



SHG CAPACITY BUILDING IN FSSM

TRAINING MODULE FOR EFFECTIVE O&M





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Maps used in this document are not to scale.

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LIST OF ABBREVIATIONS

1. SHG: Self-help group
2. O&M: Operation and maintenance
3. FSSM: Faecal sludge and septage management
4. UP: Uttar Pradesh
5. CSE: Centre for Science and Environment
6. FSTP: Faecal sludge treatment plant
7. SBM: Swachh Bharat Mission
8. AMRUT 2.0: Atal Mission for Rejuvenation and Urban Transformation 2.0
9. Q&A: Question and answers
10. PPE: Personal protective equipment
11. PPT: Presentation
12. POC: Point of contact
13. ULB: Urban Local Body

1. BACKGROUND

The engagement of Self-Help Groups (SHGs) in the operation and maintenance (O&M) of Faecal Sludge Treatment Plants (FSTPs) represents a crucial step in empowering communities, particularly women, while enhancing sanitation management in urban areas. Through the AMRUT MITRA project, several initiatives have been designed to strengthen SHG participation and build their capacity in managing FSSM facilities effectively. CSE has facilitated the onboarding and capacity building of SHG women members in four FSTPs in Uttar Pradesh.

CSE has worked closely with SHGs managing the operation and maintenance of FSTPs in four pilot towns: Sitapur, Raebareli, Jaunpur and Khurja. Drawing from this on-ground experience, a document was developed to outline the key learning outcomes needed for SHG training. It is intended as a reference for trainers working with SHGs in other towns or states.

2. ABOUT THE TRAINING MODULE

This document is designed to support trainers in conducting targeted training sessions for female SHGs involved in operating Faecal Sludge Treatment Plants (FSTPs). It serves as a practical guide for delivering a three-day training focused on the operation and maintenance (O&M) of FSTPs or co-treatment plants, using structured session plans.

The sessions are tailored to be interactive, engaging, and responsive to the learning needs of SHG women. Training will be delivered in the local language and adapted to the women's context and preferences. The programme combines simple theoretical explanations with group activities, live demonstrations, and visual tools such as PowerPoint presentations, videos, diagrams, and case stories. Field exposure and practical exercises are also included to reinforce learning and ensure effective skill-building.

3. METHODOLOGY

The training method adopted to develop this module is the Harvard Case Method approach which is aligned with the principle of adult learning. The methodology includes theoretical presentations, brainstorming exercises, and discussions on publicly available documentaries, all aimed at enhancing participants' knowledge and skills. The effectiveness of the training is assessed through undertaking pre and post assessment of participants. Reinforcement of key pointers is planned through recap sessions daily.

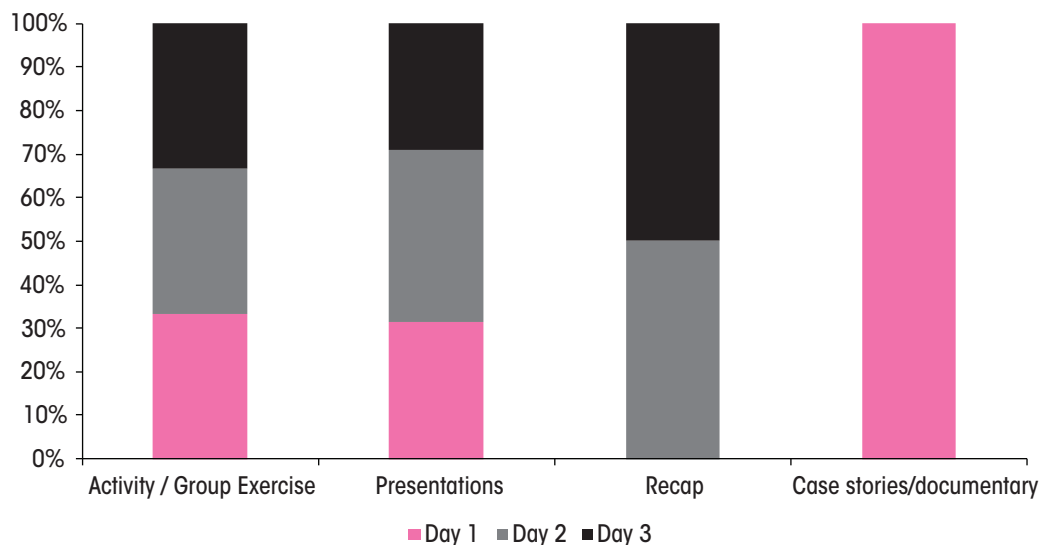
The three-day training is structured into three distinct modules, with one module covered each day:

- **Module 1:** Introduction to FSSM and stakeholders (*Total duration: 155 min*) (*Virtual/classroom: 125 min, reading material: 30 min*)
- **Module 2:** Treatment chain and role of SHG members (*Total duration: 255 min*) (*Virtual/classroom: 190 min, reading material: 35 min*) (*on-site practical: 30 min*)
- **Module 3:** Health and safety (*Total duration: 200 min*) (*Virtual/classroom: 170 min, reading material: 40 min*)

The bar diagram below illustrates the percentage of time allocated to different session types across the three-day training. The structure combines group exercises, presentations, recap sessions, and documentary or case story screenings to offer a well-rounded learning experience.

The first day (Day 1) emphasizes introductory concepts with a strong focus on presentations, while the second day (Day 2) dedicates significant time to treatment processes and group discussions/exercises. The third day (Day 3) integrates occupational safety measures, PPE, and practical demonstrations. The distribution reflects an engaging and interactive approach to learning, combining theoretical knowledge with hands-on exercises.

Graph 1: Percentage allocation of time to various types of sessions over three days



4. STRUCTURE AND SYLLABUS

The training is structured into three modules, with one module covered each day over the course of three days. A total of 610 minutes has been allocated for the entire programme, providing sufficient flexibility to accommodate discussions and ensure deeper internalization of the content. The detailed syllabus for each module is outlined below:

Table 1: Session plan for Day 1 (Module 1)

Duration (min)	Topic	Session goals	Method/elements	Materials
15	Welcome session	Understanding the structure of the course, applicability, and expectations	PowerPoint presentation	Slides
30	Introduction to FSSM	Overview of Faecal Sludge and Septage Management (FSSM) and its significance	PowerPoint presentation	Slides
30	Explaining stakeholders and roles of SHGs in O&M	Understanding key stakeholders and the role of Self-Help Groups (SHGs) in Operations and Maintenance (O&M)	PowerPoint presentation	Slides
25	SHG-led O&M case stories	Exploring case studies of SHG-led O&M	PowerPoint presentation	Slides
25	Sanitation value chain	Explanation of the sanitation value chain and its importance	PowerPoint presentation	Slides
35	Activity session and Q&A	Interactive session to engage participants and clarify doubts	Group exercise	Workbook

Table 2: Session plan for Day 2 (Module 2)

Duration (min)	Topic	Session goals	Method/elements	Materials
20	Recap of previous day	Summary of key learnings from Day 1	PowerPoint presentation	Slides
40	Introduction to the treatment process	Overview of faecal sludge treatment processes	PowerPoint presentation	Slides
55	Explaining treatment technologies	Detailed explanation of various treatment technologies	PowerPoint presentation	Slides
40	Explanation of each module from O&M perspective	In-depth analysis of treatment modules with an O&M focus	PowerPoint presentation	Slides
30	Field exposure (excluding travel)	Practical exposure to treatment sites and processes	Site visit	Field notes

Duration (min)	Topic	Session goals	Method/elements	Materials
30	Duties and responsibilities	Discussion on roles and responsibilities of SHG members	PowerPoint presentation	Slides
35	Group discussion and closing remarks	Reflection, discussion, and feedback on Day 2	Group exercise	Workbook

Day 3: Session plan for Day 3 (Module 3)

Duration (min)	Topic	Session goals	Method/elements	Materials
20	Recap of the previous day	Summary of key learnings from Day 2	PowerPoint presentation	Slides
40	Introduction to safety	Understanding workplace safety in sanitation	PowerPoint presentation	Slides
35	Personal protective equipment (PPE)	Importance and types of PPE used in sanitation	PowerPoint presentation	Slides
35	Donning, doffing, and cleaning PPE	Practical demonstration of PPE usage and maintenance	Demonstration	PPE kits
35	Resolution procedures – emergency preparedness	Preparing for emergencies in sanitation work	PowerPoint presentation	Slides
35	Group discussion and feedback session	Open discussion and reflections on the course	Group exercise	Workbook

PREPARATION FOR THE TRAINING:

- Identify and confirm the trainer and co-trainer for delivering sessions
- Gather necessary training materials (markers, chart papers, whiteboards)
- Ensure the availability of a projector
- Ensure a proper training room that is conducive to effective learning with sitting arrangements for participants

- Prepare and display banners for branding and awareness
- Prepare presentation slides and check the embedded videos that are running, if any
- Include visual aids to simplify key concepts like faecal sludge and septage management (FSSM), and their importance
- Refer to government sources such as Swachh Bharat Mission, AMRUT 2.0, and state platforms for accurate information FSSM. These platforms provide official guidelines, policies and initiatives related to sanitation and urban development
- Develop interactive exercises to reinforce learning
- Prepare discussion questions covering all topics and encourage participants to reflect on their existing knowledge and new learnings
- Prepare feedback forms/questions

MODULE 1: INTRODUCTION TO FSSM AND STAKEHOLDERS INVOLVED

■ Brief description

This module provides an overview of faecal sludge and septage management (FSSM), explaining its role in sanitation systems. It highlights key stakeholders involved in FSSM, including self-help groups (SHGs), and showcases examples of SHG-led operations and maintenance (O&M).

■ Learning outcomes

- Understand the basics of FSSM and its importance
- Identify different stakeholders and their roles in sanitation management
- Learn about SHG-led case studies and their impact on O&M
- Explore the sanitation value chain and its significance

Figure 1: Stages of the learning process



■ Preparation for the day

- Prepare the trainer and co-trainer for delivering sessions
- Set up and test projector and presentation equipment
- Arrange chart papers, whiteboards, and markers near the training area
- Place banners and posters at key locations for visibility, if necessary
- Check embedded videos in presentations for seamless delivery
- Use printed materials for reference
- Finalize the list of discussion points for interactive Q&A sessions
- Comfortable and organized seating arrangement facing the presentation board/screen

SESSION 1

Welcome address

Duration: 15 minutes

Session outcomes

- Understanding the session plan and agenda for the training
- Developing an understanding between trainers and trainees

Materials required

- Agenda for the sessions
- Handouts for the trainees
- Training kit
- Training presentations
- List of participants

Instructional techniques

- Trainer asks SHG women to introduce themselves and the organization

- The trainer introduces the sessions
- SHG women are introduced to why the training matters and how it can help them

Content of the presentation slides

- Introduction to the Government scheme under which SHGs have been involved and the state's journey in faecal sludge and septage management
- Mapping key stakeholders
- Understanding the need and importance of training
- Tracing the journey of SHG engagement in the state

Review/activities

Begin by asking each participant to describe what happens after household sewage is disposed of—where it ends up and who manages it. Have them identify and label the various stakeholders involved, such as desludging operators, ULB officials, treatment plant workers, and community members, to help map out the sanitation chain.

SESSION 2

Introduction to FSSM

Duration: 30 minutes

Session outcomes

- Participants understand the concept of faecal sludge and septage management (FSSM)
- Participants grasp the basics of the sanitation value chain
- Participants can articulate the importance of FSSM for public health

Materials required

- Presentation on FSSM
- Flipchart and markers
- Flashcards

Instructional techniques

- Open-ended questioning: What was your biggest takeaway from yesterday?
- Think-pair-share: Participants discuss their learning with a partner before sharing with the group
- Interactive recap games (such as quizzes or role-play scenarios)

Content for presentation slides

- Explain the origin of sanitation programmes and how they came about in the country and in your state
- Explain FSSM; begin with terminologies associated with FSSM and FSTPs
- Link FSSM with broader health goals
- Discuss the impact of safe sanitation practices on community health and the environment
- Trace the history and development of FSSM in India
- Define various terminologies related to FSSM
- Explain the sanitation value chain and its various stages; illustrate what happens to the sludge generated daily, the different collection systems in place, and the need for effective management. Highlight reuse practices of treated wastewater and biosolids
- Establish the connection between sanitation practices and health outcomes

Review/activities

- Facilitate a group discussion on how sanitation impacts their communities, sharing examples of health concerns in the community to relate with urgency of efficient management. Trainer can also engage the participants in asking questions using flashcards on treatment technologies.

SESSION 3

Explaining stakeholders and the need for SHGs in O&M

Duration: 30 minutes

Session outcomes

- Participants can identify key stakeholders involved in FSTP operations and maintenance (O&M)
- Participants understand the scope of responsibilities involved in O&M work
- Participants gain clarity on their specific roles and the importance of active engagement
- Participants recognize the contributions of various stakeholders across the sanitation chain

Materials required

- Chart paper for stakeholder mapping activity
- Videos on case studies from different states of India
- Presentations on topics to be covered

Instructional techniques

- Explain different stakeholders, including the roles of each one of them
- Reiterating how they fit into the picture, along with details about their point of contact and how the management functions
- Give an overview of O&M and what comes under O&M briefly; the details of treatment modules and functions should be discussed later
- The trainer should explain different roles assigned to SHG women during the field visit for better idea about their work-related tasks

Content for presentation slides

- Use stakeholder mapping to clearly represent the key actors in FSSM, highlighting roles in grievance redressal, reimbursements, equipment distribution, training, and reporting technical faults at FSTPs

- Present flowcharts and visual aids to explain O&M activities at the FSTP
- Emphasize the importance of maintaining sanitation infrastructure and how effective O&M underpins overall sanitation performance and outcomes

Review/activities: Two truths and a myth

- Each participant shares two true facts and one myth about sanitation, or their experience in SHGs
- Others guess which statement is the myth
- Helps participants get comfortable and engage in light discussion

SESSION 4

SHG led O&M case stories

Duration: 25 minutes

Session outcomes

- Participants learn from successful examples of SHG-led O&M
- Participants identify best practices that can be replicated

Materials required

- Presentation slides
- Videos depicting SHG stories

Instructional techniques

- Discuss the key factors that led to success in these cases and the challenges during implementation. The trainer outlines key O&M challenges and the requirements for effective FSTP management, setting clear expectations and helping SHG women understand the practices essential for successful implementation

Content for presentation slides

- Overview of case studies from other states
- Refer case story: online available videos
- Best practices and lessons learned

Review/activities

- Q&A

SESSION 5

Sanitation value chain

Duration: 25 minutes

Session outcomes

- Participants are able to understand and remember the sanitation value chain and its importance in the context of faecal sludge treatment plants
- Participants are able to identify and explain each component of the sanitation value chain

Materials required

- Marker
- White board
- Chart paper
- Sanitation value chain cut outs
- Presentation slides

Instructional techniques

- The trainer uses simple examples and analogies to explain each component of the sanitation value chain, discussing one module at a time
- Participants are actively engaged to ensure they understand the entire value chain comprehensively

Content for presentation slides

- Overview of sanitation value chain, introduction to the concept and its importance
- Significance, function and interrelation of managing each component of the chain
- Impact on health

Review/activity

- The trainer asks the participants to repeat the terms so that they memorize every step of sanitation value chain.
- The trainer provides each SHG with a chart paper, divided according to the number of participants. Along with it, each group receives a set of images depicting various steps of the sanitation value chain. Participants are instructed to list these steps and affix the corresponding images accordingly.

Refer to Annexure A for the sanitation value chain.

Energizer: Pass the question

- A ball is passed around while background music plays. When the music stops, the person holding the ball answers a sanitation-related question.
- This activity encourages quick thinking and interaction.

SESSION 6

Session and Question/Answer

Duration: 35 minutes

Session outcomes

- Participants reinforce their learning through activities

Materials required

- Sanitation value chain diagram
- Activity sheets

Instructional techniques

- Trainer uses participatory approach to reinforce learning outcomes of the day
- Trainers moderate discussions to allow participants to make suggestions, discuss what they learned and ask questions in order to understand their perception and gaps in understanding
- Co-trainer to note down the themes emerging from the discussion and quiz

Content for presentation slides

- Diagram of sanitation value chain.
- Key components of the sanitation value chain and their significance in FSSM.
- Explanation of important terminologies related to FSSM
- Open discussion for the participants to share insights and observations.

Review/activity

- Participants to be selected at random to identify treatment chain and elaborate on terminologies presented on the screen
- Participants to be grouped in pairs of two to recreate a map of the FSTP on a chart paper based on the treatment plant visit
- The trainer engages the group to discuss learnings by introducing topics and asking questions which should be prepared beforehand
- Close the day by giving a brief about the day's sessions

For feedback form for Day 1's training session refer to Annexure B

MODULE 2: MODULE-SPECIFIC TREATMENT CHAIN AND ROLE OF SHG MEMBERS

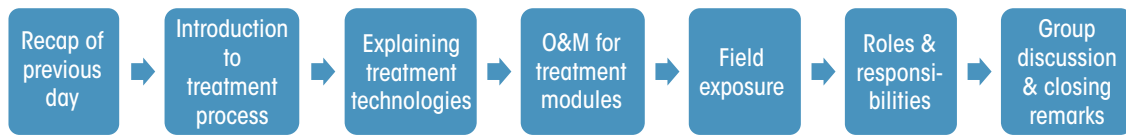
■ Brief description

This module explains the process of faecal sludge treatment, covering different treatment technologies and their operational aspects. It provides insights into how SHGs contribute to module specific O&M within treatment facilities and includes a field exposure session for practical understanding.

■ Learning outcomes

- Understand the treatment process and key technologies used
- Learn the operational aspects of different treatment modules

Figure 2: Steps in the learning process



- Identify the roles and responsibilities of SHG members in facility maintenance.
- Gain practical exposure through site visits and learning by seeing

■ **Preparation for the day**

- Ensure that the seating is comfortable and organized, and facing the presentation board/screen
- The trainer must ensure that all the material related to the activities is available to the trainees

SESSION 1

Recapitulation of the previous day

Duration: 20 minutes

Session outcomes

- This recap session allows participants to reflect on the previous day's learning, reinforcing key concepts and ensuring a smooth transition to new topics
- Participants recall and summarize key takeaways from the previous sessions
- Clarify any doubts and reinforce learning through discussion
- Strengthen understanding by connecting previous knowledge to upcoming topics

Materials required

- Flip charts or whiteboard for listing key takeaways
- Sticky notes for participants to write important points
- Handouts with brief summaries of the previous day's session

- A projector and laptop for presenting slides
- Presentations

Instructional techniques:

- Open-ended questioning: What was your biggest takeaway from yesterday?
- Think-pair-share: Participants discuss their learning with a partner before sharing with the group.
- Interactive recap games (such as quizzes or role-play scenarios)

Content for presentation slides:

- Recap of key objectives from previous sessions
- Brief bullet points outlining major themes covered
- Summary slide linking past learning to today's session

Review/activity:

Ice-breaker: Sanitation story circle

- Each participant adds one sentence to a collective story about sanitation
- The story develops in unexpected and fun ways
- This exercise encourages engagement and reinforces key concepts

SESSION 2

Introduction to treatment processes

Duration: 40 Min

Session outcomes:

- Participants understand the various processes involved in the treatment of faecal sludge and septage
- Participants identify the key stages in the treatment process
- These outcomes to be assessed by facilitating activities that test the understanding of participants before moving on to sessions that require this foundational knowledge

Materials required

- Flash cards
- Pictorial explainers of treatment processes
- Chart papers
- Pamphlets
- White/black board
- Markers
- Blank flow diagrams according to the number of participants attending

Instructional techniques:

- Introduction: Start by briefly explaining the importance of treatment processes in FSSM
- Visual walkthrough: Use flow diagrams to explain each stage of the treatment process (e.g., solid-liquid separation, digestion, dewatering, etc.). Complement the explanation with videos or pictures to provide a visual understanding
- The trainer breaks down each treatment process into smaller, manageable components to ensure a clear understanding of the scientific principles that enable treatment
- Use participatory exercises to reinforce learning and build foundation

Content for presentation slides:

- Overview of the faecal sludge and septage treatment process
- Explain basic scientific principles that are required to remember the treatment process
- Detailed explanation of each stage with a dedicated slide for every process, incorporating visual aids in the presentation
- A table highlighting 'key points to remember' for each treatment process

Review/activity

- Provide each participant with a blank flow diagram and ask them to fill in the stages of the treatment process based on what they learned; the participants can also be encouraged to verbally explain the process instead of writing depending on preference
- Question and answer session

SESSION 3

Explaining treatment technologies

Duration: 55 minutes

Session outcomes:

- Participants understand the basic principles behind each treatment technologies in the treatment chain used in FSTPs, e.g. solid-liquid separation, dewatering etc.
- Participants relate these principles to solidify understanding of the treatment process

Materials required:

- Videos of different treatment technologies
- Chart papers
- Pamphlets with treatment chain
- White/black board
- Markers

Instructional techniques:

- Trainer starts by introducing the different types of treatment technologies used in FSTPs, explaining their purpose and function
- Trainer uses simple analogies to explain scientific principles for e.g. screw press can be explained using comparison with a hand-juicer explaining compression of the fruit and separation of juice
- Interactive video session: Show videos that demonstrate these technologies, pausing to explain key principles

Content for presentation slides:

- Introduction to various treatment technologies; purpose and components
- Explanation of scientific principles
- Explanation and showcase of input and output for each technology in the treatment chain
- Video exemplars of technologies and treatment process in action

Review/activity:

- Q/A session

SESSION 4**Detailed explanation of each module from O&M perspective**

Duration: 40 minutes

Session outcomes:

- Participants describe the name and function of each module
- Participants have a detailed understanding of importance of each module in the treatment of sludge and septage
- Participants outline the need for operation and maintenance of each module, by recognizing areas that require proper maintenance for effective treatment and safe disposal of wastewater

Materials required:

- Chart papers
- Pamphlets having module names and functions associated with them
- White/black board
- Markers
- Module-specific diagrams and images

Instructional techniques:

- Detailed walkthrough: Break down each treatment process to explain functions and the scope of O&M with respect to SHGs for each module.

- Different components of a single technology should be briefly touched upon to understand the automated processes in practice that do not need to be included in the O&M e.g. self-cleaning processes.

Content for presentation slides:

- Overview of each module in the treatment process
- Details of O&M activity for each module
- Video examples of effective O&M and how it leads to better treated end-products for safe disposal and usage
- Details of different treatment chains and module specific O&M with the help of pictures and videos as per standard operating procedure (source-CSE: <https://www.cseindia.org/sop-for-operations-and-maintenance-of-fstps-and-co-treatment-plants-in-uttar-pradesh-hindi-12534>)

Review/activity:

- Participants are teamed in groups and asked to visualize scenarios at the FSTP where the O&M would be required. After group discussions, one member of the group can share these imaginary day-to-day scenarios with the trainer. Co-trainer should make a note of these discussions and observations for assessment of gaps upon completion of training.

SESSION 5

Field exposure

Duration: 30 minutes

Session outcomes:

- Participants gain practical, hands-on experience by observing the operations of the faecal sludge treatment plant
- Participants are able to identify and describe functions of different treatment modules observed during the visit

Materials required:

- Appropriate PPE kits and safety gears
- Notebooks and pens for participants to draw and note observations

Instructional techniques:

- Briefing: The participants to be briefed on the activities and the key elements to be highlighted and observed closely before the visit to make sure the session outcomes are positive
- During the visit, the trainer to keep the session interactive by asking questions and explaining every element of the treatment chain to the participants.

Review/activity

- Participants to be encouraged to share their observations post field visit.



Exposure visit to treatment plant, Khurja

Energizer: Draw your process

- Participants sketch a step in the treatment process
- Other participants take guesses in identifying the step•
Helps in visual learning and memory recall

SESSION 6

Roles and responsibilities

Duration: 30 minutes

Session outcomes

- Participants understand their specific roles and responsibilities in the O&M of the FSTP
- Participants identify the routine tasks required for FSTP operation
- Participants understand various tools and procedures required for maintenance of equipment

Materials required

- List of job descriptions
- Task lists and checklists
- Logbooks formats
- Tools and other equipment charts like rake, shovel etc.

Instructional techniques

- The trainer introduces the importance of clearly defined roles and responsibilities for a seamless FSTP operation
- The trainer outlines specific duties first and then discusses them in detail
- The trainer categorizes the tasks into daily, weekly, and monthly activities. A task checklist should be shared with the operators upon training completion for ongoing reference. For record-keeping and daily maintenance formats, refer to Annexure C.

Content for presentation slides

- Overview of SHG member's roles and responsibilities in FSTP O&M

- Step-by-step guide to routine maintenance tasks
- Tools, equipment, and the quantities required for procedural operations like chlorine dosing should be discussed
- Each slide for the O&M should be followed with a dos and don'ts list
- Best practices in O&M should be discussed

Review/activity

The trainer, along with the co-trainer, should orient every participant with information regarding filling logbooks,



SHG women understanding the treatment process by reading big panels installed at FSTP at Raebareli

maintenance of daily activity charts and discussing the proper usage of tools and equipment provided for O&M. Refer Annexure C for record keeping and maintenance format)

Refer to Annexure B for the feedback form for Day 2's training session.

MODULE 3: HEALTH AND SAFETY

■ Brief description

This module emphasizes workplace safety in sanitation operations, focusing on personal protective equipment (PPE), emergency preparedness and ensuring safety at the workplace. Participants will learn best practices for using PPE and responding to emergencies through practical demonstrations.

■ Learning outcomes

- Understand workplace safety in handling operations of FSTPs
- Learn about different types of PPE and their correct usage
- Develop knowledge of emergency preparedness and response procedures
- Participate in practical demonstration of wearing PPE kits and group discussions

■ Preparation for the day

- Review training materials on treatment technologies and responsibilities

Figure 3: Steps in the learning process



- Prepare key discussion prompts for interactive engagement
- Set up the classroom for easy participation
- Ensure PowerPoint slides are ready for reference
- Ensure that the seating is comfortable and organized and the arrangement is facing the presentation board/screen

SESSION 1

Recapitulations of the previous day

Duration: 20 minutes

Session outcomes

- Recap session allows participants to reflect on the key learnings from the previous day and strengthening their knowledge
- Learning about their respective roles and responsibilities

Materials required

- Flip charts or whiteboards for listing key takeaways
- Handouts summarizing treatment technologies and operational duties
- Sticky notes for participants to write important points
- Projector and laptop for PowerPoint slides

Instructional techniques

- Questioning approach: What was the most important takeaway from yesterday's session?
- Small-group discussions: Participants discuss key insights with a partner
- Live demonstrations (if applicable) to reinforce practical knowledge
- Recap games (such as quick quizzes or role-play activities)

Content for presentation slides

- Brief summary of key treatment technologies covered on one slide
- Bullet points highlighting responsibilities of operators based on responses received

Review/activity

Ice-breaker: Safety pledge

- Participants share one key safety precaution they follow
- Reinforces personal responsibility for safety in O&M

SESSION 2

Introduction to safety

Duration: 40 Min

Session outcomes

- Participants understand the importance of occupational safety in the operation and maintenance of FSTPs
- Participants can identify the potential hazards associated with their work and understand basic safety measures that are in place

Materials required

- Photos and pamphlets
- Videos on basic safety practices and importance of safety
- Safety checklists
- Marker
- White board

Instructional techniques

- Trainer begins with an overview of safety and its importance in sanitation work
- Discussion on the need for safety in FSTP operations by going over the potential hazards related to different O&M activities
- Include videos to cover the key safety practices in sanitation work

- The trainer asks participants to share other important practices and hazards that they may be aware of

Content for presentation slides

- Introduction to occupational safety
- Explanation of the need for safety in FSTP operations
- Elaborate the key hazards in FSTP operations
- Summarize the safety measures with visual aids
- Refer to safety equipment's checklist from SOP (<https://www.cseindia.org/sop-for-operations-and-maintenance-of-fstps-and-co-treatment-plants-in-uttar-pradesh-hindi-12534>)

Review/activity

- Q/A

SESSION 3

Personal protective equipment

Duration: 35 minutes

Session outcomes

- Participants understand the need for PPE, its types and the proper way of using it in FSTP operations
- Participants learn how to maintain PPE

Materials required

- Pamphlets
- Videos on PPE usage, types and maintenance

Instructional techniques

- Trainers ensure that sessions are interactive by incorporating videos and pictures showing the different types of PPE available and the uses for each in O&M activities
- Trainer lays out the scenarios, mentioning the different O&M activities and where the PPEs would be useful

Content for presentation slides

- Overview of PPE and its importance
- Types of PPE used by sanitation workers
- Focus on PPE need for O&M at FSTPs, discussing scenarios where it might be helpful
- Visual tools to support learning
- Refer to personal protective equipment section from SOP (<https://www.cseindia.org/sop-for-operations-and-maintenance-of-fstps-and-co-treatment-plants-in-uttar-pradesh-hindi-12534>)

Review/activity: Energizer (midway): PPE relay challenge

- Teams compete to correctly identify and explain PPE items
- Ensures engagement and retention of safety concepts

SESSION 4

Donning, doffing, and cleaning the PPE

Duration: 35 minutes

Session outcomes

- Participants learn the correct way to put on and take off PPE to avoid contamination
- Participants understand why such step-by-step procedures are essential

Materials required

- PPE kits
- Pamphlets with donning and doffing procedures
- Checklist for the PPE
- Demonstration area

Instructional techniques

- Hands-on activity where participants practice putting on and taking off PPE under supervision
- Use of posters, pamphlets, and slide illustrations for reinforcement

- Participants follow a checklist to ensure correct PPE usage
- Participants observe each other response and provide feedback
- Open discussion to clarify doubts and reinforce understanding

Content for presentation slides

- Importance of wearing PPE in sanitation work
- Risks of improper donning and doffing
- Step-by-Step guide to donning and doffing the PPE
- Cleaning and maintenance of PPE
- Guidelines for PPE usage, storage and when to replace PPE components

Review/activity

- Demonstration session and distribution of PPE kits amongst participants

SESSION 5

Resolution procedures (emergency preparedness)

Duration: 35 minutes

Session outcomes

- Participants understand the importance of emergency preparedness in the O&M of FSTPs
- Participants are prepared for any contingencies through an action plan for prevention and seeking help
- Participants should be familiarised with administrative procedures and relevant points of contact for resolving grievances and operational issues

Materials required

- Pamphlet on emergency preparedness and resolution procedures
- Contact list of relevant points of contact
- Emergency response plan with a dedicated contingency table

Instructional techniques

- Use storytelling to engage the SHG women and share details about emergencies, procedures and resolution techniques
- Plan discussions around probable emergencies or events that can be prevented

Content for presentation slides

- Emergencies at the FSTP
- How to prepare a plan of action
- Explaining the contingency table

Review/activity

- Divide participants into groups and present them with an emergency scenario. The group should then come up with a response plan, including how to seek help, whom to seek help from and what the procedures in place are for said emergencies. The participants can also enact the procedures that they will use to get out of the situation, or brainstorm ways to prevent it.

Refer to Annexure B for the feedback form for Day 3's training session.

5. TRAINING FEEDBACK MECHANISM

5.1 OVERALL TRAINING FEEDBACK:

Date: _____ Venue: _____

1. Name:
2. Designation and city name:
3. Structure of the training (Module):
☐ Excellent ☐ Very good ☐ Good ☐ Fair
☐ Could be improved
4. Duration of each session:
☐ Excellent ☐ Very good ☐ Good ☐ Could be improved
5. Confidence in sharing knowledge with colleagues:
☐ Yes, everything ☐ Most of the topics ☐ Few of the topics
☐ None of the topics
6. Ability to implement topics/techniques covered:
☐ Yes, but with some help ☐ Not sure ☐ No
7. Topics not covered but relevant to your work:
8. Overall organization of the training program:
☐ Excellent ☐ Very good ☐ Good ☐ Fair
☐ Could be improved
9. Further comments and suggestions for improvement:

5.2 RESIDENTIAL TRAINING INSTITUTE- PARTICIPANT'S FEEDBACK FORM:

Trainers' note: If the training session is conducted at a residential training institute located near the treatment plant, participants should be requested to fill out the following feedback form. This step is optional and may be skipped if the training is held at a non-residential location or at the treatment plant itself.

Participant information

- Name: _____
- Room no.: _____

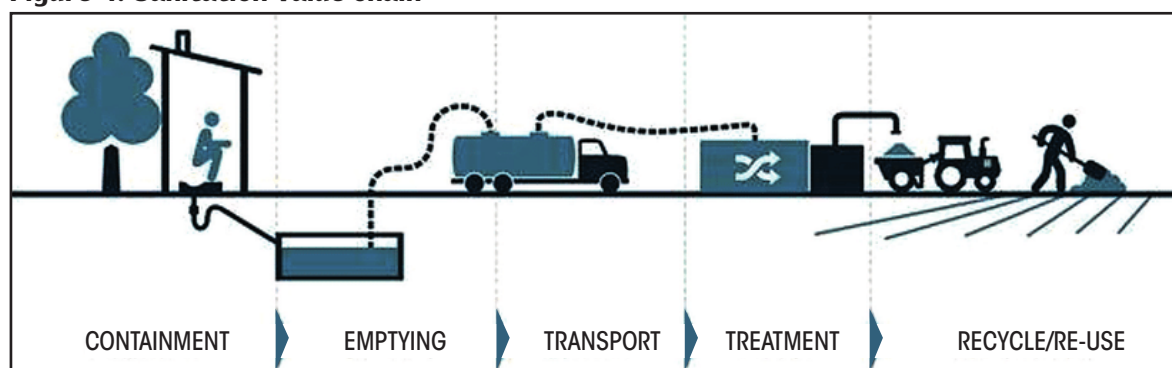
Please tick (☐) the rating that best represents your experience in each category.

Category	1	2	3	4	5
Front office – Check-in/Check-out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food quality and ambience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Room cooling / heating / hot water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreational facilities (if available at training institute)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional comments and suggestions_____

ANNEXURE A

Figure 4: Sanitation value chain



ANNEXURE B

Feedback form for training session Days 1 to 3

Trainer's Note: Please ensure feedback is collected for each session conducted during each day. Mention the session number along with a brief topic title to help participants provide accurate input.

Date: _____ **Venue:** _____

Thank you for participating in our training. We hope you had as much fun attending it as we did while organizing it.

We want to hear your feedback so we can keep improving our content. Please fill out this quick survey and let us know your thoughts (your answers will be anonymous).

1. Name:
2. Designation and city name:
3. Session no. and name*:
4. Moderator/tutor/facilitator's knowledge
☐ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Could be improved
5. Involvement of the participants: Excellent
☐ Very good ☐ Good ☐ Fair ☐ Could be improved
6. Responsiveness of the moderator to questions and problems
☐ Excellent ☐ Very good ☐ Good ☐ Fair
☐ Could be improved
- Presentation style
☐ Excellent ☐ Very good ☐ Good
☐ Fair ☐ Could be improved

* This section will repeat for each of the sessions

ANNEXURE C

1. RECORD KEEPING AND DAILY MAINTENANCE FORMAT

(Prepared by CSE)

Format 1: Record maintenance at FSTP/Co-treatment plant

ULB name:

Daily register for maintaining desludging vehicle records: For ULB vehicle

S No	Date	Address (from where the tank was emptied)	Type of property: Government/ household/ commercial	Vehicle number	Vehicle capacity in liters	Time In	Time out	Sign of desludger

Daily register for maintaining desludging vehicle records: For PRIVATE vehicle

S No	Date	Address (from where the tank was emptied)	Type of property: Government/ household/ commercial	Vehicle number	Vehicle capacity in liters	Time In	Time out	Sign of desludger

Format 2: Desludging record maintenance at ULB level (for desludging request received)

S No	Date	Name and address	Type of property: Government/ household/ commercial	Time of booking	Actual desludging date	Desludging fee	Vehicle capacity in liters	No of trips	Sign of official



Q&A session during training program in Sitapur



Interaction with SHG members during training sessions in Jaunpur

This training module, developed by the Centre for Science and Environment (CSE), is a result of rich field-level experience with Self-Help Groups (SHGs). Designed as a three-day programme for trainers, it offers a practical and participatory approach to building the skills of SHG members and plant operators in operating and maintaining faecal sludge treatment plants. With hands-on exercises, real-world case studies, and interactive learning tools, the module empowers trainers to deliver effective, engaging, and replicable sessions that strengthen sanitation systems and treatment plant operators capacities.



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