

**PROLOGUE** Warm greetings from CDD Society

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CDD Society is the lead partner

# **PROJECT FACT SHEET**

DEWATS at Sunkadakatte

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Upcoming : District level seminar on "Decentralised Approach for Wastewater Treatment, Mandya"

### **INTERESTING LINK**

http://www.endwaterpoverty.org/

QUIZ Test your knowledge...







## PROLOGUE

Warm greetings from CDD Society! We have the pleasure of bringing to our readers this July 2010 issue of e-Disha. In this issue, we present information on the post-implementation activities of DEWATS projects and various ongoing CDD training programmes on decentralised basic needs services. A profile of the new Executive Coordinator has also been included.

The Editorial Team would be pleased to receive feedback and suggestions. Contributions to the Newsletter are more than welcome.

## PICTURE OF THE MONTH

#### City Task Force (CTF) Meeting at Shimla

CDD Society is the lead Partner for the preparation of the City Sanitation Plan (CSP) for Shimla. In order to make planning, implementation, monitoring and evaluation of city wide sanitation more participatory and representative, the National Urban Sanitation Policy (NUSP) has suggested creation of a City Task Force (CTF). This along with capacity building and awareness campaigns are recognised as being integral to achieving 100% sanitation. CDD Society and GTZ have identified potential stakeholders who could be part of the CTF, in consultation with the Shimla Municipal Corporation.



Group discussion during the meeting

A half-day workshop involving all stakeholders to initiate formation of CTF was conducted in Shimla City on June 1st, 2010. The workshop agenda also included identification of sanitation issues in Shimla from the stakeholders' perspective.

Dr. Sonam Negi, Corporation Health Officer, Shimla Municipal Corporation (SMC) welcomed the gathering while Ms. Madhu Sood, Hon'ble Mayor, SMC, delivered the keynote address. A group of 24 members attended the CTF meeting. An Introduction to CSP and CTF was presented by Mr. B. R. Balachandran, Team Leader of CDD Society's CSP Team. He also moderated the group discussion among the participants and gave the closing remarks. Mr. Sonam Negi proposed the vote of thanks.

# **PROJECT FACT SHEET**

DEWATS at Sunkadakatte http://www.cddindia.org/downloads/CBS\_Projects/15.Sunkadakatte%20(KLAC).pdf

## **RESEARCH ON SANITATION**

#### The UN-Water Global Annual Assessment of Sanitation and Drinking Water (GLAAS)-2010 Report

In 2008, over 2.6 billion people were living without access to improved sanitation facilities, and nearly 900 million people were unable to receive drinking water from improved water sources. These stark figures were the headlines presented in "Progress on Sanitation and Drinking-water: 2010 Update. This is the latest report of the World Health Organization (WHO) / United Nations Children's Fund (UNICEF) Joint Monitoring Programme for Water Supply and Sanitation (JMP)". It was published in March 2010. The report describes a situation that is particularly grave with regard to sanitation, with less than half of the world's rural population and only three quarters of its urban population using improved facilities.





### **DBNS ELEMENTS**

#### Wastewater Monitoring

Monitoring the performance of a DEWATS is important and is a key factor for its sustainable operation and maintenance. Wastewater monitoring is a process to assess the performance of a system as designed and to check whether the effluent from DEWATS meets the required discharge standards as prescribed by the Central Pollution Control Board (CPCB).



Collected samples from different modules of DEWATS



Wastewater sample collection in Kadampadi

Wastewater monitoring includes periodic collection of data on the system through wastewater analysis. It also assesses the status of the infrastructure relating to the treatment unit, feedback from users of the system regarding their satisfaction with the system, their inputs on treatment performance and especially reuse applications. The assessment, in addition to the wastewater analysis, gives an overall picture of the external impacts on the performance of the treatment system.

The following issues need to be addressed prior to wastewater monitoring of any DEWATS:

- A DEWATS unit for domestic wastewater should be monitored twice a year (summer and winter months), so scheduled that it is evenly spread across seasons.
- The sampling activities should be planned well in advance of the proposed sampling date.
- Sample collection should be done at the inlet and outlet of each unit.
- The collection of information on the state of the infrastructure is as important as collecting information on wastewater. A survey of the physical state of the infrastructure could provide clues to the cause of the problems related to quality.
- Two-litre containers of glass, plastic or polythene are generally used for sample collection. The containers should be labeled properly with sample type, sampling method, code, location, time and date of collection and initials of sample collector.
- The collected samples should be analysed for different parameters both onsite and off-site (laboratory). The wastewater is analysed for parameters such as pH, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), solid contents, oil and grease, nutrients like nitrogen compounds and phosphorus, E. Coli and the like.



Wastewater collection from Anaerobic Filter

Reporting of monitoring results should focus on the synthesis of the data collected, rather than on the individual numbers that make up the data. The report should contain specific recommendations for DEWATS units to improve their efficiency. It must be borne in mind that most users who read these reports are not specialists; hence, simple, clear explanations should make for effective communication.



### WASTEWATER ANALYSIS ALKALINITY TEST

For the determination of alkalinity concentration in the range of 0.1- 10 mmol/l

The alkalinity (acid capacity) is an important parameter for the assessment of water quality and of the corrosive behavior of water and wastewater treatment. The alkalinity of most waters is mainly due to dissolved carbonates and bicarbonates.

Conventionally, pH values of two equivalence points of the carbonic acid titration at 8.2 and 4.3 are used as reference values. The corresponding consumption of acid, expressed in mmol/I H+, is termed the acid capacity to pH 8.2 (KS8.2) and the acid capacity to pH 4.3 (KS4.3).

#### Procedure

It is advisable to check the pH (using a pH-meter) before performing the actual test. KS8.2 can be determined only in waters with a pH higher than 8.2, KS4.3 only in waters with a pH higher than 4.3.



#### **Determination of KS8.2**

- Rinse the test vessel several times with the water to be tested
- Take a 5ml sample into the test vessel with the syringe and swirl.
- Add 2 drops of Reagent R-1
- Place the titration pipette loosely on the open reagent bottle R-3. Slowly withdraw the piston of the titration pipette from its lowest position until the lower edge of the black piston seal is in level with the zero mark of the scale.
- Slowly add the titration solution drop-by-drop to the sample while swirling until the sample becomes entirely colorless.
- Read and note the result for KS8.2 in mmol/l from the scale of the titration pipette at the lower edge of the black piston seal

#### **Determination of KS4.3**

Follow the same procedure as above for the determination of KS 8.2 by replacing Reagent-1 with 2 drops of Reagent-2

#### **Calculation:**

KS4.3 - KS8.2 = Alkalinity of sample [mmol/l]

### **INTERVIEW**

Interview with Mrs. Renu Mukunda, Executive Coordinator, CDD Society



Mrs. Renu Mukunda, Executive Coordinator, CDD Society

CDD Society has a new Executive Coordinator from July 1st, 2010, Mrs. Renu Mukunda.

Renu, basically a Social Scientist, has been working in the social developmental sector for the past 25 years. She is married to a Professor and Writer, and has a son who is a budding Engineer. Her main interests are basic needs services, equity issues and networking. She has been in the Water and Sanitation sector providing inputs in community engagement, Public Participation and Management. She has worked in bilateral and multi-lateral projects.

She has also been part of State level Programmes for preparation of Project Implementation Plans providing inputs on social aspects of the programme in states such as Punjab, Karnataka and Sikkim. She was inspired to be a part of the CDD community as she visualised the potential in CDD to improve decentralised basic needs services particularly in the marginalised sections of the society. She perceived the commitment to the cause in CDD. As Executive Coordinator, she plans to showcase CDD's services to the larger world through which the quality of life of the unprivileged people will improve and thus achieve the MDGs. She expects that CDD as an organisation will create landmarks in DBNS.





### **NEWS AND VIEWS**

#### DEWATS Engineers' Training (17th – 22nd May 2010)

DEWATS Engineers' Training was organised by CDD Society with the support of BORDA and RGRHCL at CASS, Bangalore, from 17th – 22nd May 2010. This Training Programme, with emphasis on civil design, aimed at imparting skills required for planning, implementing and managing DEWATS. Participants were from non-government organisations and private firms. The training approach adopted a participatory learning methodology combining lectures, illustrations and demonstrations with the active participation of trainees.



Classroom Session



Practical Session



Participants' Group

#### Half Yearly Review of CDD Network's Activities (11th June 2010)

The CDD Half-Yearly Review and Planning meeting for 2010 was held on 11th June 2010 at CASS, Bangalore. All staff of CDD participated in the meeting to review and deliberate on the planned activities carried out and those that could be carried out over the next 6 months.

In the first half of the day, each CDD Unit presented their achievements of the last two quarters and plans for the next two quarters. During the second half-day, all the Partners in-charge presented the respective Partner's activities of the previous 6 months and plans for the second half of 2010.



CDD Staff in PoO Meeting

#### CDD Society sponsored Charkha Awards for Excellence in Development Journalism (Kannada) 2009



Mr. Lakshmana, Awardee, with CDD staff

The Charkha Awards for Excellence in Development Journalism (Kannada), instituted by Communication for Development Learning (CDL), Bangalore is given out to development journalists every year since 2003 in order to appreciate, encourage and strengthen development journalism in the regional language newspapers. In 2010, Charkha Awards were expanded to offer theme-based awards on specific development areas such as women's rights, child rights, disability, sanitation and water, each of which was supported by a partner NGO.

For the year 2009, CDD Society joined hands with CDL and supported the Charkha Awards under the Sanitation category.

Mr. Du. Gu. Lakshmana, Editor in Chief of Hosadiganta newspaper in Karnataka bagged the award for his article – *"Shouchalaya aagali aduve nairmalyada devalaya"* which focuses on the harmful effects of open defecation. The award was conferred on him by His Excellency Shri. H R Bhardwaj, Governor of Karnataka on 01st July 2010 at Raj Bhawan in Bangalore at a largely attended function.





#### Site Supervisors' Training on DEWATS Construction (18th June 2010)

CDD Society organised a training programme for Supervisors on DEWATS Construction on 18th June 2010, in Villupuram, Tamil Nadu. The training programme aimed at imparting skills for specific site preparations, stages of construction and the linkages between the different stages of construction. Participants comprised of construction supervisors mainly, engineers, contractors and site supervisors who were interested in acquiring knowledge and skills on DEWATS construction.



Classroom Session

Certificate Distribution

Participants' Group

This one-day training program included interactive sessions and practical hands-on training provided by an experienced training team from CDD.

#### **Upcoming events:**

#### District-level Seminar on 'Decentralised approach for Wastewater Treatment', Mandya

A one-day District-level Seminar on 'Decentralised Approach for Wastewater Treatment' is being organised by Rural Literacy and Health Programme (RLHP) on 16th July 2010 in Mandya. The main objective of the Seminar is to create awareness on Decentralised Wastewater Treatment Systems among policy makers and key government officials.

The target group consists of key government officials from District Administration, City Corporation, Public Works Department (PWD), Karnataka State Pollution Control Board (KSPCB), Karnataka Water Supply Board, Sewage Board, Health Department, Government policy makers, Engineering department, hospitals and factories.

### **INTERESTING LINK**

http://www.endwaterpoverty.org/

End Water Poverty is the international campaign working to bring an end to the global water and sanitation crisis. The coalition is formed of like-minded organisations from around the world who are demanding urgent action and leadership from donors and governments alike.

### QUIZ

Q: what percentage of total human excreta is unsafely disposed in urban India? Ans: http://www.indiawaterportal.org/post/2683

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