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Workshops, Conferences, Meetings, Seminars and Annual Day Organized

Workshops

In order to disseminate the findings of the research project "Studies on block designs for biological assays" a Dissemination Workshop was organized at the Institute on 15 February 2005. The participants of the workshop included many eminent research workers actually engaged in using bioassays in their research endeavors and the statisticians from various reputed institutions. Prof. M.N. Das, who initiated the work on bioassays in India, was the Chief Guest. Besides disseminating the results of the project, historical perspectives, terminology and analytical techniques for bioassays were also presented. Various issues relating to practical problems of bioassays were discussed threadbare and some very important recommendations have emerged from the workshop. Some of the important recommendations that have emerged from the workshop are:

- A-efficient designs obtained for most situations are unequally replicated therefore, concerted efforts may be made for promotion of these designs to the actual experimental situations.
- D-optimality aspects of block designs with parallel line assays may be taken up.

A view of Dissemination Workshop of completed project on 'Studies on block designs for biological assays'

- Designs with smaller number of units may be obtained and/or A-efficiency per observation of the design constructed may be investigated.
- Work on block designs for multiple parallel line assays may be intensified.
- Computer aided search of A-optimal/efficient designs and software package to generate such designs and also carrying out the analysis need to be developed.
- A separate course on bio-assays may be prepared for the students of P.G. School of IARI and statisticians along with the actual experimenters and statisticians should teach this course jointly.
- Ad-hoc training programmes may be arranged with emphasis on designing and analysis of bioassays.
- Efforts should be made to have more collaboration between statisticians and the experimenter in the National Agricultural Research System.

Dr. Alok Dey, Head, Department of Statistics, ISI Delhi Centre giving his suggestions during the Workshop

Two one-day workshops were organized on 9th and 15th March 2005 on 'Training and Implementation of Personnel Management Information System in ICAR (PERMISnet)' at IASRI, New Delhi. Eighty-four Nodal Officers attended these workshops.

Sensitization and training workshops were organized for 'PIMSNET' implementation at the following centers:

- Delhi based projects at IASRI, New Delhi from 7-8 June 2004
- AED (H&M), at Dehradun from 10-11 June 2004
- AED (Arid), at Jodhpur from 16-17 June 2004
- AED Coastal, at CTCRI, Trivendrum from 8-9 July 2004
- AED (Rainfed), CRIDA at NAARM, Hyderabad from 12-13 July 2004
- AED (Irrigated) at IASRI, New Delhi from 8-9 August 2004.

Requirement Analysis Workshop for the project "Development of Expert System for Wheat Crop Management" was organized at IASRI, New Delhi from 20-21 December 2004

Conference

The XIV National Conference of Agricultural Research Statisticians of the ICAR Institutes, Project Directorates, State Agricultural Universities and Central/ State Departments of Agriculture, Animal Husbandry, Forestry and Fisheries was organised by the Institute at Jawahar Lal Nehru Krishi Vishwa Vidyalaya (JNKVV), Jabalpur (Madhya Pradesh) from 17-19 November 2004. The theme of the Conference was National Priorities in Agricultural Statistics and Computer Applications. There were six Technical Sessions followed by a Plenary Session. The details of the technical sessions is as follows:

The conference was inaugurated by Prof. Bal BPS Goel, Former Director, Indian Agricultural Statistics Research Institute, New Delhi and Key Note Address was delivered by Prof. SD Sharma, Director, Indian Agricultural Statistics Research Institute. Dr. Dhyan Pal Singh, Vice Chancellor, Jawaharlal Nehru Krishi Vishwa Vidyalaya (JNKVV), Jabalpur presided over the

Inauguration of 14th National Conference of Agricultural Research Statisticians of the ICAR Institutes

Technical Session-I	Action Taken on the Recommendations made during the 13th National Agricultural Research Statisticians Conference held at Punjab Agricultural University, Ludhiana	Chairman: Dr. SD Sharma Convener: Dr. VK Gupta Co-convener: Dr. VK Bhatia
Technical Session-II	Statistical Methodologies – Current Status and Future Challenges	Chairman: Dr. SD Sharma Convener: Dr. VK Bhatia Co-convener: Dr. GR Makan
Technical Session-III	New Frontiers in Computer Applications in Agricultural Research	Chairman: Dr. VK Gupta Convener: Dr. PK Malhotra Co-convener: Dr. NP Katyar
Technical Session-IV	Research and Teaching Coordination and Linkages between ICAR Institutes and Agricultural Universities	Chairman: Dr. RA Khan Convener: Dr. VK Sharma Co-convener: Dr. BB Singh
Technical Session-V	Identification of Problems for Future Research	Chairman: Dr. BBPS Goel Convener: Dr. VK Gupta Co-convener: Dr. SRJ Singh
Technical Session-VI	Improvement of Quality of Agricultural Statistics	Chairman: Dr. AK Srivastava Convener: Dr. Randhir Singh Co-convener: Dr. NL Idnani
Plenary Session	Presentation of Reports by Rapporteurs of Different Sessions and Summary of Recommendations	Chairman: Dr. SD Sharma Convener: Dr. VK Gupta Co-convener: Dr. VK Bhatia

Inaugural Function. Dr. CK Teckchandani, Dean, JNKVV, Faculty of Engineering and Faculty of Basic Sciences gave his remarks. The Conference was attended by more than 65 Statisticians/Scientists/ Research Workers of various organisations spread all over the country. During the Conference, recommendations emereged are as follows:

Chief Guest releasing the Souvenir during the National Conference

General Recommendations

(i) IASRI should make efforts to revive the Certificate Courses/Training Courses that had been discontinued earlier.

(ii) The course curriculum of M.Sc. and Ph.D. programmes in Agricultural Statistics and Computer Applications should be dynamic in nature so as to include the recent advances in it. Similarly, some of the topics from M.Sc. syllabi should be shifted to undergraduate programme keeping in view that the basic course curriculum remains the same in all the teaching institutions.

(iii) A workshop may be organized for developing the course curriculum of undergraduate and post graduate programmes in Agricultural Statistics, particularly the service courses in other disciplines of agricultural research system. At least one basic course of statistics may be made compulsory at the graduate level.

(iv) To ensure continuing financial as well as human resource support for development, strengthening, maintaining and sustaining the data warehouses on agricultural research.

(v) For effective collaboration among the Agricultural Statisticians in NARS, the Agricultural

A view of Technical Session during the National Conference

Statisticians Network developed by IASRI must be expanded further and discussion forum should be used more rigorously. An orientation workshop may be organized for popularizing this network.

(vi) Information management is a manpower intensive activity. The current recruitment policy does not permit filling up of vacant positions of scientific/technical manpower resulting in slow development of information systems, updation of information and poor management of the networks. This policy needs review in case we want to harness the power of IT in disseminating the knowledge to the farming community.

(vii) The computer application in Agricultural Research is multi-disciplinary effort requiring collaboration among subject matter specialists and computer professionals, on development of expert systems and knowledge based systems. This may require inter institutional and inter disciplinary efforts and support for such programmes. Such efforts may have to be taken up in a network mode as is being done in the ICAR for other research programmes.

(viii) Efficient, cost effective and robust experimental designs and analytical techniques for cropping systems, farming systems, agro-forestry experiments, inter cropping experiments, precision agriculture, micro array experiments, food processing and post harvest storage experiments should be developed.

(ix) Planning, designing and analysis of long term experiments, integrated nutrient experiments, soil test crop response correlation etc. need to be taken up for addressing the issues of sustainability and identification of sustainable treatments.

(x) An urgent action is required for identification/ development of designs for DUS (Distinct, Uniform and Stable) testing trials as well as developing a manual of statistical techniques for DUS testing.

(xi) Diagnostics should be an inherent feature of every data analysis to ensure that the assumptions are met and statistically valid conclusions are drawn. However, if there are any gaps in the analytical techniques where there are strong departures from the assumptions, appropriate analytical techniques should be developed.

(xii) Efforts to develop indigenous, user friendly statistical software packages should be continued for the improvement in the quality of teaching and agricultural research output.

(xiii) The on-line information systems for all the designed experiments conducted in NARS should be developed and integrated at one place. The research managers should ensure that there is a continuous data flow in these information systems.

(xiv) Brain storming sessions and interactive sessions should be held with various stake holders in the NARS to identify the statistical problems of their experimentation and problems, if any, in the adoption of the current statistical techniques.

(xv) At present the M.Sc. and Ph.D. degree in Agricultural Statistics is not recognized as equivalent to M.Sc. in Statistics by many research institutions and traditional Universities for employment purposes. This issue should be taken up very strongly with the University Grants Commission, UPSC, and other Institutions.

(xvi) The Advisory and Consultancy services should be strengthened for dissemination of knowledge that would help in enhancing the quality of agricultural research. E-learning and E-advisory services should be introduced. This would help in identification of problems in future research and make the presence of the agricultural statisticians indispensable in NARS.

(xvii) Human Resource Development activities are very important for undertaking research in cutting edge technologies. Continuous financial support is to be ensured for the same.

(xviii) To develop statistical approaches for estimation of parameters of research prioritization.

(xix) Development of Bayesian optimal designs and Bayesian analysis of experimental data needs to be undertaken.

(xx) Analytical techniques for combined analysis of data and stability analysis of unbalanced and non-orthogonal data, when designs at different environments are different need development.

Seminars

Salient outcome 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 74 seminar talks were delivered. Out of these, 43 were student seminars (10 thesis, 11 ORWs, 17 course seminars and 05 others), 26 by scientists of the Institute and 5 by guest speakers.

Annual Day Celebrations

The Annual Day of the Institute was celebrated on July 2, 2004. As part of these celebrations a debate contest for technical and administrative staff was held on July 1, 2004. The topic of the contest was 'Exit Polls are Reliable'. Prizes were given to the following speakers:

Prize	Name	Designation
I	Sh. S.K. Singh	Assistant Engineer
II	Sh. Rajender Singh Tomar	Technical Officer (T-5)

On July 2, 2004 in the forenoon session, another declamation contest for scientists and students was held. The topic of the contest was 'Utility of Expert System for Farming Community'.

Director, IASRI, lightening the lamp on Annual Day Function of the Institute

The first and the second prizes were won by the following speakers:

Prize	Name of the Scientist(s)	Designation
I	Ms. Anshu Dixit	Scientist
II	Sh. Sudeep	Scientist

Prize	Name of Student(s)	Course	Session
I	Ms. Priya Kohli	M.Sc. (Ag. Stat.)	2003-04
II	Sh. Dwijesh Chander Mishra	M.Sc. (Ag. Stat.)	2003-04

In the afternoon session, the main Annual Day Function was celebrated in which Dr. JSP Yadav, Former Chairman, ASRB was the Chief Guest. Dr. HK Jain, Former Director, Indian Agricultural Research Institute, New Delhi delivered the Nehru Memorial Lecture entitled "Nehru's Vision of India Science Based Development, Some Genetic Consideration".

Nehru Memorial Gold Medals for the year 2001-03 were awarded to Ms. Priyanka Shahi, M.Sc. (C.A.) and Sh. Ananta Sarkar, M.Sc.(Ag. Stat.) students.

The late Sh. VVR Murthy award for the year 2001-03 was awarded to Sh. Ananta Sarkar, M.Sc.(Ag. Stat.) student.


DISSEMINATION WORKSHOP
(February 15, 2005)
on
Studies on Block Designs for Biological Assays
(Financed by A.P.Cess Fund of I.C.A.R.)
I.A.S.R.I., Library Avenue, New Delhi - 110 012