

## INDIAN SOCIETY OF AGRICULTURAL STATISTICS

### REVIEW OF ACTIVITIES FOR THE YEAR 2003

The Indian Society of Agricultural Statistics, a scientific body, was founded on January 03, 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 Union Minister of Agriculture, Government of India and later Hon'ble President of India as its Founder President. He continued to guide the Society for sixteen years. The Society had also the privilege of having as its Presidents Shri S.K. Patil, Bharat Ratna Shri C. Subramanian, Shri Jagjivan Ram, Padma Vibhushan Dr. M.S. Swaminathan, Dr. O.P. Gautam, Shri Buta Singh, Dr. N.S. Randhawa, Padma Bhushan Prof. P.V. Sukhatme, Prof. V.L. Chopra and Padma Bhushan Dr. R.S. Paroda. All of them took keen interest in the activities of the Society and were a source of great inspiration. The Society has attained its present status primarily due to the untiring efforts and guidance of its Presidents in the past and Dr. Panjab Singh, the President at present. The farsightedness, overall guidance and unstinting support from the eminent statisticians, Late Prof. P.V. Sukhatme and Late Dr. V.G. Panse, have been fundamental to the growth of the Society.

The Society organizes annually a conference in different parts of the country. The invitations for organizing such conferences are received from State Governments, universities and other research organizations. It provides a wider platform for exchange of ideas. During each annual conference, the Society organizes one or two symposia keeping in view the current national interest as well as problems and interest in the region where the conference is organized. The Society brings out a Journal, one volume consisting of three issues (April, August, December) 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 Dr. Rajendra Prasad, a memorial lecture is organized during the Conference. The Society has organized 39 Lectures so far and the memorial lecture being organized during this Conference would be 40<sup>th</sup> in the series. The Society has also been organizing a lecture in memory of Dr. V.G. Panse, who was the guiding spirit behind the Society and its activities.

The Society has so far organized 24 Lectures in his honour. To perpetuate the memory of Prof. P.V. Sukhatme, the Society has instituted from the year 1998 an award called PROF. P.V. SUKHATME GOLD MEDAL AWARD, which is given to a well-known active scientist who has made significant contribution in the field of Agricultural Statistics and/or allied fields and has keen interest in the activities of the Society. The Society is also organizing DR. D.N. LAL MEMORIAL LECTURE AWARD from the year 2000. So far two lectures have been organized in this context.

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	26
Life Members	536
Ordinary Members (Annual)	<u>06</u>
	<u>568</u>

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	210
Foreign	02

Thus, the total number of members and subscribers during the year was 780.

One of the important activities of the Society, as mentioned earlier, is the publication of its Journal. It has brought out 56 volumes and has maintained its time schedule. This year, the Society is bringing out a Felicitation Volume in honour of Prof. Prem Narain's 70<sup>th</sup> Birthday. The Hindi Supplement continues to be a special feature of the Journal. The high standard of the Journal has been maintained due to the sincere efforts of the Editorial Board and of the referees. The Society is thankful to them for their keen interest in the activities related to the publication of Journal. With a view to promoting research in Statistics and improving the standard of its Journal, the Society has been awarding prizes for the best papers published in the Journal for every biennium, starting from 1987 in the fields of Design of Experiments, Sampling Theory, Statistical Genetics, Statistical Methodology and Applied Statistics.

The country is proud of eminent statisticians who contributed significantly to the cause of Agricultural Statistics in India and abroad. Due to their untiring efforts, Agricultural Statistics in the country stand on a fairly sound footing. The Society is honouring such eminent statisticians by conferring the SANKHYIKI BHUSHAN AWARD biennially. For encouraging the young scientists to do significant research in Agricultural Statistics, the Society has instituted ISAS YOUNG SCIENTIST AWARD in the field of Agricultural Statistics.

The 3<sup>rd</sup> 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 and all the copies have been sold out. The book was reprinted during 1997. Another important publication "Statistical Methods in Animal Sciences" by Shri V.N. Amble brought out by the Society is extremely useful for 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. Prof. P.V. Sukhatme Memorial Volume has been brought out during 1998 by the Society as a part of its Journal, Volume 51, Nos. 2 & 3. These publications contain a number of invited articles from India and abroad.

The Research Unit of the Society was engaged in carrying out research studies relating to evaluation of socio-economic development of different states of the country. As we expect, development process should lead to improvement in the quality of life. Economic planning is undertaken in the country to bring out uniform regional development and a progressive reduction in regional disparities in the pace of development. Although resource transfers are executed to the backward regions through a number of instruments like subsidies and Central assistance, yet it has been observed that the regional disparities in the level of development is not declining over time. This year, the study is undertaken to quantify the levels of socio-economic development of hilly states. The states included in the study are Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttaranchal. These states together cover about 19% area and 6% population of the country. The data on 17 developmental indicators for the year 2000-2001 are utilized in the study. It was found that in overall socio-economic development the states of Mizoram and Manipur were better developed as compared to other states. About 17% area and 6% population of the states covered are low developed. Four states having about 54% area and 61% population are observed to be at developing stage and these states are making fast improvement in their level of socio-economic development.

The statistical methodologies applied, detailed results and conclusions emerging from the study, will be presented in a separate session during this Conference by Shri S.C. Rai, Former Joint Secretary of the Society.

I am glad to mention that the Planning Commission, Government of India has very kindly funded the Society for the research project entitled EVALUATION OF SOCIO-ECONOMIC DEVELOPMENT AT MICRO LEVEL. The work on this project is already in progress and the data on socio-economic variables of about 400 C.D. Blocks of Uttar Pradesh had been collected, scrutinized, compiled, tabulated and put on PC for detailed study.

The problem of finance for scientific activities, printing of the Journal and other ad-hoc publications could be solved to a certain extent through grant-in-

aid received from the Ministry of Agriculture, Government of India and Indian Council of Agricultural Research. The Society wishes to acknowledge very gratefully the financial assistance received from them during the year under report.

The Society is already having the facilities of PC, Laser Printer and Xerox Machine. Recently, with the help of the grant from the Ministry of Agriculture, Govt. of India, the Society has procured two more PCs, Scanner and a Laser Printer. These facilities have greatly improved the quality of material produced by the Society. E-Mail facility has also been procured in the Society. A Fax Machine has been installed in the Society Office with the generous donation made by Prof. J.S. Rustagi, Vice President of the Society. I take this opportunity to thank him for his kind donation.

During the year under report, the Office of the Society has been given a relook by renovating the premises with all the infrastructural facilities like AC and Sofaset and a provision of office for the Consultant of the Research Unit of the Society and the Executive President.

I am happy to inform that a website of the Indian Society of Agricultural Statistics has been developed. One can get the information on the rules & regulations, publications, membership, awards etc. from the website.

The Society continues to be a member of the International Statistical Institute, Netherlands and also of the Indian Association of Social Science Institutions, New Delhi.

The 56<sup>th</sup> Annual Conference of the Society was held at Department of Agricultural Statistics, College of Agriculture, University of Agricultural Sciences, Krishi Nagar, Dharwad (Karnataka) from 18 to 20 December, 2002. Shri V.S. Koujalagi, Hon'ble Minister of Agriculture, Government of Karnataka was the Chief Guest and he inaugurated the Conference on December 18, 2002. Dr. S.A. Patil, Vice Chancellor, University of Agricultural Sciences, Dharwad presided over the inaugural function. Dr. J.H. Kulkarni, Director of Instructions, College of Agriculture, University of Agricultural Sciences, Dharwad delivered the Welcome Address. Dr. S. Lingappa, Director of Research, College of Agriculture, University of Agricultural Sciences, Dharwad presented the research and extension activities of the University. Review of the activities of the Society was presented by Dr. S.D. Sharma, Secretary, Indian Society of Agricultural Statistics. On this occasion, Sankhyiki Bhushan Award was presented to Prof. J.S. Rustagi, Ohio State University, Ohio, USA and Dr. M.N. Das, Former Director, IASRI, New Delhi by the Chief Guest. Dr. S.D. Sharma read out the citation. In his opening remarks, Prof. Prem Narain, Executive President of the Society presented the main theme of the Conference. Dr. S.A. Patil, Vice Chancellor, University of Agricultural Sciences, Dharwad delivered the Presidential Remarks. Two papers entitled "Strategies for Composite Forecast" by S.C. Mehta, Ranjana Agrawal, and V.P.N. Singh and "State Space Modelling Versus ARIMA Time-Series Modelling" by S. Ravichandran and

Prajneshu published in the volume LIII, No. 3, December, 2000 and LIV, No. 1, April, 2001 respectively were judged to be the best papers in the field of Applied Statistics during the period of 2000 and 2001 and these were jointly given the prizes. Dr. Ranjana Agrawal received the prize in person and other authors were given the prizes in absentia. Dr. P.A. Katarki, Professor and Head, Department of Agricultural Statistics, College of Agriculture, University of Agricultural Sciences, Dharwad proposed a Vote of Thanks.

The Technical Address on WORK OPPORTUNITIES FOR INDIAN RURAL LABOUR FORCE – RECENT KNOWLEDGE AND THINKING was delivered by the Sessional President Prof. N.S. Sastry, Former Director General & Chief Executive Officer, NSSO, Government of India, New Delhi. The points covered and the recommendations made in the lecture were as follows.

Rural India in 1999-2000 had an estimated population of 727.5 million out of which 270.4 million were labour force, 250.9 million in work force and 19.5 million unemployed on current daily status basis according to the National Sample Survey Organization (NSSO) and population count from 2001 Census. The number of unemployed increased from 14.3 million in 1993-94 to 19.5 million in 1999-2000. Looking at the relationship between unemployment and poverty in rural India, the unemployment rate was much higher in the lower consumption classes. The fall in the employment growth rate per annum in rural areas was observed in many states during the period 1993-94 to 1999-2000 as compared to the period 1983 to 1993-94 on current daily basis. Regarding trends in the structure of rural employment, the share of the agricultural and allied sector in rural work force on usual status basis declined from 83.4% in 1977-78 to 76.3% in 1999-2000 while that of the rural non-agricultural sector increased from 16.6 % to 23.7% over the same period. In rural India, the proportion of male workers engaged in agriculture and allied sector has been steadily declining from 80.7% in 1977-78 to 71.4% in 1999-2000. It was expected that growth based total additional job opportunities will be 29.67 million (60%) and programme based total additional job opportunities will be 19.32 million (40%) during the Tenth Plan Period. In terms of total employment in the Terminal year of the Tenth Plan, agriculture may contribute 52%, secondary sector 14% and Service (tertiary) sector 34%. It was, thus expected that in the year 2006-2007, employment generation in agriculture (primary sector) may be 202.46 million, secondary sector may contribute 56.57 million and Service (tertiary) sector may contribute 133.32 million, thereby generating total employment of 392.35 million in the country (rural and urban combined).

Dr. Rajendra Prasad Memorial Lecture was delivered by Prof. J.S. Rustagi, former Chairman, Department of Statistics, Ohio State University, Ohio, USA on STATISTICS IN THE COMPUTER AGE. This lecture was chaired by Dr. S. Lingappa, Director of Research, College of Agriculture, University of Agricultural Sciences, Dharwad. Prof. Rustagi discussed the nature of applied statistics and use of statistical computations for solving the statistical problems.

He expressed the present age as "computer age". He mentioned some of the computer intensive methods and super computer techniques. Applications of bootstrap technique, genomic statistics, microarray biotechnology, bioinformatics etc. were given. He discussed the influence of computers on statistical practices and established a correlation between statistical education and computers.

Dr. V.G. Panse Memorial Lecture was delivered by Prof. Prem Narain, Executive President of the Society and Former Member, National Statistical Commission, Government of India, New Delhi on ESTIMATION OF CROP YIELDS REVISITED. This lecture was chaired by Dr. J.H. Kulkarni, Director of Instructions (Agriculture), College of Agriculture, University of Agricultural Sciences, Dharwad. The main points covered and the broad recommendations made in the lecture were as follows:

The sampling design of the crop surveys was a stratified two-stage random sampling with Revenue Inspector Circles as strata, villages in the circles as the primary sampling units, fields growing the crop in the selected villages as the second stage units and standard plots usually of size 5 m × 5 m in the selected fields as the ultimate sampling units. The number of crop fields selected in each selected village was two with one crop-cut per field that is undertaken when the crop was ready for harvest. It was cut, the produce was weighed and from a sub-sample of the plot the produce was stored and reweighed after drying, so that the appropriate allowance was made for drriage in the estimation of the crop yield.

Longacre Agricultural Development Centre, London sponsored a study in 1987 in five to six African countries to compare the objective method of crop cutting experiment for estimating crop yield with the subjective method of estimating it by enquiry from farmers soon after the harvest. Studies were still being conducted to compare the two approaches with a view to adopting one of them. It seems that such comparative studies were inadmissible since we compare a scientific method of measurement with one based on judgement only. It was worth noting that in the success story of crop cutting surveys in our country we did not find any experiment conducted for such a comparison. Experiments based on issues such as 'how to locate a random plot', 'what should be size and shape of the plots', 'what should be the agency to conduct the surveys on a large scale and on a routine basis', etc. were conducted and results obtained therein were adopted.

It had been shown that the estimator would have minimum variance for samples with mean of the auxiliary variable close to the population mean in addition to being unbiased. Simple balanced sampling could therefore avoid the occurrence of a typical sample found in the design-based approach.

The large-scale sample survey for the estimation of production of various crops based on an objective method of crop-cutting experiments and adopted by various states in our country since 1950 had no parallel in the world. Its success had depended on the system of land revenue collection through the agency of

patwaris that in recent times had suffered set back due to abolition of land revenue in some of the states. Reiterating the need of an objective method as against a subjective approach of farmers' report on crop production advocated in certain quarters, the National Commission of Statistics has viewed this project as a scheme of national importance and recommended steps to rectify the deficiencies in the work of patwaris on a priority basis.

The research work conducted by the Society during the year 2002 on EVALUATION OF ECONOMIC DEVELOPMENT AT MICRO LEVEL IN KARNATAKA was presented by Shri S.C. Rai, former Joint Secretary of the Society. This session was chaired by Prof. N.S. Sastry, Sessional President. The main features and findings of the study were as follows:

Realizing the seriousness and importance of the problems of estimation of level of development, the Indian Society of Agricultural Statistics conducted a series of research studies in this direction. On detailed examination of the economic development of low developed districts, it was found that the entire parts of the districts were not low developed but some parts were middle level or high level developed. Therefore, it had been decided to quantify the levels of development of different sectors of economy at micro level. In the first instance, the State of Karnataka had been selected for conducting the study. All the 175 talukas of the State were included in the study. The study covered the evaluation of levels of development in agricultural, industrial, infrastructural facilities and overall socio-economic fields for all the talukas of Karnataka. The evaluation of economic development at taluka level was quite important as there had been a growing consensus about the need of micro level planning in the country. About 21% talukas were found to be in high developed category whereas 37% talukas were in the category of medium level. About 30% talukas were poorly developed but these were improving their level of development at a faster rate. Only 12% talukas were low developed and these talukas required special care and efforts for making improvement in their level of development. Infrastructural facilities available in talukas were very much utilized in developmental activities. Industrial development was also significantly associated with infrastructural facilities. Overall, socio-economic development was very highly associated with agricultural development. In fact agricultural development was prominent in almost all the talukas of the State and the talukas which were agriculturally advanced were found to have high level of overall socio-economic development. In other words, agricultural and overall socio-economic development were going hand in hand in the State. Industrial development did not have any significant impact on the overall socio-economic development. Better developed areas in the State were found to be thickly populated. Wide disparities in the levels of development had been observed between different talukas.

Dr. D.N. Lal Memorial Endowment Lecture was delivered by Dr. V.K. Bhatia, Principal Scientist, IASRI, New Delhi on GENETIC VARIANCE

COMPONENTS – USES AND ESTIMATION PROBLEMS. The session was chaired by Prof. N.S. Sastry, Sessional President.

ISAS Young Scientist Award was presented to Shri B.M.K. Raju, IASRI, New Delhi for his paper entitled A STUDY ON AMMI MODEL AND ITS BIPLOTS. This session was chaired by Prof. N.S. Sastry, Sessional President.

Apart from this, 42 research papers were also presented in the fields of Design of Experiments, Sample Surveys, Statistical Genetics, Applied Statistics, Statistical Methodology and Computer Applications during the Conference. Four sessions were organized for presentation of contributed papers. These sessions were chaired by Dr. M.N. Das, Dr. S.D. Sharma, Dr. A.K. Srivastava and Dr. Ranjana Agrawal.

The Technical Address, Dr. V.G. Panse Memorial Lecture, and the abstracts of papers presented in the Conference were published in the Journal of the Society Volume 55, No. 3, December, 2002.

Two symposia on (i) QUALITY OF AGRICULTURAL AND ALLIED STATISTICS: PRIORITY ACTIONS NEEDED IN THE LIGHT OF NATIONAL STATISTICAL COMMISSION RECOMMENDATIONS and (ii) CROP WEATHER MODELS IN AGRICULTURE were organized during the Conference. Prof. Prem Narain, Executive President of the Society and Former Member, National Statistical Commission, Govt. of India, New Delhi presided over the first symposium and Dr. A.K. Srivastava, IASRI, New Delhi and Shri M. Neelakantan, NSSO, New Delhi were the Convenors. Prof. J.S. Rustagi, Ohio State University, Ohio, USA presided over the second symposium and Dr. Ranjana Agrawal, IASRI, New Delhi and Dr. S.N. Megeri, UAS, Dharwad were the convenors. The main recommendations emerging from the symposia are as follows:

- (i) The recommendations on the Symposium on QUALITY OF AGRICULTURAL AND ALLIED STATISTICS: PRIORITY ACTIONS NEEDED IN THE LIGHT OF NATIONAL STATISTICAL COMMISSION RECOMMENDATIONS
  1. The recommendations of NSC regarding estimation of crop area on the basis of 20% sample of villages for major crops may be followed quite efficiently. Minor crop area estimation can be improved by using GIS and Remote Sensing technology along with the survey data. However, complete Girdawari may be required for several purposes and should be followed in State wherever, it is working satisfactorily.
  2. Keeping in view a number of intricate conceptual and methodological issues involved in effecting on integration of livestock census with agricultural census, the pilot study proposed by NSC need to be carefully designed to bring out optimal solutions to these issues. There is a need of analysis of existing



data to develop an efficient sampling design, which could be tested in the pilot study. Such studies need to be taken up immediately so that the procedures of integration could be perfected and implemented in next round of Agricultural Census, which will be conducted with reference year 2005-2006.

3. The recommendation of NSC regarding use of ICS data for working out a correction or adjustment factor should be followed. For this purpose, a statistical study should be taken up.
4. A methodological study needs to be taken up for estimation of horticultural crops, taking into account the strength of present knowledge based on available methodologies such as sample surveys, market arrivals etc. The experience and expertise of various departments such as IASRI, DES, NSSO, NHB should be utilized in this endeavour.
5. For marine fisheries statistics, efforts should be made for data acquisition and dissemination involving respective departments of maritime states dealing with marine fisheries and CMFRI. For this purpose, if need be, a national workshop may be organized for deliberating on the methodological aspects of data collection and logistic support for the data collection system and evolve appropriate strategy for developing a comprehensive marine fisheries statistical system.

(ii) The recommendations from the Symposium on CROP WEATHER MODELS IN AGRICULTURE

1. Remote sensing data should also be used along with weather parameters while developing yield forecast models.
2. Some simple thumb rules based on weather may provide forewarning of pests and diseases. Therefore, simple thumb rules may be developed crop wise and agro-climatic zone wise, which may provide quick forewarning of pests and diseases. For this purpose, task force may be created in different zones.
3. Interval estimates of forecasts may be given instead of point estimates.
4. There is need to validate region and crop specific weather based models on a larger scale.
5. There is need to establish linkages and collaboration among various institutions involved in developing crop weather models.

The research work of the Society carried out during 2002 and the detailed summaries of the papers presented at both the symposia as well as recommendations were published in Journal of the Society Volume 56, No. 1, April, 2003.

There was a plenary session chaired by Dr. S.D. Sharma, Director, IASRI, New Delhi where the recommendations of the symposia were presented and approved.

The Executive Council meeting of the Society was held on December 18, 2002 under the Chairmanship of Prof. Prem Narain, Executive President. The meeting of the General Body of the Society was held on December 19, 2002. Prof. Prem Narain, Executive President chaired the meeting.

The Society conveyed its grateful thanks to the Vice Chancellor, University of Agricultural Sciences, Krishi Nagar, Dharwad (Karnataka) for organizing 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 Dharwad.

The accounts of the Society for the year ending 31 March, 2003 were audited by a professional auditor and will be presented at the General Body Meeting.

The work of the Society during the year was made possible through the advice and help of the members of the Executive Council of the Society, Editorial Board and the Research Direction Committee. The burden of the entire secretariat of the Society has been willingly borne by my colleagues Dr. V.K. Bhatia, Dr. A.K. Srivastava, Shri R.S. Khatri and Shri S.C. Rai. In the end I wish to thank the staff of the Society for their devoted work.

S.D. SHARMA  
Secretary, ISAS

**INDIAN SOCIETY OF AGRICULTURAL STATISTICS**  
**Library Avenue, Pusa, New Delhi**

*Balance Sheet as on 31 March, 2003*

Previous Year	LIABILITIES	Current Year
700,000.00	<b>Corpus Money</b>	
	Add : Addition During the year	<u>700,000.00</u>
		700,000.00
	<b>GENERAL RESERVE</b>	
690,885.43	Balance as per last balance sheet	690,885.43
	Less : Excess of Expenditure over Income	<u>518,440.09</u>
		172,445.34
	<b>PUBLICATION RESERVE</b>	
324,407.00	Balance as per last balance sheet	324,407.00
	Add : Sale of old volumes of Journal	<u>4,900.00</u>
		329,307.00
50,050.00	Fixed Assets Reserve	50,050.00
19,451.11	Surplus Account (Journal)	52,136.36
50,000.00	Dr. D.N. Lal Memorial Lecture Award Fund	50,000.00
	<b>CAPITAL RESERVE</b> (Life Membership Fee)	
396,488.00	Balance as per last balance sheet	396,488.00
	Add : Permanent Institutional Membership	10,000.00
	Add : Life Membership Fee	38,410.00
		444,898.00
5,800.00	Advance Subscription for Journal (Vol. .56)	8,510.00
24,527.00	<b>EXPENSES PAYABLE</b>	
	Audit Fee Payable	2,160.00
	M/s Computer Corner	29,377.75
	Manoj Kumar - Contractor	50,000.00
<b>2,261,608.54</b>		<b>1,888,884.45</b>

Previous Year	ASSETS		Current Year
95,280.01	<b>FIXED ASSETS (As per Schedule)</b>		77,482.01
	<b>CASH AND BANK BALANCES</b>		
136.88	Imprest	1,372.38	
18,081.98	Syndicate Bank, IASRI-EC, New Delhi S/B	<u>230,260.98</u>	231,633.36
	<b>FIXED DEPOSITS</b>		
1,256,050.00	Syndicate Bank, Pusa, New Delhi	991,991.00	
103,211.00	Accrued Interest of Fixed Deposits	<u>203,627.00</u>	1,195,618.00
	<b>AMOUNT RECOVERABLE/RECEIVABLE</b>		
45,000.00	Grant receivable from ICAR (Journal)	22,500.00	
50,000.00	Grant receivable from ICAR (Computer)	-	
25,000.00	Grant receivable from ICAR (conference)	25,000.00	
35,039.00	Tax deducted at source	<u>43,197.00</u>	90,697.00
	<b>STOCK IN HAND</b>		
1.00	Journal (Token Value)	1.00	
1.00	Symposia Volume (Token Value)	1.00	
93,480.53	Published Books	<u>91,554.94</u>	91,556.94
	<b>DEFICIT OF RESEARCH UNIT</b>		
540,427.14	Balance as per last Balance Sheet	540,427.14	
	Less : Recover during the year	<u>338,530.00</u>	201,897.14
<b>2,261,708.54</b>			<b>1,888,884.45</b>

Place : New Delhi.  
Date : 18.09.2003.

Subject to our report of even date  
for C.S. Bhatnagar & Co., Chartered Accountants  
Sd/  
(G.S. BHATNAGAR)  
Partner

**INDIAN SOCIETY OF AGRICULTURAL STATISTICS**  
**Library Avenue, Pusa, New Delhi**

*Income & Expenditure Account for the Year ending 31 March, 2003*

Previous Year	EXPENDITURE	Current Year
72,352.00	To Annual Conference Exp.	116,576.00
1,858.00	To Salaries	6,150.00
5,415.00	To Postage and Telephone	5,444.00
385.00	To Printing and Stationery	161.00
25.00	To Bank Charges	50.00
1,467.50	To Executive Meeting Expenses	11,218.50
2,100.00	To Audit Fee Expenses	2,160.00
162.00	To General Expenses	2,970.00
6,077.00	To Conveyance	2,158.00
2,172.00	To Photo Copy Machine Maintenance	2,689.00
250.00	To Repair	416.00
3,600.00	To Accountancy charges	3,600.00
	To Office Rent	1,329.00
	To Best Paper Award	2,000.00
	To Dr. D.N. Lal Memorial Award Expenses	5,383.00
18,455.00	To Computer Repair & Maintenance	490.00
500.00	To Professional Fee	-
	To Office Renovation	461,442.00
50,050.00	To Purchase of Computer & Printer	-
	To Publication Reserve	4,900.00
15,077.00	To Depreciation on Assets	17,798.00
78,089.66	To Excess of Income over Expenditure	-
<b>258,035.16</b>		<b>646,934.50</b>
	INCOME	
2,500.00	By Ordinary Membership Fee	1,660.00
1,580.00	By Sessional Membership Fee	1,720.00
750.00	By Student Membership Fee	220.00
7,000.00	By Donation (Computer Corner)	-
	By Misc. Income	3,600.00
		2,091.00
81,880.00	By Interest on Fixed Deposits	114,602.00
2,321.00	By Interest on Savings Bank A/C	1,767.00
100,000.00	By Grant for Annual Conference (ICAR)	-
10,000.00	By Grant for Annual Conference (ICAR-1998-99)	-
50,000.00	By Grant in aid from ICAR (Purchase of Computer)	-
2,004.16	By Surplus on Published Books	1,534.41
	By Sales of Back Volume	4,900.00
	By Excess of Expenses over Income	518,440.09
<b>258,035.16</b>		<b>646,934.50</b>

Place : New Delhi.  
Date : 18.09.2003.

As per our report of even date  
for C.S. Bhatnagar & Co., Chartered Accountants  
Sd/  
(G.S. BHATNAGAR)  
Partner

**INDIAN SOCIETY OF AGRICULTURAL STATISTICS**  
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*Income & Expenditure Account (Journal) for the Year ending 31 March, 2003*

Previous Year	EXPENDITURE	Current Year
1.00	To Opening Stock (Token Value)	1.00
105,713.00	To Printing charges (Journal) Vol. No. 55	99,108.75
13,927.00	To Postage Expenses	-
3,717.00	To Staff Salaries	-
5,305.00	To Printing & Stationery	-
-	To Conveyance	64.00
30,202.50	To Excess of Income over Expenditure	32,685.00
<b>158,866.00</b>		<b>131,859.00</b>
	<b>INCOME</b>	
53,421.00	By Sale and Subscription of Vol. No. 54	41,681.00
-	By Postage Charges	177.00
1.00	By Closing Stock	1.00
60,444.00	By Grant from ICAR for Journal (Previous Year)	-
45,000.00	By Grant from ICAR for Journal	90,000.00
	By Excess of Expenditure over Income	-
<b>158,866.00</b>		<b>131,859.00</b>

Place : New Delhi.  
Date : 18.09.2003

As per our report of even date  
for C.S. Bhatnagar & Co., Chartered Accountants  
Sd/  
(G.S. BHATNAGAR)  
Partner

**INDIAN SOCIETY OF AGRICULTURAL STATISTICS**  
**Library Avenue, Pusa, New Delhi**  
**(Research Unit)**

*Balance Sheet as on 31 March, 2003*

Previous Year	LIABILITIES	Current Year
<b>INDIAN SOCIETY OF AGRICULTURAL STATISTICS</b>		
540,427.14	Balance as per last Balance Sheet	540,427.14
	Less : Recovery during the year	338,530.00      201,897.14
<b>UNUTILIZED GRANT</b>		
	Govt. of India, Ministry of Agriculture	356,000.00
<b>EXPENSES PAYABLE</b>		
1,050.00	Audit Fee	1,080.00
5,088.80	P.F. Account of Shri Bhawani Dutt	-
<b>546,565.94</b>		<b>558,977.14</b>
<b>ASSETS</b>		
3,839.30	Fixed Assets (As per Schedule)	3,650.00
5,088.80	Deposit with Post Office (P.F. Account)	-
16,000.00	Grant Receivable from Ministry of Agriculture	-
<b>DEFICIENCY ACCOUNT</b>		
521,637.84	Balance as per last balance sheet	521,637.84
	Add : Deficit for the year	33,689.30      555,327.14
<b>546,565.94</b>		<b>558,977.14</b>

Place : New Delhi.  
Date : 18.09.2003.

As per our report of even date  
for C.S. Bhatnagar & Co., Chartered Accountants  
Sd/  
(G.S. BHATNAGAR)  
Partner

**INDIAN SOCIETY OF AGRICULTURAL STATISTICS**  
**Library Avenue, Pusa, New Delhi**  
**(Research Unit)**

*Income & Expenditure Account for the Year ending 31 March, 2003*

Previous Year	EXPENDITURE	Current Year
76,000.00	To Establishment Expenses	100,920.00
-	Gratuity Paid	33,500.00
385.00	To Printing and Stationery & Postage	
1,050.00	To Audit Fee Exp.	1,080.00
792.00	To Travelling & Conveyance	42,000.00
245.70	To Depreciation on Assets	189.30
-	To Grant Unutilized Carried over to Next Year	356,000.00
<b>78,472.70</b>		<b>533,686.30</b>
	<b>INCOME</b>	
50,000.00	By Grant in aid from Govt. of India, Min. of Agriculture	500,000.00
28,472.70	By Deficit for the Year C/o to Balance Sheet	33,689.30
<b>78,472.70</b>		<b>533,689.30</b>

Place : New Delhi.  
Date : 18.09.2003.

As per our report of even date  
for C.S. Bhatnagar & Co., Chartered Accountants  
Sd/  
(G.S. BHATNAGAR)  
Partner



**INDIAN SOCIETY OF AGRICULTURAL STATISTICS**  
**Library Avenue, Pusa, New Delhi**

*Schedule of Fixed Assets as on 31 March, 2003*

<b>A. SOCIETY</b>						
Particulars	Opening Balance	Addition during the year	Total	Dep. Rate	Amount (Rs.)	Balance as on 31.3.2003
Computer	18,545.00	—	18,545.00	60%	11,127.00	7,418.00
Computer	50,050.00	—	50,050.00	0%	—	50,050.00
Xerox Machine	17,193.01	—	17,193.01	25%	4,298.25	12,895.01
Fax Machine	9,492.00	—	9,492.00	25%	2,373.00	7,119.00
<b>Total</b>	<b>95,280.01</b>		<b>95,280.01</b>		<b>17,798.25</b>	<b>77,482.01</b>
<b>B. RESEARCH UNIT</b>						
Particulars	Opening Balance	Addition during the year	Total	Dep. Rate	Amount (Rs.)	Balance as on 31.3.2003
Furniture & Fixture	366.30		366.30	10%	36.63	330.00
Typewriter	89.25		89.25	25%	22.31	67.00
Calculator	7.50		7.50	25%	1.87	6.00
Library Books	2,858.00		2,858.00	0%	—	2,858.00
Electric Calculator	21.00		21.00	25%	5.25	16.00
Room Cooler	79.50		79.50	25%	19.87	60.00
Fans	5.25		5.25	25%	1.31	4.00
Steel Almirah	44.25		44.25	25%	11.06	33.00
Cycle	368.25		368.25	25%	92.06	276.00
<b>Total</b>	<b>3,839.30</b>		<b>3,839.30</b>		<b>189.36</b>	<b>3650.00</b>

Place : New Delhi.  
Date : 18.09.2003.

As per our report of even date  
for C.S. Bhatnagar & Co., Chartered Accountants  
Sd/  
(G.S. BHATNAGAR)  
Partner