

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)

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

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