



PAKISTAN ENGINEERING CONGRESS
67TH ANNUAL SESSION

**ENVIRONMENT PROTECTION
AND
RESOURCE CONSERVATION**



**S
Y
M
P
O
S
I
U
M**

ENVIRONMENT PROTECTION AND RESOURCE CONSERVATION



PAKISTAN ENGINEERING CONGRESS
67TH ANNUAL SESSION

**SYMPOSIUM
ON
ENVIRONMENT PROTECTION
AND
RESOURCE CONSERVATION**

VOLUME XXV

MAY, 1998 LAHORE

The Pakistan Engineering Congress as a body does not hold
itself responsible for the opinions expressed by
different authors in this Volume

Compiled and Edited

By

Engr. Prof. Syed Ali Rizwan

Convener Library and Publication Committee

- Members:
- | | |
|------------------------|---------------------|
| 1. Iftikhar Ahmed | 2. Khalid Javed |
| 3. Nayyer Saeed | 4. Ijaz Cheema |
| 5. Qasim Shafi | 6. Liaquat Bashir |
| 7. Dr. Bagh Ali Shahid | 8. Dr. Izhar-ul-Haq |
| 9. Muhammad Azam | 10. Riaz Ahmed Khan |

Published

By

Engr. Dr. Izhar-ul-Haq

Convener Annual Symposium Committee

ON BEHALF OF
PAKISTAN ENGINEERING CONGRESS

Price

Members - Free

Others - Rs. 100.00

Printed at:

A-One Publishers

Al-Fazal Market Urdu Bazar Lahore

Phone No. 7232276-7224655-7357177

TABLE OF CONTENTS

Sr. No.	Paper No.	Title of Paper	Author's Name	Page No.
1	207	Environmental and Social Soundness Assessment of 700 MW Thermal Power Plant	Javed A. Aziz and Rafiq Shad	1
2	208	Nitrate, Fecal Coliform and Pesticides in Shallow Groundwater of Raiwand, Lahore, Pakistan	Shahzad Afzal, Muhammad Farooq, M. Hammad Atique Khani, Muhammad Ismail Khan, & Karamat Ali	14
3	209	Pakistan in the Grip of Deficient Contemporary Environmental Technologies	Ahmed Nawaz Cheema, S.K.	23
4	210	Ghazi Barotha Power Project - A Case Study in Environmental Protection and Resource Reservation	Brig (R) Engr. Khurshid Ghias Ahmad	29
5	211	Salinity Extent and its Management in Punjab	M. Azhar Javaid, Ch. Karamat Ali, Dr. Muhammad Javed	35
6	212	Environmental Conservation of Wetlands in Pakistan	Engr. Dr. Izhar-ul-Haq, Engr. Muhammad Arshad, Javaid Zaheer Iqbal	54
7	213	Drainage and Environment Evaluation of Past Interventions and Future Strategies in Pakistan	Asrar-ul-Haq, Dr. Bagh Ali Shahid Dr. Abdul Sattar Shakir	69
8	214	Conservation of Water Resources of Pakistan	Dr. Izhar-ul-Haq and S. Tanveer Abbas	87
9	215	Environment and Cancer	Col. Mumtaz Hussain	104
10	216	Eco-Impacts of Toxic Pesticides	Col. Mumtaz Hussain	113

ENVIRONMENTAL PROTECTION AND RESOURCE CONSERVATION

KEY NOTE ADDRESS

By

Dr. Izhar-ul-Haq

Pakistan Engineering Council has held 25 Symposiums since 1957 on various topic of national importance. The executive council decided to hold Symposium on "Environmental Protection and Resource Conservation" for the 67th Annual Session and a circular eliciting papers on the subject was sent to all the members. The objective of the Symposium was to create an awareness, deliberate the issues and formulate recommendations regarding the subject Symposium. Response for the papers was slow and steady and finally ten papers were received. The Authors have tried to sustain the standard of PEC.

The papers are concerning: A Case study in Environmental Protection of Ghazi Barotha Power Project, Salinity and Drainage projects, Conservation of wet lands, Ground Water Pollution, Portable Water, Sewerage Treatment and Assessment of Environmental Effects of Thermal Power Plants. The paper on Water Conservation high-lights, the water requirement, future shortages and conservation of this precious source. However, no paper has been received on Re-cycling and Energy Conservation.

The rapid increase in population, accompanied by urbanization and industrial growth with scant regard to environmental concerns has accelerated the process of environmental degradation. Untreated Industrial effluent, sewerage water, saline ground water drainage is being disposed off into the rivers thereby degrading the quality of water and the aqua life is disappearing. The smoke from the industries, emission from the rapidly increasing vehicles, burning of refuse and fallen leaves and dust rising from the dug up roads and excavations are polluting the air and taking a heavy toll on the health of the citizens. The noise level in big cities has surpassed the permissible levels. The situation is exacerbated by general lack of awareness.

We have the environmental laws. What is required, is their implementation. We need to educate our children and create an awareness about the environmental pollution, green earth and conservation of resources. The area under forests is the lowest in Pakistan. More trees and forests are required to clean the air. The surface water resource needs to

be preserved and conserved for domestic and agriculture use if we have to survive as a free nation. The existing water reservoirs are depleting fast due to sedimentation, if we do not conserve water by building reservoirs, we are going to be an other Ethiopia. The fertile land needs to be reclaimed from water logging and salinity. Most of the resources are finite and there is need to recycle them. Industries involved in recycling need to be encouraged. We need to use our resources judiciously and conserve specially the energy which is obtained from the imported fossil fuels. There is a dire need to harness our hydel power which is a renewable, economical and environmentally clean resource.

We should not waste bounties of nature and spoil our environment. The development should be sustainable and compatible with the environment. Our future generation should not complain that we have wrecked our resources. Global warming due to depletion of the Ozone layer and El-Nino Phenomena is creating the seasonal changes and drought in the far-east. Dealing with complex issues regarding the sustainable use of national resources, their protection and conservation will require comprehensive planning, participation of general public, communication at all levels, commitment and decision at the highest level.

I am sure there would be lively discussions and deliberation on the subject symposium based on which recommendations would be prepared for consideration of the Government.
