

June 2019

# Progress report of Coca-Cola Department of Regional Water Studies

Apr 1- Jun 30, 2019



## Highlights

This report gives information related to the activities of the Department carried out during Apr -Jun 2019. These activities include:

- Events/Seminars/Workshops
- Field Based Learning
- Projects
- Research Publications

## 1 Events/Seminars/Workshops

### 1.1 Organised by the department

#### 1.1.1 Management Development Programme on Gender, Equity and Water Management in Jaipur, Rajasthan on 30-31 May 2019

A two-day Management Development Programme on Gender Equity and Water Management aimed at building the capacity of officials from the Water Resources Department, PHED, and NGOs and Academicians was organized on 30-31 May 2019 at Hotel Lemon Tree, Jaipur. The programme was inaugurated by Honourable State Minister, Department of Women and Child Development, Government of Rajasthan, Smt. Mamta Bhupesh. Also present on the occasion were the Chief Academic Officer, ICE WaRM, Dr. Ian Reid and Dean Research



and Relationship, TERI School of Advanced Studies, Prof Arun Kansal. Appreciating the two days MDP on Gender, Equity and Water Management, Smt Bhupesh mentioned that such programmes are the need of the hour. There are lot of initiatives being taken by various government to address the issue of water and sanitation. Citing the example of near absence of water and electricity supply in the newly built toilets, she mentioned that, the needs of all genders should be kept in mind while planning projects. The programme had 65 participants and 10 resource persons form government, NGO and academia.



## 1.2 Organised by other organizations

### 1.2.1 Seeds of Change Conference in Canberra, Australia from 02-05 Apr 2019

Dr. Fawzia Tarannum participated in the seeds of change conference from 02 -05 Apr 2019 in Canberra, Australia. Her visit was supported by ICEWaRM Australia and CSIRO. The knowledge sharing on tools to measure the inclusion and agency of women in agriculture sector and the gendered impact of projects was perhaps the most valuable takeaway from the “Seeds of Change” Conference. It is said that “what gets



measured, gets managed”. The Women’s Empowerment in Agriculture Index (WEAI) tool developed by International Food Policy Research Institute (IFPRI), Oxford Poverty and Human Development Initiative (OPHI), and USAID’s Feed the Future was very fascinating. The other innovation which she thought was very useful was integration of low-cost smartphones with wearable sensors (Fitbit™) to gather information on the division of labour between men and women in farming households. This innovation has been tested in Indonesia through collaboration between DFAT’s Australia-Indonesia Partnership for Rural Development (AIP-R), University of Canberra and ONMI Design. Following the conference, CSIRO and ICE WaRM hosted a workshop in Canberra where Dr Tarannum presented the Management Development Programme on Gender, Equity and Water Management to CSIRO, DFAT, DAWR and the Australian Water Partnership (AWP), and shared some astounding statistics from India.

### 1.2.2 Invited speaker at ‘Conversations on Gurugram’ by Management Development Institute, Gurugram, Haryana, India

Ms. Ranjana Ray Chaudhuri delivered a presentation on ‘Environmental Consequences of Transport Infrastructure on Urban Soil and Water Management’. The presentation highlighted the grieving impact of urban transport infrastructure on urban soil and water movement within the city. In terms of environmental cost, the impact on urban soil, vegetation and thereby on water management was presented as an important issue not to be neglected when planning a metropolitan city’s infrastructural development. Urban population projections suggest that more than 50% of the country’s population will be urban by 2050. Infrastructure has not been able to keep up the pace with urban growth since cities still lack adequate storm water drains, disposal of sewage and the irrigation channels that are continuously affecting the urban hydrology. Deterioration of urban soil and poor water management in the city has raised issues of low - porosity, restricted aeration, slow infiltration and drainage. Therefore, it is indeed the need of the hour to improve urban soil properties in order to facilitate its role in urban hydrological systems. Flood resilience in cities can be improved based on the accumulated knowledge of past weather

events, while short medium rainfall events cause waterlogging. Having more nature-based solutions is also a sustainable option.

### **1.2.3 Participation in Sustainable Mountain Development Curriculum Building Task Force & Thematic Working Group (TWG), Bhutan during June 18-23, 2019**

Prof Kansal visited College of Natural Resource, Royal University of Bhutan, Lobesa Bhutan during June 18-23, 2019. He participated in Sustainable Mountain Development Curriculum Building Task Force & Thematic Working Group (TWG) Task Force Inception Meeting organised by Himalayan University Consortium, ICIMOD, Nepal. The Inception Meeting aims to discuss and develop the objectives, scope, and planned outputs of the two Task Forces; develop an outline of SMD Curriculum Building Strategy Paper and Plan of Work and develop a Guideline for HUC TWGs. Prof Kansal is the chair of Water TWG of HUC.



### **1.2.4 Speaker in the National Conference on Environmental Leadership on 19 June 2019**

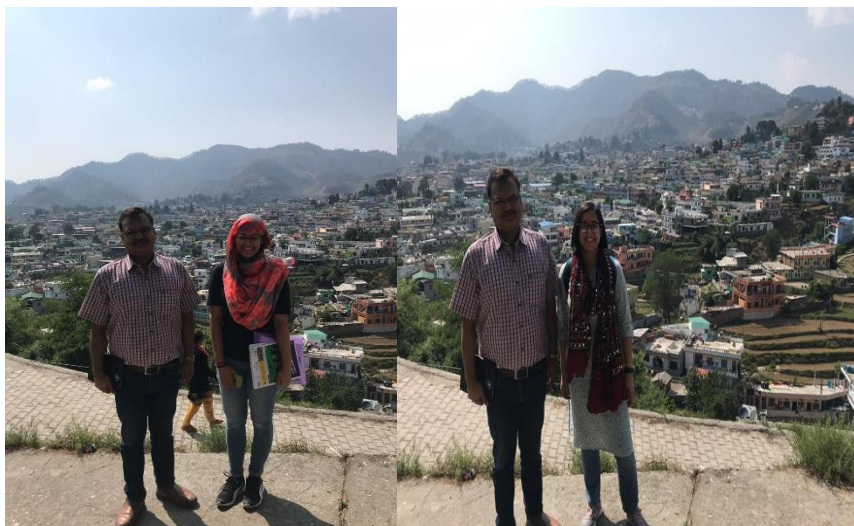
Dr. Fawzia Tarannum spoke on the environmental issues in India in the inaugural session of the National Conference on Environmental Leadership and Policy Making organized by Sashakt Bharat in association with Study of the U.S. Institutes Alumni in India, Department of State, United States and U.S. Embassy, New Delhi. Sashakt Bharat initiative aims to provide a platform for India's youth who are interested in Environmental leadership to start their own initiatives through support from the U.S. Embassy.



## 2 Field Based Learning

### 2.1.1 Visit to Pithoragarh district during June 2-9, 2019

Prof Kansal along with 2 MSc Students Ms Dikshita and Ms Tejaswi visited Pithoragarh district during June 2-9, 2019. They carried out field survey and collected data on the project titled “transboundary water governance in Mahakali river basin”.



### 2.1.2 Field trips to Sohna Block for Guru-Jal Project, Gurgaon

As part of the newly signed project, Guru-Jal with the District Administration Gurugram, multiple field visits and meetings were carried out with various departments and stakeholders during June 2019. The department conducted detailed survey among various stakeholders for an initial assessment on the integrated water resources management. Also, an initial assessment report has also been submitted based on our survey.



## 3 Projects

### 3.1 Project Guru-Jal with District Administration of Gurugram, June 2019

The project aims at recommendations for integrated water and wastewater management for selected villages and municipal council of Sohna block. The various objectives include review



of the current status of the water projects, comprehensive mapping and qualitative and quantitative analysis of drinking water, surface water, groundwater and wastewater, geospatial analysis of cropping pattern and soil health along with recommendations on efficient water use for improved crop production and assessment of the feasibility of various sustainable watershed management practices and recommendations for a conjunctive use of surface and groundwater. The field survey for the study has already begun in Sohna MC, Sohna Rural, Ullawas and Gairatpur Bas. An interim presentation was given to the GuruJal Team on 15 July 2019.



#### 4 Research Publications

Sen, S. M., **Kansal, A.\*** (2019). *Achieving Water Security in Rural Himalayas: a participatory account of challenges and potential solutions*. Journal of Environment Management. 245. 398-408p. DOI: 10.1016/j.jenvman.2019.05.132

Nanda, M., Dana, C., **Kansal, A.\*** (2019). *Assessing national vulnerability to scarcity of phosphorus to build food system resilience: The case of India*. Journal of Environmental Management 240. 511-517p. <https://doi.org/10.1016/j.jenvman.2019.03.115>

Ghosh, R., **Kansal, A.** (2019). *Anthropology of changing paradigms of urban water systems*. Journal Water History. 1- 15 p. [doi.org/10.1007/s12685-019-00229-0](https://doi.org/10.1007/s12685-019-00229-0).

Ghosh, R., **Kansal, A\*.**, Govindarajan, V\*. (2019). *Urban water security assessment using an integrated metabolism approach- a case study of the National Capital Territory of Delhi in India*. Jr Resources 62 (8). doi:10.3390/resources8020062.

Sen, S. M., Singh, A., Varma, N., Sharma, D., and **Kansal, A.\*** (2019). *Analysing Social Networks to Examine the Changing Governance Structure of Springsheds: A Case Study of Sikkim in the Indian Himalayas*. Journal of Environmental Management, 63 (2); 233-248p.DOI:10.1007/s00267-018-1128-0.

Cundill, G., Harvey, B., Tebboth, M., Cochrane, L., Currie-Alder, B., Vincent, K., Lawn J, Nicholls, R.J., Scodanibbio, L., **Prakash, A.** and New, M. (2019). *Large-scale transdisciplinary*

*collaboration for adaptation research: Challenges and insights. Global Challenges, 3(4), 1700132.*

Currie-Alder, B.; G. Cundill Kemp, L. Scodanibbio, K. Vincent, **A. Prakash**, N. Nathe. 2019. *Building climate resilience in Africa & Asia: Lessons on organisation, management, and collaboration from research consortia*. CARIAA Working Paper no. 24. International Development Research Centre, Ottawa, Canada and UK Aid, London, United Kingdom.

Mallick, D., Dilshad, T., Naznin, Z., Hassan, T. S.M., Md. Syed, A., Goodrich, C.G., Udas, B. P., **Prakash, A.**, Anwar, M. Z., Habib, N., Abbasi, S. S., Khan, Q., Ali, M., Qureshi, A. H., Batool, S., Bhadwal, S., Khandekar, N., Gorti, G., Mini, G., Varma, N., Sharma, G., Luitel, M., Nyima, K., Tamang, D. D., (2019) *Participatory assessment of multiple socio-economic drivers and climate stresses leading to differentiated vulnerabilities in the Hindu Kush Himalaya*. HI-AWARE Working Paper 24. Kathmandu: HI-AWARE

**Prakash, A.**, Cundill, G., Scodanibbio, L., Vincent, K., Nathe, N., Morchain, D., DeMaria-Kinney, J., Soumelong Ehode, L., Sukla, D., Mishra, A., and Piryani, A. 2019. *Climate Change Adaptation Research for Impact*. CARIAA Working Paper no. 22. International Development Research Centre, Ottawa, Canada and UK Aid, London, United Kingdom.

---