REPORT
NATIONAL CONFERENCE ON
WATER FOR PEOPLE, WATER BY PEOPLE
WORLD WATER DAY
Lahore, 19 March 2016

PREAMBLE

Royal Society of Chemistry (Pakistan Section), The Environ Monitor (Leading Environmental Journal of Pakistan) National Foundation for Environmental Education & Research and IMGA (Pakistan Chapter) aim at creating environmental awareness among the masses and equipping the professionals/researchers/executives with state-of-the-art know-how about natural resources, chemistry & environment. One day National Conference on Water for People, Water by People had been held in Ambassador Hotel Lahore on 19 March 2016 (0800-1500 hours) in connection with World Water Day 2016. An endeavour had been made to cover all environmental facets relevant to management of water issues and highlighting role of chemistry. Professionals with vast practical experience had made presentations.

Water Availability

- 97% of total water is found in seas and oceans. It is not available for human use. Available water is found in rivers only which is lesser than 1% of the total quantity. River water is used for irrigation, industrial, domestic & other uses after it passes through storage dams, barrages, head works, link canals, main canals, branch canals, distributaries, minors and channels.

- Availability of fresh water at global and Asia level is about 6,000 and 2,500m³/capita/year respectively. World average figure is projected to decrease to 4,800m³/capita/year by the year 2025 for a population of over 8.3 billion. 73% of global population lives in continents of Africa & Asia and suffers from water scarcity. Million Development Goal 7 calls for provision of safe drinking water to 50% population by year 2015. At present availability of water is about 1,000m³/capita/year in Pakistan which is decreasing rapidly.

- Pakistan is blessed with 143 million acre feet (MAF) surface water, 56 MAF underground water, 25 MAF rain water and 10 MAF spring water. It has 2 reservoirs, 3 barrages and 12 link canals with one of the largest irrigation network in the world.

OBJECTIVES

The objectives of the Conference were as under:

- To provide professional platform for dissemination of the latest researches, practices & techniques about water management through presentations, discussions and case studies.

- To create environmental awareness among the stakeholders relevant to water concerns at individual, community, national, regional and global levels.
PARTICIPATION
50 persons attended the Conference from following disciplines/organizations:

- Policy, planning and executives of water sector.
- Representatives of public and private sectors dealing with water issues especially irrigation & WAPDA.
- Environmental engineers, scientists, academia, consultants, medical, geologists & legal practitioners, NGOs, Chemists and chemical engineers.
- Environmental, safety, health and quality managers of water industries.

SUBJECTS COVERED
The following subjects were covered during the Conference:

- Development and exploration of water resources.
- Causes, consequences and management of water pollution and water borne diseases.
- Water and waste water treatment.
- National Policy, institutional and legal framework with respect to water resources.
- Water Quality, Safety, Security, Sustainable Development and NEQS.
- Supply and demand of water.
- Hydropower and water storage.
- Medical geology and water resources.
- Divine management of water resources.
- Gender role in water chain

AGENDA
The agenda had included the presentations given below:

Inauguration Session (0800-1120 Hours)

0800 – 0900 Hours  Registration of Participants
0900 – 0905 Hours  Recitation from the Holy Quran
0905 – 0920 Hours  Introduction of the Conference
                   Engineer Muntaz Hussain, Conference Secretary
0920 – 0930 Hours  Opening Remarks
                   Prof Dr CM Ashraf, Royal Society of Chemistry
0930 – 1000 Hours  Small Hydropower and Hydrological Network
                   Prof E.I.L. Silva, Sri Lanka
1000 – 1030 Hours  Global Water Laws
                   Taimur Khan, Advocate, Lahore
1030 - 1100 Hours  Pakistan’s Floods are not just Natural Hazards: With Special Reference to
                   July-August 2010 Flood
                   Prof Dr Syed Iazaz Ahmad Bukhari, Islamia University, Bahawalpur
1100 - 1130 Hours  
**Award of Certificates/Group Photo/Refreshments**

**Technical Session-I (1130 – 1250 Hours)**

**Chair**  
Prof E.I.L. Silva

1130 – 1150 Hours  
**Biosorptive Removal of Arsenic (III) From Water Using Leaves of Phoenix Dactylifera (Date Palm)**  
*Mohsin Rashid, Punjab University, Lahore*

1150 – 1220 Hours  
**Miracle of Rivers-Development of Water Resources in Pakistan**  
*Col (R) Abdul Razaque Bugti, Lahore*

1210 – 1230 Hours  
**Groundwater Arsenic and its Relationship with Alluvial Sediments: Case Study of Tando Muhammad Khan District, Sindh**  
*Dr Adnan Khan, University of Karachi, Karachi*

1230 – 1250 Hours  
**Leptospirosis, A Water Borne Disease: As an Occupational Health Hazard of Rice Growing Farmers in Punjab**  
*Prof Dr M Athar Khan, University Institute of Public Health, Lahore*

**Technical Session-II (1250 – 1450 Hours)**

**Chair**  
Prof Dr Sajid Rashid Ahmad

1250 – 1310 Hours  
**Challenges and Options for Sustainable Use of Groundwater**  
*Ghulam Zakir Hassan Sial, Irrigation Research Institute, Lahore*

1310 – 1330 Hours  
**Parasitic Water Borne Diseases**  
*Dr Asma Abdul Latif, LCWU, Lahore*

1330 – 1350 Hours  
**Run off Simulation Sedimentation Yield and Nutrient Loss**  
*Miss Zaibunissa and Miss Zahra Majeed, Punjab University, Lahore*

1350 – 1410 Hours  
**Evaluation of Quality Parameters for Drinking Water from Lahore**  
*Dr Saadia Rashid Tariq, LCWU, Lahore*

1410 – 1430 Hours  
**Spatial Mapping of Physicochemical Parameters Causing Contamination in Groundwater Using Cokriging Geostatistical Technique**  
*Maqsood Ahmad, Punjab University, Lahore*

1430 – 1450 Hours  
**The Bloodless Water Wars – A Menace to Pakistan**  
*Altaf Iqbal, ACE, Lahore*

1450 Hours  
**Prayer and Lunch Break**

**RECOMMENDATIONS**

In view of the above discourse following recommendations are made for efficient and effective management of global/national water resources:

- Global bodies such as United Nations, Organisation of Islamic Countries (OIC), SAARC & ECO and National Institutions need to revisit the water related protocols, conventions & respective national legislation for improving their efficiency & effectiveness.

- All divine religions advocate equality & respect for utilization of natural resources including water. In this connection Inter-Faith Dialogue may be initiated for improving performance of water sector.

- Water resource should be utilized optimally in terms of both quality and quantity well within carrying capacity of the environment.
There is need of popularizing organic farming for producing natural foods & grains with required input of water & farm yard manure and minimum application of environmentally hostile agricultural chemicals.

Agricultural practices should be revamped for discouraging water intensive uses.

Although water is used in thermal as well as hydro power projects yet preference should be given to eco-benign hydropower generation.

In view of dwindling fresh water resources it is advisable to undertake extensive research work for developing economical and eco-friendly technologies for desalination of sea water.

Indiscriminate discharges of untreated municipal & industrial effluents into environment should be stopped forthwith.

Both quality & quantity of influents/effluents should be monitored at micro and macro levels.

Alliance building among stakeholders should be undertaken immediately.

There is dire necessity of formulating global water agenda and its implementation for sustenance of life on Planet Earth.

Aquifer recharging demands special attention on part of water professionals.

Impacts of climate change on water resources should be studied in detail for avoiding extreme events like floods and droughts.

Marine pollution should be controlled with active support of public and private sectors.

Costal management including tourism should be done on priority basis