Indian Council of Agricultural Research (ICAR)
National Agricultural Higher Education Project (NAHEP)
Centre for Advanced Agricultural Science and Technology (CAAST)

Workshop cum Training
on
“Market Analytics with R - Phase II”
02\textsuperscript{nd} to 04\textsuperscript{th} March, 2020

Organizing Secretary
Dr. Dhaval R. Kathiriya

Joint Organizing Secretary
Dr. Prity Kumari

Centre for Agricultural Market Intelligence under NAHEP–CAAST
International Agribusiness Management Institute
Anand Agricultural University, Anand
Background
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 IIM- Ahmadabad, Institute of Rural Management (IRMA), Indian Space Research Organization (ISRO), Junagadh Agricultural University (JAU) and National Cooperative Dairy Federation of India (NCDFI) apart from three foreign universities namely Western Sydney University, Australia, The Papua New Guinea University of Technology and Texas Tech University, USA are associated with the project.

About NAHEP- CAAST
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.

About the Workshop
R is a statistical programming language that has rapidly gained popularity in financial time series analysis and predictive modelling which integrates statistics, marketing and analytics together on same platform. It is one of the most preferred open-source languages for market research data analysis. Since R contains a vast variety of packages, it enables us with many possibilities when processing, analyzing, modeling, inferential testing and forecasting. The R consists of functionality for a broad spectrum of statistical procedures such as time series analysis, classical parametric and nonparametric tests, linear and non-linear forecasting models, clustering, smoothing and many others area. Considering the need of analytics, this workshop aims to develop awareness and understanding of R Software specialized to cover the prospects of all statistical techniques required for market Intelligence.

Purpose and Objective
To provide an overview of introductory R software and statistical techniques required for market Intelligence as a part of market intelligence to M.Sc., Ph.D students and Faculties.

Course Contents
- Time Series Model
- Data Science and Forecasting
- Logit & Probit Model
- Co-integration
- Markov Chain
- Multivariate Analysis

Venue
Information Technology Center, University Bhavan, Anand Agricultural University, Anand, Gujarat, India. (4 km away from Anand Railway station and the bus terminal)

Eligibility
Masters, doctoral students and faculties of concern disciplines of ICAR accredited SAUs, CAUs, and other UGC recognized universities. Interested candidates are requested to apply through online registration process on or before February 28, 2020 (Friday).

Accommodation & Registration
The participants will be provided free boarding and lodging. No registration fee is to be paid. The programme is fully sponsored by NAHEP- CAAST. Participants will not be entitled for TA. They have to make their own travel arrangements.

CLICK HERE FOR REGISTRATION
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<th>Date/Day</th>
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| 02-03-2020 | 09:00 to 9.45| Registration and Tea          | Dr. Ramasubramanian  
Principal Scientist,  
ICAR-IASRI, New Delhi                                                   |
| Monday     | 09:45 to 11:15| Logit and Probit analysis     | Dr. Ramasubramanian  
Principal Scientist,  
ICAR-IASRI, New Delhi                                                   |
|            | 11:15 to 11:30| Tea Break                     |                                                                         |
|            | 11:30 to 13:00| Hands on Logit and Probit analysis | Dr. Ramasubramanian  
Principal Scientist,  
ICAR-IASRI, New Delhi                                                   |
|            | 13.00 to 14.00| Lunch                         | Dr. R. K. Paul  
Scientist, ICAR-IASRI, New Delhi                                       |
|            | 14:00 to 15:30| Co-integration                |                                                                         |
|            | 15:30 to 15:45| Tea Break                     | Dr. R. K. Paul  
Scientist, ICAR-IASRI, New Delhi                                       |
|            | 15:45 to 17:15| Hands-on Co-integration       |                                                                         |
|            | 19:00 to 20:00| Dinner                        |                                                                         |
|            | 09:00 to 09:45| Breakfast                     | Dr. Ramasubramanian  
Principal Scientist,  
ICAR-IASRI, New Delhi                                                   |
| 03-03-2020 | 09:45 to 11:15| Markov Chain                  | Dr. Ramasubramanian  
Principal Scientist,  
ICAR-IASRI, New Delhi                                                   |
| Tuesday    | 11:15 to 11:30| Tea Break                     |                                                                         |
|            | 11:30 to 13:00| Hands on Markov Chain         | Dr. Ramasubramanian  
Principal Scientist,  
ICAR-IASRI, New Delhi                                                   |
|            | 13.00 to 14.00| Lunch                         | Dr. B. N. Mandal  
Scientist, ICAR-IASRI, New Delhi                                       |
|            | 14:00 to 15:30| Multivariate Analysis         |                                                                         |
|            | 15:30 to 15:45| Tea Break                     | Dr. B. N. Mandal  
Scientist, ICAR-IASRI, New Delhi                                       |
|            | 15:45 to 17:15| Hands-on Multivariate Analysis|                                                                         |
|            | 19:00 to 20:00| Dinner                        |                                                                         |
|            | 09:00 to 09:45| Breakfast                     | Shri Subir Mitra  
DGM, SAS Group, NDDB                                                      |
| 04-03-2020 | 09:45 to 11:15| Data Science using R          | Shri Subir Mitra  
DGM, SAS Group, NDDB                                                      |
| Wednesday  | 11:15 to 11:30| Tea Break                     |                                                                         |
|            | 11:30 to 13:00| Forecasting using R           | Shri Subir Mitra  
DGM, SAS Group, NDDB                                                      |
|            | 13.00 to 14.00| Lunch                         |                                                                         |
|            | 14:00 to 15:30| ARIMAX model                  | Dr. R. K. Paul  
Scientist, ICAR-IASRI, New Delhi                                       |
|            | 15:30 to 15:45| Tea Break                     |                                                                         |
|            | 15:45 to 17.15| Long Memory Time Series Model  | Dr. R. K. Paul  
Scientist, ICAR-IASRI, New Delhi                                       |
Organizing Committee

Patron
Dr. R. V. Vyas, Hon’ble Vice Chancellor, AAU, Anand

Programme Chairman
Dr. Y. C. Zala, Principal and Dean, IABMI, AAU

Programme Advisers
Dr. R. S. Pundir, Professor and Principal Investigator, NAHEP-CAAST, AAU
Dr. Y. A. Lad, Associate Professor, IABMI, AAU

Organizing Secretary
Dr. Dhaval R. Kathiriya, Professor, Director of Information Technology (I/C), AAU

Joint Organizing Secretary
Dr. Prity Kumari, Assistant Professor, Agril. Statistics, CoH, AAU

Programme Coordinators
Dr. D. J. Parmar, Associate Professor, BACA, AAU
Dr. D. K. Parmar, Assistant Professor, AIT, AAU
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Dr. Ganga Devi, Assistant Professor, BACA, AAU
Ms. Vishita Khanna, Assistant Professor, IABMI, AAU

Committee Member
Mr. Nirav Prajapati, Research Associate, NAHEP – CAAST, AAU
Mr. Bhavik Patel, Research Associate, NAHEP – CAAST, AAU
Dr. D. K. Jaiswal, Research Associate, PIU- NAHEP, ICAR, New Delhi
Mr. Jitendra Parmar, Senior Research Fellow, NAHEP – CAAST, AAU
Ms. Ayushee Darji, Senior Research Fellow, NAHEP – CAAST, AAU
Ms. Janaki Patel, Senior Research Fellow, NAHEP – CAAST, AAU
Ms. Kosha Mehta, Senior Research Fellow, NAHEP – CAAST, AAU
Mr. Smit S. Bhavsar, Project Assistant, NAHEP-CAAST, AAU

For more information please contact
Dr. Dhaval R. Kathiriya
Professor & Director - Information Technology
Information Technology Center, University Bhavan,
Anand Agricultural University, Anand- 388110
Email: dit@aau.in
Tel/Fax: 02692- 225990/ 260712
Mob: +91 99980 09973