

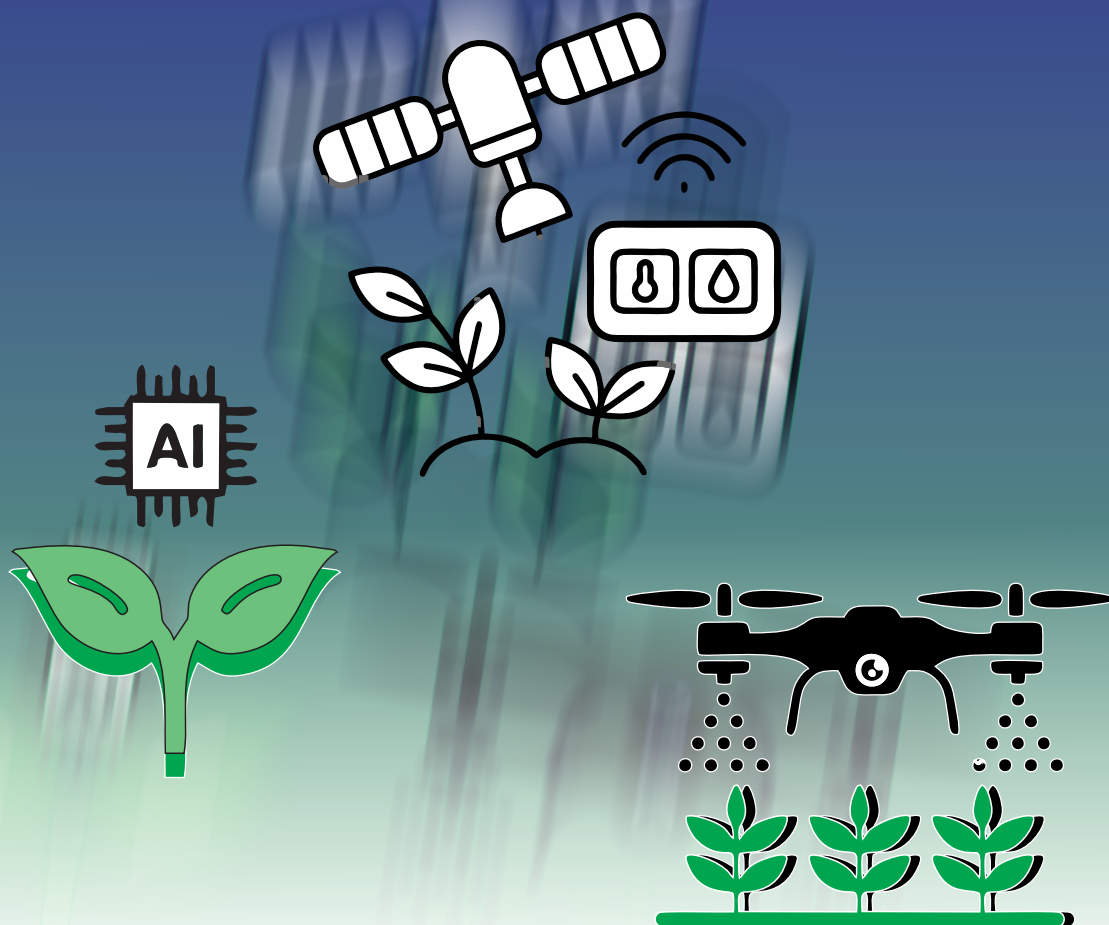


National Conference on
**AI Enabled Digital Solutions for
Achieving Unmanned Farming by 2047
(ADSAUF - 2047)**

2-4 December, 2026

Venue:

University Auditorium,
Professor Jayashankar Telangana Agricultural University
Rajendranagar, Hyderabad - 30



Centre for Digital Agriculture and Technology

Professor Jayashankar Telangana Agricultural University

Rajendranagar, Hyderabad - 500030, Telangana, India

www.pjtau.edu.in

PJTAU

National Conference on AI Enabled Digital Solutions for Achieving Unmanned Farming by 2047

2-4 December, 2026

Background

Indian agriculture has undergone a remarkable transformation since Independence. In 1950-51, the foodgrain production was only 50.8 million tonnes increased to 330 million tonnes of foodgrains. Despite these achievements, the agricultural sector faces significant challenges viz. small and fragmented landholdings, rising input costs, labour shortages, and climate variability making conventional farming increasingly inefficient. These challenges underscore the urgent need for mechanisation, automation, data-driven farm management and unmanned agriculture by 2047. In this context, the emerging digital technologies, including Artificial Intelligence (AI), Internet of Things (IoT), Remote sensing & GIS, robotics, big data analytics and unmanned systems offer transformative opportunities to enhance agricultural productivity, optimize resource use and support real time decision making. In this context, Professor Jayashankar Telangana Agricultural University (PJTAU) is organizing the National Conference on “AI Enabled Digital Solutions for Achieving Unmanned Farming by 2047”. The conference will serve as a platform for researchers, scientists, academicians, industry leaders, startups, policymakers, extension professionals, and students to exchange knowledge, showcase their innovations, foster multidisciplinary collaborations to align with the vision for 2047 of India.

Conference Objectives

- Promote AI-enabled digital agriculture.
- Advance unmanned farming technologies for Agriculture@2047.
- Foster collaboration among academia, industry, and stakeholders.
- Encourage innovation, research, and technology transfer.
- Showcase emerging digital solutions for sustainable agriculture.



Thematic Areas

Theme: 1 Artificial Intelligence and Machine Learning for Smart Agriculture

- Predictive analysis
- Crop monitoring
- Yield prediction
- Disease and Pest forecasting
- Decision support systems

Theme: 2 Remote Sensing, GIS, UAVs Technologies in Agriculture

- Satellite-based crop monitoring
- Drone applications in Agriculture
- Crop health assessment using RS & GIS

Theme: 3 IoT, Sensor and Smart farm Automation

- Wireless network
- Smart irrigation system
- Internet of Things Agriculture
- Automatic monitoring system

Theme: 4 Robotics, Autonomous Farm Machinery

- Agricultural robotics
- Autonomous tractors
- Intelligent spraying weeds and harvesting
- Navigation technologies
- Human-robot collaborations

Theme: 5 Digital Agriculture outreach

- Digital extension
- Agri-startups
- Digital advisory systems
- Agri-fintech
- Data governance
- Market intelligence

Live Demonstrations

- AI-powered decision support systems
- Smart irrigation systems
- IoT-based sensor networks
- Soil moisture and nutrient sensors
- Weather stations
- Agricultural drones
- Autonomous farm machinery
- Robotics for agriculture
- Mobile applications
- Farm management software
- Remote sensing and GIS tools
- AI-based crop disease diagnosis
- Startup innovations
- Precision farming technologies



Technical Sessions

- Session I** : Artificial Intelligence and Machine Learning Applications in Agriculture
- Session II** : Remote Sensing, GIS, UAVs and Digital Agriculture
- Session III** : IoT, Smart Sensors and Precision Irrigation
- Session IV** : Agricultural Robotics and Autonomous Farming Technologies
- Session V** : Digital Innovation Ecosystem, Startups and Future Agriculture

Digital Agriculture Exhibition

A special exhibition showcasing Digital Solutions for Agriculture will be organized alongside the conference.

Submission of Abstracts

Researchers, academicians, students, industry professionals, extension personnel, and startups are invited to submit abstract of original research papers, review papers, case studies, and innovative technology demonstrations related to the conference themes to adsauf.2047@gmail.com not exceeding 300 words in Times new roman with 12 font size in Ms-Word.

Conference Awards

Separate awards will be presented for Students and Faculty/Scientists.

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|-------------------------------|------------------|
| Best Oral Presentation Awards | : First & Second |
| Best Poster Awards | : First & Second |
| Best AI Solution Awards | : First & Second |

Important Dates

- | | |
|------------------------------|-----------------------------------|
| First Call Announcement | : 25 th July 2026 |
| Abstract Submission | : 30 th September 2026 |
| Acceptance Notification | : 30 th October, 2026 |
| Full-Length Paper Submission | : 10 th November 2026 |
| Early Bird Registration | : 30 th September 2026 |
| Final Registration | : 15 th November 2026 |

Registration Fee

Category	Registration Fee
Students	Rs. 1,000
Faculty, Scientists, Industry Professionals & Others	Rs. 3,000

Expected Outcomes

- National networking platform for Digital Agriculture.
- Industry–academia collaborations.
- Promotion of AI-enabled agricultural innovations.
- Knowledge exchange on autonomous farming technologies.
- Publication of selected peer-reviewed papers.
- Recommendations for achieving the vision of Unmanned Farming by 2047.

Who Should Participate?

- Scientists, Faculty Members, Researchers, Students, Industry Professionals, Startups, Entrepreneurs, Extension Professionals, Government Officials and Progressive Farmers

Organizing Committee

- Chairman** : **Dr. M. Balram**
Director of Research, PJTAU, Rajendranagar, Hyderabad
- Vice-Chairman** : **Dr G. Venkateshwarlu**
Managing Director, AgHub Foundation, PJTAU, Rajendranagar, Hyderabad
- Convener** : **Dr. B. Balaji Naik**
Director, Centre for Digital Agriculture & Technology, PJTAU, Rajendranagar, Hyderabad
- Members** : **Dr. J. Satyanarayana**
Project Head, SBI ARISA Lab, Ag-Hub, PJTAU, Rajendranagar, Hyderabad
- Dr. P. Rajaiah**
Principal Scientist (Ag.Engg.) & Head, FIM Scheme, CDAT, PJTAU, Rajendranagar, Hyderabad
- Dr. S. G. Mahadevappa**
Principal Scientist (Agronomy), ACRU, CDAT, Rajendranagar, Hyderabad
- Dr. T. Kiran Babu**
Scientist (Plant Pathology), Drone Academy, CDAT, PJTAU, Rajendranagar, Hyderabad
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