



**Centre of Excellence for
Digital Farming Solutions for Enhancing Productivity By
Robots, Drones And AGVs(DFSRDA)**

*One-week online training
on*

**Recent advances & instrumentation in
Agricultural Meteorology**

26 May – 02 June, 2020

**Vaswantrao Naik Marathwada Krishi Vidyapeeth
Parbhani (MS)**



About

Centre of excellence for Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (DFSRDA), VNMKV, Parbhani is organizing a **“One Week online training course on Recent advances & instrumentation in Agricultural Meteorology** during 26 May - 2 June, 2020. The Centre for Advanced Agricultural Science and Technology (CAAST) on Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (DFSRDA) is being implemented in Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra under world bank Sponsored National Agricultural Higher Education Project (NAHEP) of Indian Council of Agricultural Research (ICAR), New Delhi, Government of India, Since 2019. One of the main objectives of this center is the capacity Building among PG/PhD students and faculties of VNMKV and other universities about recent advances in agricultural science and technology.

Background

In spite of many technological developments in recent decade, Agriculture in India is still vulnerable to vagaries of weather. Agriculture in India depends mainly on rainfall and its distribution because major portion of land is rainfed. In modern agriculture, ecology and economy are on equal provisions; through weather issues they are even interdependent. Scarcity of resources, ruin of ecological systems and other environmental issues are becoming ever more serious. Observations of the physical and biological variables in the environment are essential in agricultural meteorology. Meteorological deliberations enter into assessing the performance of plants and animals because their growth is a result of the combined effect of genetic characteristics (nature) and their response to the environment (nurture). Without quantitative data, agrometeorological planning, forecasting, research and services cannot properly assist agricultural producers to survive and to meet the ever-increasing demands for food, fodder and agricultural by products. Such data are also needed to assess the impacts of agricultural activities and processes on the environment and climate.

Hence detailed observations/monitoring and real-time dissemination of meteorological information, quantification by advanced instruments, remote-sensing (radar and satellites), and derived indices and operational services are essential to take agrometeorological decisions in the short-term planning of agricultural operations for better and sustainable crop yields. Similarly in order to adapt the agricultural system to increased weather variability it becomes more and more important to supply meteorological information blended with weather sensitive management operations before the start of cropping season. The well-organized, customary production and coordinated dissemination of this information linked with agromet advisories services are essential.

Aim

The aim of the training is to give exposure to participants about the basic principles and application of instruments in agriculture, use of real time weather data and advanced weather forecast for risk management in agriculture. Training also will help participants to understand the meteorological information blended with weather sensitive management operations in order to adapt the agricultural system under weather variability.

Objective

1. To create awareness about importance of Agrometeorology and its importance in Agriculture.
2. To make aware the participants about advanced instrumentation.
3. To build a support systems for agrometeorological services.
4. To encourage the participants to use advanced instrumentations in formulating the research and academic activities on climate change and micrometeorology.
5. Capacity building for the students and faculty.

Course Content

- Basic Instrumentation: Importance, concept, principles & application
- Eddy Covariance Systems - Basic Principles and Instrumentation Configuration for GHG Monitoring
- Open Top Chamber Technology (OTP)
- Simulation model on climate change studies
- Micrometeorological Study using Advance Instruments
- Impact Based Agromet Advisory Services in India
- Introduction to Meteorological Forecasting Products and their uses
- Monsoon 2020 and Initiatives Meteorological Observational Network
- Measurements and Sensing of Agrometeorological Variables
- Satellite Meteorology

Target Audience

PG/PhD Students, Faculties, Scientists and Staff of Vasantrya Naik Marathwada Krishi Vidyapeeth, Parbhani and other Agricultural Universities, KVK SMS in the area of Agromet, Soil Science, Agronomy, Plant Physiology, Horticulture, Agril Engg. etc. and staff of Government Departments are eligible to register. They are requested to take advantage of these online training course during this COVID- 19 lock down period.

Registration

Free Registration to all Participants. The list of selected candidates will be displayed on the website <https://nahep.vnmkv.org.in>

The link for online registration is (Link: https://docs.google.com/forms/d/e/1FAIpQLSfSwuIPXmRuYcJL3Al1GPv7Cnxxc4_qBmGSamCAhwpQZrrfmA/viewform)

Registration is open till 24th May 2020, upto 10.00 AM
For Registration Kindly SCAN QR CODE



Communication about the Selection

The WhatsApp group of the selected candidates will be formed at least one day before the start of the training programme and all the communications regarding the training programme will be posted on this WhatsApp group. Alternatively, the candidates can keep accessing the CAAST-VNMKV website (<https://nahep.vnmkv.org.in/>) regarding the selection, preferable on the day before the start of the training programme.

Registration

- Participants need to register by clicking on the link above and should provide an active email ID and WhatsApp number for further communication. If email ID and WhatsApp number are not appropriate, you may not receive any communications.
- Daily lectures through online platform will be conducted along with online discussions and tutorials. The link, ID and password for joining the online session will be communicated through WhatsApp group of the selected candidates 30 mins before the start of the session.
- Certificates will be issued to those participants only who will complete all online sessions and assignments/tutorials.

PATRON



Dr. A.S Dhawan

Hon. Vice - Chancellor, VNMKV, Parbhani

Chief Guest for Inaugural Function



Dr. A M Shekh

Hon Ex Vice Chancellor, A.A.U., Anand

Chief Guests for Valedictory Function



Dr. K K Singh

Head, AAS, and Scientist G
IMD, New Delhi



Dr. S K Bal

Project Coordinator (Agrometeorology)
I/c AICRPAM, CRIDA, Hyderabad, India

Chief Convenor



Dr. D.N. Gokhale

Director of Instructions & Dean (F/A)
VNMKV, Parbhani



Dr. U.M. Khodke

Associate Dean & Principal
College of Agricultural Engineering & Technology
VNMKV, Parbhani

Convenors



Dr. G.U. Shinde

Principal Investigator
NAHEP-CAAST-DFSRDA
VNMKV, Parbhani

Organizing Secretary



Dr. K K Dakhore
Agrometeorologist, AICRP on
Agrometeorology, VNMKV, Parbhani

Training Coordinators : Er. Sachin Karad, Dr. Swati Mundhe, Dr. Aniket Waikar, Er. Apurva Deshmukh
9421864320, 9370728496

Technical Coordinator : Er. Shailesh Shinde (7385149555)

Experts



Dr. Bimal K Bhattacharya
Head & Scientist G
AED/BPSG/EPS, SAC
ISRO, Ahmedabad, Gujarat



Dr. K. S Hosalikar
Scientist-F
DDGM, RMC, Mumbai



Dr. Kripan Ghosh
Scientist E & Head,
AMD, IMD, Shivaji Nagar, Pune



Dr. Rahul Nigam
Scientist
AED/BPSG/EPS
(ISRO), Ahmedabad, Gujarat



Dr. B Ajitkumar
Head, Dept. of Agril. Meteorology
College of Horticulture,
KAU, Vellanikkara, Thrissur



Smt. Shubhangi Bhute
Scientist - E
RMC, Mumbai



Dr. B I Karande
Assistant Professor
Dept. of Agrometeorology
AAU, Anand Gujarat



Dr. Shyamal B. Pal
Director & CEO
Founder Director of
Genesis Technologies, Mumbai



Dr. Ajeet Prasad
Head- Business Development
MeaTech Solutions LLP
Haryana