

*In the Name of Allah, the Beneficent, the Merciful*

# Soil Science News

*Quarterly Newsletter of Soil Science Society of Pakistan*

Editor: Dr. M. Mahmood-ul-Hassan

Associate Editor: Dr. Azhar Hussain

January - March 2019

Vol. 20 (No. 1)



## Message from President

Dear fellow Soil Scientists, I thank all the members of Soil Science Society of Pakistan (SSSP) who actively participated in SSSP executive council election 2018-19 and those who contributed to get our panel elected. I would like to congratulate all the elected members of the executive council, who won this election and got tenure of responsibilities for services of SSSP. I thank to those senior fellows who contributed a lot in the establishment of SSSP in 1958 and then re-establishment of SSSP in 1984 and provided us the platform to dispose our ideas and plans associated with research and the promotion of soil related projects for the betterment of the society. We all are well aware that our nation is facing diversified challenges in this era and challenges to soil are amongst the most critical. Increasing population along with less planned expansion, food security, urbanization as well as decreasing water resources together with specific regional and global existential challenges are the real problems our nation is facing today. Thus, as nation we can only secure the existence and prosperity of our generations by competitive progress in soil and allied sciences.

Currently, Soil Science Society of Pakistan (SSSP) is mainly focussing on biennial Congress and regularly publishing its Journal "Soil and Environment" and Newsletter.

*Continued at page 5*

## Executive Council 2019-2020

### President:

**Prof. Dr. M. Kaleem Abbasi**, Vice Chancellor, Univ. Azad Jammu & Kashmir, Muzaffarabad, AJK

### Past President:

**Dr. Shahzada M. Mehdi**, Director, Soil Fertility Research Institute, Lahore

### Vice Presidents:

• **Dr. Abdul Khaliq**, Chairman, Deptt. Soil & Environ. Sciences, The Univ. of Poonch, Rawalakot (AJK)

• **Dr. M. Sharif**, Asstt. Prof/HOD, Deptt. Soil Science, Baluchistan Agri. College, Quetta (Balochistan)

• **Dr. Dost Muhammad**, Asso. Prof., Deptt. Soil & Environ. Sciences, Univ. Agri., Peshawar (KPK)

• **Dr. Shahid Javid**, Director, Soil and water Conservation Research Instt., Chakwal, (Punjab)

• **Prof. Dr. Inayatullah Rajpar**, HOD, Deptt. of Soil Sci., Sindh Agri. Univ., Tandojam (Sindh)

### G. Secretary:

**Dr. G. Murtaza Jamro**, Asso. Prof., Deptt. Soil Science, Sindh Agri. Univ., Tandojam

### J. Secretary:

**Mr. Sair Sarwar**, SSO, Land Resources Research Institute, NARC, Islamabad

### Treasurer:

**Dr. M. Iqbal**, Manager, Space Applications & Research Complex, SUPARCO, Islamabad

*Continued at page 5*



## ● Oath Taking of EC & Special Seminar

### Oath Taking Ceremony (EC 2019-20) & Special Seminar

Newly elected Executive Council of the Society, for the upcoming term 2019-20, was sworn in by taking oath on 4<sup>th</sup> March 2019 in a dignified ceremony held at PMAS Arid Agriculture University, Rawalpindi. The ceremony was chaired by Dr. Abdul Rashid, Director General (Rtd.), National Agricultural Research Centre, Islamabad and witnessed by a



large number of researchers, academicians and managers from public and private sectors. The proceeding of the ceremony was started with recitation of Holy Quran and followed by a special seminar entitled "Role of Soil Science in Global Food Supply". Prof. Dr. Zahir Ahmed Zahir, Director ORIC, University of Agriculture, Faisalabad/ Editor in Chief "Soil and Environment" was guest speaker.

After the presentation of guest speaker, the out-going General Secretary, Dr. M. Mahmood-ul-Hassan, congratulated the newly elected Executive Council and ensured active support to the new Executive Council. He, on the behave of outgoing EC, thanked the Election Committee:

Professor Dr. Kazi Suleman Memon, Convener and Members of the Committee, Professor Dr. Allah Wadhayo Gandahi, Mr.



Prof. Dr. Kaleem Abbasi, President, SSSP presenting shield Guest Speaker Prof Dr. Zahir A. Zahir

Mr. Abdul A. Memon, Member, Election Committee receiving shield from Prof. Dr. Kaleem Abbasi

Prof. Dr. Kaleem Abbasi, President, SSSP presenting shield to chief Guest Dr. Abdul Rashid

Sanaullah Solangi and Mr. Abdul Aleem Memon holding free and fair election.

The Chief Guest administered the oath of incoming Executive Council. After taking oath, newly sworn in General Secretary, Dr. Ghulam Murtaza Jamro, on behalf of incoming Executive Council, thank the honorable members of the Society for trusting and electing them for coming tenure 2019-20. He assured the members that the new Executive Council will try its maximum to make the Society the best. Incoming President, Professor Dr. M. Kaleem Abbasi, appreciated the efforts and progress made by out-going Executive Council. He promised that under his leadership, the Society will broaden its spectrum and will organize professional events all over Pakistan. He also acknowledged the Vice Chancellor and management of PMAS Arid Agriculture University, Rawalpindi for providing the logistic support. The Chief Guest, Dr. Abdul Rashid praised the role of the Society in the uplift of professional activities related to soil science and allied fields

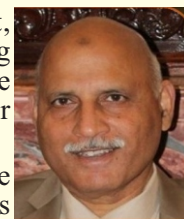
## ● Promotions/Appointment/Posting

**Dr. Fayyaz Hussain**, Principal Scientific Officer, Land Resources Research Institute (LRRI), National Agricultural Research Centre, Islamabad and life member of SSSP assumed the charge of Director, LRRI, NARC, Islamabad after the retirement of Dr. Arshad Ali, Director, LRRI, NARC, Islamabad.



**Dr. Shahid Javid**, Agricultural Chemist, Provincial Reference Fertilizer Testing Laboratory, Raiwind, Lahore has been given the additional charge of Director, Soil and Water Conservation Research Institute, Chakwal

**Dr. Omar Aziz** joined University of Agriculture Faisalabad, Sub-Campus Depalpur, Okara as a Assistant Professor IPFP-HEC in Department of Soil & Environmental Sciences in March 2019. He completed his PhD from College of Resources and Environment, Huazhong Agricultural University, Wuhan, P.R. China. His Ph. D. thesis research was on "Analysis of irrigation water efficiency in typical irrigation areas (Zhanghe Reservoir Irrigation Area,



Hubei Province, China).

**Mr. Sarfaraz Ahmad**, Assistant Agricultural Chemist, Soil and Water testing Laboratory, Attock has been promoted as Agricultural Chemist and transferred and posted at Soil and Water Conservation Research Station, Sohawa, District Jhelum.

**Mr. Bashir Ahmed**, Assistant Agricultural Chemist (SF), (BS-18), Soil and Water Testing Laboratory, Mandi Bahaiddin was transferred and posted as Assistant Agricultural Chemist (SF), (BS-18), Soil and Water Testing Laboratory, Attock.

**Dr. Ashfaq Anjum**, Soil Bacteriologist, Soil Bacteriology Section, AARI, Faisalabad was transferred and posted as Agricultural Chemist, Provincial Pesticide Reference Laboratory, Kala Shah Kaku.





**Professor Dr. Zia-ul-Hassan Shah**, Department of Soil Science, Sindh Agriculture University (SAU), Tandojam has assumed the charge of Director, Office of Research, Innovation and Commercialization (ORIC), SAU, Tandojam



**Mr. Ghulam Hussain Talpur**, Research officer (BS-17), National Fertilizer Development centre, Islamabad has been transferred to Federal Seed Certification Department, Hyderabad

**Dr. Afzal Ahmed Chhajro**, Assistant Professor (IPFP-HEC), Department Soil Science,

Sindh Agriculture University, Tandojam has joined as a Research Manager, ORIC, Sindh Madraat-ul-Islam, University, Karachi.



*Congratulations to all from Soil Science News!*

## Research Projects

**Miss Munazza Yousra**, Scientific Officer, Land Resources Research Institute, National Agricultural Research Council, Islamabad has been declared Project Incharge of the ALP project “Actual, attainable and maximum carbon sequestration potential of benchmark soils under different cropping systems”. The project is worth of Rs. 9.127 million.

## Up-gradation of Service Structure and Capacity Building

### Implementation of 4 –Tier Formula in Sindh Province

The 4 –Tier Formula has been implemented in Agriculture (Research Wing); Agriculture, Supply & Prices Department and 159 posts of BS-18, 19 and 20 have re-designation. Out of 159, 26 scientists working in Soil Science/Chemistry Section, Agriculture Research Institute, Tandoja as Assistant Soil Fertility officers (ASFOs)/Assistant Agriculture Chemists (AACs) and Assistant Research Officers in BPS-17 have been re-designations, as Senior Scientists in BPS-18.

### Establishment of new Institute

Four new directorates of Soil Science/Soil Chemistry have been established, i.e., Soil Fertility Research Institute, Tandojam, Soil Salinity and Reclamation Research Institute, Tandojam, Soil & Environment Research Institute, Tandojam, and Orchard Nutrients Management Research Institute Mirpur Khas.

### ISO 17025 Accreditation of Soil Science Laboratories

Following 16 Laboratories were successfully accredited (ISO 17025: 2005) by Pakistan National Accreditation Council, Islamabad:

#### Soil Fertility Research Institute Lahore

1. Provincial Reference Fertilizer Testing Lab., Raiwind, Lahore
2. Soil and Water Testing Laboratory for Research Rawalpindi
3. Soil and Water Testing Laboratory for Research Lahore
4. Soil and Water Testing Laboratory for Research Gujranwala

5. Soil and Water Testing Laboratory for Research Bahawalpur
  7. Soil and Water Testing Laboratory for Research Sargodha
  8. Soil and Water Testing Laboratory for Research D.G. Khan
  9. Soil and Water Testing Laboratory for Research Multan
- Institute of Soil Chemistry and Environ Sci., AARI, Faisalabad**
10. Provincial Pesticide Reference Laboratory, Kala Shah Kaku
  11. Pesticide Residue Laboratory, Kala Shah Kaku
  12. Pesticide Quality Control Laboratory Kala Shah Kaku
  13. Pesticide Quality Control Laboratory Faisalabad
  14. Soil Chemistry Section, AARI, Faisalabad
  15. Pesticide Quality Control Laboratory Multan
  16. Pesticide Quality Control Laboratory Bahawalpur

## Obituary

**Mashooq Hussain Oadhano**, Assistant Agriculture Chemist (SF), Soil and Water Testing Laboratory, Thatta was died in fatal road accident. He was very active and dedicated soil scientist and served in different Soil and Water Testing Laboratories, Department of Agriculture, Government of Sindh. He was also member of SSSP and has been actively participated SSSP activities.



*The Society records with a deep sense of grief and sorrow the sad demise and prays for the departed soul.*

## Renewal of Membership

Society's membership fee for the year 2019 is due. All regular members are requested to renew their membership by paying Rs. 1000/-. Those who are interested to become a new regular member, please pay Rs 2000/- (Rs. 1000/- registration fee +Rs. 1000/- annual fee) cash, or by pay order/bank draft (cheques not acceptable) in favor of Soil Science Society of Pakistan:

**Dr. Muhammad Iqbal**, Treasurer, SSSP/Manager Scientific Research, Space Application & Research Complex, Islamabad ([miqbalkhalid@gmail.com](mailto:miqbalkhalid@gmail.com))

## Publications

**Microbiology for Sustainable Agriculture, Soil Health, and Environmental Protection** edited by Deepak Kumar Verma, 2019 and published by Apple Academic Press, ISBN: 9781771886697.

The book focuses on important areas of microbiology related to soil and environmental microbiology associated with sustaining and improving agriculture and environmental security.

**Global Soil Proverbs: Cultural Language of the Soil**. 2018. Edited by E. Yang; M. B. Kirkham; Rattan Lal; Sigbert Huber. 275 pages, ISBN 978-3-510-65431-4

The International Union of Soil Sciences has published this book on soil proverbs worldwide. The objective of the book is to compile such soil proverbs and, through them, share insights about philosophy, culture, and life in each country, as they relate to soils. The book features 32 chapters from 29 different countries (including Pakistan) in Africa, Asia, Europe, North America, and Oceania. The chapter 12 “Soil Proverbs in Pakistan” is authored by M.A. Ali, N. Ahmed, G.M. Jamro, I. Rajpar, Zia-ul-hassan, A. Rashid, N. Akhta and I.A. Mian.





Executive Council (2019-20), SSSP with Chief Guest and senior soil scientists at oath taking ceremony

## Professional Events

### World Soil Day

Department of Soil & Environmental Sciences, Agriculture University, Peshawar and Directorate of Soil and Water Conservation, Government of Khyber Pakhtunkhwa jointly organized and celebrated World Soil Day. The theme of day was "Be the Solution to Soil Pollution". Prof. Dr. Zahir Shah, Dean, Faculty of Crop Production Sciences and Past President, SSSP inaugurated the event. Prof. Dr. Muhammad Jamal, Chairman, Department of Soil and Environmental Sciences welcomed



and briefed the guests and students about the major issues of agriculture land degradation and soil contamination and their mitigation. Mr. Yaseen Khalil, DG, Soil and Water Conservation, DG of KP also highlighted the activities being carried out in Khyber Pakhtunkhwa for rehabilitation of degraded land. A poster competition was also organized by Department soil and Environmental sciences to embrace the importance of Healthy Soils. Ms. Sowm Khan, M.Sc (Hons) student won the poster competition.

### One Day Seminar on Online Use of PASTIC (S&T) Resources

Pakistan Scientific and Technological Information Center (PASTIC), Pakistan Science Foundation, Ministry of Science & Technology, Government of Pakistan and Department of soil and Environmental Sciences jointly organized one day seminar on Use of PASTIC (S&T)



resources. Ms. Ghazala Ali Khan, Deputy Director briefed the students about the PASTIC's project "Modernization of National Science Reference Library for effective resource sharing among S&T libraries in Pakistan". She added that the project is aimed to develop a Consortium of S&T/R&D Libraries of Pakistan to facilitate the scientific community by sharing of scientific information resources among S&T Libraries of Pakistan and capacity building (Training) of library professionals to cope with the modern challenges of digital era. She said that student can request online for the research papers using PASTIC website. The workshop was chaired by Prof. Dr. Muhammad Jamal Khan, Chairman, Department of Soil and Environmental Sciences, Agri. Univ, Peshawar.

## Upcoming Events

### 18<sup>th</sup> Congress of Soil Science

18<sup>th</sup> Congress of Soil Science will be held on February 11-13, 2020 at Sindh Agriculture University, Tandojam

**Soil Science Society of Pakistan**

### International Poster Contest 'Soilutions' to solve soil degradation problems

IUSS considers stopping soil degradation as one of its most important tasks, and invites you to propose in a poster your 'Soilutions' to address soil problems in order to preserve this unique resource and life as well as the role of the soil as an essential natural resource to preserve the environment. IUSS will award 1,000 USD from the Stimulus Fund for the best 'Soilutions' poster and 500 USD each for the second and third best poster. The posters shall be submitted until May 31, 2019. The best 12 posters will be displayed on the IUSS website and a calendar shall be made using these posters.



**UNIVERSITY OF THE POONCH RAWALAKOT**

Faculty of Agriculture



**6<sup>TH</sup> INTERNATIONAL CONFERENCE ON**

**Sustainable Agriculture in Changing Climate: Strategies and Management**

**June 19-21, 2019**

RAWALAKOT, AZAD JAMMU & KASHMIR, PAKISTAN



## Recently Completed Ph. D.

**Dr. Muhammad Younis Arain**, Director/PSO, Institute of Plant Introduction, SARC, PARC, Islamabad has completed Ph. D degree from Department of Soil Science, SAU, Tandojam. He completed his Ph. D. theses research work "Comparative evaluation of DRIS (Diagnosis and Recommendation Integrated System) and CNL (Critical Nutrient Level) approaches for nutrient deficiency diagnosis in sugarcane" under the supervision of Professor Dr. Kazi Suleman Memon.



**Dr. Vishandas, Assistant Professor**, Sub-Campus Umerkot - Sindh Agriculture University, Tandojam has earned Ph.D. degree from Department of Soil Science, SAU, Tandojam. His Ph. D thesis research was on "Phyto-extraction potential of selected plant species for bio-remediation of soils contaminated with heavy metals" and was supervised Professor Dr. Kazi Suleman Memon.



**Dr. Kashif Ali Kubar**, has completed PhD in Soil Science from the College of Resources and Environment, Huazhong Agricultural University, Wuhan, Hubei, China. His PhD thesis title was "Effects of straw returning and no-tillage on soil organic carbon characteristics and soil water stable aggregates".



**Dr. Punhoon Khan Korai**, has completed PhD in Soil Science from Nanjing Agricultural University, China and his PhD thesis title was "Water extractable biochar effects on soil quality, crop production and greenhouse gas emissions from a rice paddy under rice-wheat rotation".



**Dr. Tayyaba Samreen**, Lecturer, Institute of Soil & Environmental Sciences, University of Agriculture, Faisalabad has successfully completed PhD in March 2019 under the supervision of Prof. Dr. Zahir A. Zahir. She conducted her thesis research on "Effectiveness of organically-complexed bio-augmented boron coated DAP on growth, yield and oil content of Brassica".



**Dr. Muhammad Ali** has successfully completed PhD in March 2019 from Department of Soil Science, University College of Agriculture & Environmental Sciences, The Islamia University of Bahawalpur under the supervision of Dr. Ghulam Hassan Abbasi. He conducted his research work on "Role of melatonin in mitigating salt stress in maize (*Zea mays* L.)".



**Dr. Samia Qadeer** has successfully completed PhD from Department of Environmental Sciences, PMAS Arid Agriculture University, Rawalpindi. She completed her Ph. D. thesis research titled "Utilizing potential oleaginous microbes for lipid base bio-fule production from food processing base". The Ph. D. thesis research was supervised by Professor Dr. Azeem Khalid.



**Dr. Ghulam Muhiyuddin Kaloi**, SSO, National Sugar-Cane & Tropical Horticulture Research Institute, Thatta, PARC, Islamabad has successfully completed his Ph. D degree from Department of Soil Science, SAU, Tandojam by conducting research on "Integrated use of distillery spentwash and mineral fertilizers in sugarcane (*Saccharum officinarum* L.)" under the supervision of Prof. Dr. Mehrunisa Memon



**Dr. Ali Hassan Mari**, SSO, National Sugar-Cane & Tropical Horticulture Research Institute, Thatta, PARC, Islamabad has successfully completed his Ph. D degree from Department of Soil Science, SAU, Tandojam by conducting research on "Effect of salinity on the growth and yield of sugar beet (*Beta vulgaris* L.)" under the supervision of Prof. Dr. Inayatullah Rajper



*Congratulations to all for earning a higher qualification!*

### Message from president - Continued from page 1

Some seniors members of the society have suggested that the society should take some new reforms and plans for its betterment and promotions. I invite you all please come forward and use your talents and scientific expertise to give your creative and innovative ideas which could contribute in the uplifting and strengthening of the society to enhance national services. We have already decided in executive council meetings to conduct regional seminars in all four provinces, Azad Jammu & Kashmir (AJK) and Gilgit Baltistan (GB). We will also focus to increase the participation of the Soil Scientists of Pakistan by enhancing the membership of the society especially from Baluchistan, Sindh, AJK and GB. To achieve these goals we need your continuous support and help. Once again, I thank you all for your contribution to the national cause through SSSP. I will be eagerly waiting for your inputs to enhance our effectiveness to national services as soil scientists through SSSP.

### Executive Council (2019-20) - Continued from page 1

#### Councilors:

- **Dr. Maqshoof Ahmad**, Lecturer, Deptt. of Soil Science, UCA&ES, The Islamia Univ., Bahawalpur (All Pakistan)
- **Dr. Mohsin Zaffar**, Asstt. Prof., Dept. of Soil & Environ. Sciences, Univ. of Poonch, Rawalakot, (AJK)
- **Dr. Sabir Gul Khattak**, Director, Agricultural Research Station, Mansehra, (KPK)
- **Miss. Munazza Yousra**, SO, Land Resources Research Institute, NARC, Islamabad (Punjab)
- **Dr. Javaid Ahmad Shah**, PS, Soil and Environ. Sciences Division, NIA, Tandojam (Sindh)
- **Mr. Sher Ahmed**, PSO/DG, Mountain Agricultural Research Centre, Juglote, Gilgit (GB)
- **Ms. Mah-Noor Azad**, PhD Scholar, Institute of Soil Science, PMAS Arid Agri. Univ., Rawalpindi (student - for the year 2019)

#### Editor-in-Chief:

**Professor Dr. Zahir A. Zahir**, Director ORIC, Instt. of Soil and Environ. Sciences, Univ. Agri., Faisalabad.

## Retirements

**Dr. M. Mahmood-ul-Hassan** has retired from NARC on March 30, 2019. He obtained MSc (Hons) degree from University of Agriculture, Faisalabad and Ph.D. degree from the University of Reading, Reading, UK. He started his professional career in 1985 from AARI, Faisalabad and subsequently moved to PARC.

Dr. Mahmood-ul-Hassan worked on Soil physical, fertility and environmental issues and enjoys excellent reputation among his fellow scientists nationally and internationally. He has been



involved in more than 11 research projects as PI and Co-PI funded by national and international agencies. He has published more than 130 research articles in reputed journals and was recipient of Research Productivity Award from PCST and enlisted as Productive Scientist of Pakistan. Dr. Mahmood is a HEC recognized PhD/M. Phil supervisor and has supervised 5 Ph.D. students and 7 M.Sc. (Hons).

Dr. Mahmood-ul-Hassan voluntarily served the Soil Science Society of Pakistan for >2 decades in various positions and focused on inter-provincial harmony and unity of soil scientists.

**Dr. M. Tariq Siddique**, Associate Professor, Institute of Soil Science PMAS-Arid Agriculture University Rawalpindi got superannuation on March 26, 2019. Dr. Tariq served the Punjab Department and then PMAS-Arid Agriculture University



Rawalpindi over a period of 35 years (1984-2019). He graduated from UAF and earned PhD degree from University of Reading, Reading, UK.

During his stay at AARI and then PMAS-AAUR, he worked on micronutrient requirements of arable and fruit crops. He significantly contributed towards spatial assessments of soil micronutrient status and the site-specific application. He

supervised a number of PhD and M.Sc. students.

Dr. Siddique voluntarily served the Soil Science Society of Pakistan with his blood and sweat for almost 2 decades as Councilor, Joint Secretary, General Secretary and Treasurer.

**Dr. Arshad Ali** (Director), LRRI, NARC, Islamabad has retired on January 5, 2019. He did MSc (Hons) from UAF and Ph. D. from University of Arizona, Tucson, USA. He started his professional career by joining PARC as Scientific Officer in 1985. He worked on soil fertilizer and salinity and published seventy-three research papers in journal of national and international repute and twenty-two papers in conference proceeding and reports. Dr. Arshad executed number of projects as team member, and Project Incharge. Dr. Ali played key role for the upgradation of infrastructure of biofertilizers (Biozote) production on commercial scale at NARC and in its registration of Biozote-P and Biozote Max.



Dr. Ali, as Director, LRRI, also played major role in the establishment of Bio-energy Laboratory at LRRI, NARC in collaboration with Lanzhou University, China. The University has provided state of the art equipment worth 20 million along with 50 bio-digesters.

**Mr. Muhammad Ilyas**, Director, Soil Salinity Research Institute, Pindi Bhattian has been retired from government services. Mr. Ilyas was graduated from University of Agriculture, Faisalabad in Soil Science. He started his professional career in 1985 by joining Punjab Agriculture Research Department (AARI) as Assistant Research Officer. He developed and executed several development and non-development projects and played vital role in capacity building of different institutes. He served as Assistant Research Officer, Assistant Agricultural Chemist, Agricultural Chemist, and Director, Institute of Soil Chemistry and Environmental Sciences.



**Mr. Tariq Mehmood**, Agricultural Chemist, Soil and Water Conservation Research Station Sohawa, Jhelum was retired from Agriculture Department, Government of the Punjab on attaining the age of superannuation. He served the Agriculture department at Soil and Water Testing Laboratories Rawalpindi, Jhelum, Chakwal & Soil and Water Conservation Research Institute Chakwal during his service.



*We pray for good health and prosperous retired lives of our respected colleagues.*

**N**ews and Views for next issue of the 'Soil Science News' may be conveyed to Society office bearers of your chapter or to **Dr. M. Mahmood-ul-Hassan** (mmh@comsats.net.pk), Editor/ **Dr. Azhar Hussain** (azharhaseen@gmail.com), Assoc. Editor, Soil Science News. The news can also be mailed at **info@sss-pakistan.org**