#### **ICAR Sponsored National Symposium**

#### On

### SUSTAINABLE AGRICULTURE PRACTICES FOR FOOD SECURITY AND ENVIRONMENTAL CONSERVATION (15<sup>th</sup> - 16<sup>th</sup> March, 2024)

The National Symposium on "Sustainable Agriculture Practices for Food Security and Environmental Conservation" was held on March 15th - 16th, 2024 at Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, Uttar Pradesh. The symposium aimed to bring together experts, researchers and stakeholders in the field of agriculture to discuss and exchange their ideas on sustainable agriculture practices that ensure food security while preserving the environment.

Shri Surya Pratap Shahi, Hon'able Cabinet Minister, Agriculture, Agriculture Education and Research, Government of Uttar Pradesh was the Chief Guest of inaugural session of the Symposium. He inaugurated the symposium, released the abstract book and addressed the delegates. He emphasized on role of Sustainable agriculture which gives equal weightage to environment, social and economic concerns in agriculture. He also stressed upon use of latest technologies in crop management, water conservation and environmental sustainability. He appreciated the efforts made by SVPUAT, Meerut for organizing the National symposium at the Agriculture University placed at Important Zone of Uttar Pradesh. He also applauded the scientists for innovative solutions offered by Agriculture University to address the challenges of climate change, decreasing land resources, erratic rainfall, rising population and crop residue management. He provided insights into efforts of Govt. of Uttar Pradesh aimed at adopting solar energy to decrease the dependence on conventional fuels. He also encouraged farmers to cultivate crops with low water requirement like millets. He guided scientists to make maximum use of breakthrough technologies like Artificial Intelligence in their research for transforming the farming sector. He emphasized on use of farming practices dedicated to environmental conservation. He shared his opinion that reduced reliance on pesticides/ insecticides is necessary for environmental sustainability. He also suggested experts to work on advanced area of water conservation in the era of depleting natural resources.

Professor K.K. Singh, Hon'ble Vice-Chancellor, SVPUA&T, Meerut and Patron of Symposium stressed upon sustainability which includes dimension of social economic and environment. He suggested judicious use of natural resources and reduction of carbon footprint. He emphasized on opting 17 Sustainable Development Goal of UN which covers no poverty, zero hunger, good health and clean water. Agriculture sector bears the responsibility of reducing the greenhouse emission. He also advised to implement solar and wind energy in agriculture. He recommended use of IPM, Biofertilizer, Biodegradable plastics, Natural and organic farming.



Inauguration of the National symposium by Shri Surya Pratap Shahi, Hon'ble Cabinet Minister, Agriculture, Agriculture Education and Research, Government of Uttar Pradesh and Professor K. K. Singh, Hon'ble Vice-Chancellor, SVPUA&T, Meerut along with other dignitaries.



Shri Surya Pratap Shahi , Hon'ble Cabinet Minister, Agriculture, Agriculture Education and Research, Government of Uttar Pradesh and Professor K. K. Singh, Hon'ble Vice-Chancellor, SVPUA&T, Meerut along with other dignitaries released the souvenir of the symposium.



Felicitation of the Hon'ble Chief Guest by the Hon'ble Vice-Chancellor

Total 344 delegates from diversified group of people spanning different states, union territories participated in the symposium. The symposium provided the platform to researchers and academicians from leading universities and institutions such as IARI, New Delhi, GBPUA&T, Pantnagar, Graphic Era Hill University, Dehradun, ICAR-NIAEPR, ICAR-NBPGR, New Delhi, NCIPM, New Delhi, Bundelkhand University, Jhansi, RLBCAU, Jhansi, Maa Shakumbhari University, Sharanpur, CIAE, Bhopal, Rohilkhand University, Bareilly, CCSU, Meerut, Subharti University, Meerut, SVPUA&T, Meerut, ICAR-IIFSR, Meerut, ICAR-Central Potato Research Institute RS, Modipuram, Meerut, NIH, Roorkee, CSAUT, Kanpur, NBFGR, Lucknow, Lucknow University, Lucknow, IISR Lucknow, ICAR-CIAE, New Delhi, IIT, Jodhpur, Indian Institute of Technology Delhi, IIT, Bombay, Navsari Agricultural University, Gujrat, SHUATS, Prayagraj, CIRC, Meerut, Central Institute for Research & Buffalos, Hisar, Haryana, NCIP, New Delhi, AMITY University, Noida, National Institute of Agricultural Economics and Policy Research, Pusa, New Delhi and many more to share their knowledge on all aspects of sustainable agriculture. The companies like Green Land Agri Marketing India Pvt. Ltd. Muzaffarnagar, Syngenta India Ltd., Pune and Future Chem Agro Private Limited, New Delhi also participated in the Symposium.

# The were 5 technical sessions as mentioned below:

The first technical session consist of three themes as mentioned below:

Theme-1: Reforming Agriculture/ Horticulture through sustainable agricultural practices, policies and Governance

Theme-2: Advances in crop breeding, biotechnological approaches and IPR issues

Theme-3:Climate Smart Agriculture, precision farming, digital solutions and Agri-tech Approaches.

Under this session, 3 lead lectures and 14 oral presentations were presented by the experts of the relevant themes. In this theme topics like new innovative digital technologies in precision agriculture, Integrated Farming System model for Sustainable Livelihood, Genetic variability, heritability and genetic advance for yield and Protected Cultivation etc. were discussed.



The second technical session consist of two themes as mentioned below:

Theme-4: Advances in water and soil Management for sustainable Agriculture

Theme-5: Advances in insect pest and disease Management for sustainable Agriculture

The second Technical Session had one lead lecture and two oral presentation were presented. In this theme topics like water and food security, the application integrated nutrient management strategies, entomopathogenic nematodes for insect pest management and organic farming and biological agents for nematode management etc. were discussed.



The third technical session consist of two themes as mentioned below:

Theme-6: Harvest and Post-Harvest Technologies for reducing Post-Harvest food losses.

Theme-7: Biodiversity, forestry, organic and natural farming

The third Technical Session had five lead lecture and three oral presentation. In this theme topics like the importance of resource conservation technology, use of robot for crop monitoring and Ecological Engineering for insect and disease management etc. were discussed.



The fourth technical session consist of two themes as mentioned below:

Theme-8: Optimizing Livestock, Poultry and Fisheries management: sustainable practices for health productivity and environmental harmony.

Theme-9: Innovations in agricultural communication and extension management.

The fourth Technical Session had three lead lecture and ten oral presentation were presented. The topics like role of information & communication technology for rural development & value chain analysis, biotechnology for sustainable production in livestock and sustainable livestock improvement & precision Livestock farming etc. were discussed.





The fifth technical session consist of two themes as mentioned below:

Theme-10. Natural Resources and Sustainable Management

Theme-11. Agribusiness and Agri-Enterpreneurship

The fifth Technical Session had three lead lecture and ten oral presentation were presented. The topics like issue of scarcity of IPM in agriculture fields, an agri-processing and post-harvest technology through creating farmwomen groups and the issue referring to water, soil and air quality improvement and increasing total factor productivity etc. were discussed.



## Valedictory Session



Chief guest Professor H.S. Singh, Hon'ble Vice-Chancellor, M.S.U., Saharanpur and Hon'ble Vice-Chancellor Professor K.K. Singh, SVPUA&T, Meerut along with Guest of Honour Dr. K.P. Singh, ADG, Farm-Engenering, ICAR, New Delhi lighting the lamp.



Chief guest Professor H.S. Singh, Hon'ble Vice-Chancellor M.S.U., Saharanpur and Hon'ble Vice-Chancellor/Patron Professor K.K. Singh, SVPUA&T, Meerut along with Guest of Honour Dr. K.P. Singh, ADG, Farm-Engenering, ICAR,New Delhi distributed the certificate and adressed the deligates.