



In the Name of Allah, the Merciful the Beneficent

Soil Science News

January – March 2003

Soil Science Society of Pakistan

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Message of President, SSSP

I would thank all Soil Scientists and Agronomists for reposing their confidence and electing me to the prestigious position of President. It will be a great challenge for me to lead the Society after the inspiring leadership of Dr. M. Mohsin



Iqbal and Dr. Riaz Hussain Qureshi, the past Presidents. Dear Colleagues! Concerns are growing about extent and rate of soil degradation in the country, and its impact on agricultural productivity and preservation of natural resources. Salinization, use of brackish water, depletion of soil fertility, erosion, overgrazing, deforestation and inappropriate agricultural practices account for most of the degradation. The challenge to Soil Scientists is to generate appropriate technologies to combat the issues of degradation of natural resources and water scarcity. On the other hand, responsibility of policy makers is to strengthen institutions and provide incentives to scientists doing research in natural resources that will guide farmers towards productivity increases compatible with sustainable management of natural resources. Let us join hands together to meet this challenge.

Executive Council of SSSP for 2003-2004

Elections for the 2003-2004 Executive Council were held in November 2002 under the supervision of an Election Commissioner, Dr. M. Anwar-ul-Hassan, Professor of Soil Science, University of Agriculture, Faisalabad. Members of the new Executive Council are:

President: Dr. Nisar Ahmad, Chief/Project Director, NFDC, Islamabad

Vice Presidents:

- Balochistan: **Dr. M. Abdullah**, Director, Water Resources Research Centre, Quetta
NWFP: **Dr. Zahir Shah**, Assoc. Prof., NWFP Agri. Univ., Peshawar
Punjab: **Dr. Maqsood A. Gill**, Prof. & Chairman, Deptt. of Soil Science/Director Research, Univ. Agri., Faisalabad
Sindh: **Dr. Kazi S. Memon**, Professor of Soil Science, Sindh Agri. Univ., Tandojam
AJK: **Dr. Kaleem Abbasi**, Assoc. Prof., Univ., College of Agri., Rawalkot

Secretary:

Mr. M. Aslam Kausar, CSO, Nuclear Institute for Agriculture and Biology, Faisalabad

Treasurer:

Dr. M. Ibrahim, Agri. Chemist, Ayub Agri. Research Institute, Faisalabad

J. Secretary:

Dr. M. Mahmood-ul-Hassan, SSO, Land Resources Research Program, NARC, Islamabad

Councilors:

- Islamabad: **Mr. Ejaz Rafique**, SSO, Land Resources Research Program, NARC, Islamabad
Punjab: **Mr. Saleem Akhtar**, ARO, Ayub Agri. Research Institute, Faisalabad
Dr. Khalid Saifullah, Asstt. Prof. Univ. Arid Agri., Rawalpindi
NWFP: **Dr. Sabir Hussain Shah**, Agri. Research Institute, Tarnab, Peshawar
Student: **Mr. Tariq Aziz**, Ph.D. student, Deptt. of Soil Science, Univ. Agri., Faisalabad

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The 2003-2004 Executive Council was sworn in on 18th January, 2003 in an august ceremony held at NFDC, Islamabad. Professor Dr. Riaz Hussain Qureshi, Vice Chancellor, Univ. Agri., Faisalabad administered the oath. In addition to the newly elected Executive Members, distinguished soil scientists from all around the country graced the occasion. In his address, Dr Qureshi congratulated the newly elected Executive and assured his patronage and continued support. He stressed upon the soil scientists to focus their



energies for handling the challenges posed by emerging soil problems and environmental concerns to meet the food requirements of continuously growing population in the country.

National Directory of Soil Scientists (5th edition) has been published by the **Soil Science Society of Pakistan**. The Directory documents up-to-date information on 540 soil scientists. Discipline-wise break-up of soil scientist community in Pakistan is: Soil Fertility, 307; Soil Salinity, 105; Soil Mineralogy, 43; Soil Physics, 25; Soil Conservation, 15; Agronomy & others, 7.

Special Seminar

Role of Soil Science in National Development

by Dr. M. Mohsin Iqbal,
Chief Scientist/Director,
NIAB, Faisalabad

A special seminar was organised at the Oath Taking Ceremony of new Executive of SSSP on 18 January, 2003 at NFDC, Islamabad. A brief of the seminar is:

Soils deliver our basic needs of food and shelter and play a central role in determining the quality of our environment, and thus, are crucially important in national development issues such as food security, poverty alleviation, environmental protection, etc. Soils have five major roles, i.e., i) Medium of plant growth, ii) Controller of hydrological cycle, iii)



Nature's recycling system, vi) Habitat for myriad of living organisms, and v) Engineering medium.

Soil science, emerged ~150 years ago has made a great impact on agriculture worldwide. Discovery and use of fertilizers, soil conservation, soil reclamation & saline agriculture, and Green Revolution that averted famine, are undoubtedly some of the major contributions of the soil science for the sustenance and development of humanity. Soil scientists are now engaged in the environmental arena, i.e., soil quality, biogeochemical cycling, soil pollution, conservation tillage, agroforestry, and use of geographic information system, etc.

The challenges posed for soil science in 21st century are two-fold, i.e., Scientific/Technical, and Cultural/Economic. Scientific and Technical Challenges can be handled by better understanding of soil in time and space, better understanding of soil properties and processes, and better understanding of soil use and management. Cultural, Social and Economic Challenges include food security, especially sustainable food production - which is far from being solved in many areas of the world. Another challenging issue is soil and human health. There exist many relations between soil and human and environmental toxicology which are not well understood. In some countries, these issues are as important as food production. Promoting teaching of soil science at primary and secondary school level is important, without which all these targets cannot be achieved.

Founded in 1958 and reinvigorated in 1985, SSSP is the torch bearer of all these efforts in Pakistan. The Society has been trying to bring fore the major issues related to soils in particular and to agricultural development in general in its nine national congresses arranged during the past two decades. At global level, the same objectives are being pursued by International Union of Soil Science (IUSS).

Our traditional way of considering soil mainly as a substrate for agriculture and forest production must change to accommodate new ecological concepts and insights. Soils are now viewed as source and sink for CO₂. Soil science, therefore, should cooperate internationally with other sciences especially in the field of carbon sequestration. Biodiversity is another issue having an important soil component. There exist far more biota in the soil than above it which are endangered by physical and chemical soil degradation. Therefore, soil biology should strongly cooperate in research on biodiversity. Soil scientists in Pakistan should use simulation modeling and decision support systems that can predict performance of agroecosystems with respect to various processes, cycles, management systems, parameters, etc.

New Chief Editor of Pakistan Journal of Soil Science

Dr. M. Mohsin Iqbal, Chief Scientist/ Director, NIAB, took office of the Chief Editor, Pakistan Journal of Soil Science w.e.f. January 2003.

10th National Congress of Soil Science

The 10th Congress is scheduled for March 2004. Exact dates and venue of the Congress will be decided in next meeting of the Executive Council.

Honours & Awards

Best Scientist of the Year Award – 2000

Professor Dr. Riaz Hussain Qureshi, Vice Chancellor, Univ. Agri., Faisalabad has earned the prestigious *Agha Hasan Abedi Prize for Best Scientist of the Year – 2000* in the field of Agriculture, conferred by the *Pakistan Academy of Sciences*. The Award carries a cash prize of Rs. 200,000.00, a Gold Medal, and a Certificate. The Soil Science News, on behalf of Soil Scientist community, congratulates Dr. Riaz Qureshi and admires his distinguished professional achievements which have brought laurels to Soil Science Society of Pakistan.

Best University Teacher's Awards – 2002

Higher Education Commission's Best University Teacher of the Year Awards – 2002 have been conferred upon the following distinguished soil scientists.

Prof. Dr. Muhammad Aslam, Principal, University College of Agriculture, D.G. Khan

Prof. Dr. Amanullah Bhatti, Chairman, Deptt. of Soil and Environmental Sciences, NWFP Agri. Univ., Peshawar

Prof. Dr. Kazi Suleman Memon, Deptt. Soil Science, Sindh Agri. Univ., Tandojam

Prof. Dr. Qasim Jan, Deptt. Soil Science, Faculty of Agri., Gomal Univ., D. I. Khan

Congratulations to All for earning this exceptional distinction!

National Workshop on Rice-Wheat Cropping System Management

A two-day National Workshop on Rice-Wheat Cropping System Management was held at NARC, Islamabad on 11-12 December, 2002. The Workshop was organized by LRRP, NARC and sponsored by PARC and Rice-Wheat Consortium for Indo-Gangetic Plains. More than 50 agricultural experts of different disciplines, engaged in Rice-Wheat

Systems research, participated in the Workshop. The Workshop addressed Agronomic & Extension Issues, IPM, Insects/diseases & Vertebrate Control, Soil Physical Constraints, and Socio-Economic Issues. A soft copy of Workshop Abstracts and Recommendations can be obtained by requesting through email (smakhtar206@hotmail.com).

Promotions

Dr. M. Mohsin Iqbal, Chief Scientific Officer/Director, NIAB, Faisalabad and Life Member of SSSP has been promoted as Chief Scientist, Pakistan Atomic Energy Commission.

Dr. M. Yousaf, Associate Professor, Department of Soil Science, Arid Agri. Univ., Rawalpindi has been promoted as Professor of Soil Science.

Mr. M. Aslam Kausar and Mr. Faqir Hussain, Principle Scientific Officers, NIAB, Faisalabad have been promoted as Chief Scientific Officers.

Dr. M. Younis Nadeem and Mr. Ahmad Hassan, Assistant Agri. Chemists, Chemistry Section, AARI, Faisalabad have been promoted as Agricultural Chemists.

Dr. M. Ishaq, Assistant Research Officer, Chemistry Section, AARI, Faisalabad has been promoted as Assistant Agri. Chemist and posted at Lodhran.

Congratulations to All from Soil Science News!

Appointment

Dr. Mushtaq Ahmad Khan, Professor of Soil Science has been appointed Dean, Faculty of Crop and Food Sciences, Arid Agri. Univ., Rawalpindi.

Visits/Fellowships

Dr. M. Mohsin Iqbal, Chief Scientist/ Director, NIAB, visited Bangkok, Thailand on Nov. 18-22, 2002 to participate in the IAEA Project Review Meeting on "Restoration of Soil Fertility and Sustenance of Agricultural Productivity". He presented work progress on "Inoculation of legumes as cash-cum-green manure crops in rice-wheat cropping system".

Dr. Kaleem Abbasi, Assoc. Prof., Univ. College of Agri., Rawalkot has earned the George Forster Research Fellowship in Germany.

Retirements

Dr. Mushtaq A. Chaudhry, Professor of Soil Science/Dean, Faculty of Crop and Food Sciences, Univ. Arid Agri., Rawalpindi, has retired on 31 January, 2003 after 35-year professional service in different agricultural Institutions. Dr. Mushtaq Chaudhry, a distinguished soil conservation

specialist of the country, did M.Sc. from West Pakistan Agricultural University, Faisalabad and Ph.D. from Quaid-i-Azam University, Islamabad. Starting his professional career from Soil Fertility Deptt., Punjab, he served Soil Conservation, Punjab and Univ. Arid Agri., Rawalpindi in different positions.

Dr. Fazli Qayyum, Principal Scientific Officer/Director, Land Resources, PARC, has retired on 5 March 2003 after 40-year excellent professional career. He did M.Sc. in Soil Science from American Univ., Beirut and Ph.D. from Quaid-i-Azam Univ., Islamabad. Dr. Qayyum started his professional career in 1963 at ARI, Tarnab, Peshawar and afterwards worked in PARC in different positions.

Mr. Habib Ahmad Tiwana, Agri. Chemist, Soil and Water Conservation Research Institute, Chakwal has retired in February 2003.

Mr. Muhammad Sarwar Kumbho has retired as Agri. Chemist, Soil & Water Testing Laboratory, Bahawalpur in December 2002.

Mr. Rehman Ali Chaudhry has retired as Soil Fertility Officer, Rapid Soil Fertility Institute, Lahore, in December 2002.

We pray for their good health and prosperous lives.

Publication

Encyclopaedia of Soil Science, edited by Dr. Rattan Lal has been published in December 2002 by Marcel Dekker, New York, USA. Covering all branches of Soil Science, from mineralogy and physics to all soil management and restoration, this extensive **reference** outlines the agricultural, environmental, industrial, and cultural components and processes that affect soil productivity – providing the **latest methods** in conservation tillage and mulch farming, irrigation, soil classification, fertilization, and erosion control to reduce environmental pollution and **restore and revitalize** highly disturbed soils.

Doctoral Training in Soil Science

Mr. Muhammad Tariq Siddique, has completed Ph.D. from Reading University, UK and joined his parent department, i.e., AARI, Faisalabad. His thesis

was on “Phosphorus Reactions and Leaching in Soil Amended with Organic Wastes.

Obituary

Dr. M. Bashir Chaudhary, a distinguished soil scientist and Director General (Rtd), Soil Survey of Pakistan has expired in Lahore. Dr. Bashir Chaudhary started his career as Soil Chemist in Balochistan in 1964. Later, he joined Soil Survey of Pakistan, where he had a very productive professional tenure and retired as Director General in 1986. Dr. Bashir Chaudhary was an intelligent and devoted scientist and a soft spoken and thorough gentleman. Soil survey of the whole country was completed under his able leadership/guidance, which indeed was a significant contribution for agricultural development of the country.

Professor Dr. Muhammad Aslam, Principal, University College of Agriculture, D. G. Khan, has died of cardiac arrest on 30th March, 2003. Professor Aslam, a leading soil scientist of the country, was born in Faisalabad on 13 December, 1948. He had M.Sc. (Hons) and Ph.D. from University of Agri., Faisalabad. Starting his professional career from Ayub Agricultural Research Institute, Faisalabad in 1972, he joined Soil Science Deptt., University of Agriculture, Faisalabad in 1986 as Asstt. Professor. Dr. Aslam rose to the position of Professor in 1992 and was appointed the founder Principal of University College of Agriculture, D. G. Khan in 1998.

Professor Aslam was a Soil Salinity Expert and has made a tremendous impact in this discipline through his outstanding research, extensive publications and impressive lecturing. He was life a member of SSSP; Vice-President, 2001-2002 and Editorial Board Member of Pakistan Journal of Soil Science for three years. Dr. Aslam is survived by two daughters and a son.



The Soil Science Society of Pakistan records with a deep sense of grief and sorrow the sad demise of both the distinguished Soil Scientists and prays for the departed souls.

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