International Conference

on

Water and Wastewater Management and Modelling (ICWWMM-2018) January 16-17, 2018, Ranchi, Jharkhand, INDIA

Conference Key Recommendations

The conference was attended by the following key note speakers and various delegates from different parts of India. Research scholars from different universities presented their research work. The conference was attended by about 100 participants from across India and abroad. Experts from Industries such as Ion Exchange Pvt. Ltd, Tata Projects, Jain Irrigation, CII-Triveni Water Institute and Ch2M also participated and shared their experiences in reuse of wastewater and integrated water resources management modelling.

1	Er. A C M Zulfikar, Chairman, Water Resources Board, Sri Lanka
2	Professor R.B. Singh, Department of Geography, Delhi School of Economics, University of Delhi, Delhi
3	Prof. Dr. M. Monowar Hossain, Executive Director, Institute of Water
	Modeling, Dhaka, Bangladesh
4	Dr. Amartya Kumar Bhattacharya, Chairman and Managing Director, MultiSpectra Consultants, Kolkata
5	Dr. Atul Singh, Editor, Fair Observer, USA
6	Dr. Ajay Pradhan, President & CEO, C2S2 Pvt. Ltd., New Delhi
7	Dr. Mukand S. Babel, Professor, Water Engineering and Management (WEM), Asian Institute of Technology, Thailand.
8	Dr. S.N. Rai, Ex-Honorary Visiting Fellow, IIT, Roorkee & Ex-Chief Scientist,
-	CSIR-National Geophysical Research Institute, Hyderabad
9	Prof. P. K. Singh, Irrigation and Drainage Engineering Department, GB Pant University of Agriculture and Technology, Pantnagar
10	Dr. Bharat Sharma, Scientist Emeritus (Water Resources), International Water Management Institute, New Delhi
11	Prof. Vinay K. Pandey, Dean, SV College of Agricultural Engineering and Technology & Research St. IGKV, Raipur
12	Dr. Ajai Singh, Associate Professor and Head, & Chairman ICWWMM 2018,
	Centre for Water Engineering and Management, Central University of
10	Jnarknand, Ranchi, E-mail: ajai.singn@cuj.ac.in
13	Mater Engineering and Management Central University of Ibarkhand
	Ranchi
14	Dr. Pratibha Warwade. Assistant Professor & Organizing Secretary
	ICWWMM 2018, Centre for Water Engineering and Management, Central

ICWWMM-2018

	University of Jharkhand, Ranchi
15	Dr. Birendra Bharti, Assistant Professor & Organising Secretary ICWWMM
	2018, Centre for Water Engineering and Management, Central University of
	Jharkhand, Ranchi

The conference was planned in the following themes

1	Wastewater Treatment and Re-Use
2	Flood and Surface Water Management
3	Policy Instruments and Institutions to Manage Water Challenges
4	Groundwater Management and Modelling
5	Management of Water Resources In Agriculture
6	Watershed Management and Hydrologic

Following are key messages and recommendations drawn from the presentations made at the conference:

- (1) It is suggested that water is a "strategic resource" and the importance of water in all sectors of social and economic development needs to be highlighted. Protection of the world's freshwater resources is a key challenge facing today's governments as 1.2 billion People lack access to safe water while 2.5 billion lack decent sanitation.
- (2) Wastewater should no more be considered as "waste" rather is a "resource" which can help meeting the ever-increasing demand of water for various purposes as well as provide nutrients and energy resources. However, innovative technologies which are locally suitable and cost-effective should be developed for appropriate use of treated wastewater.
- (3) Creating a water-secure society is one of the top priorities for governments and policy makers across the globe. "We cannot manage what we do not measure" is very much true for water resources. Water security measurement and assessment is, therefore, central to any water security plans made at national or sub-national level.
- (4) Ensuring livelihoods and disaster risk reduction is the key to sustainable development. This can be achieved by developing partnerships among government, private and civic sectors. Good governance of water with conducive "enabling environment", appropriate "institutional framework" and suitable "management instruments" can go a long way to address problems of employment, economy, export, equity and environment.

ICWWMM-2018

- (5) The management of extreme events, especially floods and droughts should be viewed from risk perspective so suitable measures can be implemented to build and enhance resilience against them.
- (6) Agriculture being main user of water in developing countries including India, there is a huge potential to create an enabling environment which enhances water use efficiency in agriculture sector. Adoption of micro irrigation may be enhanced even in water abundant areas.
- (7) There is a strong nexus among water, energy and food and this should be carefully considered in policy and implementation of development activities at all spatial and temporal scales for sustainable development.
- (8) Lack of knowledge, capacity at different levels, technology and infrastructure in developing countries are to be addressed by technology transfer and meaningful collaboration across water use sectors and global and local communities.
