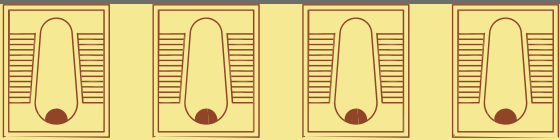
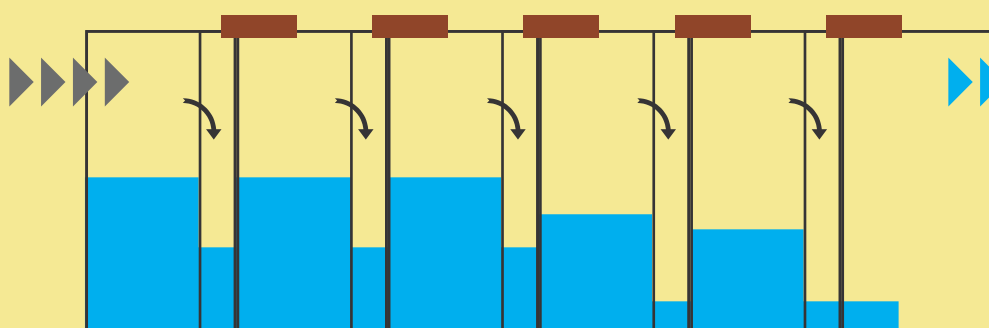
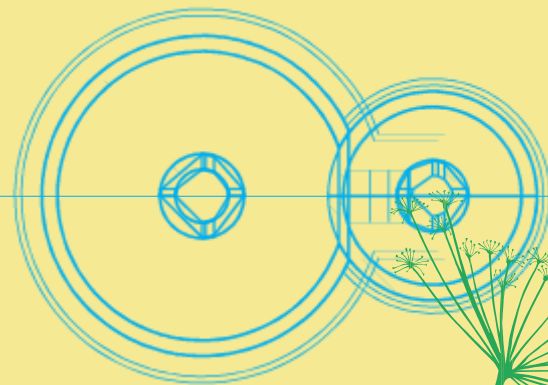
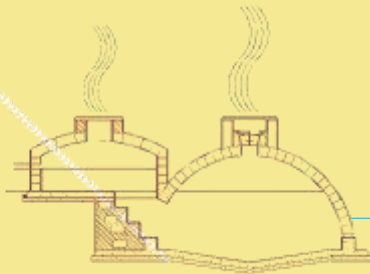


## DECENTRALISED WASTEWATER TREATMENT SYSTEMS (DEWATS™)

27 - 31 May 2013



DEWATS™ Training is a platform for engineers engaged in the sanitation and waste management sector to gain practical skills and knowledge for planning, designing, implementing, operating and maintaining DEWATS™.



Organised by



Consortium for  
DEWATS  
Dissemination  
Society

Supported by



BORDA



RGRHCL

## BACKGROUND

Urbanisation is one of the most important demographic trends of this century. The rapid growth of cities has created a **shortfall in the supply of infrastructure and services** leading to a deteriorating environment. Today an estimated two billion people in the world do not have access to 'adequate' sanitation facilities. **Indian cities generate 33,212 million litre of sewage per day (mld) but can treat only 6,190!** The disposal of such huge volume of untreated domestic sewage from cities and towns is the biggest source of water pollution and environmental contamination in India.

Most Indian cities try to handle the infrastructure demands through centralised systems, which not only require high capital expenditures but also cause high operation and maintenance (O&M) costs. The existing **centralised systems are not able to serve** the increasing urbanisation to such an extent. As a complementary option to the centralised approach, the introduction of a **decentralised waste management system** can be an **effective solution to tackle pollution** in urban areas. Moreover, decentralisation helps to increase community participation in the decision making process, in implementation and in maintenance.

In this context, there is an increasing **need for scaling up decentralised approaches** for adequate basic needs services. Decentralised wastewater treatment systems have an enormous potential in contributing to the development of sustainable environmental sanitation. The Consortium for DEWATS™ Dissemination (CDD) Society aims to bridge the gap by enhancing the capacities of service providers across the country.

# VENUE

## CASS

CENTRE FOR ADVANCED  
SANITATION SOLUTIONS

Kengeri, Bangalore



# Decentralised Wastewater Treatment Systems (DEWATS™)

DEWATS™ is an approach for the treatment of wastewater generated from domestic and industrial processes. It is based on different natural water treatment techniques comprising of some basic treatment modules. Those are combined according to individual requirements which depend on the

- Characteristics of the wastewater to be treated
- Desired quality of the treated wastewater
- Technical specificities

DEWATS™ units can be designed for the treatment of wastewater flow ranging from 1 to 1,000 m<sup>3</sup> per day.

DEWATS™ has certain advantages compared to centralised systems:

- Easily workable and simple
- On-site treatment modules require minimal operation and maintenance
- No mechanical parts
- Less sewerage network
- Due to these features substantial cost savings

## Training Objective

The objective of this training programme is to introduce and impart engineering skills to professionals for designing and implementing DEWATS™.

## Programme Overview

The course duration is **5 days** and it is scheduled from the **27<sup>th</sup> – 31<sup>st</sup> May 2013**. On each of the training days, the sessions are timed from **09:00 a.m to 06:00 p.m.** Various methods are involved, e.g.

- Lectures and presentations
- Case studies and practical workshops
- Study tours and field visits

## Participants

The participants should have a minimum of **1-2 years of prior work experience** in the water, sanitation and/or waste management sector. **English** language skills are required as that will be the medium of instruction and teaching.

Potential participants for this training course are from government and private organisations:

- Engineers (sanitary, environmental, etc.)
- Wastewater management practitioners
- Architects
- Other professionals with a background in related sectors such as water resource management, infrastructure, etc.

## Registration

The programme is designed for a **maximum of 20 participants**. The application form should be filled in all respects and returned to the contact address given below latest by **May 17<sup>th</sup> 2013**. As the seats are limited, CDD will screen and select the most eligible applicants.

## Travel & Insurance

- All expenses towards the onward and return travel to and from Bangalore are borne by the participants (or their organisations) individually
- All daily local travels during the programme will be provided by CDD Society
- The organisers and sponsors are **not responsible** for any risk of illness, accidents, loss of money, property, etc. incurred by the participants
- The participants are **strongly advised to insure themselves** against such mentioned risks

## Programme Fee

The training programme is **fully residential**. The course fee is **Rs. 15,000/-** (Rupees Fifteen Thousand Only) for Indian residents and **325 €** (Three hundred twenty five Euros) for international participants, which includes boarding and lodging, a training kit, all material and local travel. The selected participants need to send a DD/Cheque for the above amount in the name of CDD Society, payable at Bangalore to the address given below.

## Venue

The training course will be conducted at the Centre for Advanced Sanitation Solutions (CASS), located in **Kengeri, Bangalore**. This **CASS** has been jointly established by CDD Society and RGRHCL, Karnataka.

## Course Outline

- Introduction to wastewater and its effective management
- Different approaches and technologies for wastewater treatment
- Introduction to Decentralised Wastewater Treatment Systems (DEWATS™)
- Feasibility and initial project planning
- Preliminary planning and design of DEWATS™
- Implementation of DEWATS™
- Operation and maintenance

## Attendee Benefits

The participants will be awarded a certificate on satisfactory completion of the programme. Also, each one will be linked with CDD/ BORDA's International Engineers' Network which provides them with access to regular knowledge and skill up gradation. Furthermore, CDD will support the design of the first DEWATS™ project, if required.

NOTE: The brochure and application form can be downloaded from [www.cddindia.org](http://www.cddindia.org) and [www.borda-sa.org](http://www.borda-sa.org)



**Consortium for DEWATS™ Dissemination (CDD) Society** is a not-for-profit organisation comprising of like-minded network partners seeking to promote the provision of basic needs services in urban and rural environment through the promotion of decentralised solutions in

- Community Based Sanitation (CBS)
- Wastewater Treatment Systems (DEWATS™)
- Solid Waste Management (DESWAM)
- Water Supply Systems (DEWASS)
- Renewable Energy Systems (DERES)
- Citywide DBNS Planning (CSP)

**Bremen Overseas Research & Development Association (BORDA)** is a German non-profit organisation with headquarters in Bremen. Since 1979, BORDA has been working in India with local partners to implement and disseminate sustainable solutions to the related problems of poverty and environmental degradation. Through the integration of appropriate eco-friendly technology into a holistic framework, including technical, social, economic and environmental components, BORDA facilitates the provision of basic needs services to urban, peri-urban and rural populations and technical support to small and medium sized enterprises, institutions, settlements and communities.

**Rajiv Gandhi Rural Housing Corporation Limited (RGRHCL)** is a Government of Karnataka Public Ltd. Company. It has set up diverse training infrastructures across the State of Karnataka. RGRHCL is experienced in the construction, coordination and facilitation of housing provision for the Economically Weaker Sections (EWS) of society under various governmental schemes.

**For any enquiries contact:** Consortium for DEWATS™ Dissemination (CDD) Society

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