

ICAR-Sponsored Winter School Training  
on

## Uses of Advanced Statistical and Machine Learning Tools for Big Data Analysis in Agricultural and Allied Sciences Research

January 14 - February 03, 2026



### Course Director

Dr. Deb Sankar Gupta, Professor and Head

### Course Co-Coordinators

Dr. Pradip Basak, Assistant Professor

Dr. Manoj Kanti Debnath, Assistant Professor

### Organized By

Department of Agricultural Statistics  
Uttar Banga Krishi Viswavidyalaya  
Pundibari, Cooch Behar, West Bengal-736165  
<https://www.ubkv.ac.in/>



## About the Winter School

With the advent of advanced statistical tools and machine learning techniques, it is essential that the agricultural and allied sciences research data are to be analyzed with the latest available technologies such that the research outcomes are as much precise as possible. This training program will encompass a detailed discussion on the different data analysis techniques with hands-on using advanced statistical software packages. Besides; it will also orient the researchers about the applications of machine learning techniques for agricultural and allied sciences research data analysis with hands-on.

## About UBKV

UBKV is a State Agricultural University located in Cooch Behar district of West Bengal. The campus is situated at a distance of about 14 km from New Cooch Behar Railway station and about 137 km from Bagdogra Airport. For any further details, please visit <https://www.ubkv.ac.in>.

## Course Contents

- Basic statistical tools and interpretation
- Correlation and regression analysis
- Elementary concepts in design of experiments
- Analysis of single and multi factor experimental data
- Elementary concepts in sample surveys
- Sample size determination
- Small Area Estimation
- Multivariate analysis techniques with hands-on
- Spatial Statistical Techniques with hands-on
- Remote Sensing and GIS
- Time series analysis with practical examples
- An overview of machine learning techniques
- Artificial neural networks and Support vector machine
- Random Forest, Bagging and Boosting
- Non-linear modelling with hands-on
- Big Data Analysis with hands-on
- An overview of statistical software packages (SPSS/SAS/R/Python)
- Hands on data analysis using statistical software packages
- Interpretation of results from data analysis

## Eligibility

- ✓ Master's degree in any discipline of Agriculture and Allied Sciences
- ✓ Working in a position not below the rank of Scientist/Assistant Professor/SMS in ICAR Institutes, SAUs, CAUs, KVKs, Agriculture Faculty of AMU, BHU, Viswa Bharati and Nagaland University

## How to Apply

- ✓ The participants should take a print out of the application form (attached in the brochure) and after filling up get it approved by the competent authority of your organization
- ✓ A DD of Rs.50/- (non-refundable) to be drawn in favour of Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar payable at Pundibari.
- ✓ Mail the scanned copy of the approved application form along with copy of DD at [hod.agril.stat.ubkv@gmail.com](mailto:hod.agril.stat.ubkv@gmail.com)
- ✓ The hard copy of the approved application form along with DD must be sent through post to the Course Director
- ✓ Only 25 participants will be selected for the training programme

## Accommodation and Travelling Allowance

- ✓ The participants will be provided free boarding and lodging during the training period in the University Guest House. The participants are advised not to bring family members with them.
- ✓ All participants will be reimbursed to and fro travel fare for the journey to UBKV by rail or bus by the shortest route as per the ICAR norms.
- ✓ Local participants are not eligible for boarding and lodging. However; they will be provided lunch and inter-session tea.

## Important Dates

- ✓ Last date for receipt of applications: **11th December, 2025**
- ✓ Intimation to selected candidates: **12th December, 2025**

## Climate

- ✓ Daytime temperatures expected to be in the mid 20°C range, and nights maybe 10-16°C in and around UBKV. It is advisable to carry woolen cloths.

## Address for Correspondence

### Dr. Deb Sankar Gupta

Head, Department of Agricultural Statistics & Course Director, Winter School  
UBKV, Pundibari, Cooch Behar, West Bengal  
E-mail: hod.agril.stat.ubkv@gmail.com  
Mobile: +91-9593568033, +91-9434685759

### Dr. Pradip Basak

Assistant Professor, Department of Agricultural Statistics & Course Co-Coordinator, Winter School  
Department of Agricultural Statistics  
UBKV, Pundibari, Cooch Behar, West Bengal - 736165  
Mobile: +91-8368629618

### Dr. Manoj Kanti Debnath

Assistant Professor, Department of Agricultural Statistics & Course Co-Coordinator, Winter School  
UBKV, Pundibari, Cooch Behar, West Bengal - 736165  
Mobile: +91-8670937121

