









Review Meeting 7th July 2020

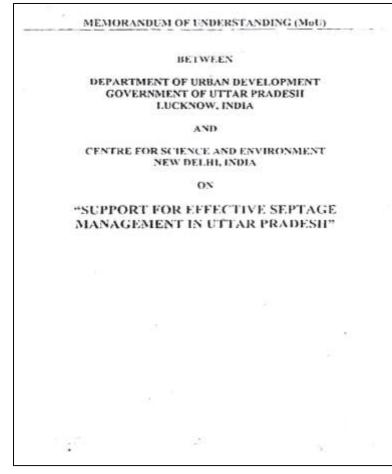
CSE partnership with DoUD GoUP in supporting Effective Faecal Sludge and Septage Management for citywide sanitation



A summary of previous year activities, present status and plan for coming year

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)

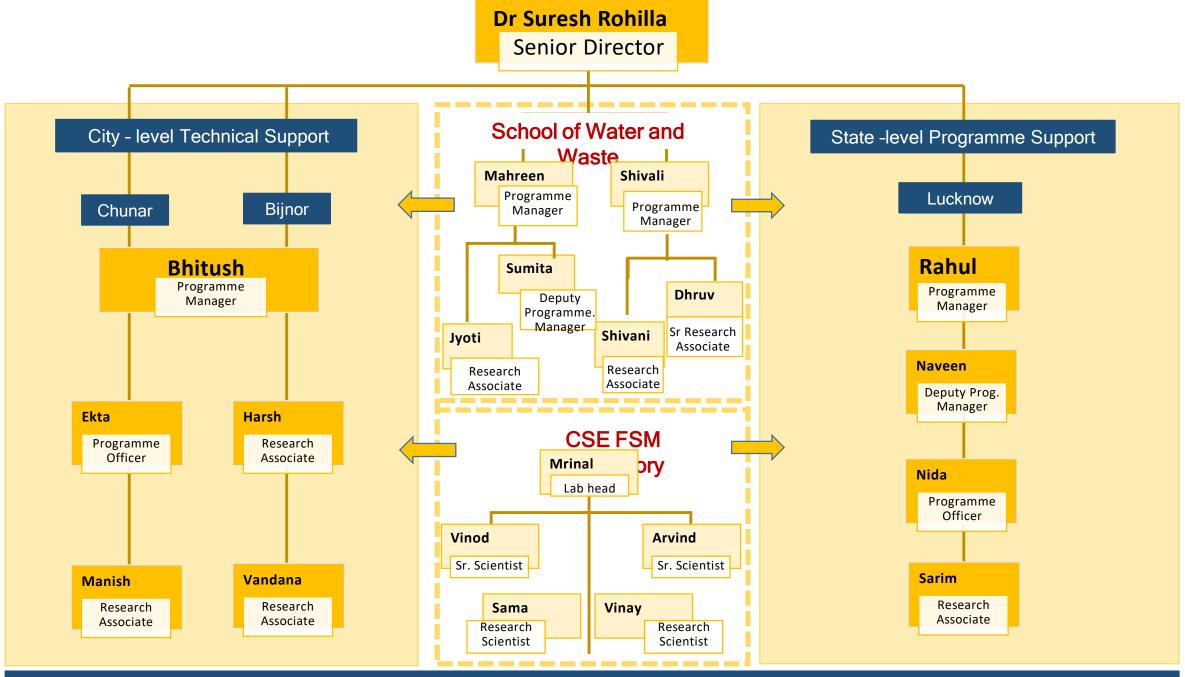


Principal Secretary Department of Urban Development, Government of Uttar Pradesh. 8° Pleys, Bapu Dhawan, Luckeaw - 226001	Director Genetal Crutee for Science and Environment 41, Lughlishbad Institutional Area New Della - 110062, India
Phone: 0522-2239467, 2214751	Phone: 011-25955124, 29956110, 29956394, 29956399
Signal in on this 3rd day of Januar	2 2018 for and on behalf of: Centre for Science and Environment
Principal Secretary Principal	Signature Date Director General

CSE & DoUD

- MoU

Jan 2018



14 member dedicated team; State & City support

Snapshot of CSE in Uttar Pradesh...

(Sept 2016 - Apr 2018): Capacity Building of State and Non-State Actors in Ganga Basin for City Sanitation



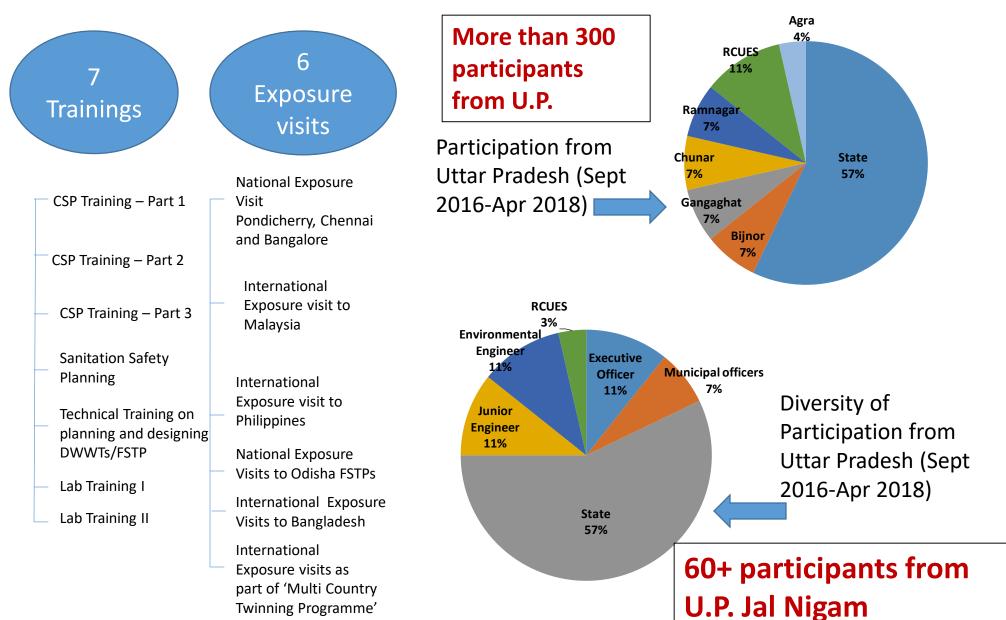
(Jan 2018 - Apr 2020): Partnership with DoUD (U.P.) in Effective Faecal Sludge and Septage Management for Citywide Sanitation



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

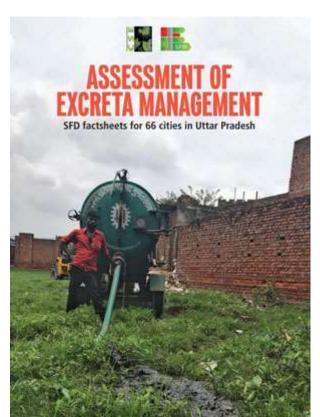
Overview of Capacity Building Activities in Uttar Pradesh

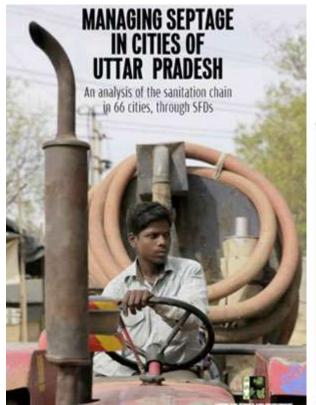
(Trainings and Exposure Visits over the past 5 years)

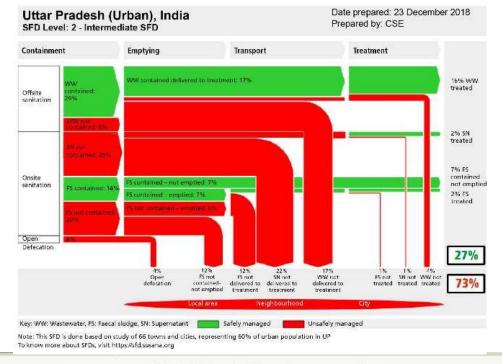


Assessment of Excreta Management 66 Cities in U.P.

- 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

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 8% of the population is discharged directly in open drains 4% of the population still defecates in the open 27% of the total population is safely managed. 7% of which is safely stored in

containment systems

No city is 100% sewered

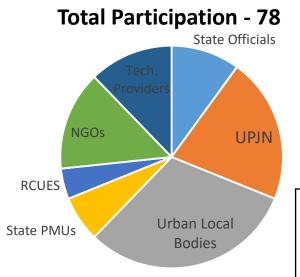
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State Workshop FSSM in Lucknow Oct'18









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.













Snapshot of Uttar Pradesh FSSM Progress 2019-20

- Operationalized FSTP in Jhansi and Unnao (October 2019)
- FSTP implementation Status
 - Under Construction
 - AMRUT: 4 cities (Lakhimpur, Raebareli, Loni, Modinagar)
 - Namami Gange: 1 city (Chunar) CSE Knowledge Partner
 - Contractor selected for FSTPs: 31 (Cities)
 - Contractor selected for Co-Treatment: 4 (Cities)
 - Tenders under evaluation of Co-Treatment: 17 (Cities)
- 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.

State-Level Programme Support in Uttar Pradesh: Planned Vs Achieved

2019-20

STATE LEVEL SUPPORT: Planned Vs Achieved

Planned (March'19)	Status (July'20)
Endorsement of State FSSM Policy with a focus on complete value chain	Septage Management policy issued on Oct'19
State level trainings, workshop and exposure visit for effective FSSM	1 - State Trainings (July'19), 1 - National Exposure Visit to Odisha (July'19) and 1 - International Training cum Exposure Visit to Bangladesh (Feb'19) 3 - training under AMRUT capacity building initiative Orientations to ~60 municipal functionaries through Directorate of Local Bodies.
Report for Co-Treatment of FS in STP (Bharwara STP Lucknow)	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.
State Level Platform of Collaboration and Convergence in Citywide Sanitation	'Alliance for Urban Transformation ' formed. First meeting held on 13 th 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

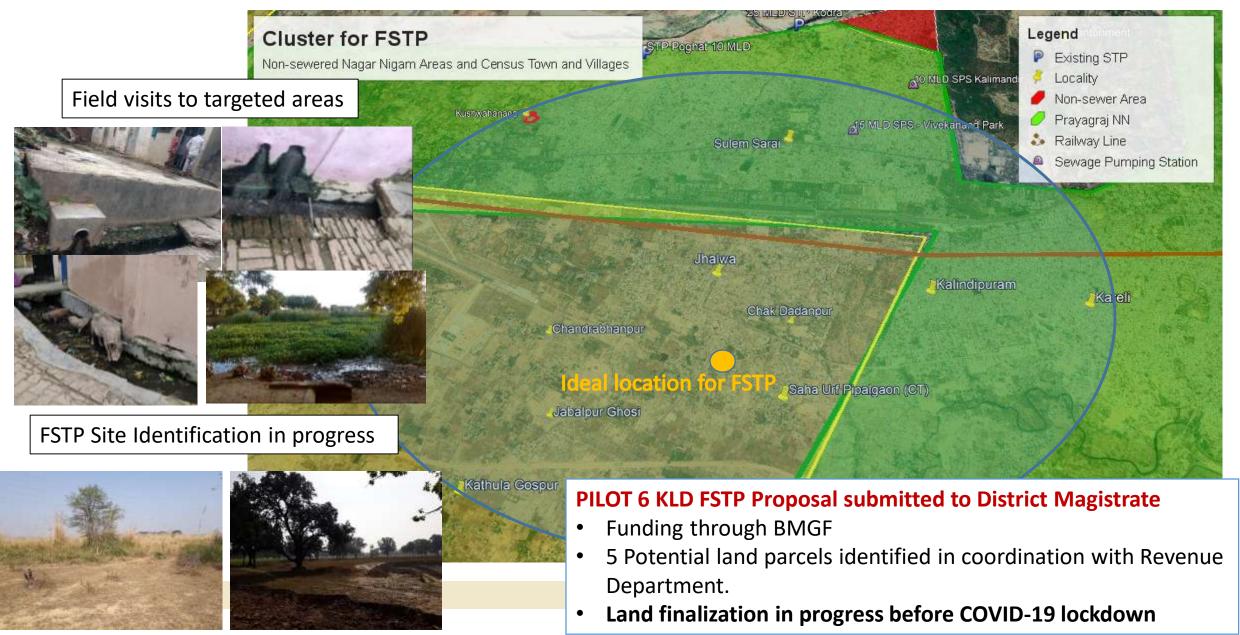
- Presentation to PS DoUD for 'Mainstreaming of Co-Treatment of FSS in STPs'
- The report recommended different **pre-treatment modules** (Solid-Liquid separation) for faecal sludge before being discharged in STP.
- Decision taken to implement Co-Treatment with Solid-Liquid separation STPs including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







Feasibility study for Pilot: FSTP (Western Prayagraj – Peri Urban Areas)



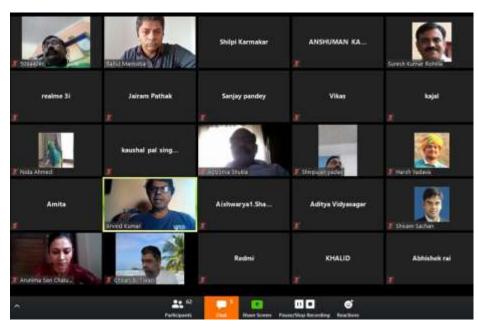
'Alliance for Urban Transformation':

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

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, UP 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

Planned Vs Achieved 2019-20

CITY LEVEL SUPPORT (Focus City (1)- Bijnor): Planned Vs Achieved

Planned (April'19)	Status (June'20)
Training on designing of containment systems for masons/plumbers	Training conducted from 16 th Jan to 18 th 2020, model septic tank and twin pit constructed by the trained masons.
City to develop FSSM bye-laws and enforcement mechanisms for containment systems	City FSSM Bye-laws is approved by the board, will get notified in next meeting. Notification got delayed due to Covid-19 Pandemic
Capacitate truck operators or de sludgers to ensure that they decant the collected sludge in designated treatment sites	City-level training conducted to capacitate private emptiers plying in the city from 14-15 October 2019
Provide technical support in setting up Model Fecal Sludge Treatment Plant (FSTP)	Feasibility study for Co-Treatment done, draft DPR ready. Land for co-composting procured.
Conduct City Sanitation Task Force (CSTF) meeting on a rolling basis to ensure the ongoing effectiveness and efficiency in the project's implementation	Conducted virtual CSTF Meeting on 26 th 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



CITY LEVEL SUPPORT (Focus City (2)- Chunar): Planned Vs Achieved

Planned (April'19)	Status (June'20)
Set up technical support unit	CSE representative stationed at Chunar closely supporting nagar palika parishad
Provide technical support in implementation of faecal sludge treatment plant	FSTP under construction , project running behind schedule due to hindrances caused by the pandemic.
Training on designing of containment systems for masons/plumbers	Training conducted from 21 st Jan to 23 rd Jan 2020, model septic tank and twin pit constructed by the trained masons.
Technical Support for Trenching for temporary Faecal Sludge disposal	Temporary trenching site is up and running and will cater to disposal of faecal sludge till the time FSTP is up and running
Capacitate truck operators or de sludgers to ensure that they decant the collected sludge in designated treatment sites	City-level training conducted to capacitate private emptiers plying in the city from 14-15 October 2019
Conduct City Sanitation Task Force (CSTF) meeting on a rolling basis to ensure the ongoing effectiveness and efficiency in the project's implementation	Conducted virtual CSTF Meeting on 26 th 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

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





Status of FSTP in Chunar

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

- Tentative completion date: Oct'20
- ~30% work completed



Physical progress of FSTP in Chunar

51	Work Description	Progress
1	Technical modules	
1.01	Screening chamber	
1.02	Planted drying bed	15%
1.03	Integrated settler & anaerobic filter	
1.04	Planted gravel filter	+
1.05	Integrated Collection Tank, Dual Media Filter, Activated Carbon Filter, UV Disinfection Unit	
2	Other civil, electrical and mechanical works	- 3-
2.01	Site preparation	50%
2.02	Storm water drain	- 6
2.03	Operator room	
2.04	Toilets	70%
2.05	Office room	70%
2.06	Sludge storage yard	
2.07	Flexible pavement	
2.08	Boundary wall	60%
2.09	Cutting & stone pitching work	
2.10	Retaining wall	-
2.11	Registers	- 4
2.12	Culvert	-
2.13	Additional works	- 3
2.14	Tools list	-
3	Additional expenses	
3.01	Access road connecting site to the existing main road	-
3.02	Plantation site showcasing reuse of by-products	-

Regular City Sanitation Task Force Meetings

Based on the process training conducted by CSE, 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.

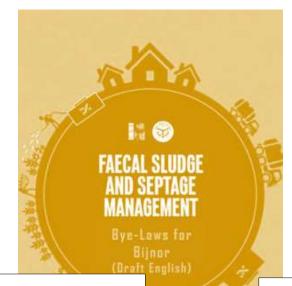


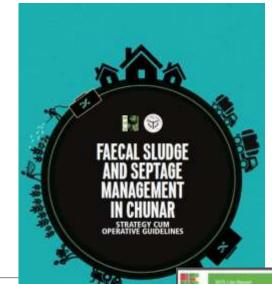




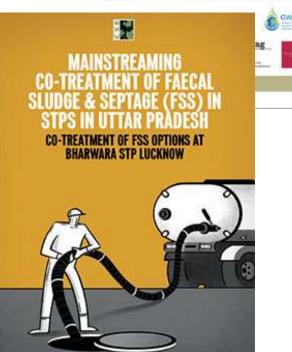
Research & Technical Feasibility Support: 2019-2020











Bijnor City Sanitation Plan

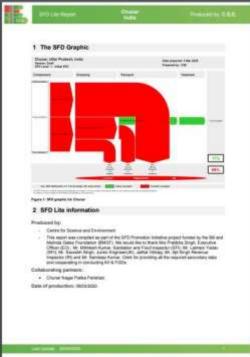
Prepared for Blinor Nagar Palika Parishad (BNPP) November, 2018

Bijnor City Sanitation Plan





APPROACH ROAD



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

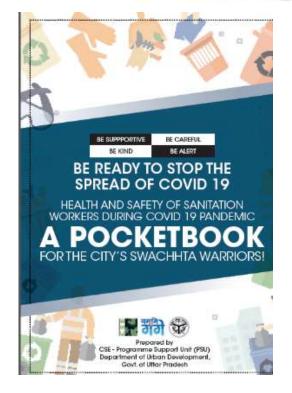
A guide to Sanitary Inspectors in cities to ensure Health and Safety of Sanitation Workers during COVID-19

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















Training of Sanitation Workers COVID-19

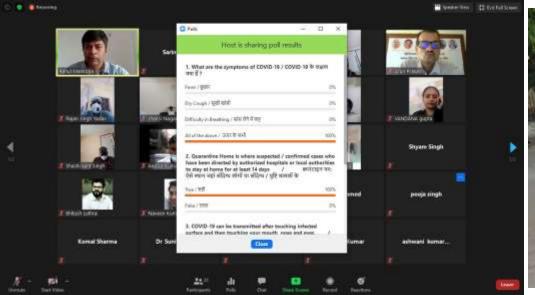
2 no. State Level Training for Sanitary Inspectors (~30 SIs trained through virtual trainings)

- 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



Multilingual IEC collaterals for supporting COVID-19 response

















अपने हाथों को अच्छी तरह से साफ रखें खय







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

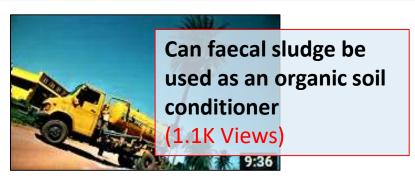
Campaign suitable for towns with FS disposal sites available: Unnao, Kanpur, Lucknow, Prayagraj, Jhansi etc

Outreach & Media Coverage on Citywide Sanitation through various communication collateral

CSE OUTREACH ACTIVITES 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



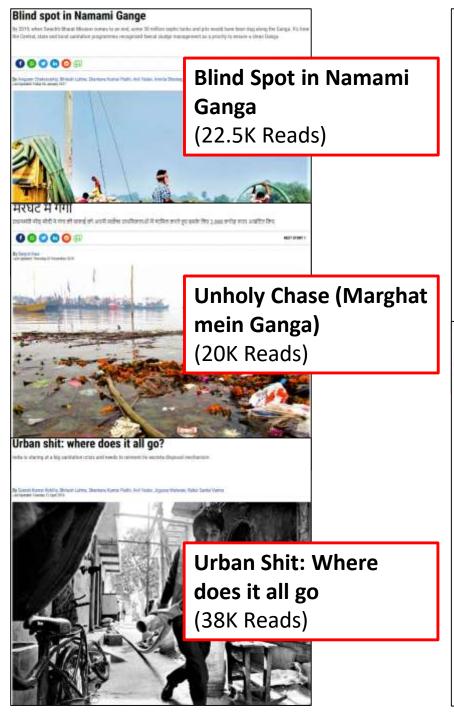




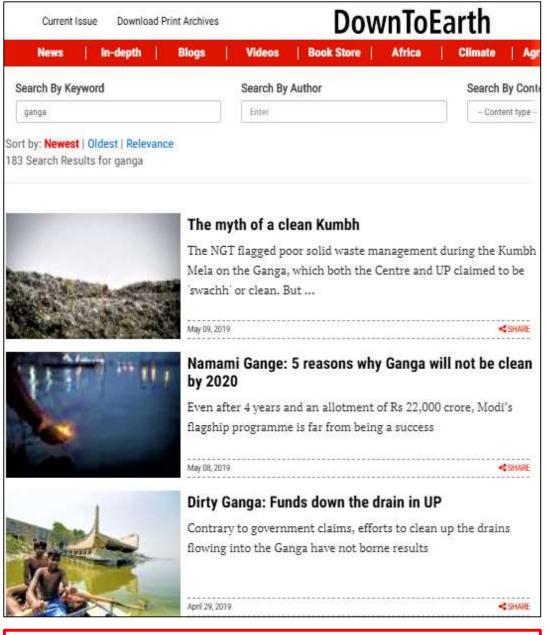












Around 50 articles/cartoon strips/interviews on Ganga uploaded on DTE web (>1 Lakh Views)

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



ऐंड एन्वायरमेंट के मार्च 2019 तक गंगा

वेस्ट वाटर मैनेजमेंट के प्रोग्राम डायरेक्टर मिलियन प्रति दिन (एमए

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प्रदेश के अधिकारी

फिकल स्लज टीटमेंट प्लांटस (एफएसटीपी) की स्थापना और 21 शहरों में एसटीपी में फिकल कीचड के सह-उपचार के लिए

यूपी जल निगम के माध्यम से 31 शहरों में

निविदाएं आमंत्रित की हैं।



UP takes initiative and sends of and Septage Management plants

effective Faecal Sludge and Sept

The state government has taken i

The Exposure Visit for 'Planning and Implementation of Faecal Sludge and Sept-and tomorrow (19-20 December) by CSE in collaboration with Odisha Water Supp



and Septage Management plants in Odisha

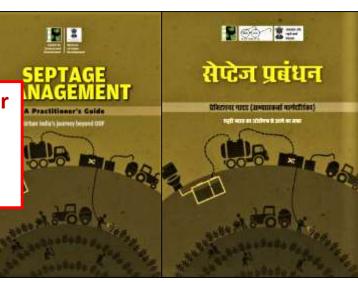




Factsheets and analysis of Sanitation chain in 30 cities of Uttar Pradesh

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

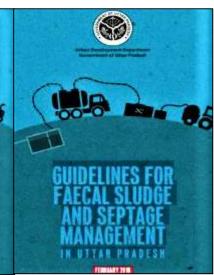
1500 Hard Copies 7500 Downloads



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





Action Plan 2020-21 for Uttar Pradesh:

State and City-Level Support for Effective FSSM for Citywide Sanitation

STATE LEVEL INTERVENTIONS: 2019-20

- 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 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: 2019-20

Focus City (ONE) – Bijnor

(Focus on CSP Implementation)

- Licensing of Desludgers
- Technical support for the implementation of co-treatment/cocomposting 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)

- Technical Support for GPS tracking of Emptying and Transportation of Faecal Sludge
- On-going support for implementation of city level FSSM guidelines including byelaws.
- Technical support for implementation of FSTP.
- Training for Sanitation Workers.
- IEC campaign for COVID-19 awareness and effective FSSM

Research / Technical Support :

State Level Publications

- 1. Business Models and Best Practices for effective citywide FSSM
- 2. State Investment plan for scaling-up FSSM in U.P.

City Level

- 1. Planning and designing for Co-composting of FSS and MSW in Chunar / Bijnor
- 2. Business model for the implementation of short term CSP strategies for citywide sanitation solutions in Bijnor
- 2. Rapid City Sanitation Plan for Chunar
- 3. Standard operating procedure for FSTP in Chunar

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



Work Overview

Centre for Science and Environment (CSE) antered into a partnership with Department of Urban Development (DoUD), Government of Uttar Pradesh for "Support foreffective Septage Management in Uttar Pradesh" in lanuary 2018. CSE agreed to co-operate with DoUD to provide support for improvement in urban sanitation across the sanitation value chain in state-supported programmes, and provide technical support to select cities in Uttar Pradesh.

CSE shall support state functionaries and ULBs plan and implement reforms for achieving effective septage management and dity wide sanitation by facilitating the convergence of various national and state policies, plans, programmes and project implementation showcasing improvements across the urban sanitation value chain containment, emptying, disposal, treatment and reuse/recycle, together with river pollution abatement.

Mone

CSE Newsletter

Launch of Pocket Book for Health and Safety Sanitation Workers during COVID-19 and MalAsur 'Demon of Defeca' Campaign

COVID-19 Awareness Drive in Uttar Pradesh (May - June 2020)

Documents

Documents

TRAINING & WORKSHOPS
FOR CITY WIDE SANITATION AND PACCAL SLUDGE & SEPTAGE WAHAGEINENT

COVID-19
Resources

TRAINING A WORKSHOPS
FOR CITY WIDE SANITATION AND PACCAL SLUDGE & SEPTAGE WAHAGEINENT

COVID-19
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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/



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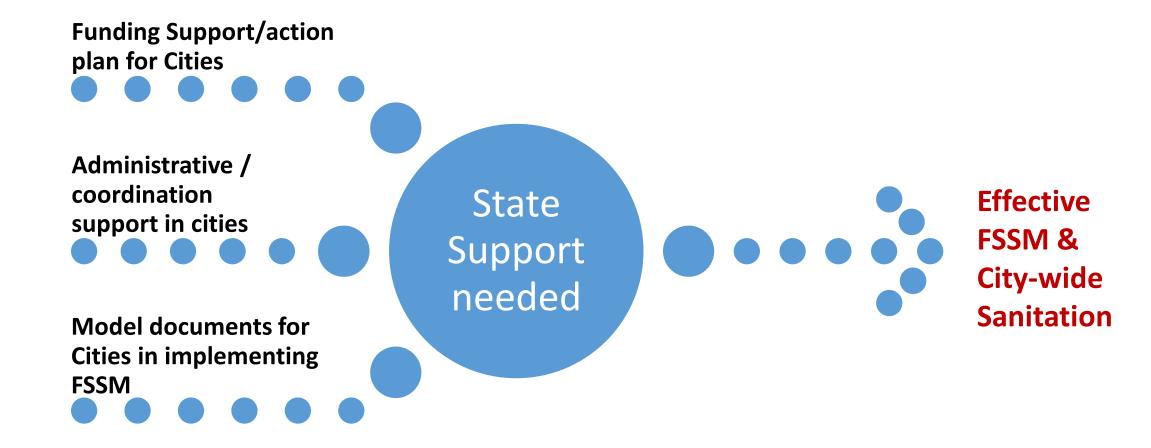
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https://www.cseindia.org/page/programme-support-for-fssm-in-uttar-pradesh

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

State Support Needed for Citywide Sanitation



THANK YOU