

*Coca-Cola Department of  
Regional Water Studies*

*Quarterly Report-  
Jan- March 2017*



## **Academic**

### **1. Field Visit of second semester M.Sc and M.Tech Water Science and Governance Students to Ahmedabad – 26 Feb -02 Mar 2017**

The second semester students of M.Sc and M.Tech Water Science and Governance visited Ahmedabad from 26 Feb to 02 March to gain practical understanding of the courses that they are taught in their second semester. Dr. Nirupam Datta from the department accompanied the students on this visit. They visited the following sites:

- a. **Sabarmati riverfront** – The visit was organised with the support of Ahmedabad Municipal Corporation and Sabarmati River Development Authority. The river development project is an excellent example of integrated river management through public-private partnership. The quick glimpse of the visit can be seen on



[https://www.facebook.com/pg/swash.teriuniversity/videos/?ref=page\\_internal](https://www.facebook.com/pg/swash.teriuniversity/videos/?ref=page_internal)

- b. **Nalsarover Wetland**- Aquatic Eco-system Management is a subject that is undertaken by the students in second semester. Nalsarover Ecosystem is an example of a thriving ecosystem where community is involved in preserving the ecosystem. The glimpse of the visit can be viewed from <https://www.youtube.com/watch?v=pjaFGgcWvpU&t=33s>
- c. **Space Application Center Ahmedabad**- The students got an exposure to how GIS and Remote sensing could be used for Water Resources Management through practical demonstrations.

## **Events, Workshops, Seminars, Meetings**

1. **Dr. Nirupam Datta**, faculty of Coca-Cola Department of Regional Water Studies visited East Delhi Municipal Corporation Office to attend a workshop on **GIS enabled Planning Information System on 27th of January, 2017.**

2. **Dr. Nirupam Datta**, faculty of Coca-Cola Department of Regional Water Studies visited Lucknow and Hardoi to observe the farmer support system for sugarcane farmers under "Unnati Meetha Sona" project of Coca-Cola India during 9th-10th February, 2017.



3. **Jal Kranti Abhiyan, 07 March 2017, Constitution Club, New Delhi:** The Ministry of Water Resources, River Development and Ganga Rejuvenation organised a national conference called Jal Kranti Abhiyan on 7 March 2017 in New Delhi. The conference was attended by the students and faculty



*Fig.1 Students from M.Tech Water Science and Governance sharing their thoughts at Jal Kranti Abhiyan*



members of Coca-Cola Department of Regional Studies. The conference was inaugurated by Sushri Uma Bharti, the Honourable Union Minister for Water Resources, River Development and Ganga Rejuvenation. It was also attended by Mr. Sanjeev Kumar Baliyan and Mr. Vijay Goel, the Union ministers of state for Water Resources, River Development and Ganga Rejuvenation and Youth Affairs and Sports respectively. The day-long conference saw around 700 participants, representing various

stakeholder groups such as government officials, farmers, students, NGOs and panchayat members. The programme mainly focussed on creating awareness among various stakeholders about the importance of water conservation and security and also to help resolve several water-related issues in the country.

**4. Ms. Ranjana Chaudhuri**, faculty of Coca-Cola Department of Regional Water Studies, participated in the round table on Sustainable Industrial Water Management' on **09 March 2017** organized by CEEW. The round table was organized to understand industry's role in increasing water use efficiency, how various industries could make their processes more water efficient and recycle waste water.



**5. Visit to Kisaan Unnati Mela, held at IARI, Pusa Campus, New Delhi, on March 15, 2017:** Second semester students of the Coca-Cola Department of Regional Water Studies, TERI University visited this Mela. The event saw the participation of a number of research organizations, agriculture institutes, farm machinery manufacturers and farmer welfare groups. Exhibits included innovative farming techniques, flood and drought resistant seeds, horticulture, water conservation measures, aquaculture and micro irrigation prototypes. Digitization of agriculture was seen in practise through stalls that provided mobile based apps for agriculture related activities like buying and selling of equipments, information about soil and water condition and sensor based soil testing services.



- i. Some learning from the event:
- ii. In areas with water salinity problems, aquaculture is being taken up
- iii. Central Institute for Women in Agriculture, Bhubaneswar had displayed innovations like revolving milking stool, vegetable harvester and eco-friendly insect trap to ease women's workload in farming and household activities
- iv. GIS based crop health monitoring and damage assessment is being conducted by Department of Agricultural Physics, IARI

- v. Bio fertilizers, bio insecticides and bio fungicides were being displayed and sold to visiting farmers

**6. Conference on Sediment Management in Indian Rivers, 17 March 2017, Central Soil and Materials Research Station, New Delhi:** The event was attended by students and faculty members from Coca-Cola Department of Regional Water Studies. The overall experience of the Conference on Sediment Management in Indian Rivers was scintillating with new concepts and ideas presented by the researchers, businessmen and practitioners representing various institutions and organizations concerned towards sustainable river management in India. Sushri Uma Bharti, the Honourable Union Minister for Water Resources, River Development and Ganga Rejuvenation delivered the Keynote address. A good insight of the methods used to curb the problem of sediment deposition in the rivers was obtained as the problem of sedimentation is increasingly deteriorating the efficiency of the river waters. The unification of the different techniques discussed in the conference definitely helps us gain a perspective to go ahead and solve the problem of sedimentation in Indian rivers.

The conference was great way to gain insights from delegates from, CWPRS Pune, IIT Roorkee, NIH Roorkee, Government of India Bihar, Brahmaputra Board, IIT Guhwati, IWAI and Engineers



from Cleantec India Private Limited. Some key learnings from the Conference on Sediment Management in Indian Rivers was that a good model needs to have

- A perfect validation of data.
- Prediction for future.
- Monitoring of the system.

**7. Walk for Water - CSR initiative of SMAAT INDIA PRIVATE LIMITED, 22 March 2017:** The Walk for Water was organised by SMAAT India Private Limited to celebrate the World Water Day on 22<sup>nd</sup> Mar 2017. The walk started at 7 AM from India Gate New Delhi, with an agenda of creating awareness about water and safe drinking water and also to

promote safe use and conservation of water. The walk was headed by Mr. Vijay Goel, Minister of Youth Affairs and Sports. The walk was joined by student representatives from TERI University, Delhi University, JNU, Jamia Millia Islamia as well as by students from outside Delhi and NCC male and female cadets. A pledge-



“I take an oath to conserve water and to use water wisely. I pledge to consume water judiciously and not waste even a drop of water. I’ll treat water as the most precious treasure that I possess and consume accordingly. I pledge to motivate my family, friends and neighbours to use water wisely and not waste it. It is our planet and only we can save it,” was also taken by the participants of the Walk for Water.

8. Head of the Coca-Cola Department of Regional Water Studies, **Dr. Arun Kansal**, delivered a lecture on **24<sup>th</sup> March 2017**, at Indian Institute of Public Administration (IIPA), New Delhi in a training programme for Executives of CPWD. The topic of the lecture was "**Quantifying hydrological performance of Cities: a case of Delhi**".

9. **Annual event SWASH (Save Water and Save Humanity) organized on 28 March 2017:**

The Coca-Cola Department of Regional Water Studies, TERI University held its annual event SWASH (Save Water and Save Humanity) on 28 March 2017. The theme of the event was “Water and Wastewater”, based on the theme of the World Water Day. At TERI University, it has always been our endeavor to engage in the problem solving process



especially related to environment and natural resource management. The objective of this one day event was to motivate the youth to creatively participate in debates, deliberations and competitions to

highlight the problem of water scarcity and come up with innovative ideas to address the issues related to water and wastewater.

The inaugural session was attended by Mr. Anand Rudra, Senior Project Management Specialist, WASH, USAID, Ms. Shubha Sekhar, Director and Head CSR and Sustainability, Coca-Cola India and South West Asia, Dr Rajiv Seth, Pro Vice Chancellor, TERI University, Prof. Arun Kansal, Head of the Department, Coca-Cola Department of Regional Water Studies and Ms. Ranjana Ray Chaudhari, Lecturer, Department of Regional Water Studies. The Pro vice chancellor emphasized on the need to address the problem of water scarcity by shifting the changes from incremental towards the transformative one. He also talked about the issue of climate change and the problem of increasing demand which will outstrip water supply by 2030. Prof. Arun Kansal interpreted the meaning of SWASH by comparing it with breath (in Hindi). He acknowledged the issues like transboundary water issues and also highlighted the role of water in the economic growth. He then emphasized that the infrastructure alone could not solve the issues of water and thus employment sector needs people who considers water as holistic. Mr. Anand Rudra who spoke about the partnerships of USAID with Coca-Cola (Water and Development Alliance), emphasized on building capacities in water sector and Coca-Cola for doing a lot of work as an example to other private sectors. Ms. Shubha Sekhar, Director and Head CSR and Sustainability, Coca-Cola India stressed on the need of recognizing the importance of water and wastewater together, having a symbiotic relationship. She further talked about “har ghar jal” initiative and brought in notice, the SDG 6 (Ensure availability and sustainable management of water and sanitation for all) and its impact on other SDGs. She also motivated the students and the participants by bringing that “Every challenge possesses an opportunity”. The inaugural session was brought to an end by the vote of thanks by Ms. Ranjana Ray Chaudhari.

The inaugural session was followed by quiz competition and poster presentation on the theme “Why waste water”, encouraging participants to think differently and be the part of change they wish to see. There was a panel discussion in the afternoon. The panellists were Mr. Romit Sen, Associate Director – Rivers, Wetlands and Water Policy, WWF India, Mr. Anshuman, Associate Director, Water Resource Division, TERI, Mr. Prashant Pastore, Senior Programme Manager, Solidaridad- South and South East Asia. Ms. Ranjana Ray Chaudhari, Lecturer, Department of Regional Water Studies moderated the session. The event has been a success in generating the enthusiasm and response as well the resolve among the participants to work for the solutions to the challenges in the water sector.



**10. Guest talk on “Estuarine modeling of eutrophication and toxics” by Wu-Seng Lung, Department of Civil & Environmental Engineering, University of Virginia, on 03 April 2017:**

The focus of the talk was on modeling the fate and transport of contaminants in estuaries with respect to nutrient/eutrophication and toxics. First, the concept water quality modeling is presented with special characteristics of estuaries in hydrodynamics. Model construction is based on the principle of mass conservation in major components: mass transport, kinetics, and loads in a mathematical representation. Throughout the presentation, the importance of data and interplay of modelling results and data is emphasized with a number of case studies to extract the physical insights into the estuarine system on specific issues. What is the limiting factor for algal growth: nitrogen, phosphorus, or flow? Finally, the verified and calibrated model is put to use in water quality management. The key message of the presentation is data, data, data for estuarine water quality modelling.



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