Event Folder



Aqua Foundation 10th World Aqua Congress

International Conference

24 - 25 November, 2016, New Delhi, India



Theme: Water-Smart Solutions for Growing India

Organized by:

Aqua Foundation

Serving Earth & Humanity

About Aqua Foundation

Aqua Foundation is a Non-Governmental Organization working on key aspects of Water, Environment & Humanity. The ever balanced, ever harmonized cycles & arrangements of nature have been greatly challenged and disturbed by humans in last century, which inturn pose a threat to their own survival. The organization is working to reverse these damages and work towards a sustainable living, in oneness with fellow humans, other living beings, plants and nature. The ultimate goal of the organization is to ensure humanity's long term future.

The activities of Aqua Foundation include knowledge creation, information dissemination, research and education. The organization works through a diverse range of tools and techniques including, but not limited to, conferences, seminars, training programs, on-line learning, capacity building, community projects, school activities etc., with prime focus on Humanity and Sustainability.

Aqua Foundation is organizing international conference 'World Aqua Congress' since year 2007. The conference aims to bring various stakeholders i.e. policy makers, researchers, academicians, industry, NGOs etc., on a common platform for meaningful discussions & deliberations and implementation & execution. 'Aqua Excellence Awards' are also key highlight of the two days international conference. These awards are given to promote, encourage & recognise innovations and contributions in the field of environment & humanity.

About Water - Smart Solutions for Growing India

Globally competition over freshwater resources has been increasing during last decades due to a growing population, economic growth, increased demand for agricultural products for both food and non-food use, and a shift in consumption patterns.

India is growing...practically in every aspect. At 7.6%, India is the fastest-growing economy in the world today. With booming economy, people's expenditure patterns change and so do their lifestyles. Rapid urbanization is also adding fuel to these changes. As a result, food consumption patterns are changing—changes a traditional country like India would not have imagined a few decades ago. The changing food consumption patterns are so significant that they have a considerable impact on future food and water demands. India also has a significant spatial mismatches between its populations and its water resources; less water is available in places where more people live and much of the food is grown. Thus, the manner in which India meets its increasing food and water demands has been the major focus of many recent food and water demand projections both at the global scale and at the national scale. According to a report by the 2030 Water Resources Group, India's water requirement will be about 1,498 BCM in 2030, which is double of the estimated aggregate water demand at present. But water balances for the country as a whole are of limited value since they hide the existence of areas of acute water shortage and do not reflect problems of quality.

India faces major challenges in the water sector with the per capita availability going down and demand growing due to urbanisation and industrialisation. Inefficiency of water use in agriculture, over-exploitation of underground water and contamination are other issues associated with water management in the country.

All these studies and research univocally says that it can not be 'business-as-usual' if India has to meet food and water demand and aspirations of its growing population. Smart solutions are urgently needed to holistically address to ensure adequate water supply for a growing India.

While there is a wide recognition that around 54% of India faces high to extremely high water stress, smart solutions and sound approaches to the utilization, conservation, protection and administration of the resource are yet to be implemented.

The objective of the 10th World Aqua Congress was to bring various stakeholders on a common platform, highlight smart solutions in various sectors, discuss inclusion of these solutions in policy framework and work towards ensuring a more sound future for the world we leave to our children. Accordingly, the Congress was targeted at natural and social scientists, practitioners, and technological innovators, as well as policy and decision-makers, financial stakeholders and investors, legal and regulatory specialists, and groups involved in capacity building.







Dr. Sunita Narain Director General, CSE





Themes & Topics

Following themes broadly described the focus areas of deliberations, with a certain degree of overlapping. The structure had been deliberately kept flexible and evolved depending on research contributions received from participants.

Water Resources: Availability, Management, Quality

- Status of Water Resources
- Water Quantity- Gaps in Demand & Supply in Various Sectors
- Water Exploration & Management- Latest Trends in Surface & Ground Water
- Hydrological, Hydro-geological, Geophysical, Remote Sensing and GIS Tools
- Additional Resource Creation (such as Rain Water Harvesting, Recycling etc.)
- Population Growth, Urbanization, Economic and Industrial Development
- Global Climate Changes & Impact on Water Resource Management
- Water Quality Criteria for various Uses-Present Status
- Water Quality Management

Water, Sanitation and Health

- Safe and Affordable Drinking Water for All
- Adequate and Equitable Sanitation
- · Water and Public Health
- Decentralizing Water Supply Systems
- · Water Leakages, Wastages, Poor Water Management

Wastewater Management & Reuse

- Water technologies
 - o Water/Wastewater Treatment
 - o Water Reuse & Recycling
 - o Water Quality Management
- The Circular Economy Reduce, Remove, Reuse

Emerging Technologies & Concepts

- · Nature-based Solutions for Water Sector
- Green Infrastructure
- Adaptive Water Management
- Water/Wastewater Treatment, Water Re-use & Recycling
- Water Quality Management
- Drinking Water: Purification, Bottling, Supply
- Salinity Management, Desalination
- Latest Technologies in Water Exploration and Management
- Software for Water Exploration/ Management/ Modeling
- Rainwater Harvesting
- Ground Water Management & Modeling
- Technologies for Irrigation and Agriculture

- Water Leakage Prevention Technologies
- · Utilities and Utility Management
- Sea Level Rise and Coastal Zone Management
- Preserving Oceans & Other Water Bodies as Carbon Sinks

Enhancing Water Use Efficiency

- Water Efficiency Including Water Footprint and Virtual Water Calculations
- · More Crop Per Drop- Agriculture Sector
- Emerging Irrigation Technologies
- Protected Cultivation Technology
- Water Use Efficiency in Domestic Sector
- Transportation and Distribution of Water
- Municipal Water Management
- Desalination and Related Technologies
- Municipal Solid Waste Treatment
- Performance Optimization and Efficiency Improvement in Industrial Sector
- Reuse, Recycling and Recovery
- Waste Water Handling

Smart Water Solutions for Smart Cities

- Efficient Water Distribution Systems & Reducing Water Loss
- Grey water use
- Ground Water Exploration & Management
- Rainwater Harvesting, Water Reuse, Recycle and Efficient Use
- Storm Water Management Solutions
- Revival and Preservation of Traditional Water Conservation Structures
- Rivers & Water Bodies Conservation
- Sustainable Water Management Practices
- Water Quality Management

Financial, Institutional, Legal & Policy Issues

- Water Policy and Water Usage Reform
- Water Rights, Pricing & Laws
- Government's Role in Water Management
- Water Access as a Fundamental Right
- Laws to Prevent Pollution of Water Bodies & Aquifers
- Municipalities and Sustainable Water Management at Local Level
- Water Infrastructure Investment and Financing









Session Chair Persons



Dr. D. K. Chadha Ex-Chairman-CGWB & President, GHS



Er. Vivek P. Kapadia Chief Engineer, WRD Gujarat



Mr. Samit Ray Director Government Affairs & Public Policy, United Technologies Corporation



Prof. P. S. Datta Ex-Project Director NRL, IARI



Prof. K. G. Moodley Honorary Research Professor Durban University of Technology South Africa



Dr. Vineet Gahlaut Head National Centre of Seismology MOES

Key Note Speakers



Dr. B. R. K. Pillai Commissioner (Command Area Development) MOWR, RD&GR, GOI



Shri A. B. Pandya Former Chairman, CWC & Consultant, WAPCOS



Dr. Pratibha Sharma Former Principal Scientist & Professor, ICAR-IARI



Dr. S. K. Malhotra Agriculture & Horticulture Commissioner, GOI



Prof. P. S. Datta Ex-Project Director NRL, IARI

Tech Talk



Mr. Pawan Kakkar Director, Jugapro New Delhi



Mr. Deeraj Kumar



Ms. Chethana Basavanna Head Water Solutions Enzen



Mr. Andrew Townsend Engineering Sales Director Micromet



Mr. Rob Richardson Consulting Engineer Hydro-Dis



Mr. Anuj Sharma COO, Piramal Water Private Ltd.



Mr. Safeer Usman Founder & CEO TetherBox Technologies Bangalore

Authors



Er. R. K. Khanna Former Chief Engineer Central Water Commission



Dr. Subhash C. Singh Sr. Geophysicist CGWB, Bhopal



Dr. Sayed Waliullah Aqili Water Resources Manager CRIDA, Afghanistan



Dr. Babar Ali Shah Jadavpur University Kolkata



Dr. Dewashish Kumar Sr. Scientist & Asst. Professor CSIR-NGRI



Mr. Amit Khatri (I.A.S.) Additional Commissioner Municipal Corporation



Mr. Shikhar Sharma Head (Plant & Environment) CleanFlo India



Ms. Kamala K. C. HOD, WASH, ACF International



Er. Chandan Kumar Project Coordinator (WASH &DRR) Save The Children, India



Mr. Ranjib K. Padhi SO, IGCAR Chennai



Prof. Pramod K. Pandey University of California



Dr. Abhijit Maiti Asst. Professor, I.I.T. Roorkee



Dr. P. K. Parhi Asst. Professor Central University of Jharkhand Ranchi



Ms. Meghal Arya Associate Professor CEPT University



Dr. Sunesh Sharma Sr. Scientist & Assistant Professor Himmotthan Society-TATA Trust Dehradun



Dr. Hema Diwan

Asst. Professor

National Institute of Industrial

Mr. Girish Chandra Mishra Director Saviram Engineering Consultants Noida



Dr. Kumud Raj Kafle Asst. Professor Kathmandu University Nepal



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Mrs. Indu Gupta Founder Paryavaran Shiksha Prasar Samiti Moradabad



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Mr. K. Jayaraj Research Scholar Gandhigram Rural Institute Tamil Nadu



Mr. Dalbir Singh Senior Fellow Institute of Development Studies Jaipur



Mr. Pravin Muchhadiya Team Leader - Water Resource Unit Sahjeevan, Gujarat



Ms. Minashree Kumari Research Scholar, ISM Dhanbad





Recommendations of 10th World Aqua Congress

• The work related to water is being dealt by many Ministries and Departments but there is no co-coordinating mechanism. Such a mechanism needs to be set up immediately and MOWRRD & GR should be empowered by enacting suitable legislations like the National Water Framework Law urgently.

- A national level empowered body, involving various stakeholders and ministries dealing with issue of water, is of prime importance, for proper coordination on this critical aspect. The concerned ministries like Ministry of Water Resources, Ministry of Agriculture, Ministry of Earth Sciences, Ministry of Drinking Water & Sanitation, Ministry of Environment, and any other ministry or department dealing with water must be part of this group.
- National level guidelines for usage of surface water and ground water may be formulated and implemented strictly.
- For proper ground water management, aquifers need to be understood. Nationwide aquifer mapping program should be made top priority using latest tools and technology, including airborne and ground geophysics, modeling etc.
- There is a lack of awareness regarding the growing scarcity of water. Such awareness needs to be created in various user groups like farmers, women, children and even domestic helps.
- Address guidelines on waste water discharge-stringent quality norms for different types of discharge, make reuse mandatory.
- The climate change is real and thus the looming water crisis in India must become the focal point of our policy making now. Given the fact that most of India saw a drought in early spring and devastation from flooding only a few months later in the same geographical area, conservation of every single drop of rain must become a national priority. We might continue to see heavy rainfall, however the number of rainy days is fast shrinking and the downpour is changing patterns, getting more intense and short lived. Traditional rain water harvesting methods need to be augmented with modern technologies in storm water management on a war footing.
- Online monitoring and automation of wastewater treatment plants will lead to minimal cost of water treatment, leading to more people voluntarily treating water.
- Encourage more scientific research on traditional water systems, not just individual water bodies.







Program Schedule

10" World Aqua Congress

International Conference

ne: Water - Smart Solutions for Growing India







Aqua Foundation's Excellence Awards 2016

The "AF's Excellence Award" are the highest award given by Aqua Foundation to its members & stakeholders in recognition of their outstanding achievements in the field of Nature. Aqua Foundation honours, in each World Aqua Congress, individual / nominees of corporate members who have made a mark in their respective fields of expertise or have made a significant contribution towards the Water & Environment Conservation Techniques.

The awardees of Aqua Excellence Awards for year 2016:







Dr. Sunita Narain Life Time Achievement



Mr. Ramesh Sharma The Scindia School, Fort, Gwalior Work on Traditional Wisdom



Mr. Ramesh Sharma The Scindia School, Fort, Gwalior Resource Management (Institutional)



Dr. Anuradha Singh Sushila Model School Holistic Development of Angels of Humanity



Shri A B Pandya
Outstanding Contribution Towards
Cause of Sustainability
(Social Sector)



Shri Man Mohan Madan Professional Excellence (Individual)



Dr. Subhash C. Singh Professional Excellence (Individual)



Dr. Anoop Kumar Srivastava Professional Excellence (Individual)



Dr. Naveen B. P. Academic Excellence (Individual)



Dr. G.S. Dwarakish Academic Excellence (Individual)



Dr. M. Krishnaveni Academic Excellence (Individual)



Prof. (Dr.) Davendra Singh Malik Academic Excellence (Individual)



Shri Nimai Lila Das Govardhan Eco Village Protection of the Quality and Supply of Freshwater Resources (Social Sector)



Mr. Gaurav Prakash Raja Professional Excellence (Individual)



Mr. Dipak Behera & Mr. Adarsh Agrawal OMQ Division, Tata Steel Limited Sustainable Development in Mining Sector



Dr. D. K. Chadha Global Hydrogeological Solutions Excellence in Resource Management (Institutional Sector)



Mr. Naresh Paliwal Dalmia Chini Mills, Unit-Ramgarh Excellence in Resource Management (Industrial)



10° 5



Mr. Samarakoon Banda VS Consulting (Pvt) Ltd. Sustainable Development in Hydropower Sector (Private Sector)



Dr. P. Jegathambal Karunya University Excellence in Development of Technology (Individual)



Dr. K. Parameswari Karunya University Excellence in Development of Technology (Individual)



Dr. S. Vinodha Karunya University Excellence in Development of Technology (Individual)



Mr. R. G. Agarwal
Dhanuka Agritech Limited
Outstanding Contribution towards
cause of Water Sustainability
(Private Sector)



Mr. Rampraveen Swaminathan International Paper APPM Ltd. Outstanding Contribution towards the cause of Sustainability (Private Sector)

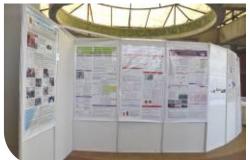


Ms. Neha Paul
D.C. Water World Supermart Ltd.
Excellence in Development
of Technology
(Industrial Sector)

Glimpses 2016













































Glimpses 2016























































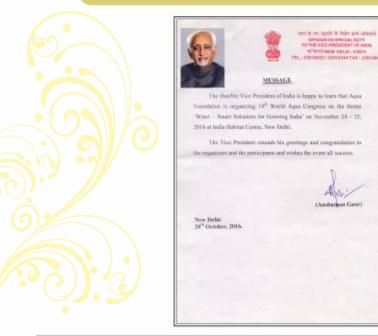








Messages









PROF M S SWAMMATHAN
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Fiz: +01 44 2925 1 310
Limit treatment/granufice.in



Sharen is an important hadrark to arquest for a Congress standed there has been greater water corse much progress both in water harvesting and ocuse that 2016 Congress will show more methods of an nation. I wish the Congress mach success.

M.S. SWAMINATHAN



Sh K.B.Birwan

Control Ground Water Board



I are indeed vary happy to note that 10° World Aqua Congress – International Conference is being argueized by the Aqua Poundation on theme "Water -Smart Selaktion has directing lead" in 2° & 2° November. 2016. Conference of tention terror provide a group coperating the agua Internity, so all only to quick behaviolities and long diseased with licent developmental scenario in the respective voter field, but also no consists of the three-conference of delegation of the behavior to customage ideas and long with each other.

I wish the Conference all the vaccess.









It gives me immerse pleasure ha note that Aqua Faundation is organising an insertiational Covincerce. "It Woold Aqua Congress 281,5" at trow Selfri with main theme as "Water - Smart School of the Growing main".

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For glad the Aqua Paundston is providing a plactic in for subsection or various littles relicable to optimal and substituted improgressor of enter nearcosts. Law our that also incommendation of the continuous will be sen-habitat and informational services in providing a substitute environment for emuring greats of not country.

I your them git the success and tope the complete of the sanference shall over a largitacting impaint on all makeholders.

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MESSAGE

Water resource planning, development, conservation and transappropertition and transappropertition development, but the same time we must understand that the success of any referrit initiative always critically bidges on must concerns of all taskshilders, both in the external environment and within the organization.

I am pleased to know that Aqua Foundation through the platform of

I stractely hope that the two days proceeding of the outle benefits all segments.

I wish them all the success and hope that the automor of the authoratic shall have a long basing benefit to our natural resources. Water & Engineeric.











Agus Congress-2016, um Vitarnational Certiference on Mater-Smart Solutions for Strowing Italia at New Bell's Floris 17-38 November, 2026.

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is some to provide roots or indicate an account to a register supply water up afficient and productivity, it is recovered to without the gapt, thy assistance of intervaluant Conference on suggesting nation-inment solutions in timely to deliberate on the lesson.

I aish the 12th World Aqua Cargress of success







Feedback





99%

1%

Venue and Arrangements



98.5%

■ 1.5%

Technical Papers and Sessions Quality



99.5%

■ 0.5%

Overall Hospitality of Organizers



100%

Excellent

Very Good

■ Good

Poor

Very Poor

Testimonials

Hydro-Dis® congratulates the organising committee for organising such a fantastic event. Our attendance at the Congress enabled us to gain a significantly improved understanding of the challenges faced by India to use, manage and invest in water to facilitate the Growth of India.

Mark Carey Managing Director, Hydro-Dis Australia We appreciate you and your team for organizing the conference, the conference deliberated on very important issues concerning the water crisis and brought together different expertise from across the country and discussed on many technologies/strategies to deal with. We are happy and thankful for the opportunity given.

Girija S. Mulay

Girija S. Mulay Sr. Hydralic Modeller, MWH Global, Maharshtra It's a very good decision to choose topic from 'Reviving Traditional Water and Environment Conservation Techniques' held in year 2015 to 'Water: Smart Solutions for Growing India', in year 2016. It is a very good direction.

Chandran Babu

Manager, Canar Geo survey Services Kingdom of Bahrain Commendable and a very well organised program. It all ran very smoothly. I learnt many new things at the conference and in that sense it was a success for me.

Dr. Meghal Arya Architect Arya Architects Asst. Professor CEPT University

Congratulations to the organizing team for a wonderful program.

Dr. S. K. Malhotra

Agriculture and Horticulture Commissioner, Ministry of Agriculture and Farmer's Welfare Very well organized and run. Excellent diversity of subjects and papers.

Rob Richardson

Consulting Engineer, Hydro-Dis Australia The conference has been very informative and innovative.

M. C. Ram EE (C) Delhi Jal Board It was indeed a mesmerizing experience.

Rajesh Kapoor

Sales Manager, Jugapro India

It was really good experience. I wish we could organize this kind of event in Nepal with joint effort.

Dr. Kamala KC

HOD, Action Contre La Faim WASH, Nepal Thank you very much for conducting such a well organized event. It was a grand success and a great learning experience.

Yogesh Sharma

Ex-Director MoEF and Ex-Advisor, NMCG Thanks a lot for allowing me to be a part of your community

Dr. Vineet Gahalaut

Head Seismology Ministry of Earth Sciences Thanks for Very Well organized Conference in terms of all segment of management. It was a pleasure to be part of this World Aqua Congress conference.

Er. Chandan Kumar Save the Children, India

The event was wonderful. It was good to connect with so many people from the water world.

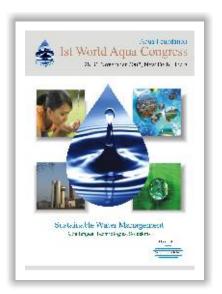
Kriti Sohel Golwalla

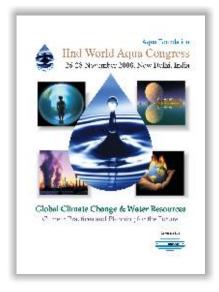
Marketing Coordinator Kamstrup Metering Solutions Pvt. Ltd. I would like to congratulate you and your team for successfully conducting the 10th world Aqua congress.

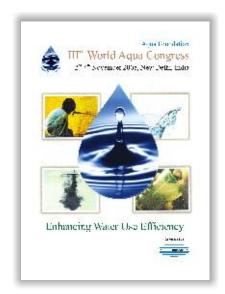
Dr. G. S. Dwarakish Professor and Head, NITK Surthakal, Karnataka

Previous World Aqua Congress - Themes & Topics

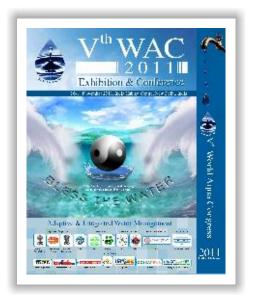
Previous conferences addressed the issues of Water Resources Availability, Management & Quality (2007), Global Climate Change & Water Resources (2008), Enhancing Water use Efficiency (2009), Emerging technologies in the water Sector-Present Status & Need for the future (2010), Adaptive & Integrated Water Management (2011), Water: Vision 2050 (2012), Balancing Panch-Tatwa (Five Elements) Strategically Towards Sustainability (2013), Balancing Development and Environment-Economic Growth with Environmental Sustainability (2014) and Reviving Traditional Water & Environment Conservation Techniques (2015).

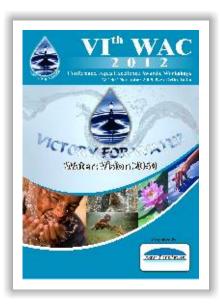


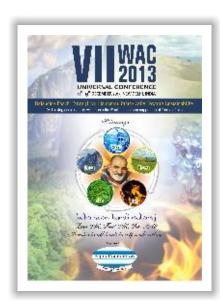


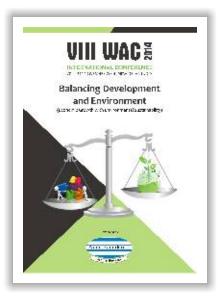














"If you cannot love each other, you cannot achieve your goal"





Aqua Foundation

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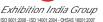




















Association of India

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