

**Centre for Science and Environment** 

# TRAINING ON DISTRICT LEVEL PLANNING FOR FAECAL SLUDGE MANAGEMENT (FSM) IN RURAL AREAS

Mode of delivery: Classroom training at AAETI

**Participants: SBM-G officials** 

Training dates: September 20<sup>th</sup> - 24<sup>th</sup>, 2022 (optional field trip on September 24<sup>th</sup>, 2022)

Objective: To train the participants to develop the district level FSM planning and implementation

Outcome: To prepare a district level faecal sludge management plan

Day 1: 20/09/2022

Module 1: Introduction to faecal sludge management and importance of safe sanitation				
Time	Title	Outcomes	Trainer	
10:00 - 10:45	Ice breaking session	<ul> <li>Introduction of the participants</li> <li>Overview of SBM – phase 1, needs for SBM – phase 2. (types of toilets created and issues with the design)</li> <li>Need for safe sanitation and experiences in the country.</li> <li>Connection between sanitation and health (SDG 6)</li> </ul>	Sushmita Sengupta, CSE	
10:45 - 11:00	Energiser 1	<ul><li> Group Agreement</li><li> Pre assessment</li></ul>	Shivangi Aggarwal, CSE	
		11:00 - 11:15: Tea Break		
11:15 - 11:45	Overview of faecal sludge management	Problem identification, need for FSM, basics of onsite and offsite solutions and need of good/related IEC activities.	Swati Bhatia, CSE	
11:45 - 12:45	Quantification of faecal sludge	Amount of FS generated household/village/block/district level	Swati Bhatia, CSE	
	Group exercise	Quantification of faecal sludge	Swati Bhatia, CSE	
12.45 - 1:15	Desludging and conveyance	To describe and brief on various sludge emptying and conveyance in practice	Ravi Kumar, CSE	
		1:00 - 2:00: Lunch		
2:00 - 2:15	Energiser 2	Importance of clear instructions	Shivangi Aggarwal, CSE	
2:15 - 2:45	Decision matrix	<ul> <li>Understanding various selection criteria necessary for selection of onsite sanitation systems</li> <li>Understanding various selection criteria for faecal sludge treatment systems</li> <li>Developing a decision matrix for selection of various technologies</li> </ul>	Ravi Kumar, CSE	
	Me	odule 2: Onsite sanitation systems – in-situ treatment		
2:45 - 3:30	Onsite sanitation design and exercise	Discussing the design specifications and hands-on exercise for honeycomb twin pit toilets	Swati Bhatia, CSE	
3:30 - 4:00	Onsite sanitation design and exercise	<ul><li>Design Specification of Septic Tank</li><li>Hands-on exercise to design of Septic Tanks</li></ul>	Swati Bhatia, CSE	
3:30 – 3:45: Tea Break (to be served inside)				
4:00 - 4:30	Design aspects of Biogas linked toilet	Step by step designing of biogas linked toilets     Case example from Kolhapur	Vijay Patil, Zilla Parishad Kolhapur, Maharashtra	
4:30 - 4:45	Energiser 3	<ul><li>Muddiest point</li><li>Daily Feedback</li></ul>	Shivangi Aggarwal, CSE	
4:45 - 5:30	Introduction to Green Visiting green feature		Gita Kavarana, Head, AAETI	
End of day 1				



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## Day 2: 21/09/2022

		Day 2. 21/07/2022			
	Module 3: Retrofitting of toilets and IEC and awareness generation				
8:00 - 10:00	Visit to nearby village to understand OSS	Visit to nearby village to understand the challenges of Toilet design	CSE team		
10:30 - 11:30	IEC and Awareness Generation Activities	Role of strong IEC and Awareness generation activities in the Sanitation value chain- Case Study from Patora, Durg	Gopesh Sahu, chairman, Patora Gram Panchayat and Swati Bhatia, CSE		
11:30 - 12:00	Group Discussion	Discussion on the challenges and solutions of toilet designs in the village visited	Swati Bhatia, CSE		
11:45 – 12:00: Tea Break (to be served inside)					
Module 4: Planning and designing of faecal sludge treatment technologies					
12:00 - 1:00	Treatment Design	<ul> <li>Data required for design of treatment plants</li> <li>Arriving at the plant capacity and dimensions of treatment modules selected</li> </ul>	Santhosh G.S., BORDA-SA		
1:00 – 2:00: Lunch					
2:00 - 2:15	Energiser 4	Graffiti Wall	Shivangi Aggarwal, CSE		
2:15 - 4:00	Treatment Design	<ul> <li>Design of Established technologies for faecal sludge treatment</li> <li>Hands on training on designing faecal sludge treatment technologies</li> </ul>	Santhosh G.S., BORDA-SA		
	3:30 – 3:45: Tea Break (to be served inside)				
4:30 - 5:30	Co-Treatment of Faecal Sludge	<ul> <li>Co-Treatment of Faecal Sludge in a Sewage Treatment Plant- Technical Modifications, etc.</li> </ul>	Santhosh G.S., BORDA-SA		
5:30 - 5:45	Energiser 5	<ul><li>Muddiest point</li><li>Daily Feedback</li></ul>	Shivangi Aggarwal, CSE		
7:00 Onwards: Get Together Night					
End of day 2					
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# Day 3: 22/09/2022

20, 20, 102, 1021				
9:15 - 9:30	Energiser 6	Cabbage Ball	Shivangi Aggarwal, CSE	
9:30 - 11:30	Cluster approach	Understanding the nuances of cluster approach and various modalities involved (hands on exercise)	Avinash Y. Kumar, NIUM	
	11:00 – 11:15: Tea Break (to be served inside)			
11:30 - 12:30	Funding options and channels	Description on various sources of funds available for FSM implementation	Avinash Y.Kumar, NIUM	
12:30 – 1:30: Lunch				
1:30 - 1:45	Energiser 7	Play with mind	Shivangi Aggarwal, CSE	
1:45 - 4:45	Management of faecal sludge treatment plants	<ul> <li>Understanding on institutional arrangements – role and responsibilities of stakeholders</li> <li>Understanding various financial models</li> </ul>	Avinash Y.Kumar, NIUM	
3:30 – 3:45: Tea Break (to be served inside)				
4:45 - 5:00	Energiser 8	<ul><li>Muddiest point</li><li>Daily Feedback</li></ul>	Shivangi Aggarwal, CSE	
5:00 - 6:00	How to identify faulty toilets and retrofit?	Understanding the challenges/technologies and approaches for retrofitting of existing toilets	Shrikant Navrekar, Nirmal Gram Nirman Kendra (Virtual)	
End of Day 3				



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## Day 4: 23/09/2022

Module 5: Management of Dry Waste			
09:45 - 10:45	Dry Waste Management	Dry Waste Management-Reduction on plastic waste- probable solutions	Solid waste team, CSE
10:45 - 11:00	Dry Waste Management	Learnings from different models across India	Shivangi Aggarwal, CSE
Module 6: Reuse of by-products			
11:00 - 11:30	Reuse standards	Understanding of standards necessary for various reuse options     Technologies options for reuse of by-products	Vinod Vijayan, CSE Lab
10:45 – 11:00: Tea Break (to be served inside)			
11:30 - 1:00	Group exercise	Working of Group Exercises	Swati Bhatia, CSE
1:00-2:00 – Lunch			
2:00 - 3:00	Group Presentation	Presentation of Group Exercises	Swati Bhatia, CSE
3:00 - 3:30	Feedback and closing r	emarks	Gita Kavarana, Head, AAETI
Day 5: 24/09/2022			
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7:00 - 02:00	Field Trip to Lalsot FSTP	CSE Team
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