

**24<sup>TH</sup> SCIENCE COUNCIL OF ASIA CONFERENCE**  
**16 – 18 November, 2025**

**Food Security, Sustainability and Biodiversity**

**In-Person and Hybrid on Zoom Platform**

Pakistan Academy of Sciences, 3-Constitution Avenue, Sector G-5/2, Islamabad, Pakistan

**Program**

**16 November 2025 (Sunday)**

**8.30-16.00: Registration**

**9.00-10.00: Inaugural Ceremony - [AUDITORIUM]**

Chair: **Prof. Dr. Kauser Abdulla MALIK (Mr.)**  
*President, Pakistan Academy of Sciences and Chair, Organizing Committee 24<sup>th</sup> SCAC*

**Welcome Address and Introduction to PAS Scientific & Academic Activities by Prof. Dr. Mushtaq AHMAD (Mr.)**  
*Fellow, Pakistan Academy of Sciences*

**Address by Prof. Dr. Mamoru MITSUISHI (Mr.)**  
*President, Science Council of Japan*

**Address by Prof. Dr. Muhammad Aslam BAIG (Mr.)**  
*President, Science Council of Asia, and Sec. General, Pakistan Academy of Sciences*

**Address by the Chief Guest; Prof. Dr. Atta-ur-RAHMAN, FRS (Mr.)**  
*Former Chairman HEC, Former Coordinator General COMSTECH*

**Vote of Thanks by Dr. Riffat Mahmood QURESHI (Mr.)**  
*Director Administration, Pakistan Academy of Sciences and Scientific Secretary (Organizing Committee)*

**10.00-10.50: Theme Lecture - [AUDITORIUM]**  
**Bridging Food Security and Biodiversity for Cultivating Wellness and Sustainability in Life & Environment**

Chair: **Prof. Dr. Kauser Abdulla MALIK (Mr.)**  
*President, Pakistan Academy of Sciences and Chair, Organizing Committee 24<sup>th</sup> SCAC*

Speaker: **Prof. Dr. Atta-ur-RAHMAN, FRS (Mr.)**  
*Former Chairman HEC, Former Coordinator General COMSTECH*

**10.50-11.30: Break for Group Photo and Refreshments - [Dining Hall]**

**11.30-13:00: PLENARY SESSION -[AUDITORIUM]**

Chair: **Dr. Khalid MEHMOOD (Mr.)**  
*Former President, Pakistan Academy of Sciences*

**11.30-12.15 Plenary Lecture I**

Speaker: **Prof. Dr. Kauser Abdulla MALIK (Mr.)**  
*President, Pakistan Academy of Sciences and Chair, Organizing Committee 24<sup>th</sup> SCAC*  
Food Security in the Era of Climate Change and Modern Technologies

**12.15-13.00 Plenary Lecture II**

Speaker: **Prof. Dr. Andrea PIERONI (Mr.)**  
*University of Gastronomic Sciences of Pollenzo, Italy*  
Biodiversity of Wild Edibles among Traditional Communities of the World

**13.00-14.30: Lunch Break and Posters Display - [Lobby]****14.30-16.00: SCIENTIFIC SESSION I (PARALLEL) – FOOD SECURITY  
- [AUDITORIUM]**

Chair: **Prof. Dr. Abdul Rauf SHAKOORI (Mr.)**  
*Fellow, Pakistan Academy of Sciences, Univ. of the Punjab, Lahore, Pakistan*

Speaker: **Prof. Dr. Sakae SHIBUSAWA (Mr.)**  
14.30-15.00 *Center for High Education Development, Kyoto Women's University, Japan*  
Role of Data Driven Agrofood Systems on Food Security

Speaker: **Prof. Dr. Niluka Udayangani HETTIGE (Ms.)**  
15.00-15.30 *University of Colombo, Sri Lanka*  
Healing the Earth, Nourishing the Self: A Transformative Psychosocial Framework to Uplift Rural Farming Communities and Promote Biodiversity and Food Security

Speaker: **Prof. Dr. Muhammad ASHRAF (Mr.)**  
15.30-16.00 *Vice President, Pakistan Academy of Sciences, and Vice Chancellor, University of Lahore, Pakistan*  
Judicious Exploitation of Stressed Lands to Ensure Food Security

**14.30-16.00: SCIENTIFIC SESSION II (PARALLEL) – SUSTAINABILITY  
- [COMMITTEE ROOM]**

Chair: **Prof. Dr. Waheed AKHTAR (Mr.)**  
*Fellow, Pakistan Academy of Sciences, Professor Emeritus, School of Biological Sciences, University of Punjab, Lahore, Pakistan*

Speaker: **Dr. Abdul RASHID (Mr.)**  
14.30-15.00 *Fellow, Pakistan Academy of Sciences*  
Agronomic Biofortification of Staple Cereals with Micronutrients to Combat Hidden Hunger in Resource-poor Populations

**Speaker: Dr. Muhammad ALI (Mr.)**  
 15.00-15.30 Member, Pakistan Academy of Sciences, Associate professor, Department of Biotechnology, Quaid-i-Azam University, Islamabad, Pakistan  
 Studying Bats and Bat-Associated Viruses Promotes Sustainability, Pakistan's Experience

**Speaker: Dr. Muhammad Naveed ANJUM (Mr.)**  
 15.30-16.00 *PMAS Arid Agriculture University, Rawalpindi*  
 Impacts of Extreme Climate Change with respect to Food Security, Biodiversity, and Sustainability

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**14.30-16.00: SCIENTIFIC SESSION III (PARALLEL) - **BIODIVERSITY****  
**- [CONFERENCE ROOM]**

**Chair: Prof. Dr. Asghari MAQSOOD (Ms.)**  
*Fellow, Pakistan Academy of Sciences*

**Speaker: Prof. Dr. Anjana SINGH (Ms.) (OL)**  
 14.30-15.00 *Former Head, Central Department of Microbiology, Tribhuvan University, Kirtipur, Kathmandu, Nepal*  
 Genetic Diversity of Dengue Virus Circulating in the Nepal

**Speaker: Dr. Mubarak Ahmad KHAN (Mr.)**  
 15.00-15.30 *Fellow, Bangladesh Academy of Sciences and Bangladesh Atomic Energy Research Establishment*  
 Oligo Chitosan as a Sustainable Solution for Enhancing Food Security, Biodiversity, and Biomedical

**Speaker: Prof. Dr. Liaquat ALI (Mr.)**  
 15.30-16.00 *Fellow, Bangladesh Academy of Sciences, Bangladesh*  
 Prevention of Noncommunicable Diseases: Choosing the Right Carbohydrate

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**16.00-17.00: Light Refreshments and Poster Presentations - [Lobby]**

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**17.00-18.00: SCA Management Board Meeting (Invitation only)**  
**- [CONFERENCE ROOM]**

**18.30-20.30: Reception / Welcome Dinner - [PAS Lawn]**

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## 17 November 2025 (Monday)

### 9.00-10:30: PLENARY SESSION - [AUDITORIUM]

Chair: **Prof. Dr. Muhammad QAISAR (Mr.)**  
*Vice President, Pakistan Academy of Sciences and Professor Karachi University, Pakistan*

9.00-9.45 **Plenary Lecture III**  
 Speaker: **Prof. Dr. You-Cai XIONG (Mr.)**  
*Foreign Fellow, Pakistan Academy of Sciences, College of Ecology, Lanzhou University, China*  
 Diversified Cropping Systems to Ensure Food Security and Ecosystem Sustainability

9.45-10.30 **Plenary Lecture IV**  
 Speaker: **Prof. Dr. Looi Lai MENG (Ms.)**  
*Vice President, Malaysia Academy of Sciences*  
 Indigenous Wisdom in Biodiversity Sustainability: A Story from Malaysia

### 10.30-11.00: Light Refreshments & Poster Presentations - [Lobby]

### 11.00-12:30: PLENARY SESSION - [AUDITORIUM]

Chair: **Prof. Dr. Muhammad ASHRAF (Mr.)**  
*Vice President, Pakistan Academy of Sciences, and Vice Chancellor, University of Lahore, Pakistan*

11.00-11.45 **Plenary Lecture V**  
 Speaker: **Prof. Dr. Kotaro TAKAYAMA (Mr.)**  
*Graduate School of Engineering, Department of Mechanical Engineering, Toyohashi University of Technology, Japan*  
 Plant-Guided Optimal Environmental Control for Sustainable Agriculture

11.45-12.30 **Plenary Lecture VI**  
 Speaker: **Dr. Anwar ul Hassan GILLANI (Mr.)**  
*Fellow, Pakistan Academy of Sciences, Islamabad, Pakistan*  
 Food Security through Sustainable Agriculture under Changing Climate

### 12.30-14.00: Lunch Break and Posters Display - [Lobby]

### 14.00-15.30: SCIENTIFIC SESSION IV (PARALLEL) - FOOD SECURITY - [AUDITORIUM]

Chair: **Prof. Dr. Shahid Mahmood BAIG (Mr.)**  
*Fellow, Pakistan Academy of Sciences, Health Services Academy, Islamabad*

Speaker: **Prof. Dr. Sakiko SHIRATORI (Ms.)**  
 14.00-14.30 *Project Leader, Information and Public Relations Office, Japan International Research Center for Agricultural Sciences*  
 Towards Nutrition-Sensitive Agriculture and Resilient Food Systems: Global Perspectives with Evidence from Africa

Speaker: **Dr. Muhammad Ramzan KHAN (Mr.)**  
 14.30-15.00 *National Institute for Biotechnology and Genetics Engineering, Faisalabad, Pakistan*  
 Integrated Genomic Assisted Breeding Technology for Accelerated Development of Crop Varieties

Speaker: **Prof. Dr. Khurram MUAZ (Mr.)**  
 15.00-15.30 *KAM School of Life Sciences, Forman Christian College, Lahore, Pakistan*  
 Valorization of Rice Husk for Sustainable Food Packaging Applications

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**14.00-15.30: SCIENTIFIC SESSION V (PARALLEL) - SUSTAINABILITY [COMMITTEE ROOM]**

Chair: **Prof. Dr. Liaquat ALI (Mr.)**  
*Fellow, Bangladesh Academy of Sciences*

Speaker: **Prof. Dr. Mamoonah MUNIR (Ms.)**  
 14.00-14.30 *Assistant Professor, Rawalpindi Women University, Rawalpindi, Pakistan*  
 Leverage Alternative Crops for Environmental Sustainability and Global Food Security

Speaker: **Prof. Dr. Olga PASHKEVICH (Ms.) (OL)**  
 14.30-15.00 *Institute of System Research in Agro-Industrial Complex of the National Academy of Sciences of Belarus, Minsk, Republic of Belarus*  
 Methodology for Assessing Agricultural Heritage Sites for Sustainable Rural Development

Speaker: **Prof. Dr. Sagarika EKANAYAKE (Ms.)**  
 15.00-15.30 *Chair, Department of Biochemistry, University of Sri Jayewardenepura, Nugegoda, Sri Lanka*  
 Traditional Sri Lankan Foods and Sustainable Healthy Living

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**14.00-15.30: SCIENTIFIC SESSION VI (PARALLEL) – BIODIVERSITY [CONFERENCE ROOM]**

Chair: **Prof. Dr. Azra KHANUM (Ms.)**  
*Fellow, Pakistan Academy of Sciences*

Speaker: **Dr. Shazia SULTANA (Ms.)**  
 14.00-14.30 *Silkroad Biohealth and Agricultural Industrial Alliance, China, International Professor Samarkand State University, Uzbekistan*  
 Plant Biodiversity Resources to Industrial Products: A way forward for Food, Health and Energy Security

Speaker: **Prof. Dr. Mushtaq AHMAD (Mr.)**  
 14.30-15.00 *Fellow, Pakistan Academy of Sciences, and Professor, Quaid-i-Azam University, Islamabad Pakistan*  
 Biodiversity for One Earth: Civilization Connection for Sustainability

Speaker: **Dr. Saima HASHIM (Ms.)**  
15.00-15.30 *Khyber Pakhtunkhwa Agriculture Department*  
Nature-Based Solutions and Community Participation for Climate-Resilient  
Water Governance

**15.30-16.00: Light Refreshments and Poster Presentations - [Lobby]**

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**16.00-17.30: Young Researcher’s Session - [AUDITORIUM]**

**Lectures**

Speaker-I (Pakistan): **Dr. Aftab Ahmad (Mr.)**  
*President, National Academy of Young Scientists, Pakistan*  
Bridging the Gap: Science, Industry, and the Future of Innovation

Speaker-II (Japan): **Dr. Ryuma SHINEHA (Mr.)**  
*Associate Professor, Graduate School of Media Design, Keio University, Japan*  
Science and Technology Policies for Advanced Knowledge-based Society in Japan

Speaker-III (Japan): **Dr. Ryohta MATSUYAMA (Mr.)**  
*Researcher, National Institute of Animal Health, National Agriculture and Food Research Organization, Japan*  
Shared Challenges, Collective Action: Empowering Early-Career Researchers in Asia

**Panel Discussion**

Moderator: **Prof. Dr. Yasir WAHEED (Mr.)**  
*School of Health Sciences, National University of Science and Technology (NUST), Islamabad, Pakistan*

**17.30-18.00: Light Refreshments**

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**18.00-19.00: General Assembly Meeting (Invitation only)**  
**- [CONFERENCE ROOM]**

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## 18 November 2025 (Tuesday)

**9.30-11.30: FUTURE EARTH SYMPOSIUM - [AUDITORIUM] (TBD)**

### A: Main Talks:

Moderator: **Prof. Dr. M. Qasim JAN (Mr.)**

09:30-09:35 *Fellow, Pakistan Academy of Sciences*

Welcome Remarks, Program Outline, Speaker introductions

Speakers: **Prof. Dr. Fumiko KASUGA (Ms.)**

09:35-09:50 *Professor, School of Tropical Medicine and Global Health, Nagasaki*

*University*

*Global Hub Director-Japan, Future Earth*

**Dr. Ria LAMBINO (Ms.) (OL)**

*Deputy Director, Japan Hub, Future Earth*

*Future Earth initiatives and the Asia Science Mission*

Speaker: **Dr. Abid MAHMOOD (Mr.)**

09:50-10:05 *Punjab Agriculture Research Board, Lahore, Pakistan*

*Building Resilient Food, Ecosystem*

Speaker: **Prof. Zabta Khan SHINWARI (Mr.)**

10:05-10:20 *Fellow, Pakistan Academy of Sciences and Vice Chancellor, Federal Urdu*

*University, Islamabad, Pakistan*

*Climate Futures - Importance of Sustainable Development for a Better Future Earth*

### B. Short Talks

Moderator: **Prof. Dr. Fumiko KASUGA (Ms.)**

10:20-10:25 *Professor, School of Tropical Medicine and Global Health, Nagasaki*

*University*

*Global Hub Director-Japan, Future Earth*

Program Outline, Speaker introductions

Speaker: **Candice LUNG (Ms.) (OL)**

10:25-10:30 *Future Earth Taipei, Taiwan*

*Air Pollution and Health: Systems Approach*

Speaker: **Arnab CHAUDHARY (Mr.)**

10:30-10:35 *Lawyer, Activist, Indigenous Youth, Nepal*

*Indigenous and Local Knowledge in Sustainability Pathways*

Speaker: **Dr. Neni SINTAWARDANI (Ms.)**

10:35-10:40 *Senior Researcher, BRIN, Indonesia*

*Resource Circularity for Livelihoods and Resilience*

Speaker: **Dr. Muhammad SHAFIQUE (Mr.)**

10:40-10:45 *National Center of Excellence in Geology, University of Peshawar, Pakistan*

*Integrated Early Warning Systems for Climate Disasters*

Speaker: **Dr. Shuja ul Mulk KHAN**

10:45-10:50 *Professor, Quaid-i-Azam University, Islamabad, Pakistan*

Agro-ecological Innovations for Food Security or Challenges or Opportunities:  
AI and Food Systems and Climate

10:50-11:30 **Moderated Fishbowl Conversation**

*(One moderator physical and the other online)*

This session will adopt a fishbowl format to encourage open, participatory dialogue between speakers and audience members.

### **C. Announcements/Closing Remarks**

**11.30-12.00: Light Refreshments**

**12.00-13.00: CONCLUDING SESSION - [AUDITORIUM]**

Moderator: **Prof. Dr. Khalid Mahmood KHAN (Mr.)**  
*Former President, Pakistan Academy of Sciences*

- **Report by the Focal Person of 24<sup>th</sup> SCAC**  
*Dr. Riffat Mahmood QURESHI (Mr.)*
- **Address by the President of Pakistan Academy of Sciences**  
*Prof. Dr. Kauser Abdulla MALIK (Mr.)*
- **Conference Declaration by Secretary-General of Science Council of Asia**  
*Prof. Dr. Sakae SHIBUSAWA (Mr.)*
- **Announcement for 25<sup>th</sup> SCAC in Cambodia by ITC's Director General**  
*H.E. Prof. PO Kimtho (Mr.) (Recorded Video Message)*
- **Address by the President Science Council of Asia**  
*Prof. Dr. M. Aslam BAIG (Mr.)*

**13.00-14.30: Group Photo and Lunch**

**14:30: End of 24<sup>th</sup> SCA CONFERENCE**