



Online Trainings

on Fecal Sludge and Septage Management



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About the Project

While the Swachha Bharat Mission ensured eradication of open defecation, post toilet infrastructure still needs attention. Without access to a centralised sewer network, more than 60% urban households are dependent on on-site sanitation systems. In Urban India, untreated fecal sludge and septage from these containment systems is one of the biggest sources of water resource pollution. Realizing this challenge, Government of India launched the national policy on Fecal Sludge and Septage Management (FSSM) in 2017.

As the focus is shifting to FSSM, a huge skill and capacity gap among stakeholders (Govt. officials/ULB officials/Professionals/Sanitation workers) across India looms large, who are instrumental to the need of FSSM service delivery.

Systematic capacity building initiatives need to be undertaken to build the skill and knowledge of the stakeholders in the FSSM sector. In order to achieve this, WASH Institute, in partnership with USAID and supported by BMGF offers to conduct capacity building trainings/certificate courses on FSSM across India through classroom training/online training.

The training courses are designed to:

- Orientation course on FSSM: strengthen basic understanding of FSSM sector encompassing technical, policy and regulatory and financial aspects.
- Advanced course on FSSM: this training is designed for those who have a foundational understanding of FSSM and want to address some of the key questions that have come up during their planning or implementation phase of FSSM.

- Training for sanitation workers: make the sanitation workers aware of the standard operating procedures, risks at work place, safety protocols and usage of personal protective equipment, so that they perform their tasks in a safe and efficient manner.

This booklet further details out the above three courses, mentioning the course content, duration, course delivery platform, agenda, batch size, language of training delivery and lesson plan. These training courses are designed keeping in mind the specific requirements of the audience it will be catering to and aim at equipping the training receivers with the knowledge they are looking for.

If you want to make an impact in the FSSM sector, we encourage you to take a look at our training booklet and enrol yourself or those who can benefit from the program that best suits your professional learning trajectory!

Learning Management System

To facilitate learning for working professionals and make it flexible and easily accessible, our trainings have been designed to be delivered in an online blended format, wherein the participants attend online live sessions delivered by experts and thereafter bolster their learnings by engaging in interactive content on the online Learning Management System developed for this project.

The Orientation and Advanced Training Sessions can be accessed on www.washacademy.org, where participants get to learn by doing – through simulations, games, watching videos, assessments, quizzes and hands on assignments. These modules are creative, engaging and make learning enjoyable for the officials to ensure they remember what is delivered in the live sessions. The LMS also helps us assess the improvement in the participant's knowledge level and take feedback after each session to fine tune the content based on what the participants need.

Acknowledgement

We are thankful to our donor USAID, BMGF, the NFSSM Alliance and all our partner organisations for their work and the research they have put in this area that made it possible for us to create the content and modules for this skill building initiative.

A man wearing a light-colored cap, sunglasses, and a light-colored long-sleeved shirt is standing on the left, gesturing with his hands as if speaking. He is facing a group of four people (three women and one man) who are standing in a line, listening to him. They are outdoors in a rural setting with white buildings and trees in the background. The entire image has a blue tint.

Orientation Training on FSSM

For government officials,
FSSM practitioners and
those interested to work in FSSM

Summary of the Course

Content

The course is designed to strengthen basic understanding of FSSM sector encompassing technical, policy and regulatory and financial aspects. The content will be delivered in multiple formats such as live sessions by experts, case study videos, games, assignments and interactive content. As an outcome of the training, the participants through the various assignments will prepare a broad FSSM plan for their ULB. This planning framework will include a 6 step process namely

Step 1: Situation assessment

Step 2: Estimating FS demand

Step 3: Planning emptying and transportation

Step 4: Planning treatment systems

Step5: Planning regulatory measures and IEC activities

Step 6: Planning operations model

These 6 steps shall form the backbone of the training and the content will be delivered around these, so that the participants learn from the content and apply it to the needs of the assignment. It is expected that through these assignments, participants will be able to get a hands on practise in planning for FSSM in their respective (or imaginative) towns/cities.

Duration

Duration of course is 10 working days (Monday - Friday) with one virtual session scheduled per day. The total seat time of each session spans 30 – 110 minutes. Session would be a mix of live sessions and self-paced learning content such as videos, games and quizzes.

Targeted participants

All key stakeholders involved in FSSM decision making process are expected to participate in the training program. This course does not require any engineering background. Each ULB can nominate up to 5 participants. A detailed participant selection criteria is available in Annexure A

Course delivery platform

A feature rich learning management system (LMS) application shall be used to deliver courses. This can

be accessed through mobile phone or computer. The platform offers multiple features to conduct quiz or assign tasks to test the learnings of participants. The course will be offered in a blended format, i.e. mix of virtual trainings and self-paced learning. The platform also facilitates interaction between participants.

Agenda

The orientation training shall cover 360 Degree aspects of FSM, with emphasis on value chain and its components. The training shall also include hands on practise session, such as preparing a FSSM plan for the ULB.

Day	Session	Seat time ¹ (in minutes)
Day 1	Introduction to the course and the LMS	30
Day 2	Introduction to FSM	90
Day 3	Onsite sanitation systems	80
Day 4	Emptying and Transportation	110
Day 5	Treatment of FS	55
Day 6	Treatment systems – 1	95
Day 7	Treatment systems – 2	95
Day 8	Regulations for FSM	90
Day 9	Operations model	105
Day 10	Wrap up	55
Total		805

Language

The primary language shall be English, with mix and usage of Hindi as deemed necessary.

Batch size

The batch size shall be limited to 35 participants.

Certification

Participants who attend all the online session and complete the course work (videos, essential reading , games, quiz and other evaluations) shall receive a certificate of completion.

1. Seat time is the total time requirement from the participant per day.

Summary of the Lesson Plan

Session #	Day	SessionName	ILT Topics	Activities/Assignment	Videos
Session 1	Day 1	Introduction to the course	<ol style="list-style-type: none"> Welcome address Trainers introductions Discussion on the agenda Housekeeping instructions Demonstration of LMS 		<ol style="list-style-type: none"> How to use the LMS
Session 2	Day 2	Introduction to FSM	<ol style="list-style-type: none"> Linkages between health and sanitation Sanitation scenario in Urban India Different approaches to sanitation - centralised, decentralised and FSM Compare and contrast different approaches Definition of FSM, FS, Septage and value chain Shit flow diagram 	<p>Assignment</p> <p>Step 1: Collection of baseline data</p>	<ol style="list-style-type: none"> Dasra- Sanitation reimagined
Session 3	Day 3	Onsite Sanitation Systems	<ol style="list-style-type: none"> Revision of topics Definition and types of OSS Functioning and design of septic tank, twin & single pit toilets Pathogen kill graph vs time HH level wastewater treatment Sept guard (WASH Institute) Sludge accumulation rate in OSS 	<p>Assignment</p> <p>Step 2: Estimate the sludge generation for a given case</p> <p>Activity:</p> <ol style="list-style-type: none"> Learn how to estimate sludge for a city 	<ol style="list-style-type: none"> Septic tank Twin pit toilet
Session 4	Day 4	Emptying and Transportation	<ol style="list-style-type: none"> Revision of topics Objectives of emptying and transportation E&T options - infrastructure Demand vs scheduled desludging Specifications for truck - example 	<p>Assignment</p> <p>Step 3: Estimate truck requirement and type of trucks</p> <p>Activity:</p> <ol style="list-style-type: none"> Estimate requirement of trucks PPE game 	<ol style="list-style-type: none"> Wai - Scheduled desludging E&T process Scheduled desludging

Session #	Day	Session Name	ILT Topics	Activities/Assignment	Videos
Session 5	Day 5	Treatment of FS	0. Revision of topics 1. Characteristics of FS and comparison with sewage 2. Treatment objectives and standards (include biosolids standards) 3. Stages of treatment 4. treatment approaches (clustering, co-treatment, co-digestion and stand-alone FSTP)		1. Co-treatment video – To be created
Session 6	Day 6	Treatment systems - 1	0. Revision of topics 1. Trenching (disposal) 2. PDB 3. AD + SDB + co-composting 4. Thickening tank + SDB + storage 5. Geobag (disposal)	Activity: 1. Match parts of system to functions	1. Trenching – To be created
Session 7	Day 7	Treatment systems - 2	0. Revision of topics 1. Mechanical system - Unnao model 2. Pyrolysis - Tide model 3. Mobile treatment unit 4. Co-treatment 5. Reuse of end products	Assignment Step 4: Propose treatment system Activity: 1. Match parts of system to functions	1. Devanahalli FSTP 2. Jhansi FSTP
Session 8	Day 8	Regulations for FSM	0. Revision of topics 1. ULB level regulations such as <ul style="list-style-type: none"> a. OSS b. licensing of desludging trucks c. disposal of FS d. desludging frequency e. Reuse of FS f. Fees for desludging 2. IEC and BCC (mediums, messages and example)	Assignment Step 5: Propose regulatory measures at the ULB and IEC plan Activity: 1. Game – ULB Regulations	1. Sinar FSM 2. Dumaguete – Philippines Case Study

Session #	Day	Session Name	ILT Topics	Activities/Assignment	Videos
Session 9	Day 9	Operations model	0. Revision of topics 1. Contract models for FSTP 2. Integrated contracts 3. Investment and cost estimates	Assignment Step 6: plan operating model Activity 1. Estimation of CAPEX and OPEX using per capital numbers	1. Gender in Sanitation 2. Video on how to use the Rapid assessment tool – To be created
Session 10	Day 10	Wrap up	0. Revision of topics 1. Steps for FSM implementation 2. Govt. policies, schemes for FSM (finances) 3. Supporting organisations and platforms 4. Gender transformation in sanitation 5. Q&A		

Annexure A

Participant Selection Criteria

To ensure that the appropriate target audience take part in the training, the below set of qualification guidelines is laid out. It is recommended that the officers nominate participants who fulfil the below requirements.

The training participant must:

- a) Be a nodal/key member of the team implementing Faecal sludge or wastewater management at the Urban local body or any other body supporting in such implementation.
- b) Be a graduate
- c) Have a smart phone with good internet connection (Wi-Fi or 3G and above)

Annexure B

Evaluations and Feedback

A three-level evaluation plan will be implemented to track the participant learning and evaluate them. Feedback from level 1 and 2 will be used to make necessary course corrections during the training.

Level 1: Evaluations at the end of every day - there will be a set of 3 -5 questions (MCQ types) which the participant has to answer, on topics covered that day

Level 2: Assignment: Participants are required to work on the assignment, based on topics covered during that session. The assignment is designed such that the participants are able to apply the knowledge gained in a contextual situation, thereby preparing a FSSM plan for their city/town.

Level 3: Pre and Post training: The knowledge of participants before and after training is assessed through a set of 10 questions on FSSM.



Advanced Training on FSSM

A more technical session for engineers working with the government, FSSM practitioners and those interested in design and implementation aspects of FSSM.

Summary of the Course

Background

Since the roll out of SBM, many programs and policies have been put in place mandating the importance and uptake of Faecal Sludge and Septage Management (FSSM). Many ULBs with the support of State Governments and civil society organisations have initiated planning for FSSM. This support comes with a standard set of guidelines or codified knowledge for implementing FSSM in various locations. It is now the role of the ULB to use their knowledge of local context and select the solutions most suitable for their region. For doing this, it is very vital that the key decision makers at the ULB have knowledge of such solutions, tools to contextualise them and awareness of the various dimensions of decision required to implement FSSM.

As opposed to basic knowledge of FSSM, these decision makers at ULB require specialised, in-depth and practical knowledge to operate and supervise the solutions best suited for them. The advanced course is designed for participants that have successfully completed the 'Orientation course' and are prepared to plan or implement FSSM in their respective towns and cities.

Content

The advanced training module assumes that participants already have a foundational understanding of FSSM. They are attending this course to address some of the key questions that have come up during their planning or implementation phase of FSSM. Thus, the course is designed to help the participants answer these questions and in doing so, contribute to preparing a project note towards the end of the training. This note will guide them systematically to take decisions post the training.

The modules predominantly focus on design and engineering components of FSSM in addition to procurement models, DPR preparation and quality assurance in FSSM value chain. The sessions are modular in nature, which means based on the local context or the requirements of the target audience, a session plan can be developed assembling together topics of their interest.

Duration

Online Mode

The duration of the online course is 15 working days. With each day requiring a seat time of 90 min from the participant. The 15 days can be customised

based on the availability and convenience of the participant and thus can either be spread over a longer duration or the course be split into multiple segments and offered over a specified time period.

Classroom Mode

The duration of the course is 5 working days, with a seat time of 6 hours each day. One of the 5 days will be dedicated to on-site training through an exposure visit to a model facility.

Targeted participants

The course is open for officials and staff from ULBs who have already initiated planning or implementation of FSSM. In addition to these, the participants who have successfully completed the orientation course on FSSM can also apply for the advanced course after a period of 3 months. A detailed participant selection criteria is given below.

Criteria for Participant Selection

If a potential nominee meets any three of the following criteria, they can participate in the training:

1. You are a key decision maker (Executive Engineer or above)
2. You belong to a town or city which has implemented or is preparing to implement FSSM
3. You are responsible for day – to – day activities involved in providing sanitation solutions for your town or city
4. You are a mechanical or civil engineer
5. You are responsible for supervising operations of the city's/town's Sewage Treatment Plant or Faecal Sludge Treatment Plant
6. You are a city or town planner

Course delivery platform

The course will be offered in a blended format, i.e. live session by experts combined with self-paced learning. A feature rich learning management system (LMS) application will help facilitate the self-learning. The LMS can be accessed through mobile devices such as mobile, tablets (app) or computer (website). The platform offers multiple features allowing participants to assess themselves such as quizzes and assignments. The platform also facilitates interaction between participants through forums.

Segment	Day	Session	Seat time (in minutes)
Segment 1	Day 1	Introduction to the training	45
	Day 2	Orientation on the State FSSM policy and role of ULB	90
	Day 3	Planning and quality assurance in FSSM	90
	Day 4	Planning, regulating and monitoring of OSS	90
	Day 5	Planning, regulating and monitoring of emptying and transportation systems	90
Segment 2	Day 6	Planning for Fecal sludge treatment	80
	Day 7	Building a treatment system	60
	Day 8	Detailed working with example: Anaerobic digestion and Sludge drying beds, Planted drying beds, co-composting systems	90
	Day 9	Detailed working with example: Mechanical dewatering and solar Pasteurization system	90
	Day 10	Detailed working with example: Thermal drying and pyrolysis system	90
	Day 11	Detailed working with example: Co-treatment of Fecal sludge	75
Segment 3	Day 12	FSSM operations model	90
	Day 13	Local regulations and financing	75
	Day 14	Procurement methods and service level benchmarks	60
	Day 15	Closure and wrap up	45
		Total	1160 (or) 20 hrs

A three-level evaluation plan will be implemented to track the participant learning and evaluate them. Feedback from level 1 and 2 will be used to make necessary course corrections during the training.

Level 1: Evaluations at the end of every day - there will be a set of 3 -5 questions (MCQ types) which the participant has to answer, on topics covered that day

Level 2: Assignment: Participants are required to work on the assignment, based on topics covered during that session. The assignment is designed such that the participants are able to apply the knowledge gained in a contextual situation, thereby preparing a FSSM plan for their city/town.

Level 3: Pre and Post training: The knowledge of participants before and after training is assessed through a set of 10 questions (MCQ) on FSSM.

Detailed Session Plan

Session #	Day	Session Name	ILT Topics	Activities/Assignment	Videos
Session 1	Day 1	Introduction to the course	<ol style="list-style-type: none"> Welcome address Trainers introductions Discussion on the agenda Housekeeping instructions Demonstration of LMS 		b) How to use the LMS
Session 2	Day 2	Orientation on the State FSSM policy and role of ULB	<ol style="list-style-type: none"> Key components of the national FSSM and State FSSM policy Roles and responsibilities of key stakeholders at the state for FSSM implementation Role of the ULB in implementing and sustaining FSSM Gender roles in Sanitation – Myths and prospects 	<p>Assignment</p> <p>Step 1: Baseline data and identification of stakeholders</p>	<ol style="list-style-type: none"> Odisha – a state's journey of FSSM Gender in Sanitation
Session 3	Day 3	Planning and quality assurance in FSSM	<ol style="list-style-type: none"> Revision of topics Steps in planning and implementing FSSM – an ULB perspective Including gender in Sanitation planning Introduction to quality assurance framework Usage guide for quality assurance tools 	<p>Step 2: Prepare timeline for the planning process</p>	<ol style="list-style-type: none"> FSSM planning video Quality assurance tool usage guide
Session 4	Day 4	Planning, regulating and monitoring of OSS	<ol style="list-style-type: none"> Revision of topics Definition and types of OSS Functioning and design of septic tank, twin & single pit toilets Pathogen kill graph vs time HH level wastewater treatment Sept guard (WASH Institute) Local regulations and monitoring of OSS IEC to households on OSS usage and operations 	<p>Assignment</p> <p>Step 3: Estimate the sludge generation for a given case.</p> <p>Activity:</p> <ol style="list-style-type: none"> Learn how to estimate sludge for a city 	<ol style="list-style-type: none"> Septic tank – Click here Twin pit toilet

Session #	Day	Session Name	ILT Topics	Activities/Assignment	Videos
Session 5	Day 5	Planning, regulating and monitoring of emptying and transportation systems	0. Revision of topics 1. Objectives of emptying and transportation (E&T) 2. E&T options - infrastructure 3. Demand vs scheduled desludging 4. Specifications for truck – example 5. Regulating Emptying and transportation 6. IEC on E&T	Assignment Step 4: Estimate truck requirement and type of trucks Activity: 1. Estimate requirement of trucks 2. PPE game	1. Wai - Scheduled desludging 2. E&T process 3. Scheduled desludging
Session 6	Day 6	Planning for Fecal sludge treatment	0. Revision of topics 1. Characteristics of FS and comparison with sewage 2. Treatment objectives and standards (include biosolids standards) 3. Stages of treatment 4. treatment approaches (clustering, co-treatment, co-digestion and stand-alone FSTP) 5. Stages in FSTP implementation	Assignment Step 5: Choose treatment approach	1. Trenching – To be created
Session 7	Day 7	Building a fecal sludge treatment plant	1. Instruction to the simulation game	Activity: 1. Technologies for FS treatment 2. Simulation game: Build a FSTP	
Session 8	Day 8	Treatment systems - 1	0. Revision of topics Detailed working and operations of: 1. Anaerobic digester 2. Thickening tank 3. Sludge drying bed/Planted drying bed 4. Anaerobic baffle reactor and constructed wetland 5. Co-composting Case study – Dhenkanal and Bhubaneswar model	Activity: 1. Review treatment system design	1. Devanahalli FSTP 2. Jhansi FSTP

Session #	Day	Session Name	ILT Topics	Activities/Assignment	Videos
Session 9	Day 9	Treatment systems - 2	0. Revision of topics Detailed working and operations of: 1. High rate anaerobic digester 2. Mechanical dewatering 3. Solar drying and pasteurisation 4. ASP for effluent treatment Case study – Unnao and PNP (Tamil Nadu) model	Activity: 1. Match parts of system to functions	1. Unnao FSTP – To be created
Session 10	Day 10	Treatment systems - 3	0. Revision of topics Detailed working and operations of: 1. Thermal dryer 2. Pyrolysis Case study – Warangal Thermal FSTP and Omni processor	Activity: 1. Match parts of system to functions	1. Thermal FSTP – To be created
Session 11	Day 11	Treatment systems - 4	0. Revision of topics 1. Dilution method of co-treatment 2. Solid liquid separation method of co-treatment 3. Pre-requisites for co-treatment 4. Case study of co-treatment – Uttarakhand / Uttar Pradesh	Activity: 1. Using the co-treatment toolkit	1. Co-treatment video – To be created
Session 12	Day 12	Operations model	0. Revision of topics 1. Contract models for FSTP 2. Integrated contracts 3. Reuse prospects from FS	Assignment Step 6: Select an operational model	
Session 13	Day 13	Regulations and financing for FSSM	0. Revision of topics 1. ULB level regulations such as a. OSS b. Licensing of desludging trucks c. Disposal of FS d. Desludging frequency e. Reuse of FS f. Fees for desludging	Assignment Step 7: Propose regulatory measures at the ULB and IEC plan Activity: 1. Simulation Game – ULB Regulations	1. Sinner FSM 2. Dumaguete – Philippines Case study

Session #	Day	Session Name	ILT Topics	Activities/Assignment	Videos			
Session 14	Day 14	Procurement methods and service level benchmarks	2. IEC and BCC (mediums, messages and example)	2. Estimation of CAPEX and OPEX using per capital numbers				
			3. Case study on regulations and enforcement in FSSM from Indian cities					
			4. Investment and cost estimates					
			0. Revision of topics	Assignment				
Session 14	Day 14	Procurement methods and service level benchmarks	1. Key highlights from the transparency/procurement act	Step 8: Selection of procurement method				
			2. Established procurement methods in FSSM					
			3. Pre-requisites and role of ULB in procurement and monitoring					
			4. Benchmarks in FSSM service delivery					
Session 15	Day 15	Wrap up	0. Revision of topics	Assignment				
			1. Steps for FSSM implementation	Step 9: Action points for implementation				
			2. Govt. policies, schemes for FSSM (finances)	Step 10: Plan for gender main streaming				
			3. Supporting organisations and platforms					
Session 15	Day 15	Wrap up	4. Gender transformation in sanitation					
			5. Q&A					
			Additional sessions (add ons, which can be packaged or swapped with any of the session above, as deemed relevant to the local context)					
			Session #	Session Name		Duration	Topics	
D1	Design of Nature based System – Package 1	120 min	Workbook practice for designing of modules: stabilization reactors, sludge drying beds and storage/solar pasteurization unit (Devanahalli model)					
D2	Design of Nature based System – Package 2	120 min	Workbook practice for designing of modules: Thickening tank, sludge drying beds and storage (Bhubaneshwar Model)					
D3	Design of Nature based System – Package 3	60 min	Workbook practice for designing of modules: planted drying beds (Jhansi Model)					
D4	Design of Nature based System – Package 3	120 min	Workbook practice for designing of modules: Thickening tank, High rate digester, Screw press and solar pasteuriser (Unnao Model)					

Session #	Session Name	Duration	Topics
B1	Stakeholder mapping	30 min	<ol style="list-style-type: none"> 1. FSSM value chain and mapping of actors 2. Transactions between actors 3. Listing interest of key actors across the value chain – activity
B2	Business models in	45 min	<ol style="list-style-type: none"> 1. Framework: Business model canvas – Discussing externalities – Social and Environmental perspective 2. Examples of business models from other public utilities such as roads (or) water supply (or) electricity distribution 3. Elements of a successful business model 4. Typology of business models 5. Value proposition of business models
B3	Implementing business models	45 min	<ol style="list-style-type: none"> 1. Planning for business models & Procurement of services 2. Step wise implementation plan for ULBS 3. Design of regulatory, enforcement and monitoring systems for sustaining the business model
Q1	Quality assurance framework in FSTP construction	60 min	Standards and monitoring protocol during civil works of FSTP

A group of approximately 15 men are gathered outdoors in a rural setting, likely a village. They are gathered around a large sheet of paper, possibly a map or a set of plans, which is laid out on the ground. Two men are kneeling and pointing at the paper, while the others stand around them, looking on with interest. The men are dressed in casual clothing, including t-shirts, button-down shirts, and traditional Indian attire like turbans and dhotis. The background shows several traditional houses with thatched roofs, suggesting a rural environment. The entire image is overlaid with a semi-transparent blue filter.

Training for Sanitation Workers

Summary of the Course

Background

Sanitation workers in India are many, and perform a wide variety of roles in sanitation and wastewater management related services. They are in sorts, the front line workers, delivering services to citizens and general public. However, there is very limited capacity building and training that is provided to these workers to perform their duties. They are most often not aware of the standard operating procedures, risks at work place, safety protocols and usage of personal protective equipment. It therefore becomes essential to train such front line workers, especially in times of COVID-19, so that they perform their tasks in a safe and efficient manner.

Who are these sanitation workers?

They are either permanently employed staff of the urban local body or are employed contractually to perform tasks such as

- a) Desludging of onsite sanitation systems
- b) Maintenance of sewer networks

- c) Cleaning of drains
- d) O&M of STPs or FSTPs
- e) Cleaning, O&M of public and community toilets

Training outcomes

The training is intended to provide an orientation about the standard operations and safety aspects of the various works listed above, carried out by the sanitary workers. This training will set a base and prepare the workers for a series of capacity building and skill development activities as suggested by the Ministry of Housing and Urban affairs and CPHEEO, Gol. The following are some of the outcomes, the orientation training is intended to achieve.

1. Participants recognise the risks at work place and know the appropriate mitigation mechanisms.
2. Participants are aware of the correct procedures to carry out their jobs

Agenda and duration

The trainings would be conducted over a period of 4 weeks (1 day/week) and target a batch of 30 workers/training session. The duration of the classroom training everyday would be for 90 mins. Therefore a total of 360 mins of training shall be administered to each of these workers over a span of 4 weeks.

The broad topics and agenda across these four days is illustrated below

Day	Duration	Session	Topics
Day 1	30 min	Introduction and Briefing on the Program	<ul style="list-style-type: none"> • Learning objectives • Rules for learning • Role of Sanitary workers • Session plan
Day 1	30 min	Sanitation in cities and towns	<ul style="list-style-type: none"> • Household and community sanitation • Faecal sludge and wastewater value chains • Sanitary vs insanitary latrines
Day 1	30 min	Sanitation and health	<ul style="list-style-type: none"> • Linkages between sanitation and health • Impact and risk from sanitation work on health and life • Disease prevention and general hygiene • Demonstration of handwashing technique
Day 2	45 min	CT and PT operations and maintenance	<ul style="list-style-type: none"> • Key activities to be performed and relevant tools • Risks in CT/PT O&M- do's and don'ts • Appropriate type and usage of PPE
Day 2	45 min	Sewer lines and	<ul style="list-style-type: none"> • Terminologies and working of sewer lines and drains • Tools and Equipment for sewer and drain cleaning • Risks in sewer line and drain O&M- do's and don'ts • Appropriate type and usage of PPE
Day 3	90 min	Septic tank and pits desludging equipment	<ul style="list-style-type: none"> • Types of equipment and tools • Parts of a vacuum truck • Standard operating procedure for desludging at a household • Risks in desludging operations • Appropriate type and usage of PPE
Day 4	45 min	STP and FSTP O&M	<ul style="list-style-type: none"> • Concept of STP and FSTP, terminologies • Key activities to be performed in STP/FSTP • Risk profile and PPE usage
Day 4	45 min	Wrap up	<ul style="list-style-type: none"> • Revision of topics • Role of sanitation workers in nation building • Distribution of PPE, Hygiene Kits and Information Booklet • Precautions during COVID-19

Course Format and Methodology

Medium of instruction: Local language

Place of training: Trainings will be delivered in classroom or similar venues with audio visual facilities, suitable to comfortably seat 30 participants in cluster arrangement.

Time of the training: The training and all evaluations together will demand 90 min seat time from the participants. The actual timings can be decided based on the convenience of the participants and their supervisors, depending on their work schedule.

The course will be delivered in an interactive format, making use of presentations, audio and video to guide the trainer deliver and explain certain concepts. Each session will also have well placed interactions with the participants for them to share their knowledge and experience. Presentations and other audio-visual aids will be designed to depict practical on ground condition and thereby educate

them on the topics. Practical demonstrations of a few topics will be carried out in the classroom. In addition, a booklet consisting of key learnings from the course will be developed and provided to the participants at the end of the training.

The course will have evaluations to assess the learning by the participant. At the end of each day, a pictorial quiz will be administered to gauge the understanding of the topic by the participant. In addition to this, a simple feedback will also be sought on the topics, method and infrastructure of the training. Feedback will be used to improve the training delivery during the course and for subsequent training.

Participants who complete the course will be provided with a certificate and will be listed in a database for subsequent capacity building initiatives.

Online Trainings

on Fecal Sludge and Septage Management