## Review of Activities of the Indian Society of Agricultural Statistics for the Year 1991

The Indian Society of Agricultural Statistics a scientific body, was founded on 3rd January, 1947 for promoting and undertaking research in Statistics and for its application to Agriculture, Animal Husbandry, Fishery, Agricultural Economics and allied fields. The Society was fortunate to have Late Dr. Rajendra Prasad, the then Minister of Food and Agriculture, Government of India, as its Founder President. He continued to guide the Society for 16 years. The Society had also the privilege of having as its Presidents Shri S.K. Patil, Shri C. Subramaniyam, Shri Jagjivan Ram, Dr. M.S. Swaminathan, Dr. O.P. Gautam Shri Buta Singh and Dr. N.S. Randhawa. They took keen interest in the activities of the Society and were a great source of inspiration. The Society has attained its present status due to the untiring efforts and guidance of its Presidents in the past and present and particularly of the eminent statisticians Prof. P.V. Sukhatme and Late Dr. V.G. Panse.

The Society organises annually a conference in different parts of the country as per invitations received from State Governments, universities and other research organisations. It provides a wider platform for exchange of ideas. During each annual conference, the Society organises two symposia keeping in view current national interest as well as problems of interest in the region where the conference is organised. The Society brings out a Journal, one volume consisting of three issues per year, which serves as a media for disseminating research findings on Agricultural Statistics and allied fields. Ad-hoc publications and Bulletins are also brought out to help the research workers and students in the field of Agricultural Statistics. It has set up a Research Unit to undertake research on specific problems of current interest in accordance with the guidance provided by a Research Direction Committee. In order to perpetuate the memory of the Founder President Late Dr. Rajendra Prasad, a lecture is organised during the conference. The Society has organised 27 lectures in the series so far and the memorial lecture being organised during this conference would be 28th in the series.

The membership of the Society, which is drawn from all parts of India as well as from abroad, during the year was:

Permanent Institutional Members	23
Life Members	335
Institutional Members	5
Ordinary Members	160
Student Members	20

In addition to regular members, the Society has a number of institutional subscribers to its Journal in India and abroad. The number of subscribers during the year was:

Indian	170
Foreign	40

Thus, the total number of members and subscribers during the year was 753.

One of the important activities of the Society, as mentioned earlier, is the publication of its Journal. It has brought out 43 volumes till 1991 and has maintained its time schedule. The society has introduced laser typeset and offset printing of the Journal from Volume 43 (1991). With this, we have moved into the recent technology of printing. The get up of the Journal has been well appreciated by our readers. The Hindi Supplement continues to be a special feature of the Journal. The high standard of the Journal has been maintained due to sincere efforts of the Editorial Board and of the referees. The Society is thankful to them for their keen interest in the activities of the Society particularly in the publication of its Journal. With a view to promoting research in Statistics and thereby improving the standard of the quality of journal, the Society has introduced a scheme to award prizes for the best articles published in its Journal once in two years.

The 3rd Revised Edition of the book "Sampling Theory of Surveys with Applications" by P.V. Sukhatme, B.V. Sukhatme, Shashikala Sukhatme and C. Asok was brought out during 1984. This book is in great demand by the students and research workers. Another important publication "Statistical Methods in Animal Sciences" by V.N. Amble brought out by the Society is extremely useful for the research workers in Animal Sciences. Two ad-hoc publications namely, "Contributions in Statistics and

Agricultural Sciences" and "Impact of P.V. Sukhatme on Agricultural Statistics and Nutrition" were brought out by the Society which contain a number of invited articles from India and abroad.

The Research Unit of the Society was engaged in carrying out measurement of socio-economic pertaining to development of different states in the country. A report entitled "Statistical Evaluation of Development on Socio-economic Front" was finalised by the the Research Direction Committee. This report deals with the methodology for building up a composite index of development. The study utilised the data on various types industrial, socio-economic indicators viz. agricultural, education and infrastructural. communications. indicators of development for the periods 1971-72 and 1981-82 in 17 major states of the country. The statistical techniques used include factor analysis, non-parametric multivariate and distance matrix concept procedures. The slippage test was applied to study the change in development levels over time. The broad conclusions emerging from the study are as follows:

- The states of Haryana and Punjab are observed to be better off in socio-economic development where as the states of Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh have remained at the low ebb of development during both the periods.
- The over-all level of development is found to be significantly different between the two time periods.
- Though the various developmental programmes have resulted in an improvement in Agricultural, Industrial and Socio-economic factors during the second period, its impact appears to have been eroded by the rapid growth of population in most of the states.
- Special care should be taken to allocate resources optimally on per capita basis for improving the socio-economic conditions of under developed states.

With the growing emphasis on district level planning, it is desirable to develop composite indices with a view to examine the intra-state variation in development index. The data are being collected for the most recent year (1990-91) for some of the states on the following indicators:

- Net sown area per cultivator
- Foodgrain production per capita
- Fertilizer consumption per hectare of cropped area
- Gross irrigated area as percentage to gross cropped area
- Agricultural workers as percentage to total workers
- Gross output in industry per capita
- Average daily employment of factory workers per lakh of population
- Industrial consumption of electricity per capita
- Percentage of villages having electricity facility
- Domestic consumption of electricity per capita
- Number of banking offices per lakh of population
- Percentage of villages connected by road
- Per capita income at current prices
- Literacy percentage
- Expected life of people
- Number of registered medical practitioners per lakh of population.

Based on these indicators, it is proposed to construct the composite index of development of different states at district level.

The problem of finance for scientific activities of printing of its Journal and other ad-hoc publications could be solved to a certain extent through grants-in-aid received from the Ministry of Agriculture, Government of India and Indian Council of Agricultural Research. The Society wishes to acknowledge gratefully the financial assistance received from them during the year under report.

The Society continues to be a member of the International Statistical Institute and also of the Indian Association of Social Science Institutions. It is also affiliated to the Federation of Indian Societies of Agricultural Sciences and Technology (FISAST).

The last (44th) Annual Conference of the Society was held at Anand from 3rd to 5th December, 1990 as per invitation received from Gujarat Agricultural University. The Conference was inaugurated by Hon'ble Shri J.V. Shah, the then State Minister of Agriculture, Government of India. The Society is thankful to him for inaugurating the Conference. Dr. V.M. Jhala, Vice Chancellor. Gujarat Agricultural University welcomed the delegates. Prof. S.L. Rao, Director General, National Council of Applied Economic Research. New Delhi was the Chief Guest and he addressed the participants. Prof. Prem Narain, Secretary of the Society announced the name of eminent scientist, Prof. P.K. Bose, who was selected for the award of 'Sankhyiki Bhushan' and he read out the citation, Sh. J.V. Shah presented the award. Prof. Prem Narain, Secretary of the Society presented the report of the activities of the Society for the year 1990. The Technical Address "Computer Intensive methods in Agricultural Statistics" was given by Prof. J.S. Rustagi, Sessional President. Shri J.S. Sarma, Vice President of the Society, presided over the function and gave the concluding remarks. Dr. K. Jankiraman, Director of Research and Dean, P.G. Studies, Gujarat Agricultural University gave a vote of Thanks.

The "Dr. Rajendra Prasad Memorial Lecture" was delivered by Dr. Har Swarup Singh, Ex-Member, Planning Commission. The topic of his lecture was "Sustainable Agriculture". Dr. V.M. Jhala, Vice Chancellor, Gujarat Agricultural University, presided over the memorial lecture. There were two symposia organised at the Conference. The Symposium on "Fertilisers - Issues and Policies" was presided over by Dr. Gunvant M. Desai, International Food Policy Research Institute, Washington D.C., USA and the convenors of the symposium were Shri P.N. Bhargava, Principal Scientist, Indian Agricultural Statistics Research Institute, New Delhi and Dr. R.T. Dangarwala, Gujarat Agricultural University, Anand. The second symposium on "Dairying - Issues and Policies" was presided over by Dr. V. Kurien, Chairman, National Dairy Development Board, Anand and convenors were Dr. J.P. Jain, Principal Scientist, IASRI, New Delhi and Dr. Rupak Chakrabarty,

Deputy Manager, NDDB, Anand. A session on "Statistical Computing" was organised under the Chairmanship of Prof. J.S. Rustagi, Visiting Scientist, IBM Corporation, USA. Shri R. Gopalan, Principal Scientist, IASRI, New Delhi was the Convenor. "Dr. V.G. Panse Memorial Lecture" was delivered by Dr. Gunvant M. Desai, IFPRI, Washington, USA. The topic of his lecture was "Issues and Themes in Growth of Fertiliser use in India: An agenda for further Research and Future Policies." Prof. P.K. Bose presided over the memorial lecture.

The detailed summaries of the papers presented at the symposia as well as the recommendations made have been printed in the Journal, Volume 42, No. 3, December, 1990, As many as 79 technical papers were presented at the Conference. The paper reading sessions were organised by conducting two concurrent sessions on two consecutive days. These sessions were presided over by Prof. S.G. Prabhu Ajgaonkar, Dr. Ramjibhai M. Patel and Dr. B.L. Agrawal. A session for presentation of papers considered for 'Young Scientist Award' was organised under the Chairmanship of Prof. J.S. Rustagi. Two papers were presented and the paper presented by Dr. (Ms.) Amrit Pal Kaur, IASRI, New Delhi was judged the best. The scientists who assisted the Chairman to judge the best paper were Dr. J.P. Jain, Shri S.D. Bokil, Prof. S.G. Prabhu Ajgaonkar and Dr. M. Gurnani. A special lecture was delivered by Dr. Y.K. Alagh, S.P. Institute of Economic & Social Research, Ahmedabad. The topic of his lecture was "Environmental consideration in agricultural planning in India -Agroclimatic planning and land and water development." Shri J.S. Sarma presided over the lecture.

The Society has conveyed its grateful thanks to the Vice-Chancellor, Gujarat Agricultural University, Anand for organising the last Conference and also to the chairpersons of various sessions as well as to those who spared their valuable time in making the Conference a great success at Anand.

The Society has organised two In-service Training Programme on "Organisation of Surveys - Recent Developments in Sample Survey Methods and their Applications" for the benefit of senior level Indian Statistical Service officers working in different organisations of the Central Government. The first training programme was organised from 28<sup>th</sup> January to 8<sup>th</sup> February.

1991 and second was from 23<sup>rd</sup> September to 5<sup>th</sup> October, 1991, at IASRI, New Delhi. Twenty three and Eighteen trainees participated in the training programmes respectively. Eminent scientists and experts in the field of Sample Surveys were selected as faculty members for these training programmes. Both the programmes were sponsored by the Central Statistical Organisation, Department of Statistics, Ministry of Planning, Government of India and Classes were arranged at IASRI, New Delhi. The Society is grateful to the CSO, faculty members and IASRI for their generous support and cooperation to make these training programmes a great success.

The Society provided financial assistance to deserving research workers and students to enable them to attend the Society's Conference at Anand for presenting their papers.

The railway authorities, as in the past, gave travel concessions to the members of the Society and delegates to the 44th Annual Conference to enable them to attend the Conference at Anand. The Society records its grateful thanks to the railway authorities.

The accounts of the Society for the year ending 31 March, 1991 were audited by a professional auditor appointed by the Society and presented to the General Body.

The work of the Society during the year was made possible through the active help of the members of the Executive Council of the Society, the Editorial Board and the Research Direction Committee. The burden of the entire Secretariat of the Society has been willingly borne by my colleagues, Dr. Shivtar Singh, Shri S.C. Rai and Dr. Padam Singh. In the end I wish to thank the staff of the Society for their devoted work.