



## COMPREHENSIVE CAPACITY BUILDING PROGRAMME ON

## Sustainable Decentralised Wastewater Treatment (Including Reuse and Recycle) July 23 – 26, 2013

| Day 1, July 23, 2013  |                     |   |  |  |  |
|---|---------------------|---|--|--|--|
|   | Time                | Topics  | Faculty  |  |  |
|   | 9.30 – 10.00        | Registration  | Water team, CSE  |  |  |
| Module 1: Introduction  |                     |   |  |  |  |
|   | 10.00 – 10.30       | Welcome address and about CSE   | Shailendra Vikram Singh,<br>Director, NURM IV,<br>Dr. Suresh Rohilla, Programme<br>Director, CSE |  |  |
|   |                     | Tea 10.30 – 10.45   |  |  |  |
| Module 2: Urban Wastewater and Sanitation - An Overview   |                     |   |  |  |  |
|   | 10.45 – 11.45       | Urban Water Management – challenges and issues with specific reference to JnNURM          | Dr. Suresh Rohilla, <i>Programme Director, CSE</i>   |  |  |
|   | 11.45 – 12.15       | Report card and road map of wastewater management and sanitation in JnNURM mission cities | Dr. Mahreen Matto, Senior<br>Research Associate, CSE   |  |  |
|   | 12.15 – 12.45       | New CPHEEO manual - provisions for decentralized treatment options                        | Dr. Deblina Dwivedi<br>Programme Officer, CSE  |  |  |
|   | 12.45 – 13.00       | Introduction to the interactive session   | Dr. Nidhi Pasi, <i>Programme</i><br>Officer, CSE   |  |  |
|   | 13.00 – 14.00       | Water neutral and low impact urban development: Case studies.                             | PZ Thomas, Environmental<br>Engineers & Consultants Pvt.<br>Ltd.                                 |  |  |
|   |                     | Lunch 14.00 – 15.00   |  |  |  |
| Module 3: D   | ecentralised approa | ches in treating urban sewage   |  |  |  |
|   | 15.00 – 16.00       | Introduction to Decentralized wastewater treatment systems                                | Dr. Nidhi Pasi, <i>Programme</i><br>Officer, CSE   |  |  |
|   | 16.00 – 16.45       | Film – Clean Your Act: A practical guide to treat domestic wastewater                     | AV Unit, CSE   |  |  |
|   |                     | Tea 16.45 – 17.00   |  |  |  |
|   | 17.00 – 18.00       | Constructed Wetlands- Approach and Practices  | Dr. Deblina Dwivedi<br>Programme Officer, CSE  |  |  |
|   |                     | Day 2, July 24, 2013  |  |  |  |
| Module 3: National Urban Sanitation Policy – City Sanitation Plan (NUSP-CSP) and technological options (Knowledge partner- GIZ India) |                     |   |  |  |  |
|   | 9.30 – 12.00        | Preparation of City Sanitation Plans  | Dirk Walther, Senior Technical<br>Adviser, <i>GIZ</i>  |  |  |

|   |              | Tea 11.00 – 11.15  |   |  |  |
|---|--------------|--|---|--|--|
| 12.00 -   | - 13.00      | Existing and emerging technologies of wastewater treatment - Issues and challenges'  | Prof. Vinod Tare, IIT- Kanpur   |  |  |
| Lunch 13.00 – 14.00   |              |  |   |  |  |
| 14.00 -   | - 15.00      | Introduction to Green Bridges-<br>planning, design, operation and<br>maintenance   | Sandeep Joshi, <i>Shrishti Eco</i><br><i>Research Institute</i>           |  |  |
| Module 4: Decentralized approaches in treating urban sewage- Do it yourself |              |  |   |  |  |
| 15.00 -   | - 16.00      | Planning and designing of DWWT components  | Dr. Deblina Dwivedi<br>Programme Officer, CSE                             |  |  |
| 16.00 -   | - 16.30      | Economics and cost recovery of DWWT in India   | Dr. Deblina Dwivedi<br>Programme Officer, CSE                             |  |  |
| 16.30 -   | - 16.45      | Introduction to planning and designing of DWWT components (working in groups)  | Shivali Jainer / Aditi Tallu,<br>Research Associate, CSE                  |  |  |
| Tea 15.45 – 16.00   |              |  |   |  |  |
| 16.45 -   | - 18.15      | Preparation of plan and design for different DWWT projects   | Dr. Deblina Dwivedi<br>Programme Officer, CSE                             |  |  |
|   |              | Day 3, July 25, 2013   |   |  |  |
| Module 4: Decentralize  | ed approach  | nes in treating urban sewage- Do it your   | self (Cont.)  |  |  |
| 9.30 –  | 10.15        | Group presentation by participants   | Water Team, CSE   |  |  |
| 10.15 -   | - 11.15      | Interactive session – Discussion on papers   | Water Team, CSE   |  |  |
|   |              | Tea 10.45 - 11.00  |   |  |  |
| 11.15 -   | - 12.00      | Operation and maintenance of decentralized systems post construction- performance and experience from projects undertaken. | Stanzin Tsephel, Consortium<br>for Dewats Dissemination<br>Society (CDDS) |  |  |
| Module 5: Field visit   |              |  |   |  |  |
| 12.00 -   | - 12.30      | CSE DWWT system  | Dr. Mahreen Matto, <i>Senior</i> Research Associate, CSE                  |  |  |
| Lunch 12.30 – 13.30   |              |  |   |  |  |
| 13.30 -   | - 18.00      | Sulabh International Museum of Toilets   | Gaurav Chandra, Coordinator,<br>Sulabh International                      |  |  |
| Day 4, July 26, 2013  |              |  |   |  |  |
| Module 6: Wastewate   | r Recycle an | d Reuse- Policy and Review   |   |  |  |
| 9.30 –  | 10.30        | Film - Fecal Attraction: The political economy of defecation   | AV Unit, CSE  |  |  |
| 10.30 -   | - 11.30      | Recycling and reuse of treated sewage – policy, options and standards  | Dr. Suresh Rohilla, CSE   |  |  |
| Tea 11.30 – 11.45   |              |  |   |  |  |
| 11.45 -   | - 12.45      | Summary, Way forward and feedback  | Dr. Suresh Rohilla, <i>CSE</i>  |  |  |
| 12.45 -   | - 13.15      | Distribution of certificates   | Shailendra Vikram Singh,<br>Director- NURM IV, MOUD                       |  |  |
| Lunch 13.15 – 14.15   |              |  |   |  |  |