

## REPORT of National Webinar on AGRITECH INNOVATIONS to leapforward sustainable management of soil and environment

15 March 2022, Time: 3:30-5:30 pm (IST)

The National Webinar on “AGRITECH INNOVATIONS to leapforward sustainable management of soil and environment” was organized by ICAR-Indian Institute of Soil Science, Bhopal, Madhya Pradesh (India) on 15 March, 2022. There were about 170 participants including directors of ICAR NRM institutes, scientists, state govt. officials, research scholars, industry representatives and students. At the outset, Dr. Asha Sahu welcomed all the delegates. Dr. Sudeshna Bhattacharjya briefed about the webinar. In the inaugural address, Chief Guest Dr. SK Chaudhari, DDG (NRM), ICAR stated the importance of scientific management of soil and water using agri-innovations like sensors, unmanned aerial vehicles, artificial intelligence and cloud based solutions. He also stressed upon nature based solutions to reduce the reliance on high input agriculture. Dr. Ashok K Patra, Director, ICAR-IISS Bhopal stressed upon the importance of ICT based AGRITECH innovations in doubling farmers’ income in a scenario where new generation is moving away from agriculture due to declining profitability.



The technical session started with the keynote address by Dr. Abhishek Mani Tripathi, Principal Agri-Researcher, Fasal (India) on the topic “The role of smart farming using IoT devise and AI approach for sustainable environment management”. The speaker explained about how Fasal could increase crop yield by 40 percent by saving nearly 9 billion litre of water and by decreasing 60 percent pesticide using their IoT system and AI system.

Dr. Praveen Pankajakshan, VP Data science & AI, Cropin (India) delivered the keynote address on the topic “Crop mapping using AI & remote-sensing for eco-agriculture and sustainability (CARES) where he discussed about how Cropin is dealing with issues like crop diversity, soil restoration, climate smart agriculture, carbon storage using prediction models, identification of crop pest and diseases and many more.

A keynote address on “FarmBeats and Terra Vibes: empowering farmers with affordable digital agriculture and earth observation solutions” was given by Dr. Sara Malvar, Senior Research Software Development Engineer, Microsoft (Brazil) and Tusher Chakraborty, Software Engineer II, Microsoft (India). The speakers explained about the challenges and prospects of AI, IoT and smart tools in agriculture. They also explained how AI and super spectra resolution data can be used effectively in agriculture.

A panel discussion was also held where the panel members were Dr. SagiKatz, Chief Agronomist, Agmatix, Israel, Dr. R.N. Sahoo, Principal Scientist, ICAR-IARI, and Dr. M. Mohanty, Scientist G, Office of the Principal Scientific Advisor to GoI. Thereafter, questions raised by the participants were addressed by the keynote speakers and panellists.

Dr. Sangeeta Lenka chaired the session and Dr. Nisha Sahu acted as co-chairperson. The rapporteurs of the session were Drs. Shinogi KC and Priya Gurav. The programme ended with vote of thanks by Dr. Khushboo Rani.

