**Advanced Training Program on “Decentralised Wastewater Management – Complementing Centralised Solutions for Achieving 100% Sanitation Coverage” in Ganga Towns**

**Training Agenda**

| Time | Session Plan | Session Content |
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| DAY 1 |
| 9.30 – 10.00 | Registration |  |
| Opening session |
| 10:00 – 10:45 | Opening Session | * Welcome and opening remarks
* Defining training objectives and expected outcomes
* Introduction of participants
* Pre-evaluation and expectations from training
 |
| Session I : Urbanisation and Wastewater Management – Status and Challenges |
| 10:45 - 11:00 | Setting the context | * Status of wastewater management in urban areas – National/Ganga Towns
* Challenges in achieving 100% coverage with respect to wastewater management in urban areas
 |
| 11:00 – 11:15 | ***Tea Break*** |  |
| 11:15 – 12:15 | Group work and presentation | * Identify components of sanitation system in your city/town – status and challenges
 |
| Session II : Decentralised approaches for Liquid Waste Management |
| 12:15 – 13:00 | Introduction | * Need for decentralised sanitation solutions – synergies with centralised sanitation systems
* Sanitation Value Chain – introduction
* Types of liquid waste and sources (sewage, faecal sludge, septage, greywater), characterisation of waste
* Decentralised liquid waste management approaches – for various scales (on-site/off-site)
 |
| 13:00 – 14:00 | ***Lunch*** |  |
| 14:00 – 14:15 | ***Energizer activity*** |  |
| Session III : Decentralised Wastewater Treatment – Technology Options |
| 14:15 – 15:15 | Technology options and areas of application | * Wastewater treatment – principles and stages of treatment
* Technology options for on-site/off-site conveyance and treatment of wastewater (sewage/greywater)
 |
| 15:15 – 15:45 | ***Tea Break*** |  |
| 15:45 – 17:15 | Best practices | * Treatment approaches for various scenarios
* Hands on exercise for designing a containment system
 |
| 17:15 – 17:30 | Wrap up of day 1 | * Key takeaways, learning progress evaluation, feedback
 |
| DAY 2 |
| 9:00 – 9:30 | Recap | * Recap of Day 1
 |
| Session IV : Faecal Sludge and Septage Management (FSSM) |
| 9:30 – 10:15 | Introduction | * Need for FSSM
* FSSM Value Chain and its components
* FSSM in India/Uttar Pradesh – status and challenges
 |
| 10:15 – 11:00 | Quantification & characterization of FS/Septage | * Difference between Faecal Sludge and Septage
* Characterisation of Faecal Sludge and Septage – key parameters and implication on selection of treatment approaches
* Quantification of faecal sludge/septage – estimation methods
* Hands on exercise to quantify FS/Septage generation
 |
| 11:00 – 11:30 | ***Tea Break*** |  |
| Session V : Faecal Sludge and Septage Management (FSSM) – Technology Options |
| 11:30 – 12:15 | Conveyance options for FSS | * Technology options for desludging/transport of FSS
* Desludging approaches – application, pros/cons
* Hands on exercise to assess conveyance requirements
 |
| 12:15 – 13:00 | Treatment options for FSS | * FSS treatment – principles and stages of treatment
* Components of treatment – key steps and objectives
* Technology options for FSS treatment – solids and liquid streams
* Criteria for selection of technology option
* Design considerations for FSS treatment
 |
| 13:00 – 14:00 | ***Lunch*** |  |
| 14:00 – 14:00 | Application of tools for wastewater management | * Application of GIS/Remote Sensing as tools for planning citywide wastewater management
 |
| 14:30 – 15:30 | Group work and presentation | * “build your FSS treatment system”
 |
| 15:30 – 15:45 | ***Tea Break*** |  |
| Session VI : Co-treatment of FSS in Sewage Treatment Plant |
| 15:45 – 16:30 | Introduction | * Introduction and objectives of co-treatment
* Assessment of co-treatment potential of a STP
* Technology options for co-treatment – dilution vs. solid-liquid separation
* Case study
 |
| 16:30 – 17:15 | Group work | * Planning for decentralised liquid waste management for given scenario
 |
| 17:15 – 17:30 | Wrap up of day 2 | * Key takeaways, learning progress evaluation, feedback
 |
| DAY 3 |
| 8:30 – 11:00 | Site Visit | * Visit to Faecal Sludge Treatment Plant (FSTP) at Jhansi
 |
| 11:00 – 11:30 | Group Presentation | * Plan for decentralised liquid waste management
 |
| 11:30 – 12:15 | Institution and Finance | * Institutional and financial aspects for decentralised liquid waste management
 |
| 12:15 – 13:00 | Closing Session | * Post training evaluation, feedback and way forward
 |
| 13:00 onwards | ***Lunch and wrap up*** |