



## Workshops, Conferences, Meetings, Seminars and Annual Day Organized

### Conferences/Workshops

Workshop-cum-training programme on “Design and Analysis of Farmers Participatory Research Trials” for the research personnel involved in the conduct of farmers participatory research trials under the aegis of Rice Wheat Consortium for Indo-Gangetic Plains was organized during 10–12 August 2006. This workshop-cum-training programme aimed at the theme of statistical principles involved in the conduct of farmers participatory research trials. It was attended by 20 participants. Out of 20 participants, 7 were from RWC-CIMMYT, 2 from IRRI, 2 from Banaras Hindu University, 4 from different ICAR Institutes, 4 from SAUs and 1 from State Department of Agriculture. Dr. Rajender Parsad was the Course Director. The topics discussed were fundamentals of design of experiments, contrast analysis, analysis of covariance, biplot graphic display, SAS and ASREML. The main emphasis was laid on case studies. Several real data sets were analyzed by the participants using SAS. The workshop-cum-training

programme was conducted in participatory mode. A lot of discussions took place. It was decided that some



Inaugural session of workshop-cum-training programme on “Design and Analysis of Farmers Participatory Research Trials”

treatments such as conventional tillage may be kept common for all the farmers. The data may be analyzed on grain yield, straw yield, thousand grain weight and returns over variable cost. To investigate the effect of resource conservation technologies on the soil physical and biological properties, long term experiments with reference to resource conservation technologies may be conducted at some of the ICAR institutes. The clear cut definition and identification of treatments was done and all the centres were asked to present their data as per the terminology finalized. The variables on which the data is to be supplied were also finalized along with EXCEL sheets.

Organised one day study programme for a batch of Statistical Personnel of Central/State/UT Governments/PSUs on 31 August 2006. Four lectures were delivered.



**Inauguration of one day study programme for a batch of statistical personnel**

An International Conference on Statistics and Informatics in Agricultural Research (ICSI2006) was organized by IASRI, New Delhi during 27–30 December 2006 to mark the Diamond Jubilee Celebration of the foundation of Indian Society of Agricultural Statistics.

To meet the goal of the Conference, the following six major sessions were convened and 54 invited lectures were delivered by eminent scientists of International repute.

- Theme 1 : Statistical Applications in Agricultural Research
- Theme 2 : Emerging Issues in Areas of Basic Statistical Research
- Theme 3 : Agricultural Informatics
- Theme 4 : Statistical and Computational Biology in Agriculture
- Theme 5 : Statistical and Economic Issues for Prosperity of Rural Community

Theme 6 : Human Resource Development for Agricultural Statistics and Informatics

The Hon'ble Minister of Statistics and Programme Implementation, Shri GK Vasan inaugurated the conference. The Minister emphasized the need for conducting basic research in Statistics and Informatics



**The Hon'ble Minister of Statistics and Programme Implementation, GOI, inaugurating the Conference**

in newer emerging areas of micro array experiments; computational biology; genomics of plant, livestock, fishery, flora and fauna; biodiversity, evaluation and valuation; statistical modeling; precision agriculture, etc. so as to meet the challenges of agricultural research. For micro-level policy planning research, small area techniques should be continued more rigorously. Efforts should be made to improve the quality of data and while providing the estimates timeliness and accuracy of estimates of parameters of interest should be maintained for proper and effective policy planning. Further, the definitions of various parameters used by different agencies should be uniform. Dr. Mangala Rai, Secretary, DARE and DG, ICAR and President, ISAS delivered the Presidential Address. Dr. Rai echoed the feeling that in view of the applicational nature of the discipline of Statistics to other sciences, it is important that the scientists of this discipline should work in close collaboration with the subject matter specialists so as to enable the information generated through research in Statistics and Informatics get converted into knowledge.

During the conference, three Plenary Talks were delivered by Dr. GP Patil, Dr. James H Matis and Dr. Padam Singh. Besides, there were two Memorial Lectures, viz., Dr. Rajendra Prasad Memorial Lecture,



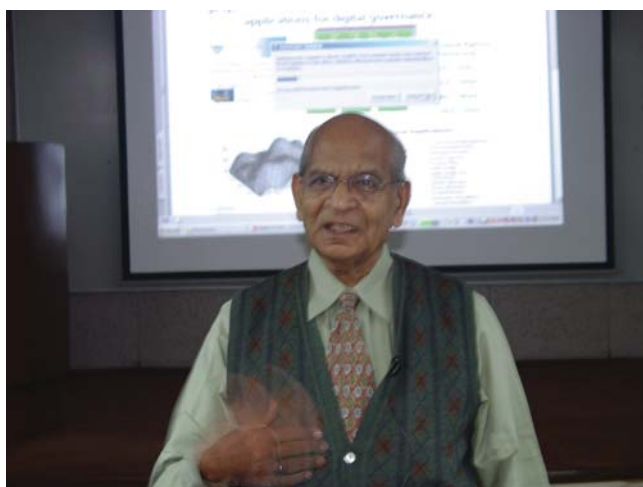
delivered by Dr. GS Bhalla and Dr. VG Panse Memorial Lecture, delivered by Dr. AK Nigam.

155 posters were presented during the conference. Many important recommendations have emerged from the conference.

During this International Conference two Pre-Conference Workshops on HOTSPOT GEOINFORMATICS and REGRESSION DIAGNOSTICS were organised on 26 December 2006.

#### **HOTSPOT GEOINFORMATICS by GP Patil**

Geoinformatics for spatial and temporal hotspot detection and prioritization is a critical need for the 21<sup>st</sup> Century. A declared need is around for statistical geoinformatics and software infrastructure for spatial and spatiotemporal hotspot detection, prioritization, early warning, and sustainable management. A hotspot can mean an unusual phenomenon, anomaly, aberration, outbreak, elevated cluster, critical area. The declared need may be for monitoring, etiology, early warning, or management. The responsible factors may be natural, accidental, or intentional. The five year NSF DGP project has been instrumental to conceptualize hotspot geoinformatics partnership among several interested cross-disciplinary scientists in academia, agencies, and private sector around the world. Our efforts are driven by a wide variety of case studies of interest to agencies, academia, and private sector involving critical societal issues, such as public health, ecosystem health, ecohealth, biodiversity and threats to biodiversity, emerging infectious disease, water management and conservation, carbon sources and



Dr. GP Patil addressing participants of the workshop

sinks, persistent poverty, environmental justice, crop pathogens, invasive species management, biosurveillance, biosecurity, disease biogeoinformatics, social networks, sensor networks, hospital networks and syndromic surveillance, video mining, early warning, tsunami inundation, remote sensing, and disaster management. Also space-time disease, poverty, pollution, object identification and tracking, early detection, early warning, hotspot trajectories and trends with examples of West Nile Virus, urban poverty patch dynamics, etc. The project emphasis is on development of geoinformatic hotspot system. The system has two methodological components: hotspot detection and prioritization.

The emphasis during this workshop was on geoinformatics of hotspot detection and prioritization motivated by a wide variety of subject areas and critical issues confronting agencies, academia, and industry involved with agriculture, natural resources, environment and ecology, and ecohealth. It has provided up-to-date exposition with live examples and illustrations. The participants were immensely benefitted from this workshop through the case studies. In all 127 scientists and technical personnel attended this workshop.

#### **REGRESSION DIAGNOSTICS by T Krishnan**

The main aim of regression modelling and analysis is to develop a good predictive relationship between the dependent (response) and independent (predictor) variables. Regression Diagnostics plays a vital role in finding and validating such a relationship. In this workshop, issues that arise in the development of a multiple linear regression under model were discussed.

The workshop consisted mainly of descriptions of the rationale and techniques of various diagnostic procedures used in Multiple Regression Analysis, and demonstrations of their use in suitable agricultural data sets, using SYSTAT statistical software. Exercises of the same type were given, some of the which the participants were asked to carry out during the workshop and the rest in their own time.

Data sets used in the demonstrations and for the exercises were also described. A folder of these data sets in the SYSTAT format were provided on the computer system used for the workshop. Moreover, information on the source of the data was available in the data file itself in the comments box of the first variable.

This workshop discussed only diagnostics for regression. In the end, participants were advised that they should follow it up with a study of remedies for the problems encountered. Since this is a vast subject, it was also familiarized to participants that these are only some show pointers whereas in practice many more problems in regression diagnostics may arise.



Director, National Professor & participants during the workshop

101 scientists and technical personnel attended this workshop.

### Seminars

Salient outcomes from the completed research projects undertaken in different aspects of Agricultural Statistics and Computer Application were presented in the seminars organized regularly at the Institute. Open seminars were also organized for new research projects proposed. Outline of Research Work (ORW) seminars, Course seminars and Thesis seminars were delivered by the students of M.Sc. and Ph.D. Agricultural Statistics and M.Sc. Computer Application.

During the period under report, a total of 85 seminar talks were delivered. Out of these, 63 were student seminars, 20 by scientists of the Institute and 02 by guest speakers.

- Guest Seminar by Dr. Mousumi Bose, ISI, Kolkata on Application of Design to Visual Cryptography on 7 June 2006
- Foreign Visit Seminar by Dr. Rajender Parsad, National Fellow, IASRI on Hands on Experience of Analysis of Farmers Participatory Research Trials conducted by Rice-Wheat Consortium for Indo-Gangetic Plains on 28 July 2006
- Guest Seminar by Dr. AP Gore on Measurement of Poverty on 14 February 2007

### Annual Day Celebrations

The Annual Day of the Institute was celebrated on 03 July 2006. As part of these celebrations a Quiz Contest for students, scientific staff was held on 01 July 2006. Prizes were given to the following teams:

Prize	Name	Designation
I	Sh. Ajay Kankure	Student, Ph.D (Ag. Stat.)
	Sh. Dharm Nath Jha	Student, Ph.D (Ag. Stat.)
	Sh. Susheel Kumar Sarker	Student, Ph.D (Ag. Stat.)
II	Dr. Ramasubramanian V	Scientist (SS)
	Dr. Himadri Ghosh	Scientist (SS)
	Sh. Amrender Kumar	Scientist
III	Sh. S.N. Islam	Scientist
	Ms. Shashi Dahiya	Scientist (SS)
	Sh. S.B. Lal	Scientist (SS)

On 03 July 2006, the main Annual Day Function was celebrated in which Dr. M. Mahadevappa, Ex-Chairman, ASRB was the Chief Guest. Dr. Nawab Ali, DDG (Engg.), ICAR delivered the Nehru Memorial Lecture entitled, 'Production and Utilization Pattern of the major Agricultural Commodities in India - Role of Statistics in its Rationalization'.

Nehru Memorial Gold Medal for the year 2003-05 was awarded to Km. Chhawi Saurabh, M.Sc. (CA), student.