CODEBLUE

EXPLORING INDIGENOUS SOLUTIONS TO SOLVING THE WATER CRISIS

MARCH 09, 2019
KARACHI

www.codeblueconf.com
8:30 - 9:30 am - **Registrations**

9:30 - 10:15 am - **Inaugural Session: Main Auditorium**  
Justice (R) Wajihuddin Ahmad

10:15 am - 12:00 am - **Main Auditorium**

**Talk 1**  
Topic - **Myth of Water shortage**  
**Rafay Ahmed** - Chief Executive, HydroCon Engineers & Professionals Pvt. Ltd

**Talk 2**  
Topic - **Water Solutions in Action**  
**Saud Hashimi** - Project Lead, Big Data & Analytics. PwC Pakistan

**Tea Break**

**Talk 3**  
Topic - **Technical Solutions for Water Efficiency**  
**Dr. Shaukat Hameed** - Ex member Planning Commission Sci & Tech, Rector GIKI & Chairman Comstech

**Talk 4**  
Topic - **Pakistan's Lifeline: Management & Regulation of Indus Waters**  
**Dr. Erum Sattar** - Doctorate from Harvard Law School. Prof of Law at Tufts, Northeastern Univ & National Univ of Singapore

12:15 pm - 1:30 pm - Panel Discussion - **Administration's Perspective**  
Main Auditorium

**Taj Haider** - Senator  
**Dr Farooq Sattar** - Ex Mayor Karachi & Chairman KWSB  
**Asadullah Khan** - MD KWSB  
**Naeem Arif** - GM Projects South, WAPDA  
**Farzana Abbasi** - GM Sindh Irrigation Development Authority (SIDA)  
**Abdul Rahim Soomro** - Secretary Forest & Wildlife Dept, Govt of Sindh  
**Dr. Atif Mustafa** - Assoc Prof & Co Chair Dept of Environmental Engg, NED  
**Rafey Ahmed** - Chief Executive, HydroCon Engineers & Professionals Pvt. Ltd

**Moderator**  
**Adnan Asdar** - CEO Multinet
1:30 pm - 2:30 pm **Break (Lunch) - Videos Screening**

2:30 pm - 4:30 pm **Action Committee Breakout Sessions - Playground and Classrooms**

Facilitator:
- **Farhan Anwar** - Sustainability Urban Planner & Faculty at Habib Univ, IBA, IVS

**Water Infrastructure and Technology**
- **Dr. Shaukat Hameed** - Ex member Planning Commission Sci & Tech, Rector GIKI
- **Saud Hashimi** - Project Lead, Big Data & Analytics. PwC Pakistan
- **Rafey Ahmed** - Chief Executive, HydroCon Engineers & Professionals Pvt. Ltd
- **Mian Suhail Husain** - MD & CEO, Greshams

**Urban Water Management and Distribution**
- **Sohail Ahmad** - CTO, Data Communication & Control (Pvt) Ltd.
- **Sophia Hasnain** - CEO Linked Things
- **Basil Andrews** - Freelance Journalist

**Waste Water Management**
- **Farhan Anwar** - Sustainability Urban Planner & Faculty at Habib, IBA, IVS
- **Abdul Hameed Dhagia** - Enviromental Activist
- **Sidra Sikandar** - Researcher, Habib University
- **Afia Salam** - Enviromental Journalist

**Creating Awareness on Conservation**
- **Naeem Sadiq** - Writer and Journalist
- **Amber Ajani** - Lecturer, Habib University
- **Afia Salam** - Enviromental Journalist
- **Daniya Khalid** - Research and Communication Associate, Hisaar Foundation
- **Tofiq Pasha** - Enviromental Activist

4:45 pm - 5:45 pm **Presentations of Breakout Sessions and Q & A**
6:00 pm - 6:30 pm **Closing Session**
Address by
- **Dr. Erum Sattar**
- **Saeed Ghani** - Provincial Minister for Local Govt, GoS

**Convenor**
- **Samir Hoodbhoy** - CEO Data Communication & Control (Pvt) Ltd.
- **Azhar Jamil** - Executive Citizens for Change
About CodeBlue

CodeBlue is an initiative, curated by concerned citizens and leading water experts from the fields of engineering, social sciences, communication & design, science and architecture. It aims to address and explore solutions for today’s most pressing water issues. CodeBlue aims to inspire the decision makers and community to take action in reshaping the water policy and solution making culture in Pakistan.

The goal of this water conference is to provide a forum for engineers, designers, policy makers, decision makers and change makers to share ideas about improving the current water solutions and consumption practices. To foster meaningful discussion and outcomes, the conference includes interactive panel sessions, presentations, workshops, and industry demonstrations.
ABOUT CITIZENS FOR CHANGE

Citizens For Change (CFC) is focused on helping to improve the lives of ordinary Pakistanis by working to identify and offer solutions to their major problems together with technical experts, civil society and government/people’s representatives.

Our goal is to transform Karachi into a 21st Century urban mega city by solving key issues for its 20+ million residents - together as a community – and helping them live together, peacefully, with hope and dignity, and continue to build this great country of ours.

Citizens For Change is a new form of people power. Using technology, social media, activists and experts, we hope to make real change happen, street by street, in Karachi. We were founded by a group of Karachi-ites who feel the time is right for such a non-partisan, apolitical approach. There are enough good people in this city who want to act, our hope is to provide the tools and the expertise and the backing through the CFC platform to allow them to act to solve their problems.

Our Major Areas of Focus are: Water, Power, Ease of Living (Sanitation, Transport, Infrastructure), Economic Opportunity, Education, Environment, Local Government.

Members: Azhar Jamil
Samir A. Hoodbhoy
Saud Hashimi
Humera Jamil
Abdul Hamid Dagia
At Data Communication & Control (Pvt.) Ltd, we have made an assessment of potential problems facing Pakistan’s burgeoning population and are prepared to venture together with partners in the indigenous development of technological solutions.

**Challenges**

- Urban Mass Transport
- Electricity shortages and load shedding
- Energy shortfall
- Water Management
- High rise Building Management
- Population Proliferation
- Industrial Productivity Enhancements
- Technical Skills Development

**DCC’s Efforts & Prescriptions**

- Intelligent Transport Services for Green / Orange Line BRT system. Subway needs assessment
- Smart meters and solutions for the Distribution Grid
- Alternate Energy Sources development Solar Farms, Hydrokinetic Power
- Flood Monitoring, Drip irrigation and Water conservation technologies
- Integrated Building Management Systems
- Demographic Planning with modeling and simulation Tools
- Computerized Flexible Manufacturing Controls, Robotic Platforms
- Simulators for industrial, commercial and military systems

*At DCC, we care. Join hands with us for Pakistan’s technological progress*
ABOUT
PLAYGROUND-DHANANI
SCHOOL OF SCIENCE AND ENGINEERING

The playground is a community space, and a university-wide ecosystem, designed for creative collaborative work that helps transform the teaching and learning experience at Habib. It serves as a gateway, and enhances accessibility, to making and design activities across departments and schools.

Through workshops, pop-ups and projects, students will be able to learn, and apply their learning, across disciplines and media – from sewing to 3D printing, photography to film, board games to phone apps, wood work to metal work, and beyond.
Talk - The Myth of Water Shortage & Emergent Measures that Need to be Taken to Control It.

Rafey Ahmed Siddiqui holds a Masters degree in Water Resources Engineering from Colorado State University, USA. He is currently the only Pakistani ENVSP (ENVISION Sustainability Professional) and also the only Pakistani to hold PMP, ENVSP and LEED together. Mr. Ahmed has consulted and led a wide range of private and public sector projects in Pakistan. He is currently serving as the Chief Executive at HydroCon Engineers & Professionals Pvt. Ltd. Ahmed will discuss the myth between the water availability and mismanagement and will also share mitigation measures including the use of innovative technologies for water conservation and sustainable infrastructure design.
Mr. Saud Hashmi has spent over 20 years as an entrepreneur in addition to developing and building new digital data driven businesses for some of the largest companies in the world. He is currently helping PwC Pakistan build a Big Data & Analytics Center.

Mr. Hashmi holds an MBA from Harvard Business School and has a B.A. in Economics from Princeton University with a focus on econometrics and applied Statistics. His talk will explore how people, communities and countries around the globe have solved their water problems with ingenuity, innovation and the right types of investments.
Dr. Shaukat Hameed Khan is a Pakistani physicist who holds BSc and DPhil degrees from Oxford University. He served as the Chief Scientist for Pakistan Atomic Energy Commission, where he was involved in R&D, teaching and production of lasers, with exports to S.E Asia and EU. As Member (Science and Technology) in the Planning Commission, he directed the Vision 2030 Project and was later involved in the preparation of the National Industrial Policy in 2011 as the sixth rector of Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI). At COMSTECH, he authored the OIC Ten Year Plan for S&T and the RE Profile of OIC countries. For his talk Dr. Shaukat Hameed will present technological solutions that can be adopted to help solve the water crisis that Pakistan faces.
Talk - **Pakistan’s Lifeline: Management & Regulation of Indus Waters**

Dr. Erum Khalid Sattar received her Doctorate in Juridical Sciences (S.J.D.) from Harvard Law School (HLS) in 2017. Her research focuses on issues of water federalism and trans-boundary water sharing in the Indus River Basin. Prior to Harvard, she qualified to become a Barrister-at-Law from The Honourable Society of Lincoln’s Inn. She co-founded the Water Law Study Group at HLS and teaches water law and policy and environmental law at Pace University School of Law, Northeastern University School of Law, and Tufts University. She will also be a Visiting Professor at the National University of Singapore School of Law in 2019-20 where she will teach the school’s first-ever course on water law, ‘Water Rights and Resources’.
The solution to the crisis of water that we all face requires a multifaceted approach that can only be possible if both the public and the government collaborate to mitigate this crisis. This panel will provide a platform for a discourse between the two groups enabling them to present their perspective on the water crisis and discuss the measures that need be to be taken to alleviate it. The panel will then be open to questions from the conference attendees.

Moderator:
Adnan Asdar - CEO Multinet

Panelist:
Taj Haider - Senator

Dr Farooq Sattar - Ex Mayor Karachi & Chairman KWSB

Asadullah Khan - MD KWSB

Naeem Arif - GM Projects South, WAPDA

Farzana Abbasi - GM Sindh Irrigation Development Authority (SIDA)

Abdul Rahim Soomro - Secretary Forest & Wildlife Dept, Govt of Sindh

Dr. Atif Mustafa - Assoc Prof & Co Chair Dept of Environmental Engg, NED

Rafey Ahmed - Chief Executive, HydroCon Engineers & Professionals Pvt. Ltd
The idea of the breakout sessions is to provide a creative space for experts and concerned citizens to brainstorm solutions for the water crisis based on specific areas of the water crisis. This session will be an interactive activity with a goal of compiling suggestions and recommendations which will then be taken up for implementation with policy makers and relevant government agencies.

Venue

Classrooms and Playground
With the availability of conventional solution like dams as well as innovative technological solutions such as desalination plants, atmospheric water generation etc there is a need to address which one of these or a combination of them is the right choice to solve our current water crisis in a sustainable way. Are these solutions feasible? Can indigenously developed water technologies help alleviate this crisis?
“If you can’t measure it, you can’t manage it.” This sentiment is required to make educated, data driven decisions regarding the efficient utilisation of the precious resource of water. This session will have a discussion on the measures that need to be taken to manage water effectively for cities like Karachi. We will explore questions such as: What are the suitable pricing structures and policy measures that can be taken? How can water metering be efficiently done on both source and consumer level? How can we improve the water supply management by reducing the manual involvement and automating the valve controls? How pressing is the need for pipeline mapping and water flow measurement? What is the capacity and condition of the current water infrastructure that includes the distribution network, reservoirs, pumping stations and filter plants? What kind of long and short term policy, planning and projects are needed to solve these issue for the years to come?
Due to an increase in population and rapid industrialisation drinking water quality is deteriorating day by day in Pakistan. According to (WHO) World Health Organization 50% of diseases and 40% of deaths in Karachi occur due to contaminated water. To use water in a sustainable way requires the recycling and proper treatment of wastewater. In most cases the used water is directly dumped into the sea or rivers without any treatment. This water is contaminated with biological as well as chemical toxic waste that is extremely harmful to the marine ecosystem. Techniques like grey water recycling, water quality testing, sewage treatment and recycling that are feasible for Pakistan will be discussed and built upon in this session.
Creating awareness on conservation of water

Farzana Abbasi
General Manager Sindh Irrigation and Drainage Authority (SIDA)

Naeem Sadiq
Writer at DAWN and Citizens Activist

Amber Ajani
Lecturer, Environmental Science, Habib University

Tofiq Pasha Mooraj
Environmental Conservationist Expert, Concerned Citizen

Daniya Khalid
Research and Communication Associate, Hisaar Foundation

There is a need to raise awareness about water conservation to build a common understanding of water issues and to create shared values on how water should be used and managed. Change starts from the individual and it is important that we all take responsibility to help resolve this issue. How can the media be used to spread awareness about water conservation? Can the message of water conservation be included in curriculum books and taught in schools? How can individuals identify water issues and collaborate with others to solve them?
SPONSORS

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playground

Dhanani School of Science and Engineering

CITIZENS for Change

Eva

Tapal

Amreli Steels

CERP | Centre for Economic Research in Pakistan
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