

REVIEW OF THE ACTIVITIES OF THE INDIAN SOCIETY OF AGRICULTURAL STATISTICS, FOR THE YEAR 1980

The Indian Society of Agricultural Statistics is a Scientific body, founded in 1947 with the object of promoting the study of and research in statistical theory and its application to agriculture, animal husbandry, agricultural economics and allied fields. It organises annually a conference where statisticians working in these fields can meet and exchange ideas. It also publishes a Journal to facilitate publication of results of research. The Journal is published in three issues *i.e.* in April, August and December every year. Apart from the Journal, it has been publishing a number of books and research bulletins. It maintains a research unit to undertake research on specific problems of current interest in accordance with the guidance provided by a Research Direction Committee. The activities of the Society during the year under report were as follows:

The membership of the society which is drawn from all parts of India as well as from abroad increased appreciably during the year. In addition to its regular members the Society has a number of institutional subscribers to the Journal in India and abroad. During this year the membership was: life members 141, ordinary members 140, sessional members 26, student members 25, institutional members 34, subscribers 285. There were in all 651 members and subscribers during the year.

So far the society has published 32 volumes of its Journal. The Hindi supplement continues to be a special feature of the Journal. The high standard of the Journal has been maintained due to the efforts of the referees and the editorial board. The society is thankful to them for their devoted work. One of the publications of the society is 'Sampling Theory of Surveys with Applications' by P.V. Sukhatme and B.V. Sukhatme. This has gone

into a number of prints. The reprint of the revised edition of the book with paper back was brought out two years ago to meet the needs of student community. The book is modestly priced at Rs. 22 and Rs. 18 (the cost price) for the members and is in great demand. Another important publication 'Statistical Methods in Animal Sciences' by Shri V.N. Amble was released a few years back. This book is extremely useful for research workers in animal sciences and about 650 copies of the book have already been sold out. Some other ad hoc publications of the society are 'Contribution in Statistics and Agricultural Sciences', a felicitation Volume published on the occasion of the 60th birthday of late Dr. V.G. Panse, a founder member and for many years the Honorary Secretary of the society, a 'Symposia Volume' containing papers presented at the symposia on 'Measurement of Green Revolution' and 'Statistical Assessment of Intensive Cattle Development Programme'. The publication activities of the society have thus been satisfactory during the year.

A large number of papers were received for publication in the Journal. However, because of limitation of space, it is difficult to publish them without considerable time lag. To accommodate more research papers, printing of one more issue of the Journal devoted to applied type of papers had been commenced from Volume 31 as per decision taken by the general body of the society at an earlier meeting. This has helped in reducing the time lag in the publication of the papers considerably.

The research unit of the society continued to tackle a number of problems of current interest. The report on 'A Scientific Approach to Bufferstock Policy' submitted to the Research Direction Committee earlier has been finalised in the light of the comments received from them. An important finding of the study was that a buffer stock of the order of 20 million tonnes of foodgrains would be required to ensure 90% probability of being able to meet possible deficit from States in the next five years. A study on growth of wheat production in pre-HYV and post-HYV periods was completed and a report on that had also been submitted to the committee. The study revealed that even in the post HYV period the growth

of productivity had been modest (a growth rate of 2.28 per cent per annum for All India for the period 1967-68 to 1977-78) and the spectacular increase in output was partly due to increase in area under the crop. Studies on growth rates of other crops, cereals and pulses, was taken up on the lines of the study on wheat mentioned above. Studies on 'Regional imbalances and constraints in agricultural production' are proposed to be taken up in future depending upon the availability of resources.

The problem of the finance for scientific activities of the society and printing of its journal could be solved to a certain extent through grants-in-aid received from the Central and state government and other organisations. The society wishes to acknowledge gratefully the financial assistance received from the Government of India, Council of Agricultural Research and the state Indian government of Maharashtra from time to time.

The society serves as a forum for discussing statistical problems. However, the members also feel that it should strive to impress upon the authorities the need for giving due recognition to statistics as a separate discipline. In the past, it has been customary for employers of statistical personnel to bracket it with the disciplines of mathematics, economics and commerce because qualified and trained statisticians were not available. As a result, posts requiring statistical expertise were often manned by persons without adequate training in statistics. Now with the free availability of persons trained in statistics it is time that the policy in this regard is changed and persons qualified or trained in statistics alone are recruited against statistical jobs.

The society continues to be a member of the International Statistical Institute. It is also a founder member of the Indian Association of Social Science Institutions. In view of the extremely useful scientific activities of the society and its good standing among the scientific societies, the society is being approached for collaboration in scientific activities by other national scientific institutions. During the year under report the society had been approached for suitable cooperation and collaboration by Indiaa Association of Social Science Institutions and Indian National Science Academy.

The society also collaborated with other learned Scientific Societies connected with agriculture in publishing a felicitation volume containing research contributions of Dr. M.S. Swaminathan, the President of the Society, which was presented to him at a special function.

The last (33rd) annual conference of the society was held from 21st to 23rd December, 1979 at Trichur under the auspices of Kerala Agricultural University. The conference was inaugurated by Shri N.N. Kaleeswaran, Vice-Chancellor of Kerala Agricultural University. Dr. G.R. Seth, former Director of Indian Agricultural Statistics Research Institute, the President elect, delivered the technical address on 'Some thoughts on statistical inference about finite populations'. Two symposia, one on 'Status of statistics of inland fisheries and their development in India' and the other on 'Design and analysis of experiments of horticultural and plantation crops' were organised during the conference. Dr. A.V. Natrajan, Director, C.I.F.R.I., presided over the first and Dr. P.C.S. Nair, Dean, College of Horticulture, Kerala Agricultural University, presided over the second symposium. Dr. Rajendra Prasad Memorial Lecture on 'Trends in Agricultural Production: Problems of Analysis and Interpretation' was delivered by Dr. A. Vaidyanathan, Centre for Development Studies, Trivandrum. The lecture was presided over by Dr. S.S. Potti, Director of Extension Education, Kerala Agricultural University, Trichur. Dr. V.K. Sukumaran Nair, Vice-Chancellor, University of Kerala, Trivandrum, delivered a popular lecture which was presided over by the Sessional President, Dr. G.R. Seth. There were two sessions for reading of contributed papers, one session was presided over by Dr. G.R. Seth and the other by Dr. P.U. Surendran, Prof. of Statistics, Kerala Agricultural University, Trichur. The society is grateful to all of them for sparing their valuable time and making the conference a great success.

Dr. Panse memorial lecture on "Agriculture in growth: changing research and data needs for effective policy" was delivered this year by Prof. John W. Mellor, Director, International Food Policy Research Institute, Washington. The lecture was presided over by Dr. M.S. Swaminathan, President of the society.

The railway authorities, as in the past, gave travel concession to the members of the society and delegates to the 33rd Annual Conference to enable them to attend the Conference at Trichur. The society records its grateful thanks to the railway authorities.

The statement of audited accounts of the society for the year ending March, 1980 is enclosed. The audit has been carried out by a professional auditor as usual.

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 society is also thankful to Dr. B.B.P.S. Goel for his help in preparing the Hindi supplement of the journal. The burden of the entire secretariat of the society has been willingly borne by my colleagues, Shri S.D. Bokil, Dr. K.C. Raut and Dr. B.B.P.S. Goel, Joint Secretaries of the Society. In the end, I have to thank the staff of the society for their devoted work.

INDIAN SOCIETY OF AGRICULTURAL STATISTICS, PUSA, NEW DELHI
Balance Sheet as on 31st March, 1980

<i>Liabilities</i>	<i>Current year</i>	<i>Assets</i>	<i>Current year</i>
<i>General Reserve</i>		<i>Cash in Hand</i>	244.83
Balance as per last B/Sheet	1,35,750.10	<i>Balance with State Bank of India, New Delhi.</i>	
<i>Add : Excess of Income over a Expenditure</i>	4,345.22	In Current Account	635.00
	1,40,095.32	In Saving Account	1,233.53
		<i>Balance with Syndicate Bank (Pusa) New Delhi</i>	1,868.53
<i>Publication Fund</i>	30,819.81	In Saving Bank	21,837.04
<i>Membership Fees Received</i>		In Current Account	743.81
in advance for 80-81	1,209.50		
for 81-82	100.00	<i>Fixed Deposit with SBI, Parliament Street</i>	1,00,000.00
82-83	100.00	<i>Membership Fees</i>	
83-84	100.00	Due up to 77-78	844.00
84-85	50.00	<i>Less : Recovered</i>	24.00
	1,559.50		820.00
<i>Capital Reserve Fund</i>		<i>Less : Written off</i>	820.00
(Life Membership Fee)		Due for 78-79	2,044.00
Balance as per last B/Sheet	4,403.00	<i>Less : Recovered</i>	180.00
Additions during the year	4,455.00		1,864.00
	8,858.00	<i>Less : Written off</i>	1,154.00
<i>Advance Subscription for Journal</i>			710.00
Vol. 31	—	Due for 1979-80	2,194.00
Vol. 32	4,892.74		2,904.00
Vol. 33	126.04		
	5,018.78		

<i>Sundry Creditors</i>		
For Audit Fees	450.00	
For Printing	—	450.00
	<hr/>	
<i>Research Unit</i>		
Balance as per last B/Sheet	5,104.54	
Less : Advanced during the year	19,125.53	
	<hr/>	
(Balance due as per contra)	14,030.99	
	<hr/>	
		<hr/>
		1,86,801.41

Outstandings for sale of Books		430.50
<i>Advance to M/s. R.K Printers</i>		
(For printing of Journal)		2,000.00
<i>Fixed Assets Furniture</i>		
Balance as per last B/Sheet	399.00	
Less : Dep. w/off	40.00	359.00
	<hr/>	
<i>Cooler</i>		
Balance as per last B/Sheet	217.00	
Less : Dep. w/off	33.00	184.00
	<hr/>	
<i>Library Books</i>		82.65
<i>Stock in Hand</i>		
Journals	7,749.80	
Symposium Vol.	1.00	
Published Books	22,455.63	30,206.43
	<hr/>	
<i>Deficiency Account (Journal)</i>		
Balance as per last B/Sheet	10,484.18	
Add : For Current year	1,425.45	11,909.63
	<hr/>	
<i>Advance Research Unit</i>		14,003.99
(As per contra)		
	<hr/>	
	1,84,974.25	<hr/>
		1,86,801.41

64, Regal Buildings,
New Delhi-110 001
Dated : 18-11-1980
Subject to our report of even date

For C.S. Bhatnagar & Co.,
Sd/-
(C.S. BHATNAGAR)
Chartered Accountant

INDIAN SOCIETY OF AGRICULTURAL STATISTICS 'RESEARCH UNIT'

Balance-Sheet as on 31-3-1980

<i>Liabilities</i>		<i>Current Year</i>	<i>Assets</i>		<i>Current Year</i>
<i>General Reserve</i>			<i>Fixed Assets</i>		
Balance as per last B/Sheet	11,324.20		Balance as per last B/Sheet	12,957.85	
Less: Deficiency for the year	1,616.53	9,707.67	Add: Additions during the year	3,197.56	
				16,155.41	
<i>Capital Reserve</i>			Less: Sold during the year	62.05	
Balance as per last B/Sheet	6,835.19			16,093.36	
Addition during the year	3,197.56	10,032.75	Less: Depreciation/W/Off	1,849.95	14,243.41
<i>Expenses Payable</i>			<i>Deposit with Post Office (P.F.A/c.)</i>		894.25
Audit Fees		350.00	<i>Advance to staff (Sh. Bhawani Dutt)</i>		100.00
P.F.A./c, (Sh. Bhawani Dutt)	1,616.23		<i>Indian Society of Agricultural Statistics</i>		—
Less: Against P.F.	500.00	1,116.25	<i>Cheque in hand</i>		20,000.00
<i>Indian Society of Agricultural Statistics</i>			(Received from Ministry of Agriculture and Irrigation)		
		14,030.99			
		35,237.66			35,237.66

64, Regal Building,
New Delhi
Dated: 18-11-1980

For C.S. Bhatnagar and Co.
Sd/-
(C.S. BHATNAGAR)
Chartered Accountant

**INCOME AND EXPENDITURE ACCOUNT FOR
The Year Ending 31-3-1980**

<i>Particulars</i>	<i>Current Year</i>	<i>Particulars</i>	<i>Current Year</i>
To Establishment Charges	28,622.10	By Grant in Aid Sanction by Govt. of India, Ministry of Agriculture and Irrigation	40,000.00
To General Charges	716.27	<i>Less</i> : Utilised for Capital Expenditure	3,197.56
To Stationary and Printing	1,151.96		36,802.44
To Audit Fees	350.00		
To Employer's Contribution to P.F.	156.00		
To Telephone Expenses	810.00	By Deficiency for the year	1,616.53
To Travelling and Conveyance	940.10		
To Liveries to Staff	480.47		
To Postage	1,083.12		
To Entertainment	—		
To Printing of Research Unit Papers	1,685.00		
To Advertisement	574.00		
To Depreciation W/Off	1,849.95		
	38,418.97		38,418.97

Checked and certified correct in accordance with books, vouchers and informations provided to us.

64, Regal Building,
New Delhi.
Dated : 18-11-1980

For C.S. Bhatnagar and Co.
Sd/-
(C.S. BHATNAGAR)
Chartered Accountant

INDIAN SOCIETY OF AGRICULTURAL STATISTICS (RESEARCH UNIT)
Receipts and Payment Account for the year ending 31-3-1980

<i>Receipts</i>	<i>Amount</i>	<i>Payment</i>	<i>Amount</i>
By Grant in Aid received from the Govt. of India	40,000.00	<i>To Revenue Expenditure</i>	
By Advances from Indian Society of Agricultural Statistics	19,135.53	Salaries	28,622.10
By Recovery of loan against P.F.	25.00	General charges	716.27
By Employees contribution to P.F.	13.00	Stationary and Printing	1,151.96
		Audit Fees	350.00
<i>By Recovery of Loan from Sh. Bhawani Dutt</i>		Telephone Expenses	810.00
Flood Relief Loan	300.00	Travelling and Conveyance	940.10
Festival Advance	160.00	Liveries to Staff	480.47
	460.00	Postage	1,083.12
		Advertisement	574.00
By Sale of Old cycle	62.05	Printing of Research Unit papers	1,685.00
			36,413.02

To Capital Expenditure

Cost of 2 Coolers	2,000.00	
Cost of 2 Calculators	726.00	
Cost of Library Books	471.56	3,197.56
		<hr/>
To Employees contribution to P.F. deposited in P.O.		85.00
To Cheque in Hand (from Ministry of Agriculture and Irrigation)		20,000.00
		<hr/>
		59,695.58

59,695.58

59,695.58

Checked and certified correct in accordance with stocks, vouchers and informations provided to us.

64 Regal Buildings,
New Delhi-100 001
Date : 18-11-1980

For C. S. Bhatnagar and Co.
Sd/
(C. S. BHATNAGAR)
Chartered Accountant

INDIAN SOCIETY OF AGRICULTURAL STATISTICS
Income and Expenditure Account For the Year Ending 31-3-1980

<i>Particulars</i>		<i>Current year</i>	<i>Particulars</i>	<i>Current year</i>
To Salaries and Honorarium	3,890.00		By Ordinary Membership Fees	6,366.00
<i>Less: 3/4 transferred to Journal A/c.</i>	<u>2,917.50</u>	972.50	By Int. on Saving Bank Account	1,180.71
			By Int. on Fixed Deposits	2,560.00
			By Miscellaneous Income	280.00
<i>To other Expenses</i>			By Sale of Symposium Volume	57.30
Postage	<u>1,133.63</u>		By Grant for Projects	
Printing and Stationary	7 49.86		By Grant from Govt. of Maharashtra	
Bank Charges	56.00		By Grant from I.C.A.R.	5,000.00
Conveydnce	63.25		By Profit on Published Books	961.09
General Charges	12.00			
Audit Fees	455.00			
Entertainment	122.25			
Advertisement	<u>100.00</u>			
	2,686.99			
	<u>2,015.24</u>	671.75		

To Expenses on Dr. Panse Memorial Lectures	1,486.13	
To Annual Conference Expedses	6,682.50	
To Membership Fees due for more than 2 years w/off.	820.00	
To Membership Fees of Statistical Institute	200.00	
To Membership fee for 1978-79 w/off	1,154.00	
<i>To Depreciation woff</i>		
Furniture	4400	
Cooler	3300	73.00
	<hr/>	
To Excess of Income over Expenditure	4,345.22	
	<hr/>	
27,424.06	16,405.10	<hr/> 16,405.10

64, Regal Buildings,
New Delhi-110 001.
Dated : 18-11-1980
Subject to our report of even date

For C.S. Bhatnagar & Co.,
Sd/-
(C.S. BHATNAGAR)
Chartered Accountant

Income and Expenditure A/C (Journal) Volume 31 for the Year Ending 31-3-1980

<i>Particulars</i>	<i>Current year</i>	<i>Particulars</i>	<i>Current year</i>
To Opening Stock	6,935.22	By Sales and Subscription of Current Volume (Vol. 31)	16,149.41
To Printing Charges Vol. 31) 11,783.50		By Sale of Back Volumes	3,491.00
To Printing Charges of Re-prints 1,930.00	13,713.50	By Sale of Reprints	1,412.30
To Staff Salaries	2,917.50	By Closing Stock	7,749.80
To other Expenses	2,015.24	By Loss Transferred to B/Sheet	1,425.45
To Postage Expenses	3,766.75		
To Printing of Envelope	879.75		
25,654.94	<u>30,227.96</u>	26,654.94	<u>30,227.96</u>

64, Regal Buildings,
New Delhi-110 001
Date : 18-11-1980

For C.S. Bhatnagar and Co.
Sd/
(C. S. BHATNAGAR)
Chartered Accountant

The papers received during 1980 for publication in the journal of the Society were sent to the following referees for critical examination. The council of the Society and the Editorial Board express sincere thanks for the valuable service rendered by them.

1. **Dr. Ravinder Singh**
Associate Prof. of Statistics,
Deptt. of Maths. and Statistics
Punjab Agricultural University,
Ludhiana-141004.
2. **Dr. O.P. Kathuria**
Senior Scientist, I.A.S.R.I.,
New Delhi-110 012
3. **Dr. A.K. Srivastava**
Scientist S-2,
I.A.S.R.I.,
New Delhi-110012.
4. **Dr. P.C. Gupta**
Reader in Statistics
Deptt, of Maths. and Statistics
Gujarat University, Surat-395007.
5. **Dr. Randhir Singh**
Scientist S-2,
I.A.S.R.I.,
New Delhi-110012.
6. **Dr. Jagbir Singh**
Prof. of Statistics
Temple University,
School of Business Administration
Philadelphia, Pennsylvania-19122.
7. **Dr. S.N. Singh,**
Prof., Deptt, of Maths. Stat.,
and Director,
Demographic Research Centre,
Banaras Hindu University,
Varanasi-221005.
8. **Dr. B.B.P.S. Goel**
Scientist S-3,
I.A.S.R.I.,
New Delh:-110012.
9. **Shri K.S. Krishnan**
Scientist S-3,
I.A.S.R.I.,
New Delhi-110012.
10. **Dr. B. Adhikari**
Deptt. of Statistics,
University College of Science,
Calcutta-700019.
11. **Dr. D. Raghavarao**
Prof., Deptt. of Statistics.
Temple University,
Philadelphia Pa-19122, U.S.A.
12. **Dr. P.D. Puri,**
Asstt. Prof. of Maths. and Statistics
Haryana Agricultural Univ, Hissar.
13. **Shri U.G. Nadkarni**
Scientist S-2,
I.A.S.R.I.,
New Delhi-110 012.
14. **Dr. J. Sarangi**
Prof. and Head, Deptt. of Statistics,
Utkal University, Vani Vihar,
Bhubaneswar 751 004
15. **Dr. Murari Singh**
Deptt. of Math. Concordia Univ.
Sir George William's
Campus, 1455 De-Maisonneuvebyld
West Montreal, Quebec
H3G1M8, Canada..
16. **Dr. M.L. Tiku**
Deptt. of Mathematical Sciences,
McMaster University,
1280, Main Street West, Hamilton,
Ontario, Canada L8S4K1.
17. **Dr. B.V.S. Sisodia**
Scientist, Division of L.E.S.,
I.V.R.I.,
Izatnagar-243 122.
18. **Dr. P. Kumar**
Scientist, Agricul. Economics
Division, I.A.R.I.,
New Delhi-110 012.

19. **Dr. V.P. Manglik**
Associate Prof. of Statistics
Govind Ballabh Pant University
of Agriculture and Technology,
Pantnagar Distt. Nainital (U.P.)
20. **Dr. D.D. Joshi**
Prof. and Head,
Deptt. of Statistics,
Institute of Social Sciences
Agra-282003.
21. **Dr. A. Sahai**
Reader in Statistics,
Deptt. of Mathematics,
Roorkee University,
Roorkee.
22. **Dr. A.K. Nigam**
Scientist S-3,
I.A.S.R.I.,

New Delhi-110 012.
23. **Shri P.N. Bhargava**
Scientist S-3,
I.A.S.R.I.,
New Delhi-110 012.
24. **Shri S.K. Raheja**
Senior Scientist
I.A.S.R.I.,
New Delhi-110 012.
25. **Dr. D.N. Jha**
Scientist, I.A.R.I.
New Delhi-110 012.
26. **Dr. T. Jacob**
Sr. Scientist and Head, FRA Div.
CMFRI Annexe,
S.T. Reddier Press Building,
Cochin-682 011.
27. **Shri M.P. Jha**
Head, Division of Crop
Forecasting Methodology,
I.A.S.R.I.,
New Delhi-110 012.
28. **Dr. C.C. Maji**
Asstt. Director General,
I.C.A.R., Krishi Bhavan,
New Delhi-110 001.
29. **Dr. R.K. Pandey**
Head, Division of Econometrics,
I A S.R.I.,
New Delhi-110 012.
30. **Shri S.D. Bokil**
Head, Division of Sample Survey,
I.A.S.R.I.,
New Delhi-110 012.
31. **Dr. Shivtar Singh**
Scientist S-2,
I A.S.R.I.,
New Delhi-110 012.
32. **Dr. M.N. Deshpande**
Deptt. of Maths. and Stats.,
Institute of Science,
Aurangabad-431 001.
33. **Dr. A.V. Kharashikar**
Deptt. of Statistics,
University of Pune,
Pune-7.
34. **Shri S.C. Bhogle**
Deptt. of Maths. and Stats.,
Marathwada University,
Aurangabad-431004.
35. **Shri C.P. Han**
Prof. of Statistics,
Snedecor Hall,
Iowa State University,
Iowa, (U.S.A.)
36. **Shri C.G. Khatri**
Prof. of Statistics
Gujarat Unive · ity,
Ahemadabad.
37. **Dr. K.B. Pathak**
Prof. of Statistics,
International Institute of
Population Studies, Deonar,
Bombay
38. **Dr. J. Singh**
Prof. of Statistics,
Vikram University,
Ujjain.
39. **Dr. S.P. Mukherjee**
Deptt. of Statistics,
35-Bally-gunj, Circular Road,
Calcutta.700 019.