



Training Program on Sustainable Natural and Advance Technologies
and Business Partnerships for Water & Wastewater Treatment,
Monitoring and Safe Water Reuse in India

Training Session Plan

Title of the training session

Sludge Drying Reed Bed

Author(s) of the training session

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Short description of the session

The session covers the Sludge Drying Reed Bed, with a general description, the key dimensioning methods and design principles. Furthermore, the construction phases will be illustrated, and finally the main operation and maintenance activities will be shown.

Learning objectives

At the end of the sessions, participants will:

1. have more familiarity with Sludge Drying Reed Bed, their functioning and the involved biological processes
2. have the preliminary skills for a first assessment and sizing of Sludge Drying Reed Bed
3. know the preliminary basis for their construction and operation

Trainer's required profile

The trainer should have a background on Sanitary Engineering and experience with constructed wetland design, construction and operation

Expected duration of the training session

3 hours, with a break of 15 minutes

Methodology and key contents of the session

Time	Topic	Key contents	Slides Numbers
5 min	Introduction to the session	Introduction to the authors and to the organization Learning objectives	5
25 min	Introduction to the technology (background overview, principles, performance expected, appropriateness)	Description Advantages Efficiency Treatment mechanisms Applicability Plants role	11
60 min	Design of the technology (key considerations, basic calculations, key formulas, etc.)	General CW design SDRB design General overview Sludge SLR Pre-treatment Distribution and drainage	16
15 min	Break		
15 min	Construction and/or implementation	Implementation phases Construction details	17
15 min	Operation and maintenance	O&M requirements Operation Phases Strat-up and commissioning Standard operation Operation problems End use	15
30 min	Example: the PAVITR pilot	Introduction Materials and methods Key messages	10
12 min	Homework: exercise to design/implement the technology for a case study	Case introduction Solution	4
13 min	Final remarks		

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