Recommendations:

1. Strengthening the National Agricultural Research System (NARS) with Special focus on Artificial Intelligence (AI) in agriculture by the Central and State Governments.

2. ICAR should be approached for a network programme or common platform on AI across all SAU's.

3. Inter-institutional consultancy mode should be developed for training and joint projects in AI and precision agriculture should be planned.

4. All the SAUs should star digitizing their data. Analyzed data should have standardized data sets since data will be available from varying sources.

5. A comprehensive policy should be drafted on the use, storage, maintenance and ownership of the data. There is a need to discuss the issues of ownership of data and generating workforce to handle the Big Data and AI related activities.

6. Applying disruptive innovations in precision agriculture by combining technological advances (i.e. Sensors, Internet of Things (IoT), Machine Learning, Automation etc.) and the associated business/social intelligence (in terms of food and water security) through stakeholders should be one focus.

7. An appropriate policy needs to be developed on the use of drones in Indian agriculture in order to boost the technological ecosystem of the country. Different stakeholders may be brought on a single platform to frame guidelines for their smooth implementation.

8. Work on exploring the huge potential of AI to promote animal husbandry sector, especially animal traceability, genetics, management and health should be initiated.

9. Drones should be used for monitoring crop health as well as data recording. Training in use of drones for ultra low volume (ULV) sprays is need of the hour.

10. Technology should be developed for use of drones with GPS enable spraying linked with imaging and mechatronics for precise sprayings on hotspots.

11. Work should be initiated in the field of precision farming with the application of robotics and drones to attract youth in agriculture, saving of inputs, increasing productivity and sustainability of agriculture.