## Two Day Seminar

## on

## Experimental Designs in Agricultural Research

## Date ： $\mathbf{2 3}^{\text {rd }} \& \mathbf{2 4}^{\text {th }}$ June， 2022



Organized by
Centre for Agricultural Market Intelligence under NAHEP－CAAST International Agri－Business Management Institute

Anand Agricultural University，Anand

## In Collaboration with

Dept．of Agricultural Statistics，B．A．College of Agriculture，AAU，Anand


Dr. R. C. Agrawal DDG (Education) National Director-NAHEP ICAR, New Delhi


## Organizing Committee Members

Dr. V. B. Darji, Professor, Dept. of Agril. Statistics, BACA, AAU, Anand
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## Programme Coordinators

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## Background:

In line with the platinum jubilee celebration of B. A. College of Agriculture, Department of Agricultural Statistics, B. A. College of Agriculture, Anand Agricultural University, Anand is organizing seminar on "Experimental Designs in Agricultural Research" on 23rd and 24th June, 2022.
Department of Agricultural Statistics is working since 1963 in the area of Agricultural Statistics especially area of variability in experimental data, plot techniques, methods of analysis, experimental designs, sampling techniques for field experiments, modelling of long term experiments, selection index etc.
The design of an experiment is just like blue print of a house prepared by an architecture based on the basic requirements, cost, etc., different house plans may be prepared. Off which one may select the one which has potential advantages compared to others. Similarly, an experiment is also designed based on the objectives, availability of experimental material, cost of experiment, etc. in order to test predetermined hypothesis with acceptable degree of precision. Modern concepts of experimental design are primarily due to R. A. Fisher who is considered to be the father of Statistics. He developed principles of experimental design in planning of agricultural field experiments and are still used in many field of agriculture and allied science experiments.

## About Centre for Agricultural Market Intelligence, NAHEP- CAAST:

Anand Agricultural University has been awarded an ICAR- World bank funded project to establish Centre for Agricultural Market Intelligence. The major objectives of this project include price forecasting and behavior, export competitiveness, evaluation of e-NAM, market institutions and capacity building of faculty, students, farmers and other stakeholders. Experts from country's premium institutes including IIMAhmedabad, Institute of Rural Management (IRMA), Indian Space Research Organization (ISRO), Junagadh Agricultural University, National Cooperative Dairy Federation of India (NCDFI) apart from foreign universities namely Australia's Western Sydney University, and The Papua New Guinea University of Technology are associated with the project.
Centre for Advanced Agricultural Science and Technology (CAAST) is a student centric subcomponent of the World Bank sponsored National Agricultural Higher Education Project (NAHEP) granted to AAU, Anand to provide a platform for strengthening educational and research activities of post graduate and doctoral students.

## Objectives:

- To explore about the experimental design
- To help in the selection of proper design
- To study the data analysis in quantitative genetics
- To aware the uses of parametric and non-parametric test
- To explore the utility of different software related to experimental data analysis


## Topics to Be Covered:

- Experimental error
- Basic principles and overview of basic experimental design
- Concept of factorial experiments and pooled analysis
- Statistical approach in genetic and plant breeding design
- Univariate and multivariate techniques
- Parametric and non-parametric test
- Overview of statistical software: SAS, SPSS and R


## Eligibility:

Interested candidates preferably; Masters - Doctoral students and faculties of concerned disciplines are requested to apply through online registration process.

## Registration:

- No fee is to be paid for registration. The selected participants will be informed through email only.
- E-certificates will be provided to the registered participants.
- No TA/DA will be paid by the host institute.
- Accommodation will be provided as per availability.

Registration link: https://forms.gle/5w7WX9Fza3r9p7LM6
:: Venue :: Centre for Agricultural Market Intelligence, IABMI, AAU, Anand

:: Schedule ::

| Time | Topic | Expert | Coordinator |
| :---: | :---: | :---: | :---: |
| 23-06-2022 |  |  |  |
| 08:00-09:00 hrs. | :: Registration and Breakfast :: |  |  |
| Inaugural Session 09:00-11:00 hrs. | Keynote Address: Experimental error | Dr. N. M. Patel | Dr. R. S. Pundir Dr. A. D. Kalola |
| Technical Session I 11:00-13:00 hrs. | Basic principles and overview of experimental design | Dr. H. R. Pandya | Dr. V. B. Darji |
| 13:00-14:00 | :: Lunch Break :: |  |  |
| Technical Session II 14:00-16:00 hrs. | Concept of factorial and pooled analysis | Dr. P. R. Vaishnav | Dr. A. N. Khokhar |
| Technical Session III 16:00-18:00 hrs. | Statistical approach in genetic and plant breeding design | Dr. J. S. Patel | Dr. A. N. Khokhar |
| 24-06-2022 |  |  |  |
| 08:00-09:00 hrs. | :: Breakfast :: |  |  |
| Technical Session IV 09:00-11:00 hrs. | Univariate and multivariate techniques | Dr. Shrinivas Rao Vatluri | Dr. Xitij U Shukla |
| Technical Session V 11:00-13:00 hrs. | Parametric and non-parametric test | Dr. Sankalpa Ojha | Dr. Xitij U Shukla |
| 13:00-14:00 | :: Lunch Break :: |  |  |
| Technical Session VI 14:00-16:00 hrs. | Overview of statistical software: SAS, SPSS and $R$ | Dr. D. J. Parmar | Dr. Prity Kumari |
| 16:00-17:00 hrs. | Plenary Session |  |  |

## ::Contact Details::

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