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## **About CDD Society**

The Consortium for DEWATS Dissemination (CDD) Society is registered as a not for profit society. CDD Society's objective is to improve the environmental, economic and therefore the social conditions of the society through the provision of appropriate, affordable and decentralised 'basic needs services'. The services aim to fulfill the mission of environmental sustainability.

Since its inception in 2005, CDD Society has worked on providing services that help conserve the environment, reduce pollution and promote services that change perception and behavior towards cleaner environment. The key areas of involvement are: Decentralised Wastewater Treatment Systems (DEWATS), Community Based Sanitation (CBS), City Sanitation Planning (CSP), and Decentralised Solid Waste Management (DESWAM). CDD Society has also identified capacity building of key players in the sanitation sector and implementation as a key area and runs tailor made courses aimed at building the required skills of various stakeholders in the entire chain of implementation of decentralised sanitation services.

CDD Society aims to address the challenges posed by increasing quantities of wastewater produced in urban and peri-urban areas in South Asia through its experience and expertise in the sector. Decentralisation, RRR (reduce, reuse and recover) and community participation are key approaches for CDD Society and it's Network's activities. This approach of decentralised infrastructure creation and its management have proven to be a democratic, sustainable and viable formula for reducing the ecological footprint while promoting environmental conservation. It provides a lasting solution to diverse problems related to wastewater treatment, sanitation and solid waste management in urban and peri-urban locations.

The CDD Society works through a network of over 24 likeminded partners across India. It also supports organisations working in this sector in Nepal, Afghanistan and Bangladesh. The network members comprise of government agencies, not for profit organisations, academic institutions as well as private service providers. The Partner Network coordinates and implements DBNS projects in close cooperation with CDD Society through the entire process of planning, implementation and monitoring. The Society functions as the network's secretariat and provides technical, research, financial, capacity building, marketing and documentation support to the partners.

CDD Society has it's headquarter in Bangalore and a Regional Cooperation Office (RCO) in Nagpur.

#### The Team

CDD Society is directed by an experienced team of sector specialists and a majority of this team has over ten years experience in the field of development cooperation. The Organisation is led by an Executive coordination team, guided by the Secretary of the Society's Governing Body. Around 55 team members work within the Society's Secretariat.

The organisation is divided into following sections:

- Coordination and Direction (Management) Team
- Technical Unit
- Research and Development Unit
- Knowledge Management Unit
- Citywide Planning Unit
- Capacity Building Unit
- Finance and Accounts Section
- Secretariat and Administration Section

### The Team

SI No	Unit	Name
	Coordination and Direction	
	(Management) Team	
1		J. S. D'Souza
2		Rajesh Pai
3		Susmita Sinha
4		Stanzin Tsephel
5		Pedro Kraemer
	DBNS Technical Unit	
6		Shamala S
7		Pavan Kumar
8		Santhosh G S
9		Thimmesha R
10		Ravi Kumar Kalal
11		Shrinivas
12		Vinay Somashekar
13		Sheetal Kumar S
14		Ramkrishna Paul
15		Anitha Sarvothaman
16		Aditi Ambadas Tallu
17	Prefab Team	Andrews Jacob
18		Anusha N
19		Venkatachala Reddy K V
20		Kanthraj A
21		Ravikumar
22		Rajashekar S
23		Nandhish D.
24		Kumar N.
25		Keerthi R.
26		Rajesh D. S.
27		Chethan B.
28	BMGF Team	R.S. Arunkumar

	Research and	
	Development Unit	
29	· · ·	Rohini Pradeep
30		Eva Mary
31		Sai Jyothi
32		Rajesh S Shenoy
	Knowledge Management Unit	
33		Nithya B P
34		Susheel Sagar
35		Rohan Ramesh
36		Manikandan Munusamy
	Marketing and Sales	
37		Sunil K G
38		Suneet Singh Puri
	Citywide Planning Unit	
39		Rahul Sachdeva
40		Shivaram KNV
41		Avinash Yadav
42		Swati Dhiman
43		Namrata Ginoya
	Capacity Building Unit	
44		Roopa Bernardiner
45		Raina Khwairakpam
46		Vidhya
	Finance and Accounts	
47		Madhwaraj Belgaumkar
48		Regin K
49		Prashantha Y. K
	Secretariat and Administration Section	
50		Molly D'Mello
51		Charles Antony Monk
52		Nithyananda J S
53		Sravani Singamsetty
54		Philip Castelino
55		Dene Godinho
56		Laxman Gowda
57		Santosh R.
58		Manjunath K.
59		Venkataraju A.
60		Jayalakshmi
61		Swarnalakshmi
62		Susheelamma

63		Shivamma H.K.
	Regional Coordination Office	
64		Satchit Bhandarkar
65		Shailendra Brahmey
66		Shekhar Diwale
67		Anwaar Ashraf
68		Sachin Tajne
69		Pravin Kumar Chaudhari
70		Anshu Nandeshwar
71		Ravindra Chambhare

## Vision

"To improve the environmental, economic and social conditions of the society through development, promotion and dissemination of appropriate, decentralised and affordable 'Basic Needs Services'"

## **Message from the President**

Looking back at the year gone by, CDD Society has had another year of enriching experiences.

I take this opportunity to thank our Board Members, Donors, Partners, Associates, and well-wishers for their continuing support over the years. My Sincere thanks goes to all committed staff members of CDD Society for working relentlessly towards achieving the vision of the Organisation.

CDD Society has been striving to improve conditions and access to basic needs services (BNS) to poor and marginalised communities along with addressing issues of environmental protection. CDD Society aims to address the challenges posed by increasing quantities of wastewater produced in urban and peri-urban areas in South Asia through its experience and expertise in the sector. Decentralisation and community participation are key approaches for CDD Society and its network's work. This approach of decentralised infrastructure creation and its management have proven to be a democratic, sustainable and viable formula. It provides a lasting solution to diverse problems related to wastewater treatment, sanitation and solid waste management in urban and peri-urban locations.

According to WHO<sup>1</sup> Globally, 63 per cent of the population use improved sanitation facilities, an increase of almost 1.8 billion people since 1990. Sanitation coverage has increased from 49 per cent in 1990 to 63 per cent in 2010. In Southern Asia, the proportion of the population using shared or unimproved facilities is much lower, and open defecation is the highest of any region. Although the number of people resorting to open defecation in Southern Asia has decreased by 110 million people since 1990, it is still practiced by 41 per cent of the region's population, representing 692 million people.

The India census 2011 shows 32.7 per cent urban Indians are connected to a piped sewer system and 12.6 per cent—roughly 50 million urban Indians—still defecate in the open. The challenge is enormous and needs urgent intervention, which provides both sanitation facility and disposal.

Since inception, CDD Society laid a firm foundation on the fact that access to sanitation is the most overlooked and under addressed of basic human needs. With over 2 billion people around the world lacking access to basic sanitation services and around 90% of the sewage being discharged untreated into water bodies in developing countries, often polluting the precious and already scarce usable water supplies, the Society found such a situation unacceptable and determined to lobby for the cause of sanitation and wastewater treatment.

In the year 2013 CDD Society ventured into the sectors of **Climate Change Impact on Sanitation** with the project titled "Determining the impacts of climate change on sanitation systems as well as impacts of systems on global climate change in the city of Valsad, Gujarat (ICCO Cooperation) "; **Operation and Maintenance of decentralised urban sanitation infrastructure by** Strengthening the Operation & Maintenance Sector for Servicing Decentralized Urban Sanitation Infrastructure in Karnataka (Bill and Melinda Gates Foundation); **Lake protection** project for Bandhwa Lake Protection through wastewater management (GIZ New Delhi & Raipur Municipal Corporation)

In 2013, under the Research and Development activities 50 DEWATS<sup>TM</sup> projects were monitored which are implemented in Maharashtra (12), Karnataka (13), Tamil Nadu (10), Pondicherry (3) and Nepal (12). More than 70% of the DEWATS<sup>TM</sup> plants monitored showing maximum COD removal efficiency of 50 – 98%. Sanitation technology options were developed for 4 coastal towns of Bangladesh under Coastal Infrastructure Improvement Project by the team and provided detailed description on pilot projects for wastewater and septage management.

<sup>1</sup>The report, Progress on Drinking Water and Sanitation 2012, by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation),

Since inception of factory setup and production of prefabricated DEWATS in April 2012, Prefabrication section has produced more than 40 large vessels and around 6 small vessels. In addition to these, in this year, the new moulds for biogas digester and grease trap were prepared with the support of an expert from Indonesia. With new mould, 5 biogas digesters have been prefabricated.

The Capacity Building Unit has successfully conducted 11 trainings covering 173 new professionals. The major training programmes conducted by the unit are the Engineers' Training on DEWATS<sup>™</sup> (57 participants), DESWAM (9 trainees), MonEv of DEWATS<sup>™</sup> (9 participants), Septage Management (50 ULB engineers) and Simplified Sewer System (23 Participants).

The Unit has facilitated and conducted exclusive international training programmes and disseminated knowledge on DEWATS<sup>™</sup> in Africa, where 15 engineers participated in Training on Wastewater Treatment Systems (DEWATS) in Zambia. DEWATS<sup>™</sup> Project Management Training Programme was held in Yangon (Myanmar), for 23 engineers. Experts(9) from BORDA or different ministries took part in Training Programme on Monitoring and Evaluation (MonEv) of DEWATS<sup>™</sup> Projects and 10 from the Afghanistan Vocational Training Institute (ATVI) participated in Training of Trainers on Decentralised Sanitation Solutions.

Alliances with Small and Medium Enterprises and Institutions' were signed for the construction of 22 DEWATS<sup>TM</sup> units across India. CDD Society along with RLHP, Member of CDD Network has put in a noteworthy effort in lobbying with Mysore Urban Development Authority for availing grants of Rs 1 Crores for Implementing DEWATS<sup>TM</sup> in Mysore District, Karnataka.

In 2011 CDD Society, along with its partners Rajiv Gandhi Rural Housing Corporation Limited (RGRHCL) and Bremen Overseas Research and Development Association (BORDA), CDD Society established a Centre for Advanced Sanitation Solutions (CASS) to disseminate knowledge and promote sustainable sanitation solutions. The Centre is equipped with facilities for conducting training programmes for applied research and knowledge management as well as an interactive sanitation exhibition hall. This Centre serves as a unique one-stop hub for sanitation information and solutions. In 2013 the sanitation exhibition at CASS witnessed an appreciable spurt in the number of visitors. A total of 522 visitors stepped into the CASS premises.

CDD Society participated in the global forum at the 3rd IWA Development Congress and Exhibition: "Catalysing Urban Water Transitions", October 14-17, 2013 in Nairobi, Kenya. A paper on 'Transitions through Capacity Building' was presented at the congress which highlighted the impact of its Capacity Building programme in improving the sanitation situation. CDD Society propagated DEWATS™ at IFAT meet and delivered talk on "Urban Wastewater Management through DEWATS". It was an excellent opportunity for CDD Society to disseminate knowledge regarding sanitation as an issue in India and the different ways to provide sustainable sanitation solutions through DBNS.

#### Governance

CDD Society is a not-for-profit organisation registered in Bangalore under the Karnataka Societies Registration Act, 1960. The Governing Body is the decision making body that sets the Organisation's vision and strategy and approves programmes and budgets. The South Asia Representative of BORDA, CDD Society's main partner, acts as an advisor to the Organisation.

#### **Governing Body Members**

Mr. Israel Gnanaraj, President Design Collaborative 179, S. V. Complex, 3rd Floor Eswaran Koil Street Pondicherry 605 001

Mr. Koshy Mathew, Treasurer Rural Literacy Health Progamme (RLHP) No. 343, Gayathripuram 2nd stage, Udayagiri Post, Mysore 570 019

Mr. T. Vijay Anand, Member Excellent Novel Radical (EXNORA) International # 40, Flat #2, 2nd Floor, Rams Appts Vijaya Ragava Road, T. Nagar Chennai 600 017

Mr. B. R. Balachandran, Member H-1701, Brigade Metropolis 73/1, Whitefield Road Mahadeva Pura Bangalore 560 048

Mr. Naresh Tajnekar, Member Indian Institute of Youth Welfare (IIYW) #134, Shivajinagar Nagpur 440 010 Mr. Anselm Rosario, Member Waste Wise Resource Center 51/2, 5th Main, 3rd A cross OMBR Layout Lal Bahadhur Nagar Bangalore – 560 043

Mr. J. S. D'Souza, Secretary #304, Tower 25, Orchid Petals Sohna Road, Sector 49 Gurgaon 122 018

Mr. A. Gurunathan, Member Development of Humane Action Foundation (DHAN Foundation) #18, Vellai Pilliyar Koil Street S.S. Colony, Madurai 625 016

Mr. Anuj Malhotra, Member R E F L O W B-101, Pruthvi Towers Jodhpur Village Road Satellite Ahmedabad 380 015

## **PROJECT COOPERATIONS**

For the implementation of projects, CDD Society collaborates with a diverse number of agencies and organisations such as government departments, non-governmental organisations, professional organisations and companies in India, South Asia and around the world.

#### BORDA

Bremen Overseas Research and Development Association (BORDA) is a specialist organisation active in the fields of poverty alleviation, sustainable protection of natural resources and the strengthening of social structures. BORDA was established as a non-profit organisation in 1977 with the mission of improving living conditions of disadvantaged communities. It aims to improve the environment through the promotion of Decentralised Basic Needs Services (DBNS) in the areas of sanitation, water and energy supply as well as wastewater and solid waste disposal. BORDA has supported CDD Society with required technology and funds.

#### NATIONAL LEVEL - GOVERNMENT OF INDIA

Urban Development and Poverty Alleviation Ministry

Central Pollution Control Board

#### STATE LEVEL GOVERNMENT

**Urban Development Departments** 

**City Municipal Corporations** 

Directorates of Municipal Administration, Karnataka

Slum Clearance Boards

State Pollution Control Boards

Rajiv Gandhi Rural Housing Corporation Ltd. (RGRHCL)

Commisionerate of Municipal Administration, Tamil Nadu

#### **GERMAN DEVELOPMENT COOPERATION**

German Society for International Cooperation (GIZ)

Weltwarts-Bremen-Koordination

Federal Ministry for Economic Cooperation and Development

#### INTERNATIONAL DEVELOPMENT AGENCIES

Asian Development Bank (ADB)

Water and Sanitation Program (WSP)

Bill and Melinda Gates Foundation (BMGF)

Interchurch Organization for Development Cooperation (ICCO)

#### PRIVATE SECTOR

Council of Architecture (COA)

**Engineering Offices** 

Consultants

**Component Producers** 

Architects and Town Planners

#### **BORDA PARTNER NETWORKS**

South-East Asia (Indonesia, China, Vietnam, Philippines, Cambodia, Lao PDR, Myanmar)

South African Development Corporation - SADC (Lesotho, South Africa, Zambia,

Zimbabwe, Namibia, Botswana, Tanzania)

South Asia (India, Nepal, Afghanistan, Sri Lanka, Bangladesh)

Latin America (Nicaragua, Mexico, Haiti)

### CDD SOCIETY NETWORK MEMBERS AND ASSOCIATES

The Society also works through its network of likeminded partners in India and Nepal. The partners coordinate and implement DBNS projects in close cooperation with the CDD Society. The Society functions as the network's secretariat and provides technical, R&D, financial, capacity building, marketing, documentation and networking support to the partners. CDD Society's approach towards the implementation of the various services is to work with partners, right from the concept stage, through the execution until the project is complete.

A Member or Associate is an individual or organisation whose area of work and expertise aligns with that of CDD Society. Once part of a consortium, the Members actively participate in disseminating and scaling up DBNS approaches. Projects are coordinated and executed by the Members in their respective areas of operation with the support of CDD Society.

CDD Network has accumulated more than 12 years of experience in the dissemination of DEWATS<sup>™</sup>, in almost all sectors of organically polluted wastewater in India. CDD Society members have more than 20 years of cumulative experience in the promotion of DEWATS<sup>™</sup> with over 500 reference projects in India.

CDD Society has a pool of expertise for the application of participatory methods, management of sanitation infrastructure projects, conception and design of advanced environmental engineering solutions, eco-sanitation, customized construction and urban planning. CDD Society profits from its affiliation with the BORDA Asia Network, which provides CDD Society access to regional and international expertise.



#### Our network partners and experts:

## **ONGOING PROGRAMMES**

CDD Society's commitment to reaching out to communities with grossly inadequate access to basic needs services means working along many verticals focusing on sustainable sanitation. CDD Society's programmes build capacities and commitment of stakeholders to champion the treatment and reuse of wastewater thus contributing to environmental conservation.

Its work is currently oriented along the following six themes:

#### **DBNS Technical**

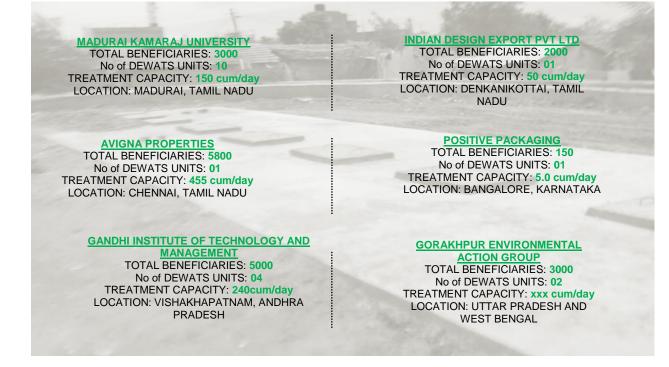
DBNS Technical Unit improves sanitary conditions with appropriate facilities that are efficient, maintainable and sustainable. This is carried out through the implementation of DEWATS<sup>TM</sup>, DESWAM, Community Based Sanitation, and Simplified Sewerage Systems connected to individual houses.

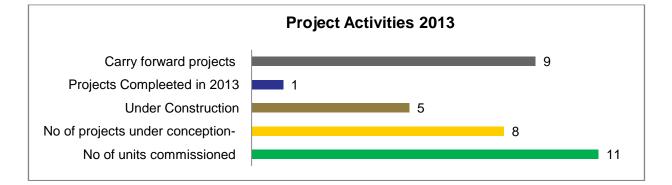
The main task of the Team is providing technical design support in implementation and post implementation of DEWATS<sup>™</sup> units. The team also provides operation and maintenance service through on-the-job training and technical support. Through their activities the technical team has been gaining knowledge, tools and skills to address the implementation of sanitation infrastructure. The team strives to share this practical knowledge through delivering sessions in the training programmes conducted at CDD Society.

Implementation of DEWATS<sup>™</sup> through civil construction has continued. In addition, a need for faster implementation (reduced construction time) has emerged. Pre-cast or pre-formed construction has therefore gained a place in the construction market. In this space, to ensure quality and timely completion of projects other than with the conventional methods involving civil construction, CDD Society felt that venturing into the production of prefabricated DEWATS modules was appropriate to meet increasing demands, executing projects in time, cost effectiveness and ensuring quality. The advantages of prefabricated DEWATS<sup>™</sup> units are that they are light weight and thus easy to transport, operation and maintenance is easier, cost is competitive and comes with significant treatment efficiency. The establishment of the production unit included setting up of the factory building at the Office premises.

This year the DBNS Technical unit has presently taken up the implementation of 27 DEWATS <sup>™</sup> projects across India which has an average treatment capacity ranging from 50- 455 cum/day covering 36,362 direct beneficiaries.

New Projects taken up in the year 2013-14





	Total No of projects contracts signed for 2013-14 (7 domestic + 2 international)							
SI No	Project	Туре	No of Units	City	State	Avg. Treatment capacity	Total Beneficiari es	
1	Madurai Kamaraj University	DEWATS- SME	10	Madurai	Tamil Nadu	150 cum/day	3000	
2	Indian Design Export Pvt. Ltd	DEWATS- SME	1	Denkanikottai	Tamil Nadu	50 cum/day	2000	
3	Aravind Eye Hospital	DEWATS- SME	3	Chennai	Tamil Nadu	270 cum/day	8000	
4	Gandhi Institute of Technology and Management,	DEWATS- SME	4	Vishakhapatn am	Andhra Pradesh	240 cum/day	5000	
5	Avigna Properties	DEWATS- SME	1	Chennai	Tamil Nadu	455 cum/day	5800	
6	GEAG	DEWATS- CBS	2	Gorakhpur and Bashirhat	Uttar Pradesh, West Bengal			
7	Positive packaging	DEWATS- SME	1	Bangalore	Karnataka	7.0 cum/day	150	
8	International Projects- Dawbon, Yangon, Myanmar	DEWATS - School	1	Dawbon	Yangon, Myanmar	5 cum/day	556	
9	International Projects- Tamwe, Yangon, Myanmar	DEWATS - School	1	Tamwe	Yangon, Myanmar	7 cum/day	1650	

	List of Projects continued from 2012 (9 domestic)						
SI No	Project	Туре	No of Units	City	State	Treatment capacity	Total Beneficiaries
2012	2	•					
1	Individual House Uttarahalli	DEWATS SME	1	Bangalore	Karnataka	1 cum/day	6
2013	3						
2	Silver Oak School	DEWATS SME	1	Bangalore	Karnataka	25 cum/day	1050
3	Prayag Discovery Village	DEWATS SME	1	Bangalore	Karnataka	17 cum/day	150
4	TNSCB	DEWATS SME	3	Coimbatore	Tamil Nadu	45 cum/day	4000
5	Thamaraserry Grama Panchayat	DEWATS CBS	1	Thamaraserry	Kerala	20 cum/day	500*

6	BMRCL	DEWATS SME	2	Bangalore	Karnataka	15 cum/day & (7.5 cum/day )	1000
7	KRIDL	DEWATS SME	1	Bangalore	Karnataka	7.5 cum/day	500
8	RGRHCL- Singanayakanahalli	DEWATS SME	6	Bangalore	Karnataka	75 cum/day	2000
9	RGRHCL- Vaddarahalli	DEWATS SME	4	Bangalore	Karnataka	45 cum/day	1000

\*150 permanent users + 500 floating population

#### **Citywide Sanitation Planning**

The CSP Unit works on planning city level sanitation infrastructure focusing on sectors, such as access to toilets, wastewater management, solid waste management and storm water management. In line with Government of India's National Urban Sanitation Policy (NUSP, 2008), the Unit facilitates State and Local governments in preparing long term strategy planning documents "City Sanitation Plans" to overcome the vast gaps in the sanitation sector.

The Unit is also extending support to Urban Local Bodies (ULBs) in implementation of the CSP through pilot projects in sectors identified within CSP which require immediate attention. Currently the unit is providing technical support in sanitation themes like decentralized wastewater management for improving conditions of surface water bodies, sanitation provisions in urban poor areas under the Indian Government's Rajiv Awaas Yojna (RAY) and also application of decentralised wastewater treatment systems in the unserved periphery areas of towns and cities.

Environment protection is one of the key motto of CDD Society; with this in mind, the CSP team has extended its reach into the field of climate change. The team has started research based planning model development for understanding the impacts of poor sanitation on climate change and vice versa.

Activities carried out in 2013-14

- Strengthening and Empowering Urban Local Authorities to Deliver Decentralised Sanitation Services, Himachal Pradesh (Client European Union)
- Implementation of City Sanitation Plans for cities of Shimla, Raipur and Kochi focusing on decentralised sanitation solutions (Client Deutsche Gesellschaft fur Internationale Zusammenarbeit, GIZ, New Delhi)
- Wastewater Management in Thuruthy Colony, Cochin, Kerala- Support to Rajiv Awas Yojana (RAY) (Client GIZ New Delhi & Corporation of Cochin)
- Wastewater Management in Jorapara Basti, Raipur, Chattisgarh Support to Rajiv Awas Yojana (RAY) (Client GIZ New Delhi & Raipur Municipal Corporation)
- Determining the impacts of climate change on sanitation systems as well as impacts of systems on global climate change in the city of Valsad, Gujarat (Client – ICCO Cooperation)

Bandhwa Lake Protection through wastewater management, Raipur, Chattisgarh (Client - GIZ New Delhi & Raipur Municipal Corporation). A first of its kind, Detailed Project Report of DEWATS pilot project lake conservation through treating wastewater entering an urban lake in Raipur has been developed along this the DBNS technical team. The possibility of citywide upscaling would be carried out on successful pilot implementation.



Picture 1 - Bandhwa Lake, Raipur, Chattisgarh

CSP team conducted a state level orientation workshop on preparing "City Sanitation Plan" for key officials working at various capacities hosted by Commissionerate of Municipal Administration (CMA), Tamil Nadu. The target group included municipal commissioners, chief engineers, health offices and MIS team members.



Picture 2 - participants of the workshop on preparing "City Sanitation Plan", CMA, Tamil Nadu

- The team supported in developing septage management plan for south east zone of Guwahati as an interim measure to address sanitation issue for un-served areas and low lying areas in the city (Client: Asian Development Bank).
- CSP unit is carrying out a research project which aims to introduce a decision making tool for the local governments to plan towards Low carbon urban sanitation services and Climate resilient sanitation services. The town selected for the study is Valsad in South Gujarat.
- CDD's CSP team along with peer group consultants is working on developing a CSP updation toolkit/template for ULB officials to ease the process of updating CSP at frequent intervals to make it a living document.
- Sanitation technology options were developed for 4 coastal towns of Bangladesh under Coastal Infrastructure Improvement Project by the team and provided detailed description on pilot projects for wastewater and septage management.

#### **Pre-Fabrication**

Since inception of factory setup and production of prefabricated DEWATS in April 2012, Prefabrication section has produced more than 40 large vessels and around 6 small vessels. In addition to these, in this year, the new moulds for biogas digester and grease trap were prepared with the support of an expert from Indonesia. With new mould, 5 biogas digesters have been prefabricated. The production has slowed down in the last few months of the year and has been planned to speed up the production once if enough project enquiries are generated.

#### Activities carried out in 2013-14

In this year, the factory has improved its production efficiency to a maximum of 6 large vessels in a month. To ensure effective floor management and the production process, various activities related to staff coordination, reporting and evaluation has been developed and is in practice. Also the stock maintenance systems and safe chemical storage systems were developed and are in practice. These systems are working well and have been effective in improving the production efficiency.

This year four prefabricated DEWATS<sup>™</sup> have been installed to treat around 28 m<sup>3</sup> of wastewater in a day. In addition to production and project installation, few research initiatives were carried out in order to optimize raw material utilisation and to improve production efficiency of the prefabricated modules.

For improving the sales of the pre-fabricated modules renewed efforts were put in to participation in exhibitions and conferences, one-on-one meetings with prospective clients and architects.

#### **Research and Development**

Research and Development (R&D) unit at CDD Society strives to impart demand-driven information and knowledge encompassing fields related to improving the treatment efficiency of Decentralised Wastewater Treatment Systems (DEWATS<sup>™</sup>). The unit's activities are continuous on-site and laboratory work and additional applied research related to water, wastewater, biogas, and sludge analysis.

Activities carried out in 2013-14

CDD Society continued its efforts towards applied research to improve efficiency and effectiveness of DEWATS<sup>™</sup>. This effort is supported by BORDA as part of its global research initiatives.

CDD Society is part of the BORDA global R&D programme. The Programme critically assesses specific design characteristics of DEWATS<sup>™</sup> in order to evolve optimal standard design dimensions. In-depth analyses have been carried out over the years.

#### **Global Monitoring and Evaluation Programme**

CDD Society with the support of BORDA is implementing a global Monitoring and Evaluation (MonEv) Program. This program aims to conduct an integrated assessment of the technical, social, institutional and economical factors responsible for proper functioning of implemented DEWATS<sup>™</sup> projects.



In 2013, R&D team monitored 50 DEWATS<sup>™</sup> projects which were implemented across India and Nepal

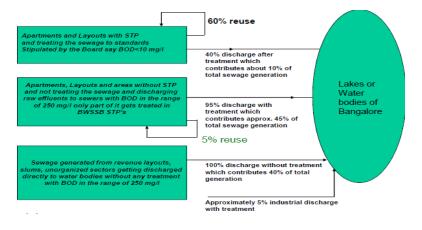
More than 70% of the DEWATS<sup>™</sup> plants monitored showed maximum COD removal efficiency of 50 – 98%. This highlights the fact that the treatment units are performing well and are well within the prescribed standards of discharge/reuse set by the Central Pollution Control Board of India.

It's also observed that there is a requirement of orientation to the operators/caretakers as well as the maintenance personnel, to facilitate them to carry out day-to-day operational tasks for smooth functioning and upkeep of DEWATS<sup>TM</sup>.

Graphic 1 DEWATS<sup>™</sup> plants monitored across India and Nepal

#### Preliminary landscape analysis of Wastewater Management in Bangalore

In order to understand the ground reality of wastewater management status in Bangalore for being able to develop a plan for appropriate technical interventions based on the identified gaps a landscape study was carried out. The study aimed to understand selected wastewater treatment technologies and stakeholders involved in the each phase of wastewater management. A comprehensive report has been prepared on this study.



Graphic 2 - Preliminary landscape analysis of Wastewater Management in Bangalore

#### **Regular Wastewater Monitoring**

CDD Society formulates a plan annually for conducting wastewater monitoring at selected DEWATS<sup>™</sup> projects. Through this program, the Society obtains a huge database demonstrating the compliance of DEWATS<sup>™</sup> effluent reuse application standard set by the Pollution Control Board.

Regular wastewater monitoring was conducted at the below given DEWATS<sup>™</sup> units to check the compliance of the effluent characteristics with the Central Pollution Control Board (CPCB) discharge standards for irrigation.

- Aravind Eye Hospital, Pondicherry,
- Friends of Camphill, Bangalore
- Prefab DEWATS<sup>™</sup> at Kamal Solar Factory, Bangalore A first of its kind, a DEWATS<sup>™</sup> unit implemented for process wastewater at a slaughter house in the city of Umred, Maharashtra was also included in the wastewater monitoring study. The final effluent was collected and analysed. It is found to be in compliance with the discharge standards.

#### **R&D** Laboratory

At the R&D laboratory, activities such as analyzing water and wastewater parameters like BOD, COD, Solids, Nitrogen Compounds, Ammonium, Phosphates, Sludge settling rates, biogas generation rates of wastewater, biogas composition analysis etc are being carried out regularly.

#### **Collaboration with Research Institute**

In order to widen the scope of applied research and also to get insights into the research activities, it has been an endeavour of the Research team to initiate collaborations with other research institutes and universities. In this effort, the Research team has approached institutes and talks were initiated for collaboration on research activities. Manipal Institute of Technology, Manipal, National Institute of Engineering, Mysore, R.V. College of Engineering, Bangalore and Civil Engineering Department of Bangalore University, Plymouth Marine Laboratory UK. More options for further collaborations have to be explored in future. Along with the PML Laboratory, a proposal for study on the Vortex Bioreactor to disinfect the secondary treated wastewater was prepared and submitted to Millennium Alliance for funding.







Pictures 5-8 Global R&D for BORDA

#### **Capacity Building**

The Capacity Building Unit at CDD Society has the objective of disseminating knowledge on sustainable sanitation solutions. Under this initiative, the training programmes focus to empower professionals who are engaged in research and implementation activities related to environmental conservation, particularly sanitation solutions and wastewater management. The purpose is to increase potential for innovations, strengthen research capacity, build network for cooperation among sector experts, ultimately contributing towards attaining environmental sustainability.

The aim of the Unit is to help scale up DBNS implementation by training a critical mass of service providers to deliver improved hygiene and sanitation solutions.

To ensure that adequate DBNS expertise is available, capacities are developed to bridge knowledge as well as skill gaps of the target groups for operation, management and routine maintenance through training programmes on these subjects. The programmes are generally a mix of training, coaching and learning-by-doing. Thus the Society's capacity building programme offers training in planning and concept development, project design and implementation as well as on post-implementation aspects like operation and maintenance of sanitation related subjects and specifically DBNS.

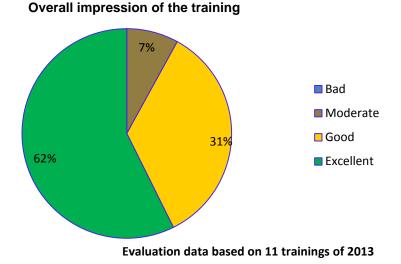
CDD Society's capacity building activities are supported extensively by BORDA. However, to substantiate the initiative and create impact additional collaborations are required. Therefore, along with the planned training programmes on topics related to DBNS, the Unit also strives to tie up with Government agencies and carry out tailor-made capacity building programmes. The Capacity Building Unit submitted proposals for customized training programmes tailored to organizations and various government departments involved in the sanitation sector across South Asia. The Society has explored opportunities for collaboration in capacity building where

the core strengths of the organizations could be pooled in designing and offering high-quality training programmes to various players within the broader sanitation sector.

The year 2013 constituted an important period for the Capacity Building Unit. A lot of new opportunities concretized, the audience increased and the dissemination of DBNS knowledge reached a higher level. Indeed, the efficient team



could achieve 12 trainings and attract 203 new professionals, an increase of 15% between 2012 and 2013 (175 trainees trained in 2012)



CDD Society through its Capacity Building Unit cares about the quality of its services. Hence, evaluation and feedback from trainees are systematically imparted and reported. For 2013, the overall impression from the trainees is outstanding: 93% participants rated trainings between good and excellent.

In order to assess the impact of the training programmes and also the transition of the knowledge gained by professionals into real implementation, a study was carried out through feedback analysis. The study showed that the transition is promising though at present the percentage of actual implementation by trainees is less (around 40%) than was envisaged. The paper was also presented at the IWA Development Congress, Nairobi, Kenya.

#### Capacity building activities carried out in 2013-14

Training Programme	Dates	Total
		Participants
DEWATS <sup>™</sup> Engineers' Training Programme -Kerala Rural Water Supply (KRWSA) Officials	September 23 - 25, 2013	14
DEWATS <sup>™</sup> Engineers' Training Programme -Kabul Afghanistan	February 23 - 25, 2013	23
DEWATS Project Management Training –Yangon, Myanmar	July 29 - August 2,2013	23
Training on CSP preparation for BORDA-SADC	February 24 - March 6, 2013	3
DEWATS <sup>™</sup> Project Management Training -CASS	March 4 - 9, 2013	13
DEWATS <sup>™</sup> MonEv Training Programme	March 25 - April 6, 2013	09
DESWAM Training Programme	June 24 - 27, 2013	08
Orientation on DEWATS for engineering students - Don Bosco	11th October 2013	50
Orientation on DEWATS for engineering students - RV College of Engineering	11 <sup>th</sup> October 2013	87
Orientation on DEWATS for architecture students - SVS School of Architecture Coimbatore	13th August 2013	185
Orientation on DEWATS for engineering students - Indian Institute for Human Settlements	23rd January 2013	07
Training on Design & fabrication of prefabricated Wastewater treatment modules	January 28 - February 8, 2013	2
DEWATS <sup>TM</sup> Engineers Training proigramme, Zambia	October 7 - 11, 2013	14
DEWATS <sup>™</sup> Engineers' Training Programme -	December 2 - 6, 2013	20
TOT on Decentralised Sanitation Solutions	January 16-29 2014	14
Simplified Sewer Systems	February 28 <sup>th</sup> , 2014	23

#### Training programmes conducted in 2013-14

#### **Staff Up-gradation**

While developing capacities of external service demanders and service providers, CDD Society also strives to improve and up-grade the capacities of its own staff to deliver effective services. In this effort, in 2013-14, staff was trained on

• WINPACCS training for the accounts and financial Unit

- Leadership training for the staff members
- DBNS technical unit members participated at the "Urban and Industrial Wastewater Treatment" training programme, CSE, New Delhi

11 guest-lectures were organized and delivered by external and in-house professionals on topics related to water and sanitation for CDD staff members.

In 2013, the Capacity Building Unit extended its outreach of training programmes in Afghanistan, Zambia and Myanmar.

A DEWATS<sup>™</sup> Project Management Training Programme was conducted in Yangon (Myanmar), where 23 engineers were oriented about DEWATS<sup>™</sup>.

CDD spread its knowledge about DEWATS<sup>™</sup> in Zambia, Africa, 15 engineers participated in Engineers Training on DEWATS<sup>™</sup>.

9 experts from BORDA, Afghanistan participated in the Training Programme on Monitoring and Evaluation (MonEv) of DEWATS™ Projects

10 participants from the Afghanistan Vocational Training Institute (ATVI) and 4 officials from BORDA, Afghanistan participated in Training of Trainers on Decentralised Sanitation Solutions.

Two batches of "One day training in the CASS laboratory" were conducted in February and July 2013. Staffs from different units of CDD Society were provided an opportunity to upgrade their understanding of important water and wastewater characteristics through hands-on experience during a one-day wastewater analysis training in the CASS laboratory.

Under the knowledge sharing initiatives CDD Society aims to demonstrate and help gain understanding of the adverse effects of untreated wastewater and prevailing sanitation issues to the future generation of professionals so that they are able to establish the link between poor sanitation and impacts on environment. In this effort, orientation on the topics related to sanitation, wastewater and DEWATS<sup>™</sup> was carried out for students from the environmental science, civil and environmental engineering and architecture streams of study. The colleges involved were Rashtreeya Vidyalaya College of Engineering (RVCE), Don Bosco Institute of Technology, and Institute of Business Management and Research IBM-R College of Management studies, Bangalore

#### **Training Materials Improvement**

Training materials for Site Supervisors, Septage Management and Orientation on DEWATS<sup>™</sup> for Academia were updated.

#### Trainee tracking survey

A trainee tracking survey was conducted by a postgraduate student from the Institute of Rural Management Anand (IRMA) in order to deliver an impact assessment of Capacity Building Training Programmes. It enabled to update the trainee tracking database. It was observed that

40% of the former trainees (8 out of 20) are successfully using their knowledge and have implemented/are in the process of implementation of projects.

#### **Review of the Capacity Building Strategy**

In order to face the new challenges of the sanitation sector and orient more professionals on DBNS and environmental issues, the Unit reviewed its strategy for 2014 and beyond. An assessment of **Marketing Strategy** was conducted and **Capacity Building Strategy and Operational Strategy Report for 2014** was prepared.

#### Collaborations

Training on **Septage Management** for Urban Local Body (ULB) Engineers, Government of Tripura, was conducted in collaboration with the Government of Tripura, Water and Sanitation Programme (WSP) of the World Bank, Consortium for DEWATSTM Dissemination (CDD) Society, International Water Management Institute (IWMI) and Asian Development Bank. A group of 50 engineers from the ULBs attended the programme from 8 districts in Tripura.

Between April 2013 and March 2014, the team worked to be more innovative and create new training programmes. One training proposal was submitted to **BORDA**, **Afghanistan** to conduct Training of Trainers on Decentralised Sanitation Solutions for faculty of a vocational training institute (ATVI) at Bangalore. A training proposal on sustainable community based sanitation was submitted to **CHF International**. Training proposal for conducting DEWATS<sup>™</sup> Engineers Training programme was submitted to **Kerala Rural Water and Sanitation Agency**. Another Training proposal for conducting DEWATS<sup>™</sup> Engineers Training proposal for conducting DEWATS<sup>™</sup> Engineers A training proposal for conducting DEWATS<sup>™</sup> Engineers Training programme was submitted to **Urban Administration and Development Department for Government of Madhya Pradesh**. A training proposal for conducting designing and implementation of DEWATS<sup>™</sup> was submitted to **Urban Development Department**, **Tripura state**.

#### **Knowledge Management**

The Knowledge Management Unit (KMU) works to share knowledge across the organization and with the public in a systematic and efficient manner. The knowledge management unit consists of a team of professionals from multi-disciplinary backgrounds. Working in its second year now, KMU has continued to strengthen CDD Society's activities by providing support in effective documentation of implementation and of the project management software. Preparation and publications of brochures and IEC materials in coordination with the ongoing activities were carried out along with circulation of e-Disha bi monthly newsletters.

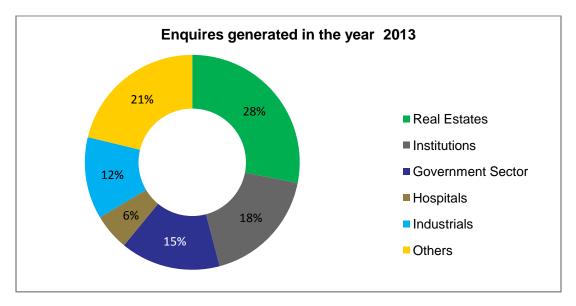
The unit effectively streamlines the multilateral activities of CDD Society and its partner network to distribute to the outside world through the bi-monthly newsletter e-Disha which reaches a readership of 3,000. The newsletter covers news related to Decentralised Basic Need Services activities, to emerging need and research aspects of Water Sanitation and Health (WASH) sector.

In-order to customize the regular project activities a comprehensive Project Management Software (Activity Based Funding Software) is developed and implemented.

Under Knowledge Dissemination CDD Society's teams participated in 12 Conferences and dissemination about DBNS to over 900 individuals.

Pertaining to Lobbying with Government Departments, various efforts have been initiated to include DEWATS<sup>™</sup> as part of the options for sanitation projects in the States of Kerala and Goa.

Various sales and marketing activities have been carried out throughout the year to scale up the service delivery of DBNS. The enquiry analysis has assisted in streamlining the potential sectors of application.



## **NEW INITIATIVES**

For scaling up it's activities and also to have a larger impact on the sanitation value chain, CDD Society has been taking initiatives for building on the work already being carried out and also new areas of work. In this financial year, CDD Society has been working in two new initiatives as highlighted below.

# Strengthening the O&M sector for servicing decentralized urban sanitation infrastructure in Karnataka, India

In order to provide solutions across the sanitation value chain, BORDA successfully submitted a proposal to the Bill and Melinda Gates Foundation for a project titled 'Strengthening the Operation & Maintenance Sector for Servicing Decentralised Urban Sanitation Infrastructure in Karnataka, India'. The project aims to reduce the proportion of people without access to safe and basic sanitation facilities by strengthening the enabling environment for cities and companies to develop efficient and effective Operation and Maintenance (O&M) services, and related regulatory systems for decentralised sanitation infrastructure at city scale in the state of Karnataka, India. CDD Society has been sub-contracted by BORDA work on the project. This project is for a time period of November 2013 to December 2015. Activities carried out so far:

i. Setting up of Project Advisory Board

This project is multi-dimensional, with several influencing criteria affecting the course of the Project. Specifically, the sanitation landscape analysis and delivery of O&M service packages will require guidance and subject expertise. Thus, an effective advisory board appropriately composed and structured, would provide informed guidance and serve as an accompaniment in better understanding the sanitation landscape as well as guide the Project to its objectives.

ii. Kick-off meeting and Project Launch

In order to formally launch the project, a two days workshop was organised in Bangalore on 20th and 21st January, 2014 at the Centre for Advanced Sanitation Solutions (CASS). The main object of the workshop was to seek expert input from sector specialists to improve the project design, which included revisiting the set of objectives of the project, suggesting necessary activities and strategies and support of government institutions like Karnataka State Pollution Control Board (KSPCB), Bangalore Water Supply and Sewerage Board (BWSSB) and others to anchor the project at state level. Seventy people from the sanitation sector attended the Workshop.

- iii. Selection of city for project implementation
  - · City selection criteria preliminary criteria
  - Visit to preliminary cities to collect data in accordance to the city selection criteria both primary as well as secondary data, at this stage of the project
  - · Analysis against the selection criteria, and ranking
  - · Short-listing of 4 cities
  - Preparation of a 2nd level selection criteria
  - · City visits to evaluate against selection criteria ongoing

The activities planned under this project are

- · Kick-start the sanitation landscape studies by the respective consultants
- · Develop of deep understanding of the selected city and the impending interventions
- · Initiate technical landscape study within CDD Society
- · Deliberate and develop preliminary planning document with each of the Project Consultants
- · Initiate all the landscape studies by the selected consultants
- · City selection and finalization; meetings with city officials
- · Drafting of MoU with the selected city

CDD Society has proposed to set up a team to work on this very important subject and is putting in extra efforts to ensure effective delivery of the project.

# Strengthening and Empowering Urban Local Authorities in the Delivery of Decentralised Sanitation Services, a European Union Funded Project

In 2012, along with Municipal Corporation of Shimla, Himachal Pradesh and BORDA, CDD Society has started work on a European Union project titled "Strengthening and Empowering Urban Local Authorities in the Delivery of Decentralised Sanitation Services". The overall objective of the project is to contribute to integrated action at municipality level to reduce poverty, support inclusive and sustainable economic development, environmentally safe sanitation and improve the health situation of urban poor. It is aimed to achieve this through building capacities of MCS and four other ULBs in delivering decentralised, integrated sanitation services focusing on un-served settlements and urban poor residing in the targeted cities of Himachal Pradesh.

Under this project the activities carried out in the year 2013-14 have been the support extended to MCS to recruit staff for the Project Implementation Unit to be based at Shimla, initiated development of training packages for orientation training on decentralised basic needs services, conducting induction on decentralised sanitation services for the PIU team, development of project implementation plan for the year, technical support to PIU in delivering the planned activities, participating in steering committee meetings for activity planning/funding approval and implementation monitoring of planned activities; and presentation on work progress in review meetings conducted by European Union.

## **VOLUNTEER PROGRAMME**

#### Weltwaerts Programme

The German Federal Ministry for Economic Cooperation and Development (BMZ) sponsors a volunteer service program catering to developing countries. Young professionals who wish to offer their services to such countries are financed by BMZ and deputed to NGOs working in the social development sector.

The volunteer service operates on the principle of "learning by serving" and aims to add value to partner projects by providing limited qualified human resource support. Additionally, the program aims to generate interest in social development issues in Germany.

The Weltwaerts volunteers work for 11 months both in the office and in the field. BORDA and Econtur jointly select volunteers based on project activities and assign them to local partner organizations.

A batch of five Weltwaerts volunteers successfully completed their assignments for the year 2012-2013 with CDD Society. Two volunteers chose to extend their stay in order to complete the specific projects they were working on. In November 2013, a new batch of five volunteers with backgrounds in engineering, teaching, social sciences, business and economics joined and started working in different teams where they are gaining hands-on experience in the sanitation sector. This year, volunteers have been placed with Capacity Building, Knowledge Management, Marketing and Sales, Research and Development, and the DBNS Technical Unit.

#### Other Volunteer Programmes

Four individual volunteers with various academic backgrounds contributed to the ongoing activities of CDD Society. The volunteers supported Knowledge Management, Capacity Building, HR and Prefab unit.

Five students from National Institute of Construction Management and Research (NICMAR) completed their short term Internship by conducting market study for expansion of DEWATS<sup>™</sup> implementation and identification of institutions for commercialization of the research and development activities of CDD Society.

Four students from Institute of Rural Management, Anand (IRMA) participated in the short term internship programme. The students working with different units at CDD Society, assessed and made comprehensive study on

- Developing a service package for operations and maintenance of DEWATSTM units
- Aspects to be considered for conducting Feasibility study for implementing DEWATS CBS projects;
- Impact Assessment of Capacity building training programmes through trainee tracking

## **Participation in Events**

As part of its dissemination activities, CDD Society aims to participate in various international, national and state level events related to the subject of decentralised basic needs services. This helps in reaching out to people working in the sector, to develop more contacts and build networks. In the year 2013-14, CDD Society continued this effort by participating in the following events:

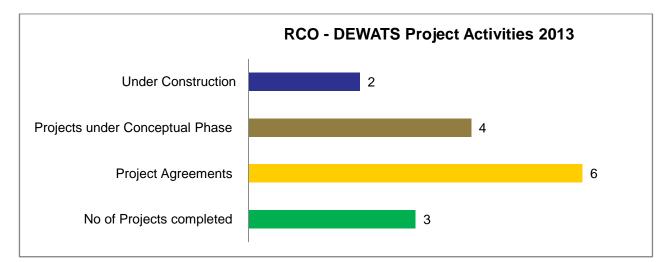
SI No	Category	Total Participants	Events	
1	Conference	400	Municipalika 2013,Delhi, March 2013	
2	Workshop	25	Stakeholder workshop for LAKE Protection project in ward 61 in Raipur under GIZ SANITATION, Raipur, April 2014	
3	Workshop	50	DEWATS Orientation Work shop on waste water treatment and reuse, Dharwad, Karnataka, April 2013	
4	Workshop	100	Resource Recovery and Reuse: From Research to Implementation – City Workshop, Bangalore, April 2014	
5	Conference	250	Conference on "Green Cities & Town Ships"-for sustainable urban future, Mumbai, April 2013	
6	Conference	300	Conference organised by "Mahila Samakhya Karnataka", Access to Sanitation a Basic Right, Bangalore, April 2013	
7	Workshop	45	NUSP : Towards Nirmal Shahar, Mumbai, April 2013	
8	Workshop	40	Multi-Stakeholder Workshop on Strategic Action Planning for Revival of Bangalore Lakes, Bangalore, April 2014	
9	Workshop	60	National Practitioners Workshop on developing a National Policy framework on solid and liquid waste management in rural areas, Delhi, May 2013	
10	Meeting	35	WSP-SA Development Partner Meet , Bangalore, May 2013	
11	Conference	200	Green Home Conference, Bangalore, June, 2013	
12	Event	50	Urban Aqua 2013, forum for practicing Architects and Civil Engineers, Davanagere, Karnataka, July 2013	
13	Workshop	50	CMA Chennai for UGSS Scheme, Chennai, July 2013	
14	Workshop	30	Orientation on DEWATS, Asha Kendra, Ahmed Nagar, July 2013	
15	Workshop	30	DWWTS Training, CSE, Delhi, July 2013	
16	Workshop	50	Workshop on "Waste Management & Best out of Waste" at IBMR Business School, Bangalore, July 2013	

17	Workshop	50	Waste management & best out of waste, Hubli, Karnataka, July 2013	
18	Workshop	120	Event for Decentralised sewage treatment apartment, Layout & Industries, Hubli & Dharwad, Karnataka, July 2013	
19	Workshop	30	Weltwaerts Preparatory seminar, Germany, August, 2013	
20	Meeting	150	3rd Annual Builders Association Executive Committee Meeting at NGV Karamangala, Bangalore, August 2013	
21	Conference	200	8th Annual International Conference on Public Policy & Management, Bangalore, August 2013	
22	Conference	200	International conference-IFAT, Mumbai, October 2013	
23	Workshop	250	International conference & technical seminar on "INDIAN COMPOSITE INDUSTRY", October 2013	
24	Workshop	120	Mythri Sarva Seva Samithi (MSSS) 25 years celebration, Bangalore, October 2013	
25	Training	75	Awareness on Sanitation in Housing, during Training Programme on "Planning and Management of IAY with focus on Cost effective Technologies and Sanitation", RGRHCL ,Bangalore, April,2013,	
26	Workshop	40	Usage of G.P.S.& Fast Track Technology in Vajpayee Awas Yojana organised by Koushlyashaale, Bangalore October, 2013	
27	Conference	200	IWA Conference, Nairobi, October 2013	
28	Conference	100	Watertech, National Exhibition & Conference On Drinking Water, Municipal & Industrial Waste Water Treatment & Management, October 2013	
29	Event	100	Generocity, connecting citizens of BANGALORE to various NGO's working under different causes, Bangalore, October 2013	
30	Seminar	25	Indian Composite Show 2013, Delhi, October 2013	
31	Conference	200	BORDA BNS Meeting 2013, Dar-e-Salaam, October 2013	
32	Training	200	Outreach Program on FCRA, 2010, Bangalore, November 2013	
33	Workshop	16	District Level Orientation on DEWATS for Mysore Urban Development Authority(MUDA), November,2013	
34	Workshop	35	Stakeholder Workshop for Septage Management, Guwahati, November 2013	
35	Event	70	World Toilet Day, Bangalore, 19th November 2013,	
36	Workshop	150	DEWATS Orientation work shop, Madurai, Tamil Nadu, November 2013	

37	Event	200	School - Renovation of Toilet, Inauguration Programme, Kengeri, Bangalore, November, 2013	
38	Workshop	36	Workshop on "Modeling for city sanitation planning in India" on December 2nd to 3rd, 2013, organized by Bill and Melinda Gates Foundation (BMGF).	
39	Seminar	55	State level Seminar on Decentralised Wastewater Treatment System (DEWATS) and Decentralised Basic Needs Services (DBNS), Mysore, Dec 2013	
40	Seminar	150	DEWATS Seminar, Yangon, Myanmar, December 2013	
41	Workshop	30	Workshop on Performance Improvement Plan (PIP) conducted by PAS, CEPT, February 2014	
42	Workshop	150	Workshop organised by Zilla Panchayat, Mysore, February 2014	
43	Seminar	200	CII CSR Summit 2014 & NGO Mela, organised by Confederation of Indian Industry (CII) February 2014	
44	Workshop	50	Workshop on Energiewende in Germany and its applications in India, Organised by The Heinrich Böll Foundation and Centre for Environment Education	
45	Training	30	CSP Training , GIZ, March 2014	
46	Training	27	How to use a City Sanitation Plan as a tool for Urban Development, Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH, March, 2014	
47	Exhibition	50	ENIVISON 2025 Exhibition, March 2014	

#### **Regional Cooperation Office (RCO) Nagpur**

The RCO focuses on promotion and enhancement of regional cooperation for implementation of DEWATS<sup>™</sup> in the western and eastern parts of India. In the year 2013, RCO has taken up the initiative of providing sanitation solutions in Orissa through a project initiated by the Bill and Melinda Gates Foundation titled 'Project Sanman'. Under this project DEWATS<sup>™</sup> will be provided at 92 locations in Bhubaneshwar and Cuttack. RCO has also has initiated implementation of seven projects of DEWATS<sup>™</sup> at Maharashtra Jeevan Pradhikaran (MJP) Amravati region under Mozari Development Programme. In order to scale up the service delivery of DEWATS<sup>™</sup>, concrete efforts were made for promotion and sales. As a result, 36 enquires were received in the year 2013-14.the team is following up on these enquiries and is sure of converting them into projects.



List of	List of DEWATS - SME Projects carried forward (9 domestic)							
SI No	Project	No of Units	Place	Treatment capacity				
	Completed Projects							
1	First Shelter Awas	1	Bihar	28 m3				
2	for Mumbai Metro Development Authority (MMRDA)	1	Mumbai	25 m3				
3	Shimala Municipal Corporation	1	Shimla	12m3.				
	Under Construction							
4	Shri Shankarachrya Group of Institutions (SSGI)	1	Bhilai	100 m3				
5	Sumangal Vihar, Nagpur	1	Nagpur	182 m3				
	Project Agreements							
6	M/s Akshay Builders	1	Nagpur	35 m3				
7	M/s Dhariwal & chorriaya group	1	Yavatmal	300 m3				
8	M/s Ramnath Builders,	2	Nagpur	170m3 & 90 m3				
9	M/s Dwarka Builders	2	Katni, (M.P)	215 m3 & 110 m3				
10	Project Sanman	14	Orissa					
11	Maharastra Jeevan Pradhikaran	7	Amravati					
	Projects under Conceptual Phase							
12	IIPH, Gandhinagar	1	Gujarat	55 m3				
13	VNIT, Nagpur	1	Nagpur	400 m3.				
14	Suraburdi Meadows	1	Nagpur	60m3 & 27 m3.				
15	Nagpur Municipal Corporation	3	Nagpur	270 m3 & 425 m3 &110 m3				

#### CONSORTIUM FOR DEWATS DISSEMINATION (CDD) SOCIETY BALANCE SHEET AS AT MARCH 31, 2014

				(Amount in Rs.)	
	Schedule	As at March 31, 2014		As at March 31, 2013	
SOURCES OF FUNDS					
Capital Fund	А		50,000.00		48,000.0
Capital Reserve	A		1,047,301.00		1,047,301.0
General Fund	А		16,222,195.03		14,140,408.4
Donors Funds	В	_	15,622,292.91	_	6,900,556.0
		-	32,941,788.95	_	22,136,265.4
APPLICATION OF FUNDS					
Fixed Assets	С				
Gross Block		9,696,268.02		8,803,092.94	
Depreciation		5,742,206.59		4,725,049.22	
Net Block			3,954,061.43	-,	4,078,043.7
nvestments			10,000.00		10,000.0
Capital Work in Progress			123,000.00		10,000.0
Lapital Work In Progress			125,000.00		
Current Assets, Loans & Advances:					
Cash & Bank Balances	E	17,450,452.26		8,034,727.72	
Loans, Advances & Deposits	D	9,053,954.04		4,752,302.90	
nterest Accrued on NSC		3,687.37		3,687.37	
TDS Receivable		1,594,389.54		1,370,356.53	
nventory	D	7,194,703.86		5,578,711.73	
	-	35,297,187.07	_	19,739,786.25	
Less Current Liabilities					
Programme Advances	G	4,563,192.79		361,045.00	
Statutory Recoveries	Н	489,747.48		364,973.48	
Other Liabilities	I ,	1,389,519.28		965,546.06	
	-	6,442,459.55	-	1,691,564.54	
Net Current Assets		-,,	28,854,727.52		18,048,221.7
TOTAL		-	32,941,788.95		22,136,265.4

For Consortium for DEWATS Dissemination (CDD) Society

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Koshy Mathew Treasurer

J.S.D'Souza Secretary As per our report of even date attached For M.A. BRAGANZA & ASSOCIATES Chartered Accountants Firm Registration No 000507S

N-Thomas Mathai

Partner ICAI Membership No 521

Bangalore Dated: 2/ Jun

#### CONSORTIUM FOR DEWATS DISSEMINATION (CDD) SOCIETY INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2014

	(Amount in Rs.)			
		Year ended	Year ended	
	Schedule	March 31, 2014	March 31, 2013	
INCOME				
Annual Subscription fees		53,000.00	51,000.00	
Income earned during the year	J	19,373,141.76	9,728,469.08	
Savings Bank Interest		377,454.00	105,744.39	
Fixed Deposit interest		-	-	
(Deficit)/ Surplus Prefab DEWATS Unit		(3,018,988.03)	3,368,655.89	
Restricted Funds:				
Grants		26,400,572.00	32,166,479.00	
Grants - Welwarts BORDA Project		231,990.00	203,458.02	
Grants - BWC		-	-	
Grants - Lafez (IWA conference)		-	374,602.78	
Grants - GIZ		4,027,890.00	1,342,630.00	
Grants - BMGF		11,684,623.00	-	
Grants - EU Shimla		1,000,000.00	-	
Savings Bank Interest		4,444.00	316,763.74	
Miscellaneous Income		-	-	
Liability no longer required w/back		-	217,063.28	
TOTAL (A)		60,134,126.73	47,874,866.18	
EXPENDITURE				
Project Expenses - Foreign Contribution	Н	33,946,738.40	38,102,480.03	
Sanitation - DEWATS unit and Other Expenses	Ι	17,065,095.53	6,120,782.97	
Depreciation on Fixed Assets	С	1,017,157.29	833,802.67	
Consultancy charges		-		
Travel Expenditure		-		
TOTAL (B)		52 028 001 22	45 057 065 67	
IOTAL (b)		52,028,991.22	45,057,065.67	
Surplus/(Deficit) (A-B)		8,105,135.51	2,817,800.51	
Surplus/(Deficit) transferred to -				
Donors' Funds		8,721,736.90	(4,405,092.25	
General Fund		(616,601.39)	7,222,892.75	
Schertur i ultu		8,105,135.51	2,817,800.51	
Notes to Accounts	W		_,017,000,01	

The Schedules referred to above form an integral part of the Income & Expenditure Account

For Consortium for DEWATS Dissemination (CDD) Society

al Koshy Mathew J.S.D'Souza Treasurer Secretary

As per our report of even date attached For M.A. BRAGANZA & ASSOCIATES Chartered Accountants Firm Registration No 000507S

7A& Thomas Mathai Partner

ICAI Membership No 52141ACCO

Bangalore Dated: 21 Jun

#### CONSORTIUM FOR DEWATS DISSEMINATION (CDD) SOCIETY RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED MARCH 31, 2014

	. On Th	(Amount in Rs.)		
		Year ended	Year ended	
	Sch	March 31, 2014	March 31, 2013	
Opening Balance	Sen	March 51, 2014	What Ch 51, 2015	
		E0 264 8E	242 720 25	
Cash		50,364.85	243,728.35	
At Bank		7,984,362.87	10,298,735.79	
		8,034,727.72	10,542,464.14	
Receipts				
Annual Subscription fees		50,000.00	12,000.00	
Admission fees		2,000.00		
Advances Recovered	Μ	1,622,422.15	3,512,093.45	
Statutory Recoveries	N	192,066.00	150,731.00	
Grant Received		43,345,075.00	33,712,567.02	
Savings Bank Interest		381,898.00	422,508.13	
Miscellaneous Income		-	-	
Sundry Creditors - yet to be settled		-	446,496.00	
Recoverable Deposits		-	37,000.00	
Income earned during the year	0	16,824,825.47	11,354,773.78	
Programme Advance Received	Р	4,493,192.79	383,045.00	
Fixed Asset sold		-		
Stale cheques reversed & liability also written back		-	216,433.78	
TOTAL		66,911,479.42	50,247,648.16	
Payments				
Project Expenses	Q	33,299,852.40	37,637,273.25	
Sanitation - DEWATS unit and Other Expenses	R	21,630,859.47	9,912,554.94	
Fixed assets purchased	С	893,175.00	248,183.00	
Advances Paid	S	453,264.00	1,869,875.00	
Statutory liabilities paid	Т	196,438.00	91,420.00	
Other Liabilities settled	U	675,133.00	2,880,332.38	
Capital Work in Progress		123,000.00	-	
Tax deducted at Source		224,033.01	115,746.01	
TOTAL		57,495,754.88	52,755,384.58	
Closing Balance				
Cash		91,085.00	50,364.85	
At Bank		17,359,367.26	7,984,362.87	
TOTAL (B)		17,450,452.26	8,034,727.72	

The Schedules referred to above form an integral part of the Receipts & Payments Accounts For Consortium for DEWATS Dissemination (CDD) Society

oshy Mathew J.S.D'Souza Treasurer 4 Secretary

#### Auditors' Report

We have examined the above account with the books of account and vouchers maintained by Consortium for Dewats Dissemination (CDD) and have found the same to be in accordance therewith and the information and explanations furnished to us and gives a true and fair view of the transactions of the CDD for the year ended March 31, 2014 For M.A. BRAGANZA & ASSOCIATES

ACC

Chartered Accountants

Firm Registration No 000507S

Thomas Mathai Partner ICAI Membership No 52141 Bangalore Dated: 2

## **The Way Forward**

CDD Society is embracing the sustainable sanitation infrastructure and precautionary approaches for wastewater management as integral aspects and also central to the quest for sustainable environment.

The activities carried out by the Society in the last few years have been oriented around scaling up – reaching out to a larger number of people through knowledge dissemination, implementing projects directly and through trained professionals, developing plans that help cities and towns for providing sanitation and in supporting policy changes for ensuring provision of sanitation services. Even with these efforts and improved capacity to deliver, the requirements for services are still too large to meet the demand. Therefore, along with being knowledge providers and implementers CDD Society is making efforts to create a larger impact with support from BORDA.

This is being done by

- Moving towards implementation of citywide sanitation plans;
- Working with Government departments and local bodies for conducting training programmes and implementing sanitation programmes;
- Developing databases to coordinate and compile knowledge being generated through experiences;
- Monitoring of implementation and their evaluation to ascertain modifications, if required and to support in ensuring their sustainability;
- Improving delivery of services through larger implementation teams and prefabricated elements.