

National Institute of Agricultural Extension Management (MANAGE)

(An Autonomous Organization of Ministry of Agriculture and Farmers' Welfare, Govt. of India) Rajendranagar, Hyderabad 500 030, Telangana, India



Training on "Trends on Sustainable Climate Resilient Precision Agriculture -Role of Artificial Intelligence and Remote Sensing"





About the Program:

Climate change poses a significant threat to agricultural productivity, food security, and farmer livelihoods. To address these challenges, integrating Artificial Intelligence (AI) and Remote Sensing with Precision Agriculture offers immense potential to optimize inputs, monitor crops, and build resilience to climate variability.

This three-day training program aims to build the capacity of agricultural professionals, researchers, and extension personnel in understanding emerging technologies and sustainable practices that enhance climate-smart decision-making and farm-level precision management.

Objectives:

- * To familiarize participants with recent trends and innovations in sustainable and precision agriculture.
- * To demonstrate the role of Artificial Intelligence, Machine learning, and IoT in climate resilient farming.
- * To provide practical exposure to Remote Sensing, GIS tools, and data-driven farm management.
- * To discuss success stories in AI-enabled sustainable agriculture.

Key Themes:

- * Climate Resilience and Sustainable Agricultural Systems
- * Al Applications in Crop Monitoring, Pest Prediction & Yield Forecasting
- * Precision Agriculture Tools and Technologies
- * Remote Sensing and Satellite-Based Farm Advisory
- * Smart Irrigation and Soil Health Management
- * Drones and Sensor-Based Decision Support Systems
- Government Policies, Start-up Ecosystem, and Case Studies
- * Capacity Building for Digital and Climate-Smart Agriculture

Target Participants:

Officers from State Departments of Agriculture, Horticulture, and Allied Sectors; Scientists, Researchers, and Faculty Members from ICAR, SAUs, and KVKs who are involved in climate-smart and digital initiatives.

Course Fee:

No Course Fee. Food and Accommodation (Twin sharing basis) is arranged at MANAGE campus. However, No TA / DA will be provided by MANAGE.

Training Methodology:

Lectures by Experts, interactive sessions, group discussions, case study presentations, and field exposure.

Expected Outcome:

- 1. Gain conceptual and practical knowledge of Al and remote sensing applications in agriculture.
- 2. Develop strategies to promote sustainable and climate-resilient precision agriculture.
- 3. Strengthen linkages between technology, policy, and field-level implementation.

Nomination for the program:

Interested candidates have to send their nominations through proper channel from their respective departments/organization on or before 20.01.2026 to the following mail id.

Course Director:

Centre for Sustainable Agriculture National Institute of Agricultural Extension Management (MANAGE) Rajendranagar, Hyderabad – 500030 Email: balasubramani@manage.gov.in