

INDIAN SOCIETY OF AGRICULTURAL STATISTICS

SEVENTH ANNUAL REPORT, 1953-54

THE Report gives a brief review of the Society's activities for one year from 1st July 1953 to 30th June 1954.

MEMBERSHIP

As in the previous year the Society's membership during the year was 241. They were classified as follows:—

Honorary Members	..	..	..	..	5
Patrons	..	..	..	..	5
Life-Members	..	..	..	..	32
Ordinary Members	..	..	..	..	199

Besides the above, the Society is maintaining an additional mailing list of subscribers to the Journal which includes important research institutions in India and abroad. The number of foreign members and subscribers was 60 during the year.

ACCOUNTS

The opening balance at the beginning of the year was Rs. 13,571-0-11 apart from Rs. 2,826-0-0 set aside for the publication of the book *Sampling Theory of Surveys with Applications* by Dr. P. V. Sukhatme. The receipts during the year amounted to Rs. 5,704-1-10, and the expenditure to Rs. 3,523-3-5, so that the balance at the end of the year was Rs. 15,751-15-4.

Account in connection with the publication of the above book could not be finalised as the press bills were in the process of scrutiny and payment.

The following donations received by the Society during the year are acknowledged gratefully:

			Rs.	A.	P.
National Institute of Sciences	..	..	500	0	0
Government of Bombay	..	..	500	0	0
Government of Orissa	..	..	1,000	0	0
Government of Uttar Pradesh	..	..	500	0	0

An audited Statement of Accounts is given at the end of the Report.

JOURNAL

Owing to the Society's preoccupation with the publication of Dr. Sukhatme's book on Sampling Theory, only one issue of the Journal could be brought out during the period under report. The second issue is, however, expected to be published shortly. The Journal continues to be popular among eminent research workers in India and abroad. Among latest requests for exchange approved by the Executive Council of the Society is one from the Soviet Academy of Sciences, Moscow. The Hindi Supplement continues to be a feature of the Journal.

OTHER ACTIVITIES

(a) During the year under Report, Dr. P. V. Sukhatme's long awaited book on *Sampling Theory of Surveys with Applications* was published by the Society in collaboration with the Iowa State College, Ames, Iowa, U.S.A. The book is a landmark in the literature on Sampling and is very popular in India and abroad. The Food and Agriculture Organization of the United Nations also supported this publication by distributing copies to member countries in furtherance of its own programme in the field of sampling. Members will be interested to learn that the French and Spanish translations of this book are being published from Paris and Mexico. The cost of publication of the book has come to about Rs. 15,000. This has caused a considerable strain on the Society's financial resources, and the Society is extremely grateful to the grant of a donation of Rs. 10,000 by the Government of India towards the publication of the book. This will enable the Society to set up a separate publication fund and to proceed with its plan of undertaking further similar publications.

(b) The Society was represented at the 27th Meeting of the International Statistical Institute held at Rome in September 1953 by Dr. V. G. Panse and Dr. P. V. Sukhatme. At the invitation of the Institute they also participated in the Statistical Seminars organised in conjunction with the meeting. The 28th Meeting of the Institute is scheduled to be held at Rio de Janeiro, Brazil, in July 1955. In this connection the Executive Council of the Society has decided that the Society should contribute papers on the following topics:—

- (1) The content of statistical teaching;
- (2) The place of Statistics in operational research;
- (3) Recent developments and prospects in Survey Techniques.

(c) The Society elected Shri C. D. Deshmukh, Finance Minister, Government of India, as its Honorary Member, as a token of its appreciation of his services to the Science of Statistics and the support and encouragement that the Society has received from him in its activities.

(d) The Seventh Annual General Meeting of the Society was held at Delhi in March 1954. Due to unavoidable reasons this session had to be a short one. On this occasion Dr. Lokanathan, Executive Secretary of the United Nations Economic Commission for Asia and the Far East, gave an address entitled, "Agricultural Situation in the Far East", Dr. Punjabrao S. Deshmukh, Minister for Agriculture, presided. Dr. Deshmukh's and Dr. Lokanathan's addresses were published in Vol. 6, No. 1.

The Proceedings of the business meeting are reproduced below.

PROCEEDINGS OF THE BUSINESS MEETING

The Seventh Annual General (Business) Meeting of the Indian Society of Agricultural Statistics was held on 6th March 1954 at Chelmsford Club, New Delhi. The following were present:—

Shri K. R. Damle (*in Chair*); Dr. P. N. Saxena; Shri D. R. Kohli; Shri S. Subramanian; Dr. S. R. Sen; Shri G. M. Panchang; Shri B. N. Datar; Shri J. S. Sarma; Shri J. S. Guleri; Shri J. K. Pande; Shri V. R. Rao; Shri M. A. Telang; Dr. G. R. Seth; Shri D. Y. Lele; Dr. Uttam Chand; Shri R. Raghunathan; Shri T. P. Abraham; Shri K. V. R. Sastry; Dr. K. R. Nair; Shri M. V. Divatia; Shri J. S. Srivastava; Shri C. S. Grewal; Dr. V. G. Panse and Shri Daroga Singh.

Item No. 1

Confirmation of the Proceedings of the Sixth Annual General (Business) Meeting of the Society

The Proceedings of the Sixth Annual General (Business) Meeting held on 24th February 1953, at New Delhi, were read out and adopted.

Item No. 2

Secretary's Annual Report

The Secretary's Report for the year 1952-53 was read out and adopted.

Item No. 3

Election of Office-bearers

In accordance with the practice followed, the nominations of the Executive Council for the election of Office-bearers for the year 1953-54

were placed before the House. No additional nominations were made by the members present and nominations proposed by the Executive Council were approved unanimously. As a result, the following Office-bearers were elected for the year 1953-54:—

President:

Dr. Rajendra Prasad.

Executive President:

Shri K. R. Damle.

Vice-Presidents:

Shri M. S. Randhawa.

Prof. Dr. R. Gadgil.

Other Members of the Executive Council:

Shri B. N. Datar.

Dr. R. J. Kalamkar.

Prof. D. D. Kosambi.

Dr. K. R. Nair.

Dr. K. Kishen.

Shri M. V. Divatia.

Dr. S. R. Sen.

Dr. G. R. Seth.

Honorary Secretary:

Dr. V. G. Panse.

Honorary Joint-Secretary:

Shri Daroga Singh.

Honorary Treasurer:

Shri V. R. Rao.

Item No. 4

Fixing the Venue and Time of the Next Annual General Meeting of the Society

The Secretary reported that the Food and Agriculture Organisation of the United Nations is proposing to hold an International Training Centre for South-East Asian Countries in Experimental Designs from September 1954 in Delhi and at that time some foreign experts will also be present. It was, therefore, suggested that the next Annual General Meeting should be held sometime in November or December

1954 at Delhi. The exact time and place would be decided by the Executive Council.

Item No. 5

Any other Business with the Permission of the Chair

Some queries were made by some Members about the arrangements for the publication and printing of copies for F.A.O. of the book entitled *Sampling Theory of Surveys with Applications* by Dr. P. V. Sukhatme and the Secretary explained the present position in these respects.

The meeting ended with a vote of thanks to the Chair.

INDIAN SOCIETY OF AGRICULTURAL STATISTICS

Statement of Accounts for the year ending 30th June 1954

RECEIPTS					EXPENDITURE							
		Rs.	A.	P.			Rs.	A.	P.			
To Opening Balance—												
Fixed Deposit		8,258	0	0	By Payment to Press		1,712	1	0			
Bank Current Account*		5,217	11	8	By Clerical and other Remuneration		435	0	0			
Cash in hand		95	5	3	By Seventh Annual General Meeting		144	7	0			
		13,571			0	11	By Affiliation Fee to International Statistical Institute	110	11	5		
To Donations from—					By Postage		202	12	0			
The Government of Bombay				1,000	By Bank Commission		22	4	0			
National Institute of Sciences				500	By Post Box Charges		21	0	0			
Government of Uttar Pradesh				500	By Stationery		30	11	0			
Government of Orissa				1,000	By Purchase of Typewriter		844	5	0			
To Membership Fees—					By Balance—		Rs.	A.	P.			
Ordinary				968	Fixed Deposit		8,381	0	0			
Life				125	Bank Current Account*		7,086	2	1			
To Cost of Journals and Reprints				1,486	Deposited in June and credited		225	0	0			
To Bank Interest				123	in July							
		TOTAL ..			19,275	2	9					
								15,751	15	4		
								TOTAL ..		19,275	2	9

Note.—*These exclude the amounts pertaining to the transactions relating to Book on Sample Survey by Dr. P. V. Sukhatme.

(SD.) O. P. BHATNAGAR,
Section Officer, I.C.A.R.,
New Delhi, Auditor.

20th March 1956.

SEVENTH ANNUAL REPORT, 1953-54

223

INDIAN SOCIETY OF AGRICULTURAL STATISTICS

EIGHTH ANNUAL REPORT, 1954-55

The Report gives a brief review of the Society's activities for one year from 1st July 1954 to 30th June, 1955.

MEMBERSHIP

The Society's membership during the year was 149 as a result of the revision of cases with long standing arrears. The present members are classified as follows:—

Honorary Members	..	..	..	..	6
Patrons	..	..	..	..	5
Life-Members	..	..	..	..	35
Ordinary Members	..	..	..	..	103

Besides its regular membership the Society is maintaining an additional mailing list of subscribers to the Journal. The number of foreign and Indian subscribers was 71 during the year.

ACCOUNTS

As decided by the Executive Council of the Society, from this year onwards the accounts of the Society would be audited by a professional auditor, and the accounts relating to special publications commencing with the publication of the book *Sampling Theory of Surveys with Applications* by Dr. P. V. Sukhatme would be placed in a separate fund.

	Rs.	A.	P.	Rs.	A.	P.
Opening Balance—						
Receipt due to sale of books	21,031	3	0	}	36,783	2 4
Society's Account..	15,751	15	4			
Receipts during the year	..	..	..	21,621	6	10
Expenditure	..	..	..	17,175	5	11
Closing Balance	..	..	..	41,229	3	3

The following donations received by the Society during the year are acknowledged gratefully:—

	Rs.	A.	P.
1. National Institute of Sciences	500	0	0
2. Government of Orissa	1,000	0	0
3. Government of Bombay	500	0	0
4. Sir Dorabji Tata Trust, Bombay	1,000	0	0
5. Government of India	10,000	0	0

Grant-in-aid was also sanctioned by the Government of Uttar Pradesh but was not received during the year under Report. An audited Statement of Accounts is given at the end.

JOURNAL

Only one issue of the Journal (Vol.V, No. 2) was published during the year. Since then Volume VI, No. 1 has been brought out and Volume VI, No. 2 is in the press. Efforts are being made to bring the publication of the Journal up-to-date during the year 1956-57. Judging from the requests received for exchange the Journal continues to draw great appreciation in India and abroad. Among such requests approved by the Council of the Society during the year under Report, is one from the Indian National Scientific Documentation Centre, New Delhi. A number of statistical publications in Russian received in exchange from the Soviet Academy of Sciences are available in the Society's Office.

The Hindi Supplement continues to be a feature of the Journal. The Hindi terminology prepared by the Society for Statistics with the help of Dr. Raghuvira has been brought to the attention of the Education Ministry which is undertaking preparation of such terminology for the different sciences.

OTHER ACTIVITIES

(a) Judging by the favourable notices that it has received in world statistical journals, the book *Sampling Theory of Surveys with Applications* by Dr. P. V. Sukhatme which was published by the Society jointly with Iowa State College Press, U.S.A., last year, has been received very well. The Society's edition is being rapidly sold out and the question of reprinting more copies is being considered.

(b) The 28th Meeting of the International Statistical Institute to which the Society is affiliated as a member organisation was held at Rio de Janeiro, Brazil, in the month of July 1955 and the Society was represented at this meeting by Dr. P. V. Sukhatme. A paper entitled "On Recent Developments and Prospects in Sampling and Surveys with Special Reference to Work Done in India" contributed by Shri Daroga Singh and Dr. P. N. Saxena on behalf of the Society was presented at this meeting. Members will be glad to learn that Dr. V. G. Panse has been recently elected a Member of the International Statistical Institute.

(c) In his inaugural address at the Eighth Annual Meeting the President of the Society had stressed the importance and urgency of

the Society undertaking the study of the possible relationship between size of agricultural holdings and production per acre. Available data for this study were collected from Indian States and from other countries with the co-operation of the F.A.O. A preliminary analysis of the data has not revealed any definite trends. Collection of more extensive data for a more critical analysis is being continued. The problem is also being brought to the notice of organisations like Indian Council of Agricultural Research, Research Programme Committee of the Planning Commission and the Society of Agricultural Economics for further study.

(d) The Eighth Annual Meeting of the Society was held at New Delhi in November 1954. The members showed a keen enthusiasm in attending this meeting and participating in the discussions. Eminent foreign statisticians like Dr. Wishart from Cambridge, England, Dr. Lush from Iowa State College, U.S.A., Dr. Pearce from East Malling, England, and Dr. Bancroft from Iowa State College, U.S.A., took part in the meeting. The meeting was inaugurated by President Dr. Rajendra Prasad, and the Society continues to enjoy the privilege of his guidance as its President. The inauguration was followed by an address by Dr. J. L. Lush, the subject of his address being "Statistics in Investigations in Animal Production". Two sessions for reading of contributed papers were held. One was presided over by Dr. S. C. Pearce and the other by Dr. K. R. Nair. A popular lecture on "Influence of Agronomic Investigation on the Science of Statistics" by Dr. Wishart was one of the features of the meeting. Prof. Mahajani, Vice-Chancellor of Delhi University, presided on the occasion. Two symposia, one on "Experiments in Cultivator's Fields", presided over by Shri H. M. Patel, Secretary, Ministry of Food and Agriculture, and the other on "Status of Experimentation", presided over by Dr. T. A. Bancroft, Director, Statistical Laboratory, Iowa State College, Ames, U.S.A. were also organised on the occasion and were well attended. The President's inaugural address to the Annual Meeting along with the addresses of Dr. J. L. Lush and Dr. J. Wishart on this occasion are being published in this Volume.

Titles of papers presented at the First Session along with the names of the contributors are as follows:—

1. Some problems in the analysis of breeding data on Dairy Cattle, by K. S. Krishnan, I.C.A.R., New Delhi.
2. Precision of estimates of cost of cultivation of crop, by S. D. Bokil, I.C.S.C., New Delhi.

- The power function of trend test against a shift in the location parameter, by Uttam Chand, Professor of Statistics, I.C.A.R., New Delhi.
- A statistical study of factors determining efficiency of field experimental designs in cotton trials, by Y. S. Kapse, Institute of Plant Industry, Indore.
5. The so-called almost balanced incomplete block designs, by K. R. Nair, Forest Research Institute, Dehra Dun.
 6. On the problem of ranking of varieties, by M. N. Kapoor, I.C.A.R., New Delhi.
 7. Efficiency of sampling methods in forest surveys, by V. K. Mokashi, Forest Statistician, Bombay State, Poona.
 8. On the construction and analysis of some asymmetrical confounded factorial designs, by K. Kishen, Chief Statistician, U.P., Lucknow.
 9. On a sequential procedure for estimating "The median effective dose" (ED 50), by S. G. Mohanty, Directorate of Economics and Statistics, New Delhi.
 10. Uniformity trial on coffee, by A. Ananthapadmanabha Rau, Statistician, Office of the Director of Agriculture, Bangalore.

Titles of papers presented at the Second Session along with the names of the contributors are as follows:—

1. Sample survey for estimating the *per capita* consumption of common salt and other articles of food in Mysore City, by A. N. Sankaran, Central Food Technological Research Institute, Mysore.
2. The estimation of effective number of segregating factors for the inheritance of quantitative characters, by T. R. Puri, I.C.A.R., New Delhi.
3. On efficiency of sampling with varying probabilities without replacement, by Daroga Singh, Directorate of National Sample Surveys, New Delhi.
4. A note on the mortality at the cattle breeding station, Ajjampur, Mysore, by G. V. Doddaramiah, Department of Animal Husbandry, Mysore State, Bangalore.
5. On sampling without—with replacement with special reference to two-stage sampling systems, by A. R. Sen, Department of Economics and Statistics, U.P., Lucknow.

6. On the enumeration of Latin-Cubes of the first order, by P. N. Saxena, Indian Agricultural Research Institute, New Delhi.
7. On the distribution of the shortest route connecting n random points, by K. S. Avadhany, I.C.A.R., New Delhi.
8. Some considerations in deciding plot size in field trials with trees and bushes, by S. C. Pearce, East Malling Research Station, Maidstone, England.
9. On parametric relations in a balanced incomplete block design, by M. N. Das, I.C.A.R., New Delhi.
10. A statistical study of some methods of selection in dairy cattle breeding programmes, by A. V. K. Sastri, I.C.A.R., New Delhi.

PROCEEDINGS OF THE BUSINESS MEETING

The Eighth Annual General (Business) Meeting of the Indian Society of Agricultural Statistics was held on 26th November 1954, at Jamnagar House Hutments, New Delhi. The following were present:—

Shri J. S. Guleri (*in the Chair*); Shri V. R. Rao; Dr. S. S. Prabhu; Dr. P. V. Sukhatme; Dr. S. R. Sen; Shri B. N. Datar; Shri J. S. Sarma; Shri D. Y. Lele; Shri A. N. Sankaran; Dr. Uttam Chand; Shri B. S. Seshgiri; Dr. K. Kishen; Dr. A. R. Sen; Dr. K. R. Nair; Shri G. M. Panchang; Shri Y. S. Kapse; Shri S. S. Iyer; Shri T. P. Abraham; Shri V. B. Sâhasrabudhe; Shri V. K. Mokashi; Shri Ujagar Singh; Shri K. C. Raut; Shri G. S. Rajaraman; Shri V. N. Amble; Shri M. N. Das; Shri Mahendra Nath; Shri R. Raghunathan; Shri D. S. Rajabushanan; Dr. V. G. Panse; and Shri Daroga Singh.

Item No. 1

Confirmation of the Proceedings of the Seventh Annual General (Business) Meeting of the Society

The Proceedings of the Seventh Annual General (Business) Meeting held on 6th March 1954, at New Delhi, were read out and adopted.

Item No. 2

Secretary's Annual Report

The Secretary's Report for the year 1953-54 was read out and adopted.

*Item No. 3**Election of Office-bearers*

In accordance with the practice followed, the nominations of the Executive Council for the election of Office-bearers for the year 1954-55 were placed before the House. No additional nominations were made by the members present and nominations proposed by the Executive Council were approved unanimously. As a result, the following Office-bearers were elected for the year 1954-55:—

President:

Dr. Rajendra Prasad.

Executive President:

Shri K. R. Damle, I.C.S.

Vice-Presidents:

Shri M. S. Randhawa, I.C.S.

Prof. D. R. Gadgil.

Other Members of the Executive Council:

Shri B. N. Datar.

Dr. R. J. Kalamkar.

Prof. D. D. Kosambi.

Dr. K. R. Nair.

Dr. K. Kishen.

Prof. J. N. Warner.

Dr. G. R. Seth.

Honorary Secretary:

Dr. V. G. Panse.

Honorary Joint-Secretary:

Dr. Uttam Chand.

Honorary Treasurer:

Dr. P. N. Saxena.

Editors:

Dr. V. G. Panse.

Dr. P. V. Sukhatme

Item No. 4

Fixing the Venue and Time of the Next Annual General Meeting of the Society

Dr. K. Kishen suggested that the next Annual General Meeting of the Society could be held at Lucknow. The members accepted this suggestion with thanks and left the final decision to the Executive Council of the Society.

The meeting ended with a vote of thanks to the Chair.

INDIAN SOCIETY OF AGRICULTURAL STATISTICS

Statement of Accounts for the year ending 30th June 1955

RECEIPTS					EXPENDITURE					
	Rs.	A.	P.	Rs.	A.	P.		Rs.	A.	P.
To Opening Balance—							By Payment to Press—			
Cash in Hand	59	13	3				For Publication of Books ..	11,262	0	0
Current Account with State Bank of India	28,342	5	1				For Publication of Journal ..	3,000	0	0
Fixed Deposit	8,381	0	0					14,262	0	0
				36,783	2	4	By Clerical Staff			1,540
To Membership Fees—							By Eighth Annual General Meeting ..			300
(a) Ordinary—							By Donations to Mr. Shukla's Family ..			300
For Current year	926	2	0				By Affiliation Fee to International Statistical Institute ..			110
For Arrears	1,242	6	0				By Stationery and Printing			140
For Advance	58	0	0				By Postage—			13
(b) Life-Membership				2,226	8	0	On Books	50	2	0
To Sale of Journal				779	0	0	For Office	250	8	0
To Sale of Books				1,168	3	4				300
To Interest on Fixed Deposit Receipts ..				4,744	0	6	By Post Box Renewal			12
To Interest on F.D.R. in Current Account ..				203	0	0	By Railway Freight			69
To Grant-in-Aid				0	11	0	By Miscellaneous			113
To Donations				10,000	0	0	By Bank Commission			26
				2,500	0	0	By Closing Balance—			8
							Cash in Hand	69	11	9
							Current Account with State Bank of India	32,575	7	6
							Fixed Deposit	8,584	0	0
								41,229	3	3
TOTAL ..	58,404	9	2				TOTAL ..	58,404	9	2

EIGHTH ANNUAL REPORT, 1954-55

64, Regal Buildings,
New Delhi,
Dated 19th September 1956.

(Sd.) C. S. BHATNAGAR & Co.
Chartered Accountants.