



National Agricultural Higher Education Project

Sponsored
Training programme on

Analytical Techniques for Empowering Social Science Research

07-18, August 2023

Organised By
Centre for Advanced Agricultural Science and Technology (CAAST)

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ICAR-IARI, New Delhi -110012

Last date to register: 30th June, 2023

Registration Fee: Nil

Register here: <https://forms.gle/yVshr8SnNZNVxYdFA>

e-mail: nahep.eco2023@gmail.com

QR code for registration:



Contact Details: nahep.eco2023@gmail.com

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About NAHEP-CAAST

Centre for Advanced Agricultural Science and Technology (CAAST) is a new initiative and student-centric sub-component of the World Bank sponsored National Agricultural Higher Education Project (NAHEP) granted to IARI to provide a platform for strengthening education and research activities of post-graduate and doctoral students. "Genomic Assisted Crop Improvement and Resource Management" is the CAAST theme for IARI, and it specifically aims to instil genomics literacy and abilities among students at IARI and other universities.

Training at a glance

This training course on "Analytical Techniques for Empowering Social Science Research" aims to provide students with a general understanding of how social scientists develop and approach research challenges. In addition to giving students a general overview of identifying social problems and formulating research questions, the course will teach students to structure their study design, acquire social data, methodologies of data analysis, and result interpretation through a systematic research paradigm. In order to accomplish this, the course is designed to give students access to a variety of quantitative and qualitative techniques. Real-time social data analysis will be performed utilising both quantitative and qualitative algorithms on publicly accessible or faculty-gathered data. This programme will use a mix of in-class lectures and lab sessions to give students hands-on experience working with datasets, data analysis tools, and data analytical methodologies.

Students who successfully complete this course will be able to: (1) comprehend the theoretical underpinnings of social research methods; (2) recognise social problems; and develop research questions and agendas; (3) gain knowledge about quantitative and qualitative analysis techniques applied in Social sciences (4) independently design a research study to examine a real-world phenomenon.

Trainees, on completion of the course, will receive a certificate of participation.

Classes will be held in physical mode-Four sessions daily

Course Outline

- ❖ **Fundamentals of Statistics and Econometrics**
- ❖ **Sample Selection Techniques in Agriculture and Social Sciences: Probability and Non-Probability Sampling**
- ❖ **Introduction to Statistical Software like STATA, SPSS, R, QGIS etc**
- ❖ **Data Visualizations, Data Collection Techniques and Tools**
- ❖ **Recent Advances in Impact Analysis Techniques- Difference in Difference (DID), Propensity Score Matching(PSM), Regression Discontinuity Design, Synthetic Control Methods, Endogenous Switching Regression etc**
- ❖ **Regression Analysis and its Applications in Social Sciences**
- ❖ **Univariate Time Series Models: ARIMA Models**
- ❖ **Modeling Economic Time Series: Trends and Volatility: ARCH and GARCH models**
- ❖ **The Linear Probability Model for Binary Response: Logit and Probit Model**
- ❖ **Long Memory Forecasting Techniques and Cointegration Analysis**
- ❖ **Handling Large Datasets / NSSO data**
- ❖ **Content Analysis and Thematic Analysis using NVIVO Software**
- ❖ **Spatial Data Analysis using ArcGIS**
- ❖ **Research Paper Writing in Social Science: How to Effectively Publish Scientific papers, Articles, Preprints etc**
- ❖ **Literature Review, Bibliometric Analysis, Systematic Review, and Meta-Analysis**
- ❖ **Neural networks and its application in social sciences: An illustration on ANN using time series data**

Who Can Participate

Students pursuing M.Sc. or Ph.D. degrees in Agricultural Economics/ Extension/Statistics at various Agricultural Universities/Central Agricultural Universities/UGC-recognised private agricultural universities/ICAR institutes are eligible to apply. The number of participants is limited to 30 (5 students from IARI). Ph.D. and M.Sc. Students who already conceptualised their research problems and are in the advanced stage of their data analysis will be given priority. Participants who have been chosen should bring their laptops.

How to apply

Interested candidates can apply through the Google form link until June 30, 2023. You must attach a permission/forward letter/endorsement from your department/university to be eligible for the training course to examine a real-world phenomenon.

Travel

Selected participants are entitled to Sleeper/III AC tickets or any state road transport services as per the ICAR guidelines. Participants must prove they have not received TA/DA from their host institute (Head of Department/Institute).

Accommodation

Food and accommodation will be arranged at the ICAR-IARI campus only for the participants and expenditure will be met from the training budget.

Venue

Seminar Hall, Division of Agricultural Economics, ICAR- IARI, New Delhi 110012



**DIVISION OF AGRICULTURAL ECONOMICS
ICAR- Indian Agricultural Research Institute
Pusa Campus, New Delhi 110012**