

March 2016

Coca-Cola Department of Regional Water Studies

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**Progress report**  
**January 1- March 31 2016**



## Highlights

### 1. Direct Dissemination of the Department

- a. Miranda House, Delhi University in Feb 2016
- b. Jamia Millia Islamia, Faculty of Science, in Feb 2016
- c. Krishna Institute of Engineering and Technology, Ghaziabad in Feb 2016
- d. Shaheed Rajguru College of Applied Sciences For Women, Ghaziabad
- e. Daulat Ram, Delhi University in Feb 2016
- f. St. Teresa's College, Ernakulam, Kerala in Feb 2016
- g. Jamia Millia Islamia, Engineering and Technology, New Delhi in March 2016
- h. JSS Academy of Technical Education, Noida



Shaheed Rajguru College of Applied Sciences



Daulat Ram, Delhi



JSS Academy of Technical Education



Jamia Millia Islamia

## 2. Postal Dissemination

Top 90 Engineering Colleges- Attached as Annexure 1

## 3. Workshops and Seminars

### a. 2nd International conference on Waste Management Innovation: Research, Learning and Propagation at Teri University on 15th January, 2016



The conference provided a platform for experts working on waste management to share, their research and learning. The discussion was around current scenario, environmental issues & challenges, policies and analysis on waste management in India and emerging technologies on treatment of wastewater. The conference had special focus on use of alkaline waste for carbon sequestration from municipal solid waste landfills and incinerators for ever increasing urban municipal waste. The conference also touched upon sustainable entrepreneurship

### b. Strengthening Water and Sanitation in Urban Settings -Inter University Competition on Water Resources Management National Competition, 28th January 2016, New Delhi

Initiated in June 2014, the project titled “Strengthening Water and Sanitation in Urban Settings: Inter-University Competition on Water Resources Management” directly engaged around 500 youth participants by helping to develop a multi-stakeholder, evidence-based, participative and practically implementable Integrated Water Resources Management (IWRM) proposal. Under the programme, 75 teams of undergraduate and post-graduate students, 17-22 years, from West Bengal, Assam, Jharkhand, Chhattisgarh, Punjab, J&K, Delhi, U.P, Haryana, Uttarakhand, Kerala, Telangana, Karnataka, Tamil Nadu, Goa, Maharashtra and Gujarat presented various proposal ideas to address water and sanitation problems in the regions through various regional competitions held in 2015. The final round of this competition was held on 28 January 2016 in New Delhi.



**c. Project meeting on ‘Water-Energy Carbon Nexus - a case study of Delhi’ (funded by Asia Pacific Network, in collaboration with AIT, Thailand and Hiroshima University, Japan) held on Feb 1-2, 2016**



Water footprint in energy sector and energy footprint in water sector are increasingly becoming a concern in development and planning process. The meeting was held to discuss the outcomes of water-energy carbon nexus study conducted in selected cities- Tokyo, Bangkok, Delhi and Kathmandu. A brief discussion was also done on barriers and opportunities for optimizing the water-energy-carbon nexus.

d. **2016 ProSPER.Net Young Researchers' School on 'Sustainable Energy for Transforming Lives: Availability, Accessibility, Affordability' 1-12 Feb 2016**



The TERI University in association with the United Nations University Institute for Advanced Study of Sustainability (UNU-IAS), and ProSPER.Net Secretariat, organized a two-week long Young Researchers' School (YRS) on 'Sustainable Energy for Transforming Lives: Availability, Accessibility, Affordability' from 1–12 February 2016 at the University campus, New Delhi. The main goal of the YRS was to provide PhD students an opportunity to better understand the spectrum of challenges that underpin sustainable development. The participants were from eight different countries of the Asia-Pacific region. The school programme was aligned with the sustainable development goal number 7 and the participants were exposed to different aspects of clean and sustainable energy and related challenges through lectures, movies and field trips. While gaining specific knowledge regarding the theme, the participants through the school also got an opportunity to develop their research skills including communication skills through activities like a 3-minutes thesis competition, research communication session, and group work on research proposal development and presentation. By assembling these young researchers together, the school aimed to foster the growth of a network of sustainability scholars and professionals in the Asia-Pacific region.

e. Ms Fawzia Tarannum delivered a talk on '**Climate Change and Vulnerabilities of Urban Poor Women**' at a workshop on "**Sustainable Development and Climate Resilience for Urban poor**" organised by Mahila Housing Trust, at India Habitat Centre, New Delhi on 18 Feb 2016.

#### 4. Project Reports and Publication

- a. Project report submitted on ‘Socio-ecological metabolism study for urban water planning- A case study of Delhi’ (funded by Enel Foundation, submitted to University of Toronto, Canada), Feb 22, 2016
- b. Ghosh R, **Kansal A**, Aghi S (2016). Implications of end-user behaviour in response to deficiencies in water supply for electricity consumption – a case study of Delhi, Journal of Hydrology, Vol 536, pp 400-408
- c. Course Material on Gender, Equity and Water Management for conducting two days Management Development Programme prepared and submitted to ICEWaRM, Australia in February 2016

#### 5. Students- Major Project

##### M.Sc/ M.Tech (WSG)

REG_NO	NAME	PROJECT NAME	ORGANISATION
1448MWS	Manas Awasthi	Performance Evaluation of Water and Waste Water Treatment plants with special emphasis on energy conservation measures	VA TECH WABAG LTD.
14109MWS	Bedashree Choudhury	Impact Evaluation of Solar Water Pump Programme in Rajasthan	TERI University
14103MWS	Niyati Seth	Facilitating Learning on WaSH	The Energy and Resources Institute
1449MWS	Mohd Zeeshan	Improving Water Use Efficiency in Indian Railways by using Automation Technologies	The Energy and Resources Institute
1454MWS	Ruchika Satish	Wastewater Characterization Studies of 24 HCCBPL Manufacturing Plants	Hindustan Coca-Cola Beverages Private Limited
14100MWS	Aparna Gupta	Lake Rejuvenation- A pilot study	TERI University
14108MWS	Shoobhangi Tyagi	Potentially Toxic element analysis in surface and subsurface water of urban Delhi	Environmental Pollution Laboratory , Department of Environmental Studies, University of Delhi
1455MWS	Vishal Pratap Singh	comparison of water use efficiency at major railway stations of new delhi	TERI
1446MWS	Anurag Prakash	WATER SUPPLY AND SANITATION	TERI
1453MWS	Rajesh Ramamoorthy	Study on the effect of hydraulic mixing on septic tank performance	Clearford Water Systems
14104MWS	Pallavi Kharbanda	Evaluation of legal aspects of water usage of Coca-Cola India operations	Coca-Cola India Pvt. Ltd
1452MWS	Qazi Syed Wamiq Ali	STUDY OF SOIL TEXTURE'S IMPACT ON INFILTRATION RATE ON GROUNDWATER IN SOUTH DELHI	TERI University

14107MWS	Sakshi Chawla	Field validation of water replenishment projects of CCIPL	Coca-Cola India Pvt.Ltd.
1450MWS	Praveen Kumar S	Vaigai River Restoration Project	DHAN Foundation
14105MWS	Prapti Verma	Sales,Water and Process Technologies	GE Water
1447MWS	Deepali Goyal	Impact assessment of river rejuvenation project-a case study of Lakya watershed, Vedavathi river	Vyakti Vikas Kendra India (The Art of Living)
1445MWS	Akash Purohit	Market Research to identify new business opportunities for GE Water. in Chemicals and Equipment field and evaluation of other players in the industry.	GE Power and Water
14102MWS	Himanshi Gupta	Water ATM	Water Health India
1451MWS	Priyank Jain	Environmental Regulations and Technological Innovations for Indian Thermal Power Sector - Level of Compliance, Gaps and Lessons	GE Water

## 6. REPORT ON THE LECTURES HELD THIS QUARTER UNDER SEMINAR SERIES

### Institutionalized Seminar Series

This seminar series is designed to address key issues in the WASH sector, so that wide range of students and working professionals get exposure to the latest techniques, innovations and interventions, in continuation, we held the following expert lectures.

#### a. Challenges that Women Face in urban slums in the water and sanitation sector

By Abha Bahadur, President, Centre for Water, Sanitation & Health for Women

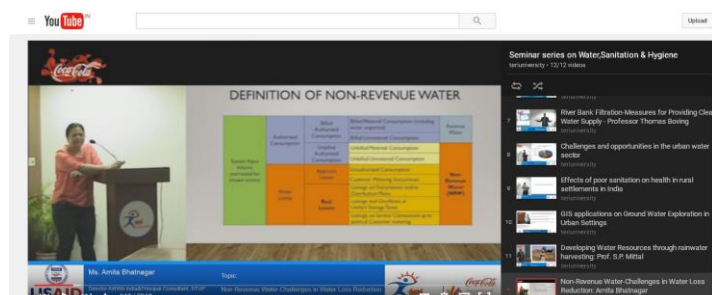
Abha Bahadur has worked in the sanitation sector, in India, for more than two decades now. She has provided her expert guidance on many rural and urban projects concerning women and girls. She in her expert lecture highlighted the problems that women face in crowded, urban slums. She displayed bio incinerators. Students took keen interest in her talk.



#### b. Non-Revenue Water-Challenges in Water Loss Reduction

By Amita Bhatnagar, Director, AWWA India, and Principal Consultant, STUP Consultants Pvt. Ltd.

Ms.Amita Bhatnagar has over

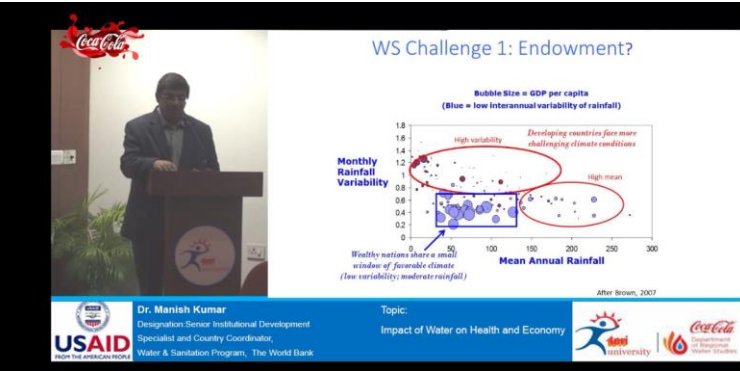


twenty years of experience in the urban water development and management sector. She discussed where specifically the challenges in water loss in the urban water distribution network exist. Leak detection, repair, management plays a very important role in water loss reduction, however, sometimes large losses go undetected and lead to non-revenue water. She invited students to be water champions and they appreciated the idea very much.

### c. Impact of Water on Health and Economy

By Dr. Manish Kumar, World Bank

Dr. Manish Kumar, is currently Senior Institutional Development Specialist and Country Coordinator, Water & Sanitation Program at the World Bank. He has over twenty years of experience in the development sector, of which the first eleven were as an Indian Administrative Service Officer. He holds a PhD from George Washington University and a post graduate

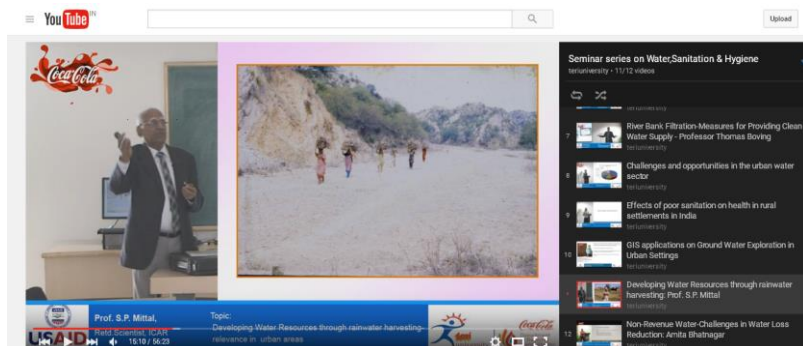


degree from John F. Kennedy School of Government, Harvard University. He spoke extensively on the impact of water on health and economy both in the rural and urban systems. He discussed the challenges to water demand management, how groundwater management will hold the key to management of water in the irrigation sector, while changes in the urban sector is needed to bring about better water and waste water management. The audience was very responsive and participated actively in the question and answer section.

### d. Developing Water Resources through rainwater harvesting-relevance in urban areas

By Prof. S.P. Mittal, Retd. Scientist, ICAR

Professor Mittal specializes in water resources assessment and management; he has worked in many watershed projects involving developing innovative rainwater



harvesting techniques. He shared his extensive practical experience with community participation, cropping pattern and water use efficiency techniques and its relevance in urban areas. Many students showed interest to work on their master's thesis in this area.