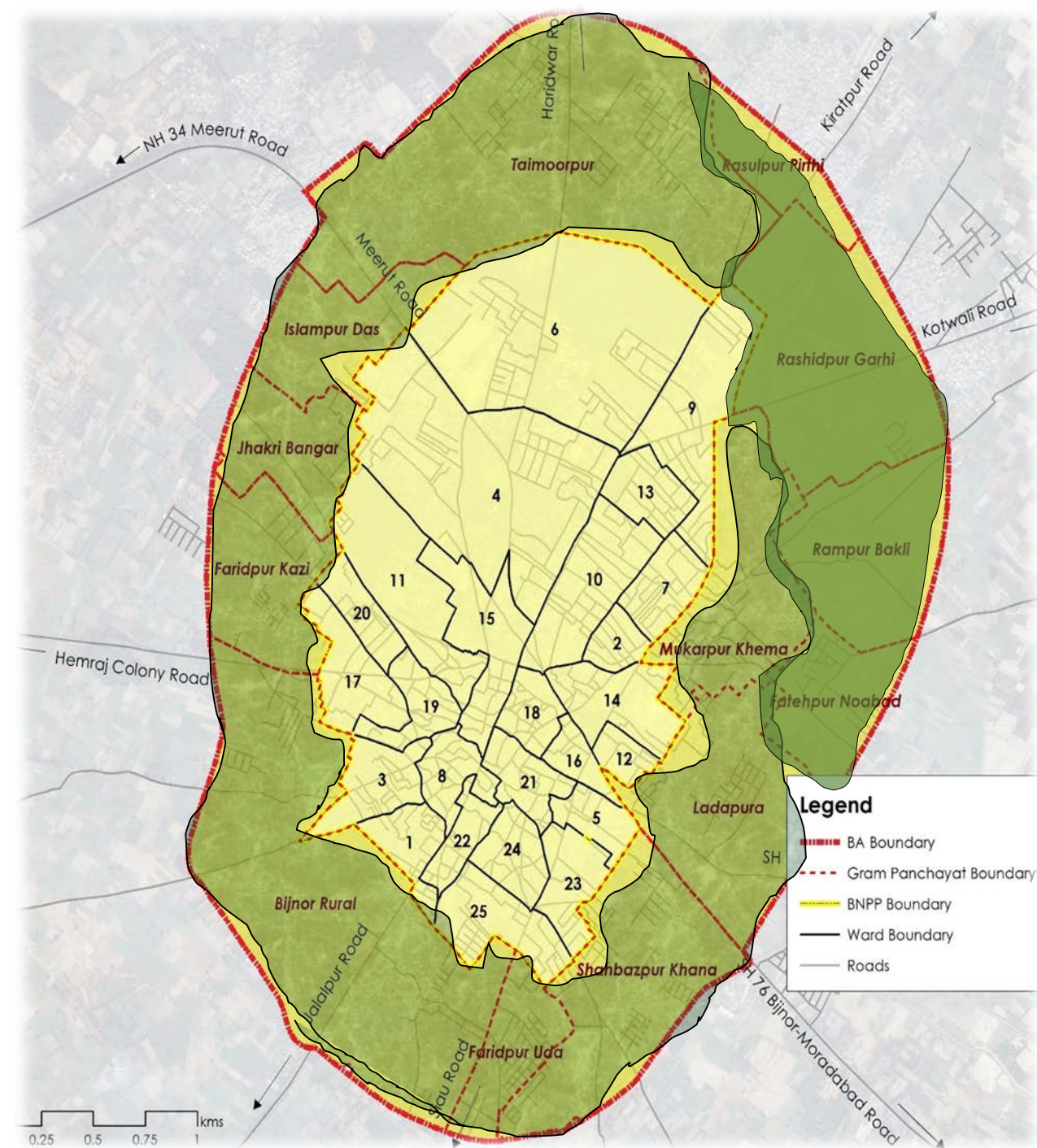
Bijnor

- Bijnor city is located 12 km West from Banks of holy Rive Ganga – **a priority town for river pollution abatement under national mission**
- A small City, which is also a **district headquarter** of district Bijnor in Uttar Pradesh, India |
- **Pop.:117001 & 23,401 Households (approx.) & approx. 30 % living in slums)**
- Area of the city 3.6 sq. km. having 25 wards
- **Declared Open Defecation Free (ODF) in 2019.**



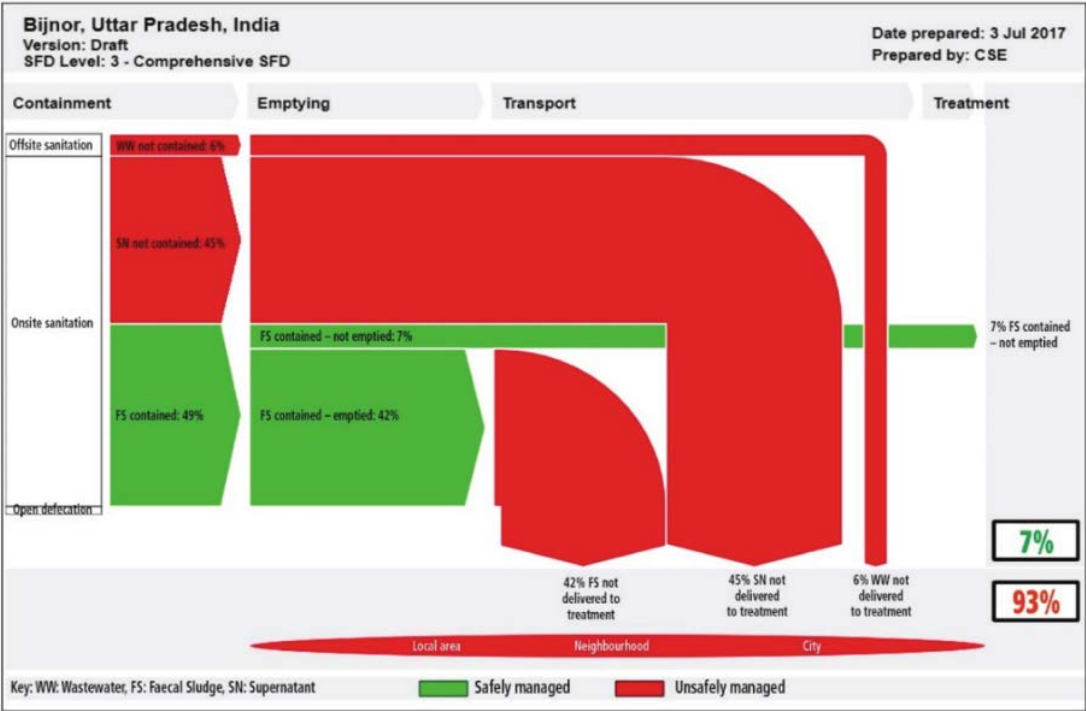
Bijnor Extended Area (BEA)

- 14 adjacent urban villages have been included in its **boundary expansion in December 2020**.
- Revised total area of Bijnor City is 14 sq.km.. - **three times the current area of administration**.
- The urban villages are completely dependent on ground water for their daily water requirements.
- **100% population of the BEA is dependent on Onsite Sanitation Systems (OSS).**

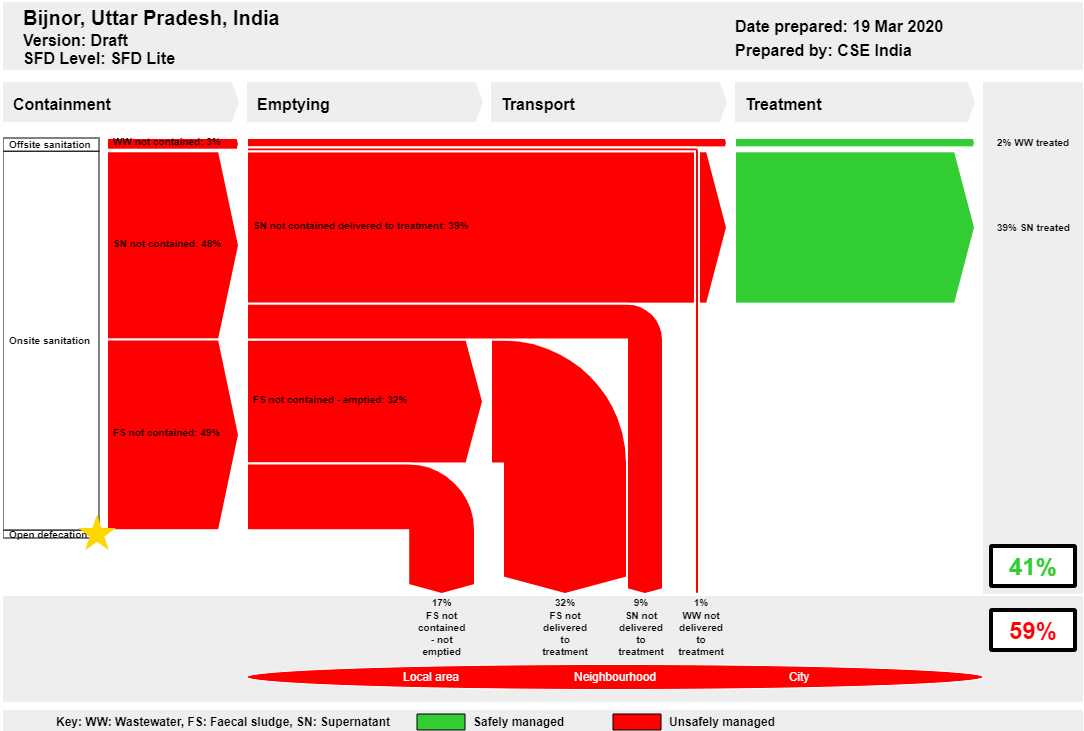


Comparison of Sanitation Situation of Bijnor

SFD Bijnor in 2017



SFD Bijnor 2020



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

Shit Flow Diagram - Bijnor 2020

- No household connected to sewer lines
- 3% population was found with toilets with no containments attached i.e. night soil discharged directly to open drains.
- 97% of the population is dependent on OSS* (31% Septic Tanks & 66% Fully lined tanks) which has outlets connected to open drains.
- Supernatant from OSS along with grey water flowing through open drains is intercepted and transported through gravity-based sewer system to 24-MLD STP.
- City has no Faecal Sludge Disposal site at place at the moment.

CITY LEVEL SUPPORT (Focus City (1)- Bijnor):

Training conducted from 16th Jan to 18th 2020, **model septic tank and twin pit constructed by the trained masons.**

City FSSM Bye-laws is approved by the board, will get notified in next meeting. Notification got delayed due to Covid-19 Pandemic

City-level **training conducted to capacitate private emptiers** plying in the city from 14-15 October 2019

Feasibility study for Co-Treatment done, draft DPR ready. Land for co-composting procured.

Conducted virtual **CSTF Meeting** on 26th May'20. More meetings planned for the coming year.

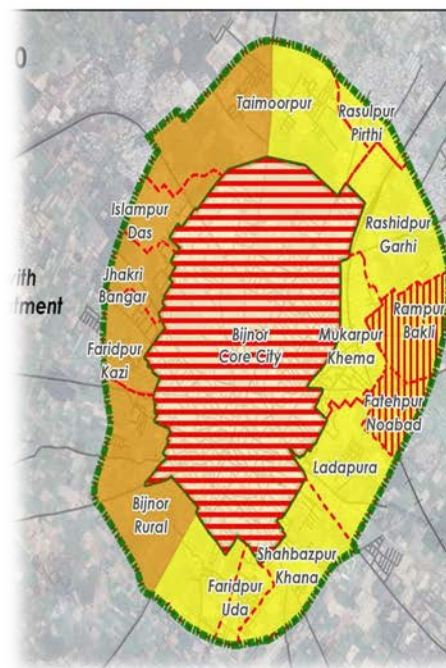
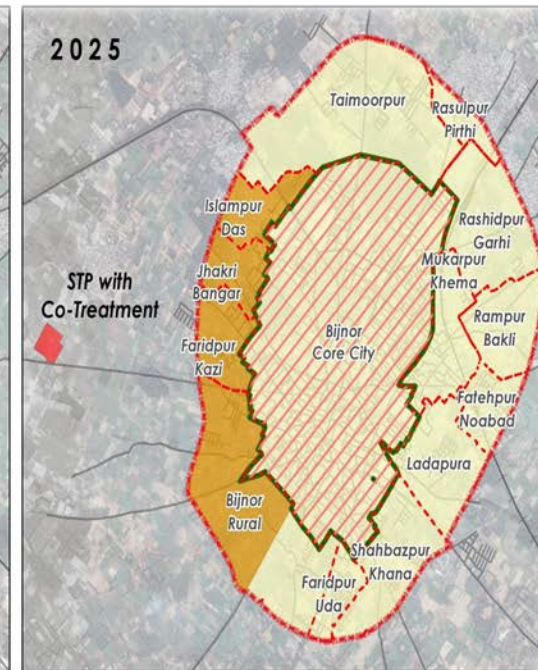
Training of sanitary workers, provision of PPE, Covid awareness week- painting competition, slogan writing competition, social media campaign, wall paintings in low income settlements

CSP approved by CSTF and Co-treatment of FS project at STP under construction – funded by NMCG



Co-Treatment Plan

- Co-treatment is a process where Sewage Treatment Plant (STP), in addition to treating the domestic sewage conveyed through sewers, also treats Faecal Sludge & septage (FSS) emptied from various OSS in the city.
- Plan:** Starting with FS collected from municipal area only be discharged at STP.
- In 2-5 years household in municipality will be connected to sewers hence, low FS generation.
- FS collected from sub-urban Bijnor expansion area will be allowed to be discharged at STP.
- Faecal Sludge Handling Capacity- 20KLD** based on the ultimate demand (year 2030)* **at 24 MLD existing STP. Low CAPEX~ 29lakhs; OPEX ~ - Low**
- Total area required - 625 Sq. mt.
- Technology used- solid liquid separation** at drying beds followed by liquid treatment at UASB reactor.



NOTES:

2020

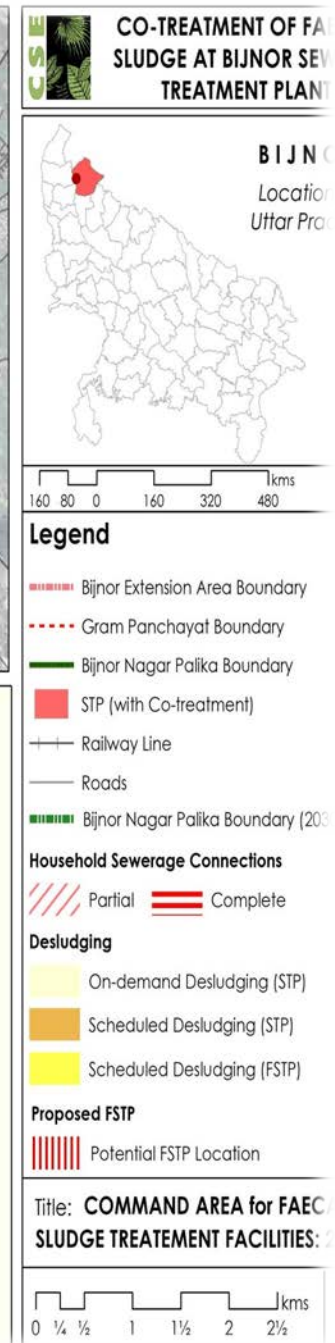
- Total faecal sludge treated through co-treatment facility at ext...
- On-de...

2025

- Sched...
- Expected drop in demand for desludging from core city due to partial sewerage connections.

2030

- FSTP of 24 KLD capacity is commissioned.
- No demand for desludging from core city due to complete sewerage connections.
- Municipal Boundary is extended to cover Bijnor Ext. Area
- Scheduled desludging from eastern parts for FSTP
- Scheduled desludging from western parts for co-treatment
- Total faecal sludge treated: 44 KLD
- 20 KLD in co-treatment facility | 24 KLD in FSTP

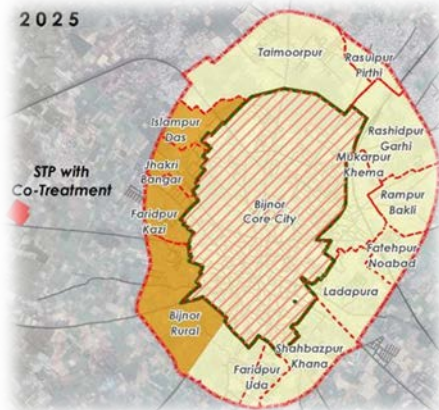


Status as on date and way forward..

- The National flagship Programme for cleaning The River **Ganga-National Mission for Clean Ganga (NMCG)-funds first co treatment project** in Bijnor
- Work started in mid- April 2021 and expected to be completed in next four months

Year 2025:

Scheduled desludging on pilot basis for BEA as expected drop in demand desludging due to partial sewerage connections in core city

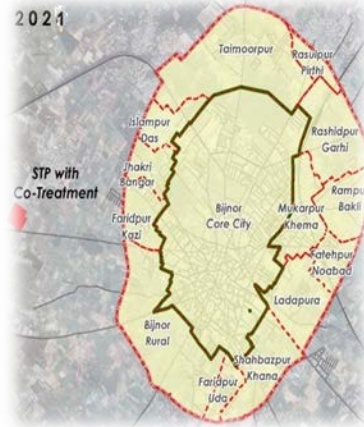


Planned Milestones...

Year 2021:

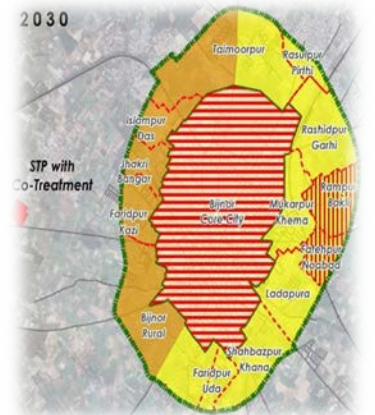
Total FS to be treated by co-treatment facility at existing STP is 20KLD.

On demand desludging in core city & BEA



Year 2030:

- **No demand desludging from core city** as complete sewerage connections
- **Scheduled desludging only from BEA**



CITY LEVEL SUPPORT (Focus City (2)- Chunar)

CSE TSU at Chunar closely supporting ULB

FSTP under construction, project running behind schedule due to hindrances caused by the pandemic.

Training conducted from 21st Jan to 23rd Jan 2020, **model septic tank and twin pit constructed by the trained masons.**

Temporary **trenching site is up and running** and will cater to disposal of faecal sludge till the time FSTP is up and running

City-level **training conducted to capacitate private emptiers** plying in the city from 14-15 October 2019

Conducted **virtual CSTF Meeting** on 26th May'20. More meetings planned for the coming year.

Training of sanitary workers, provision of PPE, Covid awareness week- painting competition, slogan writing competition, social media campaign, wall paintings in low income settlements



First FSTP (10 KLD) funded by NMCG under soft run in March 2021

FSTP Chunar – under trial run since March 2021



Faecal Sludge Treatment Plant in Chunar

A pilot through NMCG with CSE as Knowledge Partner for the project

Capacity: 10 KLD

Area: 3797 sqm. + 1742 sqm. (for plantation)

Capital Cost: **INR 195.9 Lakhs**

Funding: Namami Gange

Implementing Agency: UP Jal Nigam

Contractor Name: ELEFO Biotech Private Limited

Trenching for temporary FS disposal



Chunar City & FSTP to be developed a model learning center – for other urban local bodies in state and across India

[illegible]

Support for health and safety of workers during COVID-19



Supporting COVID-19 response in Uttar Pradesh

Key Activities

COVID-19 support in Bijnor & Chunar

Phase-1: support to Bijnor and Chunar

Protection of Sanitation Warriors during COVID:

- 300 sets of personal protective gear
- 2 Thermal Scanner
- IEC campaign relating to good practices during COVID-19 with messaging in Hindi and Urdu.

In phase-2 :

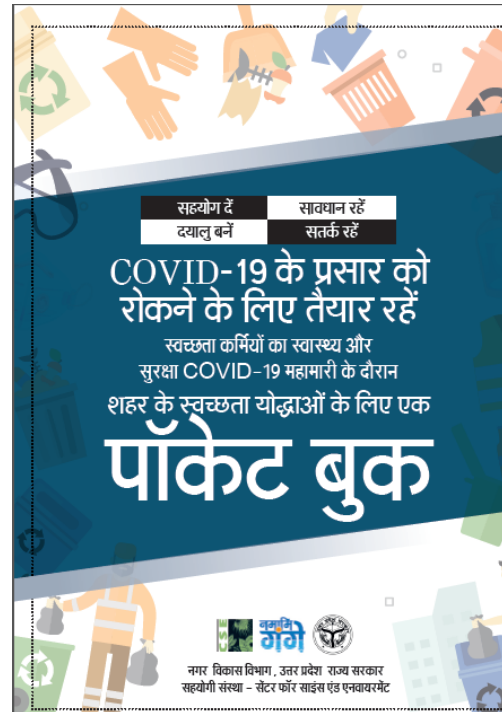
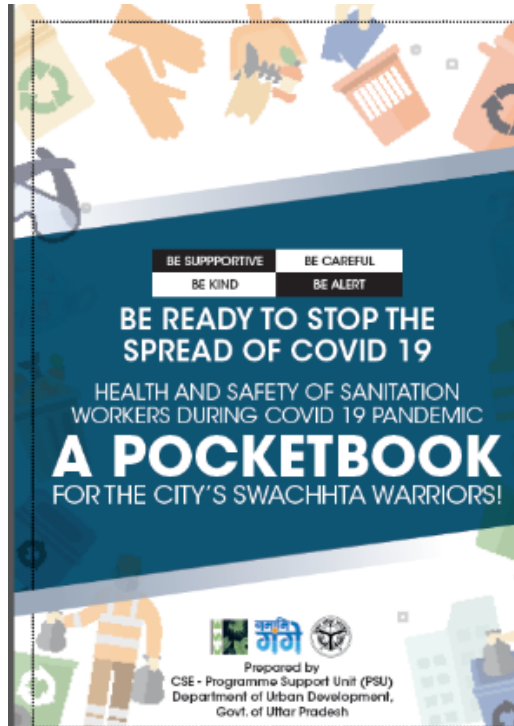
Support 5 cities -
PPE, thermal
scanners as well as
'Foot Operated
Hand-Wash Stations



Pocket Book for Sanitation Workers

A guide to Sanitary Inspectors in cities to ensure Health and Safety of Sanitation Workers during COVID-19

5000 copies under print as CSE PSU - Local Bodies Directorate initiative



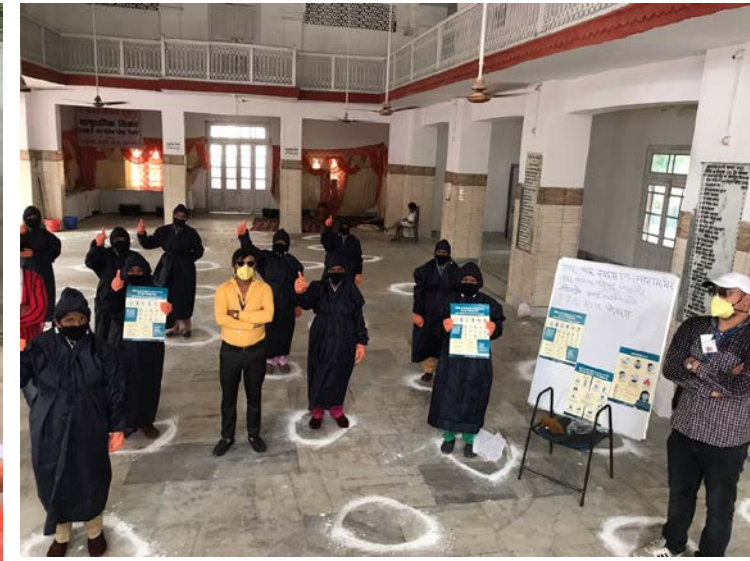
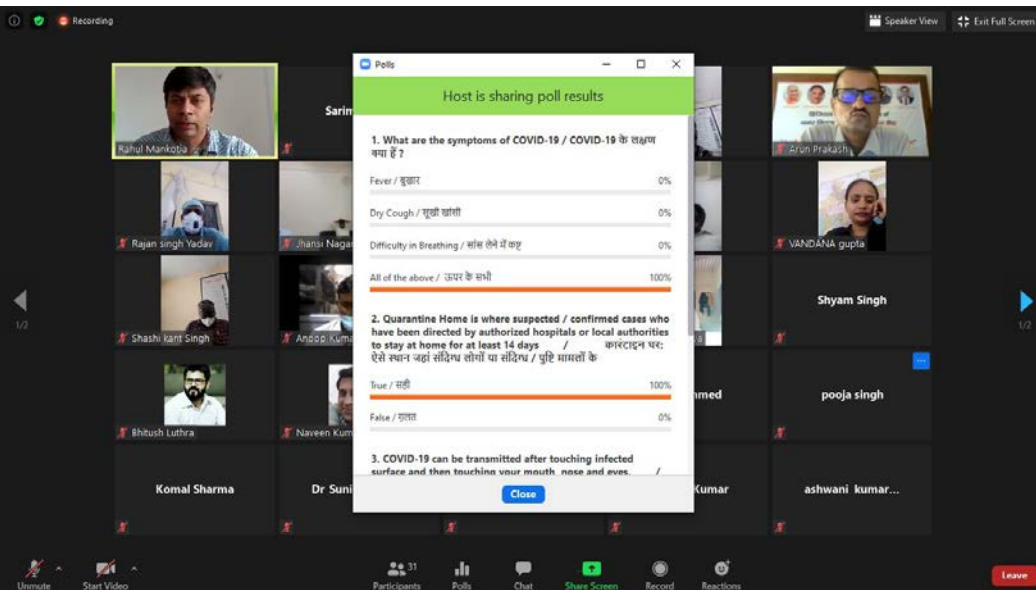
Training of Sanitation Workers COVID-19

2 no. State Level Training for Sanitary Inspectors (~30 SIs trained through virtual trainings)

- Lucknow, Bijnor and Chunar
- Prayagraj, Jhansi, Agra, Unnao, Gangaghat and Lakhimpur

Support for field level orientation of Sanitation Workers:

- 4 session in Bijnor, 6 in Chunar and 5 in Lucknow



Covid Awareness Drive in Bijnor, Chunar and Lucknow

Launch of campaign



Over 2500 kids participated in Painting and Slogan writing competition

Wall paintings in low income settlements



Awareness generation around COVID-19 among women by CSTF members



Audio recording played every morning through mobile vans

Multilingual IEC collaterals for supporting COVID-19 response

SAFE DISPOSAL OF WASTE FROM QUARANTINED HOUSEHOLDS

Persons operating Quarantine camps/centres should get the authorized waste collector or common biomedical waste treatment facility (CBMTF) operator to collect biomedical waste as and when it gets generated

Biomedical waste from quarantined households should be disposed of only through incineration

Biomedical waste from quarantined households should be collected and transported separately from regular waste

Biomedical waste from quarantined households should be treated as domestic hazardous waste

Used masks and gloves from quarantined homes should be kept in a paper bag for 72 hours prior to disposal of the same as general waste

Biomedical waste from quarantined households should be collected in specially marked bags

- General waste from quarantine camps: "Waste to be disposed in solid waste as per CBMTF Rules 2016"
- Biomedical waste from quarantine camps: "Waste to be disposed in solid waste as per CBMTF Rules 2016"
- Biomedical waste from quarantine camps: "Waste to be disposed in solid waste as per CBMTF Rules 2016"

Prepared by Centre for Science and Environment
 D.O.S., State Government of U.P. Programme Support Unit, Lucknow

[illegible]

WASH YOUR HANDS

**Protect Yourself & Others from COVID-19
Ensure Hygiene, Save Water, Stop Corona**

HOW TO HAND WASH



Turn handle to get water



Rub in enough soap to make a lather between fingers



Rub your thumbs the opposite way



Turn off the tap with a tissue



Open tap to rinse hands with water

WHEN TO HAND WASH



Before and after eating



After using toilet/flushing



After using the telephone



After going near ailing people



After frequently touching surfaces



When returning back home



20 SEC

**Together we can help
stop the spread, save
water and stay healthy**

Let's become leaders in water conservation

Prepared by Centre for Research in Water Science
Water Science, Assessment and Policy Department, University of Melbourne

HOW TO WEAR A MASK?



Wash your hands
properly.



Please should
be hiding face.



Cover your mouth,
nose and chin, make
sure there are no gaps.



Change your mask
every 8 hours or as and when
it becomes dirty.



Discarded masks are
not to be reused at all.



Used masks should
be disposed of it only
through fire service.

TIPS



Do not reuse, single use masks



Avoid touching the mask



Remove the mask only using strings



Wash/Disinfect your hands after removing mask.



Prepared by: seema@kashyapandco.com
 Email: seema@kashyapandco.com / Dr.Kashyap@kashyapandco.com

اپنے ہاتھوں کو دھوئیے

خود اپنی اور دوسروں کی COVID-19 سے حفاظت کریں:

ہاتھ کیسے دھوئیں

1. ہاتھوں میں پانی چھڑک لیں
2. صابن لگائیں
3. دو ہاتھوں کے پالموں کو آپس میں راسخ کر لیں
4. بائیں ہاتھ کے پالم کو دائیں ہاتھ کے پالم سے راسخ کریں
5. دائیں ہاتھ کے پالم کو بائیں ہاتھ کے پالم سے راسخ کریں
6. انگلیوں کے درمیان راسخ کریں
7. انگوٹھ راسخ کریں

ہاتھ دھونے کے لئے جب

1. کھانے سے پہلے
2. کھانے کے بعد
3. کھانسی یا کھانسی کے بعد
4. ٹوائلٹ کے بعد
5. کسی عام شے کے بعد
6. کسی COVID-19 سے بیمار شخص کے بعد
7. کسی COVID-19 سے بیمار شخص کے بعد

20 SEC

ہاتھ دھونے کے بعد صابن کو دھو کر رکھیں اور صابن کو دھو کر رکھیں۔
 اگر صابن نہ ہو تو ہینڈ ڈسینفینٹ استعمال کریں۔
 ہینڈ ڈسینفینٹ کے استعمال کے بعد ہاتھوں کو دھو لیں۔

[illegible][illegible]

अपने हाथों को अच्छी तरह से साफ रखें स्वयं तथा दूसरों को कोविड-19 से सुरक्षित रखें

**अपने हाथों को
इसने साफ करें**



पानी अपने हाथों को साफ
से धोना करें



अपने हाथों पर ऊर्धी
करो 20 सेकेंडें



अपने से साफ सूखे हाथों को
के तब तक बांधें। धरी से हाथों को

**अपने हाथों को
धर नाइ करें**



हाथों को अपने हाथों की
कमरे साफ करें



हाथों को अपने पैर या अपने
कमरे की सतह पर न करें



हाथों को किसी वस्तु पर
अपने हाथों को न रखें



**20
SEC**

**सब मिलकर हम सैन स्वास्थ्य
और बाल दोनों को स्वस्थ भी रखें**

कर सकते हैं

अपने हाथों को 20 सेकेंडें, साफ करने से



हाथों से साफ हाथों को साफ
करो 20 सेकेंडें। तब तक हाथों
को के तब तक बांधें



हाथों को 20 सेकेंडें
से 30 सेकेंडें



हाथों को अपने पैर या अपने
कमरे की सतह पर न करें



हाथों को अपने हाथों से साफ
करो 20 सेकेंडें। तब तक हाथों
को के तब तक बांधें

[illegible]

وہمی مقامات سے جراثیم کیسے دور ہیں جہاں COVID19 پایا گیا ہے -

ہیل بھڑ والے علاقے



ہاتھ



دھت



ریلوے اسٹیشن



ریلوے اسٹیشن



دکان



پارک

ہار بار چھوئے
والی جگہوں کو 1%
سے سافٹ کریں۔

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ماسک کیسے پہنئے؟



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تھوڑی سیلانی



ماسک پہنیں
تھوڑی سیلانی



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Repository of COVID-19: Online Resources



- **Advisories and Guidelines Issued**
- **Best Management Practices during COVID-19**
- **Communication Collaterals**
- **COVID-19 Blogs**

- <https://www.cseindia.org/reorganizing-the-repository-of-covid-19-resources-10103>



Mal-Asur: 'Demon of Defeca' campaign

Creating awareness regarding need for proper Faecal Sludge and Septage Management

Launched by MoHUA on 4th June 2020 and by NMCG on 19th June 2020



Odisha and Telangana has already started this campaign



Pilot proposed in Chunar (U.P.) – NMCG priority town

Campaign suitable for towns with FS disposal sites available: Unnao, Kanpur, Lucknow, Prayagraj, Jhansi etc

Outreach & Media Coverage

on

Citywide Sanitation through various communication
collateral

CSE OUTREACH ACTIVITIES ON FSSM / CITYWIDE SANITATION

Type of Content	Number	Views
	Completed	
Films/Videos	11	18000
DTE Articles	4	80500
Articles in Annual Publications	2	10000
Articles / interviews / blogs on DTE Web	70	100000
Web – based tools	2	1000
Media - briefing	1	Sensitization of 25 hindi speaking journalists
Total	90	>2 Lakh Views



FSM in Delhi – A case study

(8.3K Views)

15:14



Can faecal sludge be used as an organic soil conditioner

(1.1K Views)

9:36



Faecal Sludge Management in Jhansi

(7.2K Views)

8:16



How to prepare a Shit Flow Diagram

(1.2K Views)

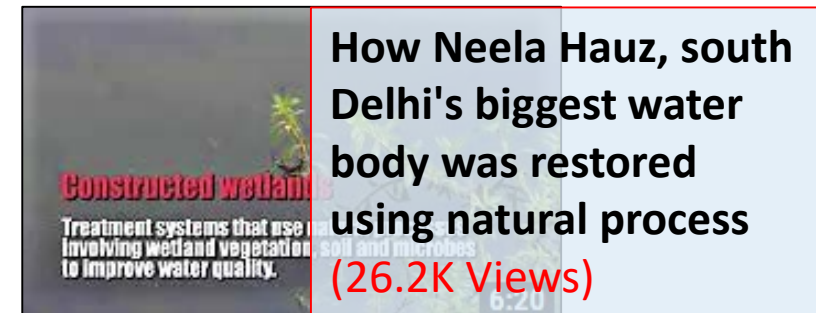
12:52



Centre for Science and Environment's capacity building initiative in the Ganga Basin

(166 Views)

7:09



How Neela Hauz, south Delhi's biggest water body was restored using natural process

(26.2K Views)

6:20

Blind spot in Namami Gange
By 2019, when Swachh Bharat Mission comes to an end, some 30 million septic tanks and pits would have been dug along the Ganga. It's time the Central, state and local sanitation programmes recognised faecal sludge management as a priority to ensure a clean Ganga



Blind Spot in Namami Ganga
(22.5K Reads)

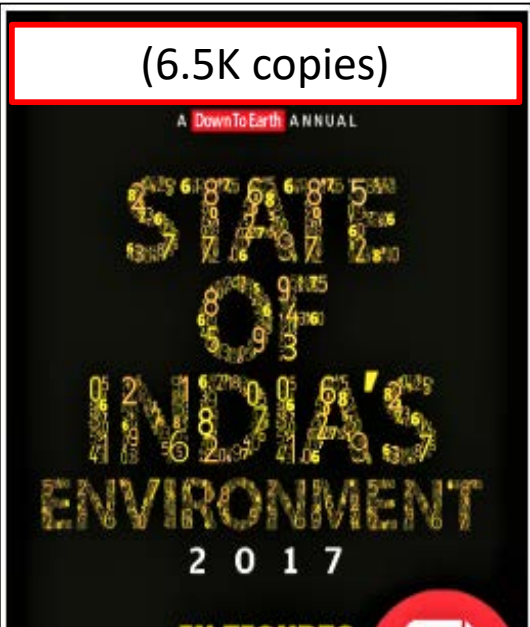


Unholy Chase (Marghat mein Ganga)
(20K Reads)

Urban shit: where does it all go?
India is staring at a big sanitation crisis and needs to reinvent its excreta disposal mechanism



Urban Shit: Where does it all go
(38K Reads)



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Search By Keyword

ganga

Search By Author

Enter

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- Content type...

Sort by: Newest | Oldest | Relevance

183 Search Results for ganga

The myth of a clean Kumbh
The NGT flagged poor solid waste management during the Kumbh Mela on the Ganga, which both the Centre and UP claimed to be 'swachh' or clean. But ...
May 09, 2019SHARE

Namami Gange: 5 reasons why Ganga will not be clean by 2020
Even after 4 years and an allotment of Rs 22,000 crore, Modi's flagship programme is far from being a success
May 08, 2019SHARE

Dirty Ganga: Funds down the drain in UP
Contrary to government claims, efforts to clean up the drains flowing into the Ganga have not borne results
April 29, 2019SHARE

Around 50 articles/cartoon strips/interviews on Ganga uploaded on DTE web (>1 Lakh Views)

OUTREACH IN UP (PRINT & ELECTRONIC MEDIA)-(100 +)

'In urban U.P., 87% of waste from toilets goes to rivers, farmlands'

Study by Centre for Science and Environment says if more toilets and septic tanks are

SPECIAL CORRESPONDENT
New Delhi
While urban Uttar Pradesh has an 80% coverage of toilets, inefficient sanitation systems ensure that almost 87% of the excreta being generated by these toilets is being dumped in waterbodies or agricultural lands, according to a new analysis of 30 cities by the Centre for Science and Environment.
"With 2019 just round the corner, the number of toilets and on-site sanitation systems being built in the state has still not increased enough

Monday, argues that building more toilets will only worsen the environmental, sanitation and manual scavenging situation, unless sewerage connections increase from the current 28% of households in the 30 cities studied. On-site sanitation systems—such as septic tanks or pit latrines—are far more prevalent, and are used by 47% of households.
Manual scavengers Without a sewerage system, the effluent from the septic tank, along with sewerage

आमर उजाला

नदियों को साफ रखने को सेप्टेज प्रबंधन जरूरी
लखनऊ। शहरों में सैटेज टैंक के मल-मूत्र (सेप्टेज) का वैज्ञानिक तरीके से सीएसई के साथ काम कर रहे हैं। अधिकतर सतह में रहे हैं। नगर विकास

नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है : मनोज कुमार

यूपी जल जल्द ही ओडीएफ

मुख सचिव

सीवेज के अपशिष्ट को कारोबार जोड़ें तब होगी नदियों की सफाई

■ एनबीटी, लखनऊ : घरेलू टैंकों से निकलने वाले मल-मूत्र अपशिष्ट का बीओडी (बायोकेमिकल ऑक्सीजन डिमांड) 1000-20000 एमएलडी होता है। जो नदियों के लिहाज से काफी हानिकारक है, लेकिन इसके खेतों में इस्तेमाल से फसल काफी अच्छी होती है। किसान सिस्टम से निकलने वाले अपशिष्ट के मुकाबले घरेलू अपशिष्ट ज्यादा

सैंटर फॉर साइंस एंड एन्वायरमेंट के कार्यक्रम 'क्या हम मार्च 2019 तक गंगा को बचा पाएंगे' पर विशेषज्ञों ने दी राय है।
सिस्टम से निकलने वाले अपशिष्ट के मुकाबले घरेलू अपशिष्ट ज्यादा है। किसान सिस्टम से निकलने वाले अपशिष्ट के मुकाबले घरेलू अपशिष्ट ज्यादा है।

राष्ट्रीय सहारा

प्रदेश के शहरों में सीवर प्रबंधन की हालत खस्ता

सांध्य दैनिक

गतिविधि हमारा काम की जा सकती है, यदि आपके पास उन्हें स्वीकार करने का साहस है।

नगरीय स्वच्छता कार्य में लाई जा रहों

प्रदेश के नगर विकास प्रमुख सचिव मनोज कुमार सिंह ने कहा कि प्रदेश में स्वच्छ भारत मिशन के तहत

साथ ही यह कार्य निष्पक्षित लक्ष्य को पूरा करने में भी सहायक होता है। उन्होंने कहा कि इस क्षेत्र में प्रदेश की कार्यवाही देश के अन्य राज्यों की भी प्रेरित करेगी और इस प्रकार राष्ट्रीय लक्ष्य को प्राप्त किया जा सकेगा। उन्होंने आशा व्यक्त की कि सीएसई तथा प्रदेश सरकार के बीच सहयोग से प्रदेश अन्य राज्यों के लिए प्रेरणा स्रोत बन जाएगा। कार्यवाही के उद्देश्यों पर प्रकाश डालते हुए सीएसई के जल एवं अपशिष्ट जल

कार्यक्रम के दौरान डाउन टु अर्थ पत्रिका का विमोचन।
है। यह जानकारी मंगलवार वाटर एंड वेस्ट वाटर मैनेजमेंट के प्रोग्राम डायरेक्टर सरोज मोहिल्ला ने हजरतगंज स्थित एक निजी

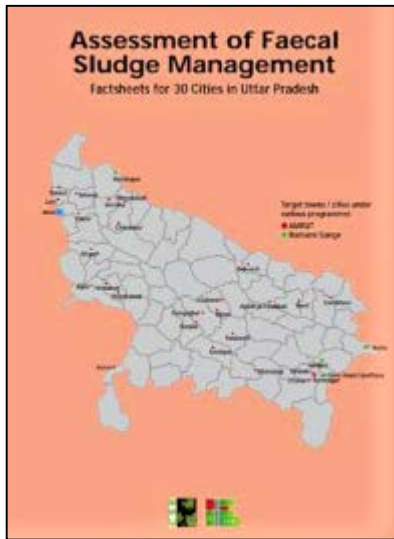
ऑडिशा में सेप्टेज प्रबंधन के गुरु सीखेंगे उत्तर प्रदेश के अधिकारी

यूपी जल निगम के माध्यम से 31 शहरों में फिकल स्लज ट्रीटमेंट प्लांट्स (एफएसटीपी) की स्थापना और 21 शहरों में एसटीपी में फिकल कीचड़ के सह-उपचार के लिए निविदाएं आमंत्रित की हैं।

Radiance MEDIA GROUP

UP takes initiative and sends officials for Exposure Visit to Faecal Sludge and Septage Management plants in Odisha
UP Government is planning 31 effective Faecal Sludge and Septage support from CSE.
The state government has taken initiative to Faecal Sludge and Septage Man...

UP takes initiative and sends officials for Exposure Visit to Faecal Sludge and Septage Management plants in Odisha
UP Government is planning 31 FSTPs and 21 Co Tre effective Faecal Sludge and Septage Management in the support from CSE.
The state government has taken initiative and sent officials to Faecal Sludge and Septage Management plants in Odisha
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The state government has taken initiative and sent officials to Faecal Sludge and Septage Management plants in Odisha

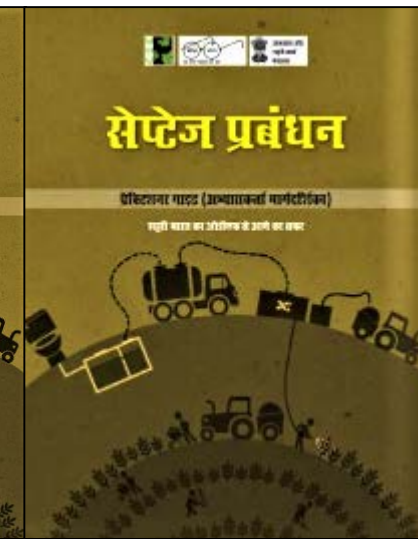
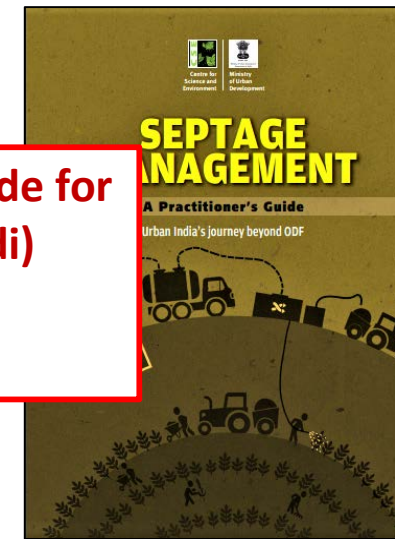


Factsheets and analysis of Sanitation chain in 30 cities of Uttar Pradesh

150 Hard Copies
3000 Downloads

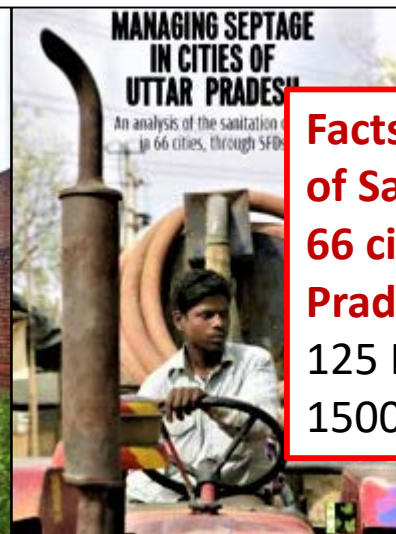
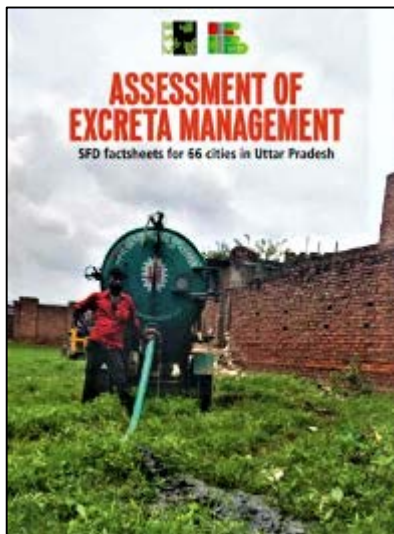
Practitioner's Guide for FSSM (Eng. + Hindi)

1000 Hard Copies
1000 Downloads



Factsheets, reports, Guidelines prepared by CSE for FSSM

1500 Hard Copies
7500 Downloads

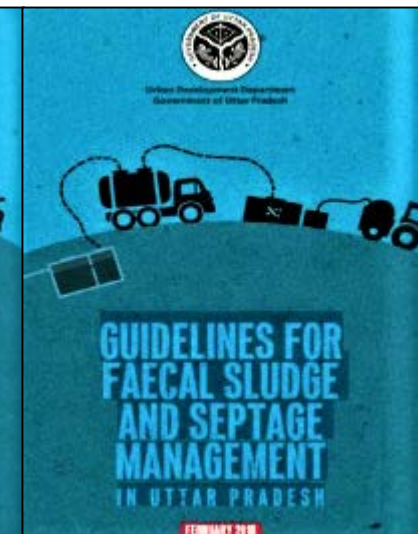
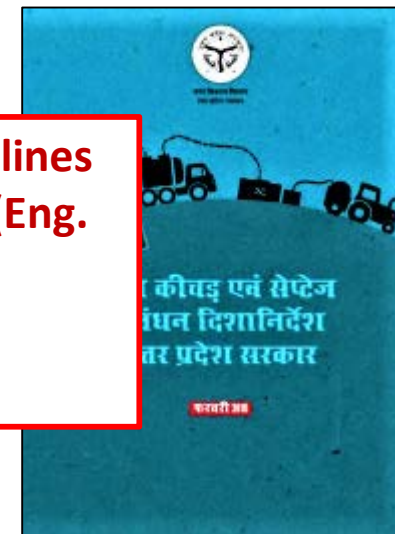


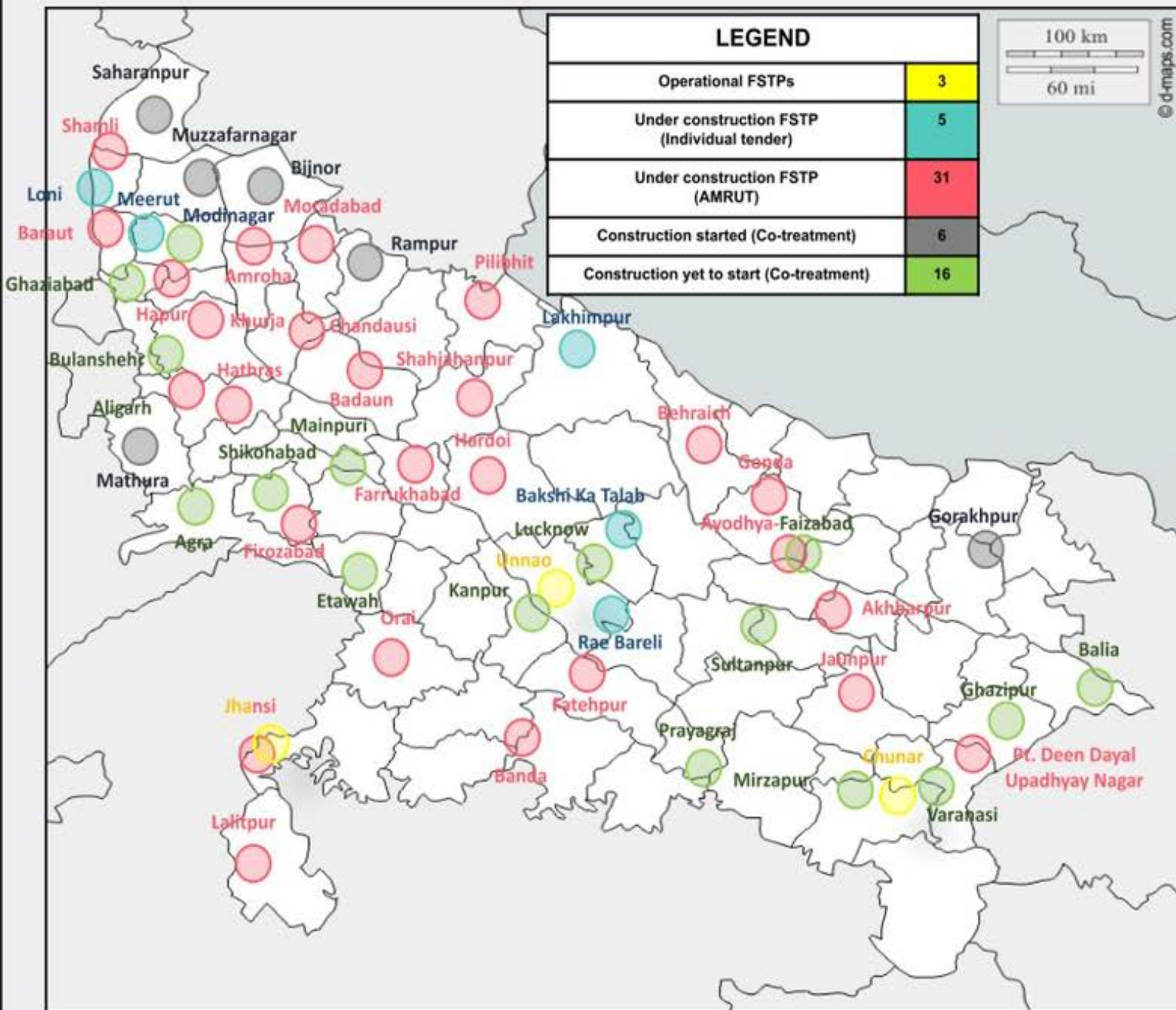
Factsheets and analysis of Sanitation chain in 66 cities of Uttar Pradesh

125 Hard Copies
1500 Downloads

Draft FSSM Guidelines of Uttar Pradesh (Eng. + Hindi)

150 Hard Copies
2000 Downloads





Overall FSSM Progress

Uttar Pradesh

3

Operational FSTPs

(Jhansi, Unnao, Chunar)

59

FSSM projects

Sanctioned (38 FSTPs and 21 co-treatment)

37

Construction started in

Projects (5 co-treatment and 32 FSTPs)



Bijoli FSTP, Jhansi
FSTP Operational Since 2018
Total Trips: 2307
Total FS Treated: 3.9 ML



Hussain Nagar FSTP, Unnao
FSTP Operational Since 2019
Total Trips: 611
Total FS Treated: 1.8 ML



Gwari Sewage Pumping Station / Bharwara STP, Lucknow
Co-treatment Operational Since 2018
Total Trips: 5940
Total FS Treated: 29.6 ML



Bingawan STP, Kanpur
Co-treatment Operational Since 2015
Total Trips: 15778
Total FS Treated: 78.9 ML

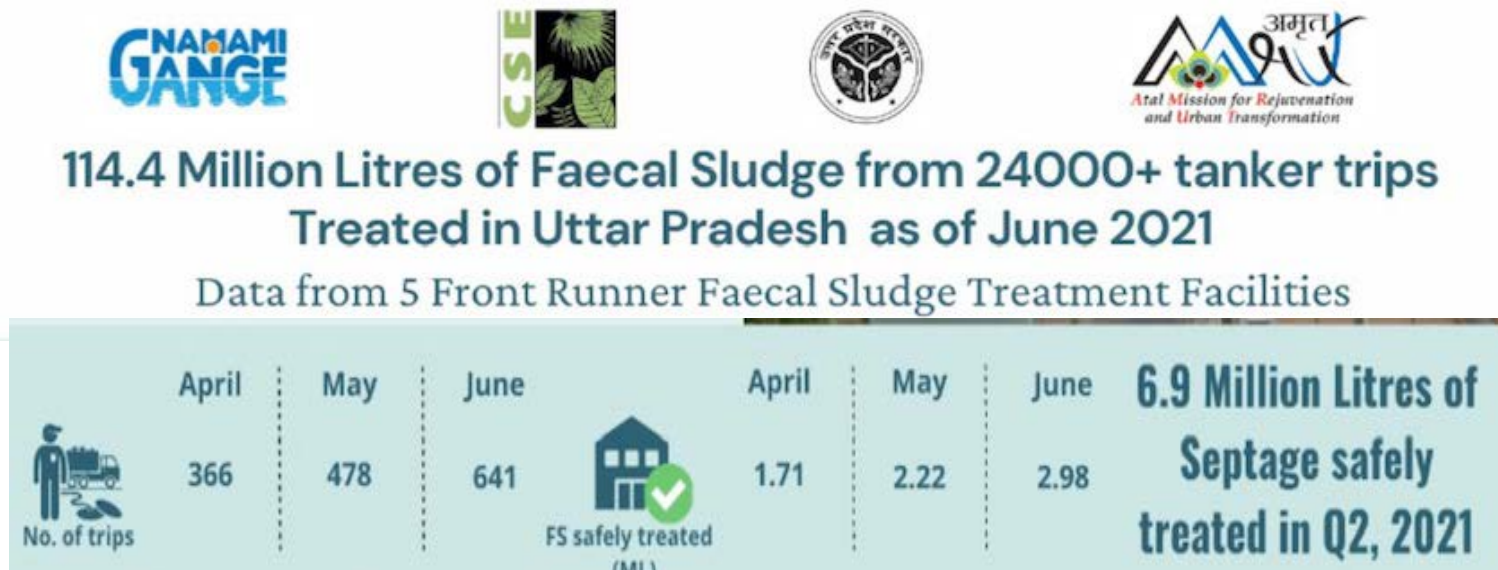


Dargah Shareef FSTP, Chunar
FSTP operational Since March 2021
Total Trips: 35
Total FS Treated: 0.12 ML



Operationalized FSTP in Jhansi and Unnao & Co-treatment at STPs

- Septage Management policy operationalized in Oct 2019.
- Several city have started registration and **licensing of De-sludgers for decanting faecal sludge at - Sewage Pumping Station / Sewage Treatment Plant.**
- City level FSSM Bye-laws approved in **Bijnor, Chunar, Jhansi.**
- CSE city-level FSSM guidelines approved by **Chunar City Council.**



Website / Page : CSE – DoUD PSU & TSU in Uttar Pradesh

The screenshot shows the CSE website with a navigation bar at the top. The main content area is titled 'Programme Support for FSSM in Uttar Pradesh'. It includes a 'Work Overview' section on the left, an 'Updates' section in the middle, and a 'Documents' section on the right. The 'Updates' section features a large article titled 'Launch of Pocket Book for Health and Safety Sanitation Workers during COVID-19 and MalAsur 'Demon of Defeca' Campaign'. Below this, there is a section for 'COVID-19 Awareness Drive in Uttar Pradesh (May - June 2020)'. The 'Documents' section lists various reports and resources, including 'TRAINING & WORKSHOPS FOR CITY WIDE SANITATION AND FAECAL SLUDGE & SEPTAGE MANAGEMENT' and 'COVID-19 Resources'.

Links to the page available from following pages:

NMCG: <https://nmcg.nic.in/index.aspx>

AMRUT – U.P.: <http://www.amrutup.in/>

SMCG – U.P.: <http://smcg-up.org/>

Directorate of Local Bodies: <https://localbodies.up.nic.in/>

The screenshot shows the website for the State Mission for Clean Ganga (Namami Gange) in Uttar Pradesh. The header includes the mission's name in Hindi and English, along with the Government of Uttar Pradesh logo. The navigation bar lists various sections: Home, About Us, Projects, Documents & Media, City Sewerage Profiles, Partners & Stakeholders, Procurement & Tenders, and Contact Us. The main content area features a large image of the mission's launch, with portraits of Yogi Adityanath and Dr. Mahendra Singh. Below this, there is a section for 'References' which lists various organizations and institutions, including 'Water 2030 (World Bank)', 'IITs/NITs/BHU/Universities and Research Institutes', and 'CSE'. A red circle highlights the 'References' section. The footer includes a 'Quick Links' section with links to various government departments and organizations.

<https://www.cseindia.org/page/programme-support-for-fssm-in-uttar-pradesh>

<https://www.cseindia.org/page/technical-support-for-fssm-in-bijnor-uttar-pradesh>

<https://www.cseindia.org/page/technical-support-for-fssm-in-chunar-uttar-pradesh>

Supporting State & Cities Journey Beyond ODF

SBM 2.0 / ODF +/ODF++/ Water+ & Jal Jeewan Mission

Next Steps

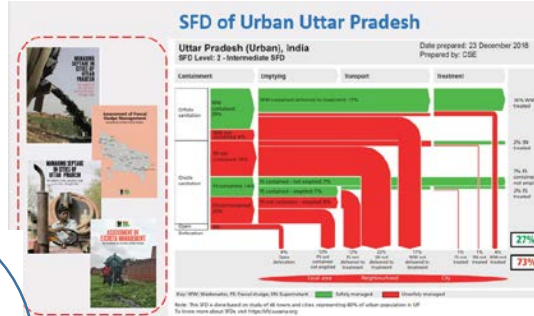
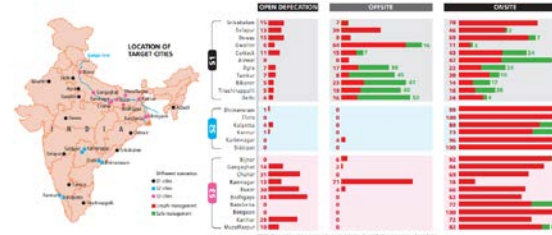
Advocacy at City, State and National level

Indian SFD story so far :

- CSE tested methodology of data collection to Indian context trained various change agents to prepare and use SFD for advocacy and undertaken :
- Baseline study for developing **City Sanitation Plans** in Ganga basin (represents almost 40% Indian population)
- Analysis of sanitation in Urban Uttar Pradesh using SFDs of 66 major cities to produce **State level SFD**
- **Baseline study of Hindon River basin** through SFDs **to decide on the relevant projects**
- **Baseline study of Ganga River Basin through SFDs of 21 cities along the main stem**
- **CSE has developed more than 100 SFDs** and used as an **advocacy tool to sensitize the decision makers at national , state and local level.**
- More than **500 SFDs (different versions)** developed in India, by various agents and 450 + cities initiated effective FSM intervention

SFDs institutionalised - Advisory issued by MoHUA (July 2020) on 'Onsite and Offsite Sewage Management Practices' recommends - *'SFDs to monitor the progress of cities and City Sanitation Planning'*.

Advocacy at City, State and National level



INDIA'S 1ST FAECAL SLUDGE MANAGEMENT PROJECT FUNDED BY NATIONAL MISSION FOR CLEAN GANGA



SFD –

Tool for situation assessment, monitoring & City Sanitation Planning recommended by MoHUA – CPHEEO for improved Citywide Water & Sanitation

1. Collection
2. Transport of faecal matter
3. Transportation of the treated sludge/sewage
4. Safe treatment of the collected sludge/sewage
5. Safe treatment of the treated sludge/sewage
6. Safe treatment of the treated sludge/sewage
7. Safe treatment of the treated sludge/sewage
8. Safe treatment of the treated sludge/sewage
9. Safe treatment of the treated sludge/sewage
10. Safe treatment of the treated sludge/sewage



Swachh Bharat Mission - Urban

Advisory on ON-SITE AND OFF-SITE SEWAGE MANAGEMENT PRACTICES

Central Public Health and Environmental Engineering Organisation (CPHEEO)

Ministry of Housing and Urban Affairs Government of India

www.swachhbharaturban.gov.in | www.cphdeo.gov.in

July 2020

Year 2020-21 : Supporting U.P for Cities Journey Beyond ODF

- **Online Trainings for sensitization** of 650+ Urban Local Bodies on ODF+/ ++/ Water+ : 10 no.s
- **Training of Plumber & Masons** on for improved OSS as per IS Code in Chunar & Bijnor : 2 no.s including construction model septic tanks / pits
- **Training of Sanitation Workers** : 6 no.s

Total 740+ State / Municipal Functionaries sensitized on

- ODF+ / ODF++/ Water Plus and
- CPHEEO new guidelines on Preparation of SFD & CSP for On-site & Off Site Sewage Treatment for Citywide Sanitation.

STATE LEVEL INTERVENTIONS : Next Steps

- **State-Level Workshop** to operationalize a **'Forum of Cities that manage Excreta'** to track and evaluate **'Front Runner Cities'** in Effective Citywide Sanitation.
- **Support 'Front Runner Cities'** (like **Chunar, Bijnor, Unnao, Lucknow, Prayagraj, Jhansi, Lakhimpur, Loni etc**) in adopting effective FSSM and become a model for other cities
- Pilot **IEC campaign** for effective **FSSM using 'Malasur - collaterals'**
- **State Level Trainings and Exposure Visit** for mainstreaming best practices in FSSM.
- City-level **FSSM guidelines / bye-laws** developed for Chunar to be used as model for other cities to adopt.

CITY LEVEL INTERVENTIONS : Next Steps

Focus City (ONE) – Bijnor

Focus on CSP Implementation

- Licensing of Desludgers
- Pilot Testing for Scheduled Desludging
- Technical support for the implementation of co-treatment/co-composting at STP of Bijnor
- On-going Support for implementation of City Sanitation Plan in Bijnor
- Tech support for pilot DWWTs.
- Training for Sanitation Workers.
- IEC campaign for COVID-19 awareness and effective FSSM

Focus City (two) – Chunar

Focus on FSSM

- Pilot Testing for Scheduled Desludging
- Technical Support for GPS tracking of Emptying and Transportation of Faecal Sludge
- On-going support for implementation of city level FSSM guidelines including bye-laws.
- Technical support for implementation of FSTP.
- Training for Sanitation Workers.
- IEC campaign for COVID-19 awareness and effective FSSM
- **Prepare Model Rapid CSP**

Model Cities developed as teaching learning centers for other ULBs across state and India

- THANK YOU