

In the name of Allah the most Merciful & Beneficent



SOIL SCIENCE SOCIETY OF PAKISTAN

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16th International Congress of Soil Science held with flying colors

Soil Science Society of Pakistan organized 16th International Congress of Soil Science “Healthy Soils for Food Security” at PMAS-Arid Agriculture University Rawalpindi Pakistan on March 15-17, 2016.

including academicians, researchers, scholars, policy makers, agriculture extension agents, fertilizer and pesticide industry representatives and students.

The congress was attended by several

Federal Minister for Defense Production Rana Tanveer Hussain, in his address said that the economy of a country is heavily dependent on the health of its soils, the productivity of which resultantly affects its intrinsic characteristics coupled with



Federal Minister for Defense Production Rana Tanveer Hussain was the chief guest at the inaugural session while Prof. Dr. Muhammad Ashraf

distinguished soil scientists from abroad including the countries USA, Germany, Australia, Indonesia and Turkey. The congress program included one key note address, twelve

interaction of external inputs such as water, fertilizer, climate and other factors.

Prof. Dr Rai Niaz Ahmad Vice Chancellor. PMAS- AAUR in his welcome address highlighted the importance of efficient use



plenary session papers, about 150 oral in 12 technical sessions and 180 poster presentations in 3 poster sessions. The congress also included a city tour and a gala dinner followed by an excellent cultural event.



Chairman Pakistan Science Foundation, Dr. Shizra Munsab MNA and Prof. Dr. Rai Niaz Ahmad Vice Chancellor PMAS -Arid Agriculture University Rawalpindi were guests of honor. The congress was attended by more than 500 people

Speakers emphasized the importance of protecting and improving natural resources particularly soil for increasing agriculture production in the country. They stressed the need to adopt latest agri. practices and urged upon the agricultural scientists to pace up their work.

of farm inputs and said water shortage for agricultural crops is a major problem faced by farming community. He urged the Soil Science Society of Pakistan to play leading role in conservation, land and water resources and guide policy makers in evolving research priorities.









Recommendations of 16th International Congress of Soil Science

Based on the papers presented in the congress, following recommendations were made for policy makers and are being sent to concerned quarters.

- There was a general consensus that soil health is extremely essential for crop production and food security. Therefore, the soils must be dealt scientifically to maintain the soil health and productivity in a sustainable manner.
- The Soil Scientists have to use the innovative technologies in soil management to maintain soil health without harming the precious natural resource.
- Application of best agricultural practices along with precision farming with site specific production technologies are extremely essential to get optimum production.
- The intensity and frequency of soil

disturbance should be minimized to protect carbon sink and conserve soils.

- Organic matter in the soil should be conserved through recycling of crop residues and proper legislation be implemented against its burning in the field or its transportation outside a field for fuel purposes.
- Soil carbon sequestration techniques should be promoted through appropriate management practices.
- There is dire need of improving nutrients availability through efficient use of fertilizers, manures and bio-fertilizers in order to reduce crop production costs and protection of the environment.
- Balanced use of macro-nutrients

like N, P and K along with site specific micronutrients application should be promoted for improving crop yield.

- Fortification of cereals through Zn and Fe should be promoted.
- Organic matter sources such as green manures, crop residues, manures and composts etc. should be periodically applied to rejuvenate soil organic matter.
- Degraded soils such as salt-affected/ water logged, eroded, and polluted soils should be reclaimed and causes of their degradation should be addressed through appropriate technologies.
- Sewerage water should only be applied to soils after proper treatment.
- Use of premium agricultural lands for urbanization should be banned.

Meeting of the Task Force to Promote 4R Nutrient Stewardship

The Food and Agriculture Organization of the United Nations (FAO) in partnership with the Ministry of National Food Security & Research and Pakistan Agricultural Research Council are implementing a United States Department of Agriculture's (USDA) funded project "Soil Fertility Management for Sustainable Intensification in

Pakistan: Baseline Input Atlas and Promotion of Soil Fertility with Private Sector" in Punjab and Sindh provinces. The project will provide a baseline atlas of current soil fertility practices, disaggregated by farm size and cropping systems. The atlas will help to understand required soil fertility management changes for sustainable inten-

sification.

To promote appropriate balanced inputs and "4Rs" (Right fertilizer at the Right rate at the Right time in the Right place) a task force was constituted in December, 2015. First meeting of the task force (Punjab) was organized at FAO Resident Mission Office Islamabad on 22nd February 2016.



Two-day International Workshop on “4R Nutrient Stewardship for Food, Economic and Environmental Security”

Food and Agriculture Organization of the United Nations (FAO) in partnership with the Ministry of National Food Security



Research, Pakistan Agriculture Research Council (PARC) and U.S. Department for Agriculture (USDA) convened a two-day International Workshop on “4R Nutrient Stewardship for Food, Economic and Environmental Security” (April, 4-5, 2016 at Serena Hotel, Islamabad).

The objectives of the workshop were to showcase the significance of 4R nutrient stewardship for sustainable fertilizer management for food and environment security, identify the knowns, known

unknowns and unknowns of fertilizer recommendation system in Pakistan, and propose a nutrient management collabora-

tive framework at national level. The workshop provided an added opportunity to review existing initiatives, share information and learn from the experiences.

The workshop brought together approximately 70 participants from the Agricultural Services Departments of Fertilizer Industry, Punjab and Sindh Government Agriculture Extension Departments, Research and Agricultural Information Departments, National Fertilizer Development Centre, Farmers

Associates, International Potash Institute Switzerland, Academia, PARC, USDA, International Plant Nutrition Institute (IPNI). The key issues like economic returns with appropriate fertilizer use and environmental issues arising with the burning of crop residues were discussed in greater detail.

FAO Representative to Pakistan Mr. Patrick T. Evans, Dr. Nadeem Amjad, Chairman Pakistan Agricultural Research Council, Dr. Waqar Ahmad Soil/NRM



Expert FAO, President IPNI, Dr. Terry Roberts and other experts addressed the workshop.

H.E. Sardar Sikandar Hayat Khan Bosan, Minister, National Food Security and Research in his concluding remarks appreciated the efforts of FAO and expressed his interest to replicate the activities in rest of the provinces of Pakistan (KPK and Balochistan). He suggested using public private partnership as a mechanism for sustainable agricultural intensification in the country.



Annual function of Institute of Soil and Environmental Sciences, UAF

Soil & Environmental Sciences Students Society (SESSS), ISES of the University of Agriculture Faisalabad arranged Annual Function & Oath taking ceremony of new cabinet of SESSS for 2016 in the Institute on April 21, 2016. This was a mega event of the year in the Institute. Students got opportunity to express their co-curricular abilities. On this



event retired professors of the Institute and other alumnus of ISES-UAF working in the other Institutes of Faisalabad were also invited.

Prof. Dr. Javed Akhtar Director of the Institute presented awards to the students for performing best in academic and co-curricular activities.



World Earth Day Celebrated at Institute of Soil & Environmental Sciences, UAF

World Earth Day (April 22, 2016) was celebrated in the Institute to create awareness about the importance of "Trees for the Earth" and strategies for controlling pollution with the help

of trees. Mr. M. Irshad Ramay (Director National Cleaner Production Center Rawalpindi) delivered lecture to highlight the importance of trees in our life. Public awareness

walk was organized by Soil & Environmental Sciences Students Society (SESSS), Institute of Soil & Environmental Sciences.



Training Workshop on Sustainable Transport System in Pakistan held at PMAS-AAUR

The Department of Environmental Sciences, PMAS Arid Agriculture University Rawalpindi organized a training workshop on "Sustainable Transport System in Pakistan" on June 16, 2016, in collaboration with UNDP-Pakistan Sustainable Project. The main objective of the training was to reduce GHG emissions from transport sector in Pakistan and to improve urban envi-

ronmental conditions and energy security for Pakistan. Addressing the occasion different experts emphasized the need to take necessary actions for the implementation of traffic rules and create awareness among masses to use properly maintained and certified vehicles.



Promotions/Transfers/New Appointments/Professional Visits

⇒ **Prof. Dr. M. Jamal Khan Khattak** Professor, Department of Soil & Environmental Science, The University of Agriculture Peshawar was appointed Chairman of the department.



⇒ **Mr. Muhammad Yahya Khan, Ph.D** student in the Institute of Soil and Environmental Science, UAF appointed as Lecturer in the University of Agriculture Faisalabad, Sub-campus Burewala-Vehari. He joined his duties on 14/3/2016.



⇒ **Dr. Moazzam Jamil**, Associate Prof. Soil Science & Principal University College of Agriculture & Environmental Sciences, The Islamia University Bahawalpur has been promoted as Professor.



⇒ **Dr. Zulfiqar Ahmad** has joined Department of Environmental Sciences, PMAS-Arid Agriculture University Rawalpindi as Assistant Professor (IPFP).

⇒ **Dr. Muhammad Ashfaq Anjum**, Assistant Agricultural Chemist, Institute of Soil Chemistry and Environmental Sciences AARI has been appointed as Director, Provincial Pesticide Reference Laboratory Kala Shah Kaku.



⇒ **Punjab Agriculture Department** has been vitalized by fresh entry of the following talented young soil scientists who have joined the department as Agriculture Officer/Assistant Research Officer;



⇒ **Dr. Tariq Aziz**, Associate Professor, Institute of Soil & Environmental Sciences, has assumed the charge of Project Director of UAF Sub-Campus Depalpur, Okara w.e.f 20th January 2016.

⇒ **Dr. Niaz Ahmed Jam** formerly Assistant Agricultural Chemist at Pesticide Quality Control Laboratory, Multan has joined Department of Soil Science, Bahauddin Zakariya University, Multan as Associate Professor in August, 2015.



⇒ **Dr. Zafarulhaye Gondal** formerly Assistant Professor in the Department of Soil Science, Bahauddin Zakariya University, Multan has been promoted as Associate Professor of Soil Microbiology in April, 2016.

⇒ **Dr. Tanveer-ul-Haq** formerly Assistant Professor in the Department of Soil Science, Ghazi University, D.G. Khan has joined Department of Soil and Environmental Sciences, Muhammad Nawaz Shareef University of Agriculture, Multan as Associate Professor and Chairman in December, 2015. Now he has departed for post doc on Endeavor Fellowship to The University of Tasmania, Hobart, Australia.



⇒ **Dr. M. Imran Khan** joined Institute of Soil and Environmental Sciences, UAF as an Assistant Professor on 28th Feb 2016. Earlier he was working as a lecturer in the department of Agronomy since 2009.

- | | |
|--------------------------|-------------------|
| • Ghashiya Sattar Kayani | • Rehman Gul |
| • Ayesha Irum | • Annum Sattar |
| • Shabana Nazeer | • Amna Saleem |
| • Saira Khalid | • Noor-us-Sabah |
| • Ali Afzal | • Qudsia Nazir |
| • Muhammad Shakar | • Asia Shaheen |
| • Umair Riaz | • Asifa Naz |
| • Tasawar Abbas | • Ana Aslam |
| • Asif Ali | • Mahrana Ehsan |
| • Sobia Noor | • Shahrish Nawaz |
| • Farah Rasheed | • Noor-ul-Ain |
| • Muhammad Awais | • Hina Nazir |
| • Zeshan Aslam | • Fariha Amin |
| • Hina Javed | • Saba Naz |
| • Muhammad Naveed | • Mahwish Kanwal |
| • Waqas Ashraf | • Ayesha Malik |
| • Fraza Ijaz | • Zeenat Javaid |
| • Tariq Mehmood | • M. Faraz Anwar |
| • Waqar Ahmad | • M. Umar H. Khan |
| • Arslan Nazarat | |

⇒ Following soil scientists have been appointed in Punjab Agriculture Department as Assistant Agricultural Chemist;

- Dr. Abdul Ghaffar Khan Niazi
- Dr. Muhammad Sarfraz
- Dr. Muhammad Mazhar Iqbal
- Mr. Abdul Majeed
- Mr. Muhammad Arsalan
- Mr. Muhammad Shakar

Soil Science Society of Pakistan wish them bright career and the best of luck in their future endeavors.

Retirement from Service

Professor Dr. Safdar Ali

Eminent soil scientist, Dean Faculty of Crop and Food Sciences PMAS-Arid Agriculture University Rawalpindi Prof. Dr. Safdar Ali retired from the university after reaching the age of superannuation.

Dr. Safdar Ali obtained his Ph.D. in Soil & Water Conservation from Oregon State University, Corvallis, OR, USA. He joined Department of Soil Science of PMAS-Arid Agriculture University Rawalpindi in the year 1980 as Lecturer. He was promoted as Assistant Professor in 1992 and then as Associate Professor in 1998. In 2004 he became full professor. Dr. Safdar Ali remained Chairman of the Department of Soil Science and Soil Water Conservation

of PMAS-Arid Agriculture University and later became Dean of Faculty of Crop & Food Sciences of the University.

Prof. Dr. Safdar Ali has shown active participation and involvement in basic as well



as applied research in the areas of soil and water conservation for the past three decades. He supervised and guided more than 25 M.Sc. (Hons.) and

8 Ph.D. students in the field of Soil science. He carried out extensive research work and has published more than 60 research papers in different Journals of national and international repute. He is author of several books, technical reports

and bulletins. He successfully conducted many research projects funded by various national and international organizations and contributed significantly for improvement of rainfed agriculture in Pakistan.

Dr Safdar Ali was awarded Best University Teacher Award in 2000 by Higher Education of Pakistan (then University Grants Commission). He also got Best Scientist Award by PMAS-AAUR.

Keeping in view his vast research experience after his retirement from regular services, his services have been hired by PMAS-Arid Agriculture University Rawalpindi. He is now making efforts to promote hydroponic agriculture in the country in capacity of his current position of Director Institute of Hydroponic Agriculture PMAS-AAUR.



Prof. Dr. Sajida Perveen

Prof. Dr. Sajida Perveen earned Ph.D. in Chemistry from University of Peshawar in 1990. Dr. Sajida started her teaching career as lecturer in the department of Soil Science, Faculty of Agriculture, The University of Agriculture Peshawar in September 1981. She supervised and guided more than 40 M.Sc. (Hons.) students and one Ph.D. student in the field of Soil science. She is the author of fifteen technical reports, 4 bulletins, proceedings, Lab.

Manuals and has published more than 50 research papers in different Journals of national and international repute. Also she successfully conducted research projects



funded by various national and international organizations.

She was twice appointed as Chairperson, Department of Soil and Environmental

Sciences of the University of Agriculture

Peshawar.

Prof. Dr. Sajida Perveen was awarded "The Certificate of Excellence as Star Women of the Year 1995" by the South Asia Publications. Later in 2006, Ministry of Women Development of Pakistan awarded Prof. Dr. Sajida Perveen with Mohtarma Fatima Jinnah Gold Medal for the year 2006 for outstanding performance in the field of Agriculture.

She retired from her services after reaching the age of superannuation in 17 May 2016. We wish her a long, healthy and prosperous retired life.



World Environment Day observed at UAF

On June 5th 2016, Soil & Environmental Sciences Students Society (SESSS), ISES in collaboration with Environment Protection Department (EPD) Faisalabad arranged a ceremony to create aware-

ness among the student about environment. Playcards were displayed at different places of the campus for public awareness on "World Environment Day". The theme of this event

was "Join the race to make world a better place". Director ISES along with all faculty members participated in the event.



Dr. Tariq Aziz & Dr. Sher M. Shahzad conferred HEC Best Research Paper Award 2013-14

It is a matter of immense pride for the soil science community that Dr. Tariq Aziz, Associate Professor of Soil & Environmental Sciences University of Agriculture Faisalabad and Dr. Sher Muhammad Shahzad, Assistant Professor of Soil Science, University of Sargodha have been awarded HEC best research paper award 2013-14 by Higher Education Commission of Pakistan. The title of manuscript of Dr. Tariq Aziz was "Organ specific phosphorus allocation patterns and transcript profiles linked to phosphorus efficiency in two contrasting wheat genotypes". The manuscript was published in highly reputed journal Plant Cell and Environment. The title of manuscript of Dr. Sher M. Shahzad was "Co-inoculation integrated with P-enriched compost improved nodulation and growth of Chickpea (*Cicer arietinum* L.) under irrigated and rainfed farming systems" published in Biology and Fertility of Soils (2014), 50:1-12. The paper was authored by Sher Muhammad Shahzad, Azeem Khalid, Muhammad Saleem Arif, Muhammad Riaz, Muhammad Asharf, Zafar Iqbal and Tahira Yasmin.



Upcoming International Conferences

International Conference "Asia Pacific Policy Dialogue on Water, Energy and Food Security for Poverty Alleviation in Dryland Regions"

Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan. November 01-03, 2016. The conference themes include Water Security for Sustainable Development, Renewable Energy Systems, Food Security, Poverty Alleviation. Abstract deadline: September 20, 2016. Details at <http://www.uaar.edu.pk/waterconf/>

International Conference on Forestry and Environment: Challenges and Prospects

University of Agriculture Faisalabad, Pakistan. November 21-22, 2016. The conference themes include Tree Soil Interactions, Forestry and Environment, Forest Ecology, Climate Change vs Forestry, Forest Protection and Diseases, Forest Marketing, Tree Crop Interactions, Forest Economics, Tree Physiology, Eco-Tourism, Forest Genetics, Wood Utilization, Environmental sciences. Abstract deadline: July 15, 2016. Details at http://uaf.edu.pk/downloads/events/Pakistan-Turkey_conference%20brochure_final.pdf