

**administration report**  
**for the year 1967-68**

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**BUREAU OF ECONOMICS  
AND STATISTICS**

REPORT

ON

THE

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©

Government of Kerala

1969

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## PLANNING (C) DEPARTMENT

**G.O. (Rt.) 188/69/Plg., dated Trivandrum,  
18th June 1969**

*Abstract.*—Bureau of Economics and Statistics—Administration Report for 1967-68—Reviewed.

*Read.*—Letters No. PA1-9231/68/ESD, dated 19th February 1969 and 7th March 1969 from the Director, Bureau of Economics and Statistics.

### ORDER

1. Recorded.

2. The Bureau of Economics and Statistics continued to function as the central agency for the systematic collection, compilation, analysis and objective interpretation of all statistics relating to the State.

3. In September 1967, Government constituted a State Planning Board with the Chief Minister as chairman, four non-official and four official members for the formulation and evaluation of the State's Plan Programmes on a scientific basis. The Bureau rendered research, library and administration facilities to the Planning Board.

4. There were 78 gazetted posts, 20 permanent and the remaining temporary, in the Bureau at the end of the year. The expenditure on various schemes (Plan and non-Plan) implemented by the Bureau during 1967-68 was Rs. 26,54,303.90 as against Rs. 21,98,220.47 in 1966-67.

5. The Bureau continued to attend to the work relating to the Land Utilisation Survey and the Crop Cutting Surveys on paddy and tapioca. The tables of agricultural statistics for the agricultural year 1966-67 and the season and crop report for 1965-66 were prepared and published. The forecast reports on area and production of 37 important seasonal and perennial crops in the State were continued besides compiling the usual basic data on rainfall. Statistics of gross produce per hectare of the crops specified under the Kerala Land Reforms (Tenancy) Rules of 1964 for the year 1966-67 were published. The Fact Book on Agriculture brought out during 1966-67 was being revised by incorporating the details for the latest year and district-wise data. The report on the study on land holdings, land tenures and the effects of land reforms in Kerala, on the basis of a survey conducted in 1966-67 was

completed. An assessment of the progress achieved in the field of forestry during 1966-67 was attempted and details incorporated in the Economic Review of Kerala, 1967. A study of the relative efficiency of the different types of pumpsets in use for agricultural operations in the State was initiated. The Bureau continued to coordinate the technical programme of the Benchmark and Assessment Survey conducted in Palghat and Alleppey districts under the I.A.D.P.

6. The Bureau continued to collect, compile and publish the price statistics of important commodities and to compute monthly wholesale price index of agricultural commodities and the monthly working class consumer price index numbers for thirteen centres in the State. A special survey on markets in Kerala was also conducted. The State income unit of the Bureau prepared comparable estimates of working force for the years 1951 and 1961.

7. The Labour Statistics Unit of the Bureau continued to collect process and forward to the Labour Bureau, Simla the various returns under the labour enactments, besides compiling the annual lists of registered factories, registered trade unions/federations and registered plantations. The Industrial Statistics Unit prepared the report on Annual Survey of Industries, 1962 and tabulated the schedules of the survey for the years 1963 and 1964. Collection and consolidation of statistics on rubber, coffee and tea plantations was continued. The Mechanical Tabulation Unit continued to function tabulating data on vital statistics and National Sample Survey. During the year under report the Bureau also attended to the collection of educational and health statistics, data on road mileage and expenditure statistics pertaining to Public Works Department, Forest Department, Electricity Board, Municipalities and Panchayats for the years 1964-65 and 1965-66. Statistics relating to Municipal Finances of the State for the years 1961-62 to 1965-66 and statistics on cinema and entertainment tax from Panchayats and Municipalities were also collected.

8. The Vital Statistics Wing of the Bureau continued to attend to the collection, compilation, analysis and publication of vital statistics of the State. The Demographic Research Centre prepared the Demographic Report of Kerala, 1901-61 besides conducting analytical studies connected with family planning and completing the reports on the special demographic survey (pilot) and the effects of 'Marumakkathayam' on the fertility pattern of State.

9. During the year the Bureau conducted the action phase survey of the applied nutrition programme. The 22nd round of the National Sample Survey was started on 1st July 1967. Reports on evaluation studies on rural works programme and high yielding variety programme were completed and new studies on improved agricultural practices and seed farms and seed distribution schemes were taken up. A unit for the estimation of resources for Plan was started



in the Bureau during the year. The family budget survey was completed and its report published. A committee was subsequently appointed to recommend additions or changes if any as are necessary for the preparation of a new series of working class consumer price index numbers. The report 'Planning for Employment in Kerala' was finalised. The Man-power Planning Unit of the Bureau conducted studies on the requirement and availability of medical and public health personnel in the State over a period of fifteen years and that of the engineering personnel over a period of ten years. The pepper survey to estimate area under and production of pepper was in progress.

10. Some of the important publications of the Bureau during the year were Statistical Hand Book of Kerala, 1966, District Statistical Hand Books, 1966 (for four districts), Annual Statistical Abstract, 1964-65 and 1965-66, Kerala in Maps, 1967, Brochure on Basic Statistics Relating to Kerala Economy, 1956-57 to 1965-66, Working Class Family Budget Survey, 1965-66, Season and Crop Report, 1965-66 and National Sample Survey Reports.

11. The working of the Bureau during the year under report was on the whole satisfactory.

(By order of the Governor)  
 S. PADMAKUMAR,  
*Addl. Secretary to Government.*





# ADMINISTRATION REPORT OF THE BUREAU OF ECONOMICS AND STATISTICS FOR THE YEAR 1967-68

## CHAPTER I

### ADMINISTRATION

#### I. Introductory

The Bureau of Economics and Statistics was constituted in 1963 amalgamating the Bureau of Economic Studies and the Department of Statistics. It is the central agency for the systematic collection, compilation, analysis and objective interpretation of all statistics relating to the State. It is also functioning as an advisory body on economic issues referred to it. Its main object is to find solution for all economic problems which faces the State, by analysing and interpreting the statistical data with the aim of building up of a welfare State. There are two wings in the Department viz., "the Directorate" and "the Field Surveys Division". The Director is the Head of the Department. The Additional Director is in charge of the Field Surveys Division.

In G.O. (P) No. 44/67/Plg., dated 7th September 1967 Government have constituted a State Planning Board with Chief Minister as Chairman. Vice Chairman and full-time Members of the Board are :—

1. Sri M. K. A. Hameed—Vice Chairman and Member (Industries and Infra structure).
2. Professor Joseph Mundasseri — Member (Education and Social Service).
3. Dr. K. Mathew Kurian—Economic Adviser to Government and Member (Economic Division)
4. Sri T. P. Kuttiamu—Member (Irrigation)

The Minister for Finance, Chief Secretary to Government and the Secretary to Government, Planning Department are also members. The Director, Bureau of Economics and Statistics is the Member-Secretary of the Planning Board. The Bureau of Economics and Statistics rendered Research, Library and Administration facilities to the State Planning Board.

#### II. Personnel

1. *Director*.—Dr. P. K. Gopalakrishnan continued as the Director during the year under report.

2. *Additional Director*.—Shri N. Gopalakrishnan Nair continued as the Additional Director throughout the year under report.



3. *Administrative Officer.*—Government considered that the Director and Additional Director who are technical Officers should not be burdened with routine administration work and that they should concentrate attention on work of a technical nature. To enable this, sanction was accorded for the creation of a post of Administrative Officer to the Director, Bureau of Economics and Statistics on a scale of pay of Rs. 550-800 in G.O. (MS) No. 36/67/Plg., dated 10th August 1967. The post of Administrative Officer is an addition to the cadre of Assistant Secretaries in the Administrative Secretariat. In G.O. Rt. 2533/PD/67, dated 29th August 1967, Shri M. P. Madhavan Nair, Assistant Secretary, Home Department was posted as the Administrative Officer and he took charge of the post with effect from the F.N. of 8th September 1967 and continued as such till the end of the period under report.

4. *Deputy Directors.*—Shri N. Gopalakrishnan Nair continued as Deputy Director (Econometrics) during the period under report.

Shri K. C. Cheriyan, Deputy Director continued on deputation as Statistician, (Sample Surveys) in Somalia under UNTAO programme on foreign service conditions.

Shri P. P. Philipose, Dr. R. Sivasankara Kurup and Shri M. S. Venkitaraman continued as Deputy Directors during the year under report.

Shri N. Karunakara Menon continued as Deputy Director in the Office of the Senior Town Planner, Ernakulam a post declared as addition to the cadre of Deputy Director in the Kerala Statistics and Economics Service.

Shri G. Kuttappan Pillai continued as Deputy Director till 30th September 1967 A.N. In G.O. (MS) No. 22/67/Plg., dated 22nd June 1967, he was deputed for training in the field of Agriculture Statistics in Japan for a period of three months from 25th June 1967 under Colombo Plan. He was relieved with effect from 26th June 1967 A.N. to report for the above training. While undergoing the training he was reverted to the cadre of Assistant Director with effect from 1st October 1967 for want of vacancy. He was again promoted as Deputy Director vice Shri M. S. Venkitaraman granted commuted leave for 150 days from 3rd October 1967. Shri Kuttappan Pillai on return from the training took charge as Deputy Director with effect from 3rd October 1967 F.N. He continued to officiate in the post till 1st March 1968 when he was reverted to the cadre of Assistant Director and posted as Economist-cum-Publicity Assistant in the Office of the Chief Town Planner and Consulting Architect to Government, Trivandrum. Shri Kuttappan Pillai was again promoted to the cadre of Deputy Director vice Shri M. S. Venkitaraman granted earned leave for 33 days preparatory to retirement. He took charge of the post of Deputy



Director with effect from 16th March 1968 and continued to officiate in the post till the end of the period under report.

5. *Assistant Directors*.—Shri T. Kuruvilla Mathen, Shri S. Bhagavatheeswara Iyer, Shri K. Balakumaran Nair, Shri P. C. Kurien, Shri K. A. George, Shri B. Thrivikraman Pillai, Shri V. Sankaranarayanan Potti, Shri K. Rama Varma, Shri T. R. Thankappan Asari, Shri R. Gopalakrishnan Nair, Shri K. N. Gopala Panicker, Shri K. Narayanan Nair and Shri N. George John continued to officiate in the cadre of Assistant Directors during the year under report.

In the G.O. (Rt) 20/68/Plg., dated 22nd January 1968, Shri K. Easwarankutty Warriar, Research Officer, Shri K. Balakrishnan Nair, Research Officer and Shri P. S. Gopinathan Nair, District Statistical Officer were promoted to the cadre of Assistant Directors.

Shri K. Easwarankutty Warriar continued as Statistical Officer in the Kerala Veterinary College and Research Institute, Trichur after his promotion till the end of the period under report. The post was since upgraded to that of Assistant Director.

Shri K. Balakrishnan Nair, assumed the post of Assistant Director with effect from 30th January 1968 and continued to officiate in the post till the end of the period under report.

Shri P. S. Gopinathan Nair was allowed to continue on training in the Demographic Training and Research Centre, Bombay after his promotion and posting as Economist-cum-Publicity Assistant. He was reverted as District Statistical Officer and allowed to continue on training in G.O. Rt. 88/68/Plg., dated 29th February 1968. He continued as such till the end of the period under report.

Shri K. Balakumaran Nair, Assistant Director continued to be on other duty as Economist-cum-Publicity Assistant in the Office of the Chief Town Planner and Consulting Architect to Government, Trivandrum till 31st July 1967 when he was reverted and posted as Assistant Director in the Bureau. He continued to officiate in the post till the end of the period under report.

Shri K. A. George and Shri K. Ramavarma, Assistant Directors continued to be on other duty as Assistant Directors in the Office of the Joint Director of Agriculture (Package Programme), Alleppey and Palghat respectively.

Shri B. Thrivikraman Pillai, Assistant Director continued to be on deputation as Deputy Superintendent of Census Operations, Kerala, Trivandrum during the period under report.

Shri K. N. Gopala Panicker, Assistant Director continued to be on deputation as Training Officer in the Office of the Superintendent of Census Operations, Kerala, Trivandrum till 29th February 1968 when

he was reverted to the Bureau and posted as Assistant Director. He continued to officiate in the post of Assistant Director till the end of the period under report.

6. *Chief Supervisors*.—Shri K. Mailerumperumal Pillai and Shri G. Velayudhan Thampi continued to officiate in the post of Chief Supervisors, Trivandrum and Palghat respectively during the period under report.

7. *Personal Assistant to the Director*.—Shri K. M. Bala Warriar continued as Personal Assistant to the Director till 26th December 1967 F.N. when he was deputed to the Office of the Backward Classes Reservation Commission, as the Personal Assistant and Superintendent. He continued on deputation till the end of the period under report.

8. *Administrative Assistant*.—Shri T. V. Chandran continued as Administrative Assistant till 15th January 1968. With effect from 16th January 1968 he was posted as Personal Assistant and continued as such till the end of the period under report. Sri P. Narayanan, Junior Superintendent was appointed as Administrative Assistant with effect from 16th January 1968 F.N. and he continued to officiate in the post till the end of the period under report.

9. *Publication Assistant*.—Shri A. N. Bhaskaran Pillai continued as Publication Assistant during the period under report.

10. *Senior Superintendent*.—Shri V. K. Achuthan Nambiar continued as Senior Superintendent during the period under report.

11. *Research Officers*.—Sarvasree C. Thomas Varughese, N. Gopalakrishnan, John Thomas Chirayath, G. Ramachandran Nair, Dr. T. Edwin, Sarvasree G. Viswanatha Pillai, S. Krishna Iyer, Smt. P. L. Sreedevi Amma, Sarvasree K. Bhaskara Menon, T. Janardhana Menon, A. Balakrishnan, N. V. George, V. N. Sukumara Pillai, Smt. S. Retna Bai Ammal, Sarvasree P. Vasudevan Nampoothiri, R. Ramalingom Iyer, P. Vidyasarangaratha Das, K. George, A. Abdul Wahab, N. Kochumman, J. Benjamin, N. M. Syed Mohammed, P. Gopalan, K. Appukuttan, O. Ayyappan, C. R. Parameswaran, M. K. Bhaskaran Pillai, K. K. Karunakaran, V. K. Paran Unni, P. K. Ramakrishnan Nair, G. Surendranathan Nair, P. B. Lekshmanan, K. Easwaran Namboodiri, Smt. P. K. Saradamony, Sarvasree R. Parameswaran Nair and A. Abdul Gafoor continued as Research Officers during the year under report.

Shri K. Easwarankutty Warriar, Research Officer working as Statistical Officer in the Veterinary College and Research Institute, Trichur, was promoted to the cadre of Assistant Director in G.O. (Rt) 20/68/Plg., dated 22nd January 1968. Even after his promotion he continued there till the end of the period under report.

Shri K. Balakrishnan Nair continued as Research Officer till 29th January 1968 when he was promoted as Assistant Director.



Shri V. N. Sukumara Pillai continued as Research Officer till 5th September 1967 A.N., when he was relieved to take up an appointment as teacher in Ethiopia on foreign service condition.

Shri C. Kumaraswamy continued as Research Officer till 4th December 1967 F.N. when he was reverted to the subordinate cadre.

The following persons were working in other Departments against posts declared as addition to the category of Research Officers in the Bureau during the period noted below:

Sl. No.	Name	Designation of post held	Period	
			From	To
(1)	(2)	(3)	(4)	(5)
1.	P. Gopalan	Research Officer, Office of the D.P.I., Trivan- drum	Throughout the period under report	
2.	J. Benjamin	do.	do.	
3.	P. K. Rama- krishnan Nair	Economic Investi- gator, Rural Industries Project, Kozhikode	do.	
4.	N. M. Syed Mohammed	do.	do.	
5.	K. K. Karuna- karan	Economic Investi- gator, Rural Industries Project, Alleppey	do.	
6.	K. Appukuttan	Economic Investi- gator, Rural Industries Project, Alleppey	1-4-1967	20-5-1967
7.	A. Abdul Wahab	Economic Investi- gator, Rural Industries Project, Alleppey	20-5-1967	31-3-1968
8.	K. Bhaskara Menon	Research Officer, Office of the Senior Town Plan- ner, Ernakulam	Throughout the period under report	
9.	V. K. Paran Unni	do.	do.	
10.	M. K. Bhas- karan Pillai	Statistical Officer, Animal Husbandry Department	1-4-1967	31-7-1967
11.	P. Vasudevan Nampoothiri	do.	do.	



Shri G. Thomas Varghese and Shri G. Ramachandran Nair, Research Officers continued on Foreign Service in the Office of the Regional Manager, Food Corporation of India, Regional Office, Trivandrum during the period under report.

Shri V. C. Chidambara Iyer continued on Foreign Service as Junior Professor on Rs. 400-950 in the Demographic Training and Research Centre, Bombay till 28th October 1967. Then rejoined duty in the Bureau on 2nd November 1967. He continued as Research Officer till 18th November 1967 A.N. when he resigned the post to accept an offer from the University of Southamptons, U.K.

Shri John Thomas Chirayath continued on Foreign Service as Research Officer in the Labour and Industrial Bureau, Trivandrum during the period under report.

Dr. T. Edwin was deputed to the Taxation Enquiry Committee with effect from 4th January 1968 as Research Officer and continued there as such during the year under report.

12. *District Administration.*—The following Officers were in charge of the District Statistical Offices during the period noted against each:—

Sl. No.	District	Name of District Statistical Officer	Period of charge during the year under report	
			From	To
(1)	(2)	(3)	(4)	(5)
1	Trivandrum	P. Sankunny Nair	1-4-1967	5-6-1966
		K. Ramanarayanan Nair	5-6-1967	8-8-1967
		P. Sankunny Nair	8-8-1967	28-9-1967
		K. Ramanarayanan Nair	28-9-1967	31-3-1968
2	Quilon	M. Mohammed Yusuf	1-4-1967	27-5-1967
		K. P. Mohammed Sally	27-5-1967	31-3-1968
3	Alleppey	K. P. Mohammed Sally	1-4-1967	18-5-1967
		G. Sreedharan Nair	26-5-1967	31-3-1968
4	Kottayam	K. Ramanarayanan Nair	1-4-1967	18-5-1967
		P. T. Joseph	19-5-1967	10-11-1967
		K. Ananthanarayana Iyer	17-1-1968	31-3-1968
5	Ernakulam	T. P. Rajagopalan	1-4-1967	3-6-1967
		P. S. Gopinathan Nair	3-6-1967	20-7-1967
		N. Krishna Pillai	28-9-1967	31-3-1968
6	Trichur	P. S. Gopinathan Nair	1-4-1967	26-5-1967
		N. O. Kumaran	26-5-1967	31-3-1968

(1)	(2)	(3)	(4)	(5)
7	Palghat	H. Padmanabha Iyer	1-4-1967	18-5-1967
		K. S. Ayyappan	9-6-1967	31-3-1968
8	Kozhikode	G. Sreedharan Nair	1-4-1967	18-5-1967
		A. Shahul Hameed	27-5-1967	23-6-1967
		D. Gopinathan	23-6-1967	30-6-1967
		N. Krishna Pillai	30-6-1967	20-9-1967
		D. Gopinathan	20-9-1967	31-3-1968
9	Cannanore	N. O. Kumaran	1-4-1967	18-5-1967
		H. Padmanabha Iyer	11-7-1967	31-3-1968

In G. O. Rt. 266/67/Plg., dated 27th October 1967, Shri P. T. Joseph, District Statistical Officer, Kottayam was deputed as Project Evaluation Officer on Rs. 400-950 under the Programme Evaluation Organisation of the Planning Commission, Government of India. He was relieved on 10th November 1967 A.N. to take up the above appointment.

The following persons were in charge of the post of Senior Research Assistants in the various Districts during the period noted against each:—

Sl. No.	District	Name of District Statistical Officer	Period of charge during the year under report	
			From	To
(1)	(2)	(3)	(4)	(5)
1	Trivandrum	K. Rajagopal	1-4-1967	18-5-1967
		P. Sankunny Nair	18-5-1967	8-8-1967
		P. Achuthan Nair*	8-8-1967	19-9-1967
		Do.	20-10-1967	20-11-1967
		P. Sankunny Nair	20-11-1967	31-3-1968
2	Quilon	A. Shahul Hameed	1-4-1967	18-5-1967
		M. Mohammed Yusuf	18-5-1967	31-3-1968
3	Alleppey	P. M. Thankappan	1-4-1967	31-3-1968
4	Kottayam	P. T. Joseph	1-4-1967	19-5-1967
		K. Ananthanarayana Iyer	16-6-1967	17-1-1968
		P. Rajammal	29-1-1968	31-3-1968
5	Ernakulam	K. K. Sukumaran	1-4-1967	3-6-1967
		T. P. Rajagopalan	3-6-1967	31-3-1968
6	Trichur	K. S. Ayyappan	1-4-1967	1-6-1967
		K. K. Sukumaran	12-6-1967	31-3-1968
7	Palghat	V. C. Kurien	1-4-1968	31-3-1968
8	Kozhikode	V. C. George	1-4-1967	31-3-1968
9	Cannanore	S. R. Selvaraj	1-4-1967	29-9-1967
		Do.	1-1-1968	29-2-1968



Shri M. Mohammed Serverkhan, Shri S. Natarajan and Sri K. N. Radhakrishnan Nair, continued as Supervisors (Pepper Survey) at Cannanore, Kottayam and Trivandrum respectively, during the period under report.

The following Officers were working as Scrutiny Officers in the Head Office against the four sanctioned posts:—

Sl. No.	Name	Period	
		From	To
(1)	(2)	(3)	(4)
1	P. Achuthan Nair	1-4-1967	29-4-1967
	G. Somasekharan Nair	2-5-1967	15-5-1967
	T. Divakaran Nair	16-5-1967	31-5-1967
2	D. Gopinathan	1-4-1967	18-5-1967
	K. Rajagopal	19-5-1967	31-5-1967
3	S. Saraswathy	1-4-1967	31-3-1968
4	K. Leelakumary	1-4-1967	31-3-1968

Two posts of Scrutiny Officers were since shifted to Kottayam and Palghat. Consequently Shri K. Rajagopal and Shri T. Divakaran Nair, Scrutiny Officers were transferred and posted as Scrutiny Officers at Kottayam and Palghat respectively. They were relieved with effect from 31st May 1967 A.N. Shri K. Rajagopal took charge as Scrutiny Officer, Kottayam on 9th June 1967 and continued there as such till the end of the period under report. Shri T. Divakaran Nair took charge as Scrutiny Officer, Palghat on 9th June 1967 and continued as such till the end of the period under report.

The following Officers were working as Senior Research Assistants, Sample Registration in the Head Office against the one sanctioned post:—

Sl. No.	Name	Period	
		From	To
(1)	(2)	(3)	(4)
1	T. Divakaran Nair	1-4-1967	16-5-1967
2	K. Ananthanarayana Iyer	16-5-1967	18-5-1967
3	D. Gopinathan	18-5-1967	14-6-1967

The post of Senior Research Assistant, Sample Registration was since shifted to Kozhikode and Shri A. Shahul Hameed was posted as Senior Research Assistant, Sample Registration with effect from 23rd June 1967 and he continued as such till he was deputed for the Statistical Officers Training Course.

Shri P. Achuthan Nair, Senior Research Assistant, Trivandrum retired on superannuation with effect from 20th November 1967.



The following promotions were made to the cadre of District Statistical Officer/Senior Research Assistant during the year under report.

Shri C. Daniel, Research Assistant on deputation to the Census Department was promoted to the cadre of the District Statistical Officer/Senior Research Assistant and allowed to continue in the Census Department.

Shri D. K. Vidyanandan, Statistical Inspector (N.S.S.), District Statistical Office, Cannanore was promoted and posted as Senior Research Assistant, Sample Registration vice Shri A. Shahul Hameed deputed for the Statistical Officers Training Course.

Shri Vidyanandan took charge of the post of Senior Research Assistant with effect from 18th January 1968 and continued as such till the end of the period under report.

Smt. P. Rajammal, Research Assistant was promoted and posted as Senior Research Assistant, District Statistical Office, Kottayam. She took charge of the post with effect from 29th January 1968 and continued as such till the end of the period under report.

The following Officers were working in other Departments against the posts declared as addition to the cadre of District Statistical Officers in this Department:—

<i>Designation</i>	<i>Name of Officer</i>	<i>From</i>	<i>To</i>
1. Statistical Officer, Directorate of Agriculture, Trivandrum	S. Cecil	Throughout the year under report	
2. Statistical Officer, Board of Revenue (Taxes)	P. Gopinatha Pillai		do.
3. Statistical Officer, Board of Revenue (Civil Supplies)	K. Ananthanarayana Iyer	1-4-1967	15-5-1967
	G. Somasekharan Nair	16-5-1967	31-3-1968

The following Officers were deputed for training during the year under report:

In G.O. MS. No. 22/67/Plg., dated 22nd June 1967, Shri G. Kuttappan Pillai, Deputy Director was deputed for training in the Field of Agricultural Statistics in Japan for a period of three months from 22nd June 1967.

In G.O. (Rt.) 201/67/Plg., dated 1st August 1967, Shri T. Kuruvilla Mathen, Assistant Director was deputed for the Fourteenth Senior Statistical Officers' Training Course for seven weeks in New Delhi organised by the Central Statistical Organisation from 21st August 1967. He was relieved on 16th August 1967 A.N. and after the training rejoined duty on 10th October 1967 A.N.

In G.O. Rt. 268/67/Plg., dated 31st October 1967, Shri K. Balakumaran Nair, Assistant Director was deputed for the Third Short Term Training in the field of Housing at New Delhi from 13th November to 23rd December 1967. He was relieved on 8th November 1967 A.N. and after the training rejoined duty on 28th December 1967 F.N.

In G.O. Rt. 150/67/Plg., dated 28th June 1967, Shri P. S. Gopinathan Nair, District Statistical Officer was deputed for the Certificate Course in Demography for the academic year 1967-68 from 24th July 1967 at the Demographic Training and Research Centre, Bombay.

In G.O. Rt. 334/67/Plg., dated 23rd December 1967, Shri A. Shahul Hameed, Senior Research Assistant, Kozhikode was deputed for the nine months' Statistical Officers' Training conducted by the Central Statistical Organisation from 26th December 1967. He was relieved on 27th December 1967 to joint the Training Course.

After the Certificate Course training in Demography at the Demographic Training and Research Centre, Bombay, Shri N. Krishna Pillai, rejoined duty as District Statistical Officer, Kozhikode on 30th June 1967.

Sanctioned strength of the Department as on 31st March 1968 was as follows:—

	Number		Scale of pay	
	Perma- nent	Tempo- rary	Rs.	
Gazetted:				
Director	1	..	1000-1300	
Additional Director	.. 1	..	800-1100	
Administrative Officer	.. ..	1	550-800	
Deputy Director	.. ..	4	500-800	
Assistant Director	.. 2	8	} 350-700	
Assistant Director (Nosology)	.. ..	1		
Chief Supervisor	.. ..	2	350-700	
Research Officer	.. 5	16	300-600	
District Statistical Officer/ Senior Research Assistant/ Special Officer	} ..	9	18	300-600
Deputy Health Officer		.. ..	6	250-500



	Number		Scale of pay Rs.	
	Perma- nent	Tempo- rary		
Personal Assistant to the Director	..	1	..	250-500
Administrative Assistant to the Additional Director	..	1	..	250-500
Publication Assistant	..	..	1	250-500
Senior Superintendent	..	..	1	250-500
Non-Gazetted:				
Junior Superintendent	..	2	..	190-300
F. C. Superintendent	..	1	..	160-270
Statistical Inspector/ Research Assistant/ Supervisor (M.T. Unit)	} ..	29	80	190-300
U.D. Clerks	..	1	5	120-230
U.D. Clerk-cum-Accountant	..	2	..	120-230
U.D. Typist	..	3	4	120-230
U.D. Compiler/ Investigator/ Punch Card Operator	} ..	8	58	120-230
Clerk-cum-Librarian	..	1	..	90-190
Draftsman	..	1	2	90-190
Stenographer	..	1	5	90-250
Rota Typist	..	..	1	90-190
Rota Print Operator	..	..	1	90-190
L.D. Clerk	..	4	12	80-160
L.D. Accountant-cum-Clerk/ L.D. Accountants	} ..	8	2	80-160
L.D. Typists	..	7	12	80-160
Typist-cum-Clerk	..	..	1	80-160
L.D. Compiler/ Investigator/ Punch Card Operator	} ..	103	216	80-160
Driver	..	..	2	75-135
Duffadar	..	1	..	65-80
Peons	..	22	6	60-75
Night Watcher	..	..	1	60-75
Part-time Sweeper	..	..	3	@ 49
Do.	..	..	27	@ 34

### III. Expenditure

Statement of Expenditure in respect of Bureau of Economics and Statistics for the financial year 1967-68.

<i>Name of Scheme</i>	<i>Head of Account</i>	<i>Total expenditure incurred (Rs.)</i>
<b>NON-PLAN SCHEMES:</b>		
1. Statistical Bureau	39-b (ii)	8,47,692.07
2. Bureau of Economic Studies	39-b (iii)	72,466.81
3. Planning Statistics	39-b (iv)	35,041.90
4. Diagnostic Studies and Supervision	39-b (vi)	2,38,305.61
5. State Income Unit	39-b (vii)	19,852.89
6. Labour Statistics	39-b (viii)	17,143.41
7. Market Intelligence	39-b (ix)	1,47,999.10
8. Administrative Intelligence	39-b (x)	25,024.10
9. Formation of Planning Cell	39-b (xi)	27,537.60
10. Pepper Survey	39-b (xii)	73,797.55
11. National Sample Survey	39-b (xiii)	2,12,811.14
Total		17,17,672.18
<b>PLAN SCHEMES :</b>		
1. Family Planning Demographic Research Centre	39-b (xiv)-3	83,779.20
2. Construction of Index No. Series relating to Agricultural Economy	39-b (xiv)-6	10,668.25
3. National Index of Field Experiments	39-b (xiv)-7	16,722.55
4. Inservice Training Programme	39-b (xiv)-10	14,293.45
5. Wage Structure Survey	39-b (xiv)-11	21,685.60
6. Improvement of Plantation Statistics	39-b (xiv)-13	25,341.77
7. Purchase and Installation of Machines	39-b (xiv)-17	68,119.71
8. Sample Registration	39-b (xiv)-18	90,984.57
9. Strengthening of Vital Statistics Organisation at State Headquarters	39-b (xiv)-20	72,360.52
10. Strengthening of District Statistical Offices	39-b (xiv)-21	91,739.60



<i>Name of Scheme</i>	<i>Head of account</i>	<i>Total expenditure incurred Rs.</i>
11. Strengthening of Statistics Unit in Municipalities for improvement of Vital Statistics	39-b (xiv)-22	90,191·62
12. Scheme for a new State series of Consumer Price Indices	39-b (xiv)-24	13,475·69
13. Employment and Unemployment Survey	39-b (xiv)-26	17,843·60
14. Strengthening of State Income Unit.	39-b (xiv)-28	23,717·94
15. Housing Statistics Cell	39-b (xiv)-29	12,943·90
16. Strengthening of Market Intelligence Unit	39-b (xiv)-31	19,872·05
17. Rationalised supervision of area statistics and crop cutting surveys	39-b (xiv)-35	1,11,751·97
18. Scheme for the Evaluation of Soil Conservation Programme	39-b (xiv)-36	10,286·15
19. Strengthening of Prices Unit	39-b (xiv)-37	30,290·73
20. Applied Nutrition Programme	39-b (xiv)-38	21,812·45
21. Grants to Institution for Economic Studies	39-b (xiv)-39	328·90
22. Preparation of Municipal Statistical Year Book	39-b (xiv)-42	8,964·45
23. Strengthening of Industrial Statistical Unit	35-a (viii)-K	35,500·90
24. Evaluation Unit	19-c (a) (x)-E	19,121·85
25. Man Power Planning Unit	19-c (a) (x)-F	24,834·30
Total		9,36,631·72
Grand total		26,54,303·90

## CHAPTER II

## AGRICULTURAL STATISTICS

## I. Land Utilisation Survey

During the period under review this section continued to attend to the conduct of land utilisation surveys to get estimates of area under different land uses and various crops in the State. The analysis of data collected through the land utilisation survey conducted during 1966-67 was completed this year and the statistics of land utilisation were finalised.

It was proposed to conduct two rounds of the surveys during 1967-68, the first round covering the period from 1st July 1967 to 31st January 1968 and the 2nd round covering the period from 1st February 1968 to 30th June 1968.

The first round of the survey was conducted in all the taluks in the State. About 40,000 plots were enumerated. Data on land utilisation, number of various perennial crops and area under different seasonal crops in those plots were collected. The analysis of data thus collected was carried out in this section.

The second round of the survey which is in progress is confined to wet land plots only. The purpose of the survey is to prepare a survey number wise list of padasekarams (continues paddy fields) in each taluk of the State and to classify the padasekarams into the different categories according to irrigation facilities and intensity of cultivation.

## II. Crop Cutting Survey

This section has been dealing with Crop Cutting Surveys on paddy and tapioca as in the previous year. The details of the work attended to under each of these crops are given below :

1. *Crop Cutting Survey on Paddy.*—During the year under review two series of Crop Cutting Surveys were conducted on paddy viz., (1) State series of experiments conducted by the Investigators of the Bureau and (2) the Block level series conducted by the Gramsevaks.

Both the series of experiments were conducted during the three paddy harvesting seasons viz., Autumn (virippu) Winter (Mundakan) and Summer (Punja) in the year.

During each season 18 experiments were planned in each taluk, where the crop is grown, under the State series and 30 experiments per Block under the Block level series. The results of experiments conducted during Autumn crop 1967 and Winter crop 1968 on Paddy crop have been finalised.



During the year under review the following reports have been prepared by the section and are under print.

(i) Report on crop cutting survey on Winter and Summer crop of paddy 1967.

(ii) Report on crop cutting survey on Autumn crop of paddy 1967.

The particulars of yield rate of paddy and the total outturn of rice during the Agricultural year 1966-67 in the State is given below :

Year	Yield rate of paddy Kgs./Hectare	Total production of rice in Tonnes
1966-67	2064	1084062

2. *Crop Cutting Survey on Tapioca.*—Crop Cutting Survey on Tapioca was also conducted by this Department during the year under report.

The object of the survey was to estimate the yield per hectare and the total outturn of Tapioca in the State 750 experiments were planned for the agricultural year ending with the 30th June 1968. The survey was proposed to be conducted in 5 Census Villages selected for the Land Utilisation Survey at the rate of 3 experiments per village. The survey will be over by 30th June 1968. The results of the crop cutting survey conducted during 1966-67, were analysed and the total production of raw tapioca in the State was estimated to be 34 lakh Tonnes. The yield rate was estimated at 13.94 tonnes/hectares.

*Pre-harvest Section.*—This scheme 'pre-harvest estimation of crop acreage' was aimed at preparing the pre-harvest estimates of area and yield of important crops on an objective basis.

During the year under review this Department collected data on area and yield of Paddy (Autumn, Winter and Summer crops), Sugarcane, Pepper and Groundnut in order to prepare the pre-harvest estimates. It was done along with the Land Utilisation Survey conducted by this Department. The pre-harvest data for Paddy were obtained from all the plots selected for crop cutting experiments. The pre-harvest area and yield thus collected were tabulated and the estimates prepared thereof. During the period under review pre-harvest estimates of area and production of Autumn Paddy (1967) and Winter paddy (1968), Sugarcane, Pepper and Groundnut 1967-68 were forwarded to the Government of India.

### III. Other Agricultural Statistics

This section dealt with the following items of work during 1967-68.

(i) Collection and compilation of :—

(a) Agricultural Statistics relating to the State.

(b) Rainfall data relating to the State.

- (ii) Preparation of Forecast reports of area and production of important crops in State.
- (iii) Preparation of Statistics of gross produce/Hectare etc., in accordance with Kerala Land Reforms Act, 1964.
- (iv) Preparation of the Season and Crop Report.
- (v) Other miscellaneous items of work.

(a) The tables of Agricultural Statistics for the agricultural year 1966-67 have been prepared and published. Classification and utilisation of land and its percentage to the total area of the State during the year 1966-67 are given below :

<i>Sl. No.</i>	<i>Classification of area</i>	<i>Area in hectares</i>	<i>Percentage</i>
1	Area of the State according to Village papers	3858523	100.00
2	Forests	1055832	27.36
3	Land put to non-agricultural uses	235321	6.10
4	Barren and uncultivable waste land	100437	2.60
5	Permanent pastures and grazing land	27800	0.72
6	Land under miscellaneous tree crops not included in net area sown	181842	4.71
7	Cultivable waste	105651	2.74
8	Current fallow	26446	0.69
9	Other fallows	33965	0.88
10	Net area sown	2091229	54.20
11	Area sown more than once	530742	13.75
12	Total cropped area	2621971	67.95

The area under and production of important crops in the State during 1966-67 were as follows :

<i>Sl. No.</i>	<i>Name of crop</i>	<i>Area in hectares</i>	<i>Production</i>
1	Rice	799438	1084062
2	Coconut	609583	3425 (Million nuts)
3	Arecanut	71231	10683 (Million nuts)
4	Tapioca (Raw)	244647	3409668 (Tonnes)
5	Sugarcane (Gur)	8773	54902 (Tonnes of Gur)
6	Cashewnut	90559	101607 (Tonnes)



<i>Sl. No.</i>	<i>Name of crop</i>	<i>Area in hectares</i>	<i>Production</i>
7	Tea	39799	44130 (Tonnes)
8	Coffee	25152	10513 (Tonnes)
9	Rubber	153357	50495 (Tonnes)
10	Cardamom (Processed)	47026	1606 (Tonnes)
11	Black Pepper	99695	21406 (Tonnes)
12	Ginger (Dry)	11793	11054 (Tonnes)
13	Turmeric	4443	3747 (Tonnes)
14	Sesamum	12070	2400 (Tonnes)
15	Groundnut	13745	23601 (Tonnes)
16	Banana and Plantain	45589	67060 (Tonnes)
17	Pulses	43547	17071 (Tonnes)

The season and crop report for the year 1965-66 was prepared and got printed. The season and crop report for the year 1966-67 was under preparation.

(b) The preparation of forecast reports on area and production of important seasonal crops in the State was continued during this year also and these reports were forwarded to the Government of India and to the State Government as per the time schedule fixed. Thirty-seven important seasonal and perennial crops are covered by the forecast reports.

(ii) Daily rainfall data were recorded from 87 centres in the State. The monthly and annual rainfall return received from these centres were compiled and the monthly totals of rainfall for the year 1967 have been sent to the Deputy Director General of Observatories, Poona. The daily rainfall statements for the year 1966 have been sent to Government Press for printing. A statement showing the monthly average rainfall in each District during the Financial year 1967-68 is appended herewith.

(iii) During the year under reference the Department published the Statistics of gross produce per hectare of the crops specified in Rule 26 of the Kerala Land Reforms (Tenancy) Rules of 1964 for the year 1966-67.

(iv) During the year 1967-68, the Department supplied Basic data on Agriculture to many Official Agencies.

#### IV. National Index of Field Experiments

The National Index of Field Experiments Scheme is one of the Plan Schemes of this Department. Details of staff sanctioned for this scheme are given below :

<i>Designation</i>	<i>No. of posts</i>	<i>Scale of pay Rs.</i>
Research Officer	.. One	300-600
Lower Division Compiler	.. Three	80-160
Lower Division Typist	.. One	80-160

The National Index of Field Experiments Scheme aims at putting together in one place, the results of all field experiments conducted in different parts of the country, whether they are conducted by the State Departments of Agriculture, Central Research Institutes, Commodity Committees or other organisations. The objective is to catalogue all this material on a uniform basis and standard manner so that they are available to all the Agricultural Research Workers in the country. The field experiments are indispensable for acquiring new knowledge, as well as measuring the impact on crop production, of the various improvements which may be introduced in agricultural practice.

This Bureau performs the compilation and statistical analysis of the experimental data which are received from the various Agricultural Research Stations in the State. The results of analysis of the above data are promptly communicated to the concerned Research Stations, State Directorate of Agriculture and to the Institute of Agricultural Research Statistics (I.C.A.R.), New Delhi.

The details of agricultural experiments analysed in this Bureau during the period under report are given below :

<i>Sl. No.</i>	<i>Design of the experiment</i>	<i>No. of experiments analysed during the year 1967-68</i>
1	Randomised Block	.. 152
2	Split plot	.. 25
3	Factorial Experiment	.. 18
4	Balanced incomplete Block	.. 4
5	Miscellaneous Designs	.. 12
	Total	.. <u>211</u>



## Average monthly rainfall (in M. Metres) in Kerala during the year 1967-68

19

Serial number	District	Month												Total		
		1	2	3	4	5	6	7	8	9	10	11	12		13	14
1	Trivandrum	..	..	63.2	215.6	461.1	217.2	138.8	222.2	308.6	51.6	18.8	13.9	15.0	112.4	1838.4
2	Quilon	..	..	99.5	276.5	536.5	554.4	353.6	224.5	245.2	81.8	78.2	30.7	67.4	133.5	2681.8
3	Alleppey	..	..	109.4	371.4	642.8	1092.0	519.7	187.4	205.6	70.4	75.8	35.2	44.0	137.3	3491.0
4	Kottayam	..	..	100.8	258.8	497.4	424.6	410.7	122.7	223.8	65.7	32.4	5.7	51.9	125.0	2319.5
5	Ernakulam	..	..	82.8	478.0	667.6	692.5	631.8	191.7	207.4	102.7	25.3	4.2	47.7	115.5	3247.2
6	Trichur	..	..	27.6	333.8	497.2	743.1	678.4	125.7	172.7	65.8	40.4	..	44.8	74.1	2803.6
7	Palghat	..	..	40.9	139.4	342.1	750.2	444.3	89.2	134.6	102.7	39.8	..	8.9	66.8	2158.9
8	Kozhikode	..	..	62.9	219.6	598.5	1029.2	597.6	99.3	101.4	60.0	15.4	..	2.8	61.3	2848.0
9	Cannanore	..	..	39.0	178.7	714.8	1213.5	711.3	140.4	81.8	56.0	7.4	..	4.6	25.2	3172.7

## V. Agricultural Research Division

The most important change in the administrative set up of the Agricultural Research Division that took place during the year under report was that the staff concerned were transferred to form the Agricultural Planning Unit under the State Planning Board since November 1967. The following were the activities of the Division both in the Bureau of Economics and Statistics and in the Planning Board.

*A. Preparation of Fact Book on Agriculture.*—The Fact Book on Agriculture brought out during 1966-67 was being revised by incorporating the details for the latest year and also district-wise data. The work was in progress during the year under report. The first section relating to Kerala was made up-to-date and the district-wise tables on Agricultural Statistics such as area and production of crops were completed.

The division prepared the chapters relating to Agriculture, Forestry, Plantations, Fisheries and Animal Husbandry included in the Economic Review, 1967. According to the review the agricultural sector of the State registered overall progress during 1966-67. There was appreciable increase in the production of eight out of the ten principal crops. However, the food situation in the State continued to be critical. The rationing system and partial de-control of sugar aggravated the problem. Remarkable progress was registered during 1966-67 in the case of the plantation industry and forestry. The increase in the net revenue from forests was 14 per cent. The rise in productivity of rubber was nearly 8 per cent, that of tea 2.6 per cent and coffee 6.4 per cent. During 1966-67 total fish production increased by 5.9 per cent and marine fish landings by 3.5 per cent. The formation of the Kerala Fisheries Corporation was an important development during the year in the case of fisheries.

Preparation of notes, reports, papers etc., on specific problems of current interest was also attended to by the division in addition to the Planning work relating to Agricultural Sector.

*B. Land Reforms.*—The report on the Study on land holdings, land tenures and the effects of land reforms in Kerala undertaken by the Bureau of Economics and Statistics at the instance of Government was prepared during the year under review. The compilation, preparation of statistical tables and analysis of the data obtained through the field survey conducted during 1966-67 were done by the staff of the division in addition to their normal duties. The draft of the report was published in March 1968 and submitted to Government. This report, in general fills a long-standing gap in the knowledge of the quantitative and qualitative aspects of land relations in the State and provides the factual basis for land reform measures which may be taken in future.



C. *Irrigation*.—The Irrigation and Package section which formed part of the Agricultural Research Division of the Bureau of Economics and Statistics was abolished consequent on the formation of the State Planning Board and in its place the Section “Irrigation and Forestry” was formed. An assessment of the progress achieved in the field of forestry during 1966–67 was attempted and details incorporated in the Economic Review of Kerala, 1967. The gross and net receipts from forests and outturn of timber and firewood showed an upward trend in 1966–67 compared to the previous years. A study of the relative efficiency of the different types of pump sets in use for agricultural operations in Kerala was initiated at the end of the year with a view to rationalise the existing system of subsidies for pump sets. A scheme for the conduct of a census of the paddy yelaha (25 acres and above in extent) was drawn up. The census will provide complete data regarding the resource potential and production possibilities of each yelaha. The idea is to adopt yelaha as the unit for which production is to be planned. If full co-operation of the cultivators in the Yelaha is enlisted this will enable adoption of uniform cultivation practices in the area and will have almost all the advantages of large scale farming. The usual assistance technical as well as financial now being given by Government will be provided at a higher rate.

D. *Package Programme*.—The co-ordination of the technical programme of the “Benchmark and Assessment Survey” conducted in Alleppey and Palghat Districts under Intensive Agricultural District Programme formed part of the work of the Division. A summary of the report on the evaluation of the working of the Package Programme in Palghat and Alleppey Districts conducted by the Bureau of Economics and Statistics in 1965–66 was sent to various agencies connected with the programme. This report attempts a qualitative and quantitative assessment of the impact of the package programme. The study revealed the impact of the Intensive Agricultural District Programme on Agriculture in the Districts covering not only the progress in production and productivity but also the change that has taken place in the ryots’ attitude to cultivation and in their cultivation practices. The work of giving final touches to the complete report of the above study was also attended to.

E. *Animal Husbandry and Fisheries*.—The data relating to a study of the relative efficiency in terms of net returns of different sizes of fishing crafts conducted by the Department of Fisheries, was analysed. The preparation of the report is in progress. An appraisal of the progress made in the fisheries sector of the States was made and the results incorporated in the Economic Review, 1967. The review showed the increase in the total fish production and the remarkable progress made in the construction of mechanised boats during 1966–67. It also highlighted the valuable service rendered by the Indo-Norwegian Project to the development of fisheries in the State. The

review, under animal husbandry sector mentioned about the plan of the Indo-Swiss Project to start a piolet project in Peermade area for the development of animal husbandry by supplying improved breeds cattle to the settlers of the area. The objective of the proposed project is to examine the extent to which animal husbandry would improve the economy of the settlers so that farmers in general can emulate animal husbandry along with farming as a business proposition. The review of the activities under dairying and milk supply in the State was also incorporated in the Economic Review, 1967.

F. *Fourth Five Year Plan.*—With the formation of the State Planning Board, the Government in their G.O. (MS.) No. 5/68/Plg. dated 29th January 1968 have constituted a Working Group on Agriculture, Irrigation and Land Reforms with the object of reformulating the draft Fourth Five Year Plan prepared by the State Government in 1966. Under the Working Group, the following eight Sub-committees were also formed.

1. Agriculture and Soil Conservation.
2. Irrigation, Flood Control and Rural Electrification.
3. Co-operation, Ware-Housing and Marketing.
4. Fisheries.
5. Animal Husbandry and Dairy Development.
6. Forests
7. Land Reforms
8. Community Development and Panchayati Raj.

Till the end of the year under report the first meetings of the three Sub-committees, viz., Irrigation, Flood Control and Rural Electrification, Animal Husbandry and Dairying and Community Development and Panchayati Raj were held. This division has been assisting the member-in-charge of Agriculture in the work relating to the Committee.

### CHAPTER III

## ECONOMIC STATISTICS

### I. Prices Statistics

The following are the various items of work attended to in the Prices Division :

1. *Retail Prices and Consumer Price Index.*—(1) Weekly retail prices of about 39 necessary articles of daily use are being collected from 20 selected centres in the State. The data are primarily used for computing the State series of consumer price index numbers.

(2) The prices of about 64 essential commodities were also collected every week from the District Headquarter town for the use of



the Planning Commission. Based on this data a fortnightly statement of prices and a review are prepared and forwarded to the Planning Commission, Government of India and to Secretary to Government, Food Department, Trivandrum.

(3) As per directions from the Economic and Statistical Adviser, Government of India, weekly retail prices of about 72 specified commodities were collected to study the price fluctuations of the essential commodities, their availability, and apprehended scarcity. The price returns are received in this Office from the District Headquarter towns. A weekly consolidated review indicating the price trends, availability and apprehended scarcity of these commodities, with a statement of prices at Trivandrum, Ernakulam and Kozhikode centres is forwarded to (1) The Secretary to Government of India, Ministry of Commerce (Civil Supplies), New Delhi, (2) The Secretary to Government, Food Department, Trivandrum, (3) Additional Secretary (Civil Supplies), Board of Revenue, Trivandrum and (4) The Retail Price Intelligence Branch, Directorate of Economic and Statistics, Government of India.

(4) This Bureau is computing consumer price index numbers for the following 13 centres: (1) Trivandrum (2) Quilon (3) Punalur (4) Alleppey (5) Changanacherry (6) Kottayam (7) Alwaye (8) Ernakulam (9) Trichur (10) Chalakudy (11) Munnar (12) Sherthalai and (13) Kozhikode.

The weighing diagram for the first 12 centres have been obtained from the Family Budget Enquiries conducted during 1955. The base for Kozhikode is the average prices for the year ended June 1936=100 and for all other centres August 1939=100. The index numbers are published in the Government Gazette every month. Copies of the same are being forwarded to various organisations and industrial concerns direct from this Bureau.

The Committee of Direction for the conduct of the Family Budget Survey under the chairmanship of Prof. V. R. Pillai submitted the final report on 31st July 1967 and the report was approved by Government in G.O. (Rt) 234/67/Plg, dated 6th September 1967. Consequent on the representations received from various Trade Unions complaining about the absence of their representatives in the committee already constituted, Government appointed another committee consisting of (1) Shri K. N. Kunjukrishna Pillai (Convener), (2) Sri B. V. Pai, Manager, Tata Oil Mills Ltd., and President of the Cochin Chamber of Commerce, Ernakulam, and (3) Sri T. C. N. Menon, Advocate, Ernakulam. They have to recommend to Government additions or changes if any as are necessary for the preparation of a new series of working class consumer price index numbers regarding the basis recommended by the Committee of Direction. The Committee have already started the work and it is expected

that the committee will submit their report to Government by August, 1968.

2. *Strengthening of Prices Units.*—The Prices Unit in this Bureau was strengthened in 1966-67 as per order No. G.O. (MS) 18/66/Plg., dated 20th May 1966 in order to make improvements in the collection, processing and reporting of various types of price data. The scheme continued during the year under report with the following temporary posts:—

Assistant Director	..	1
Research Officer	..	1
Research Assistant	..	1
U.D. Compilers	..	2

Monthly Price Bulletins are being issued regularly. This contains a review of the wholesale prices of important agricultural commodities, retail prices of necessities, consumer price index numbers, index numbers of wholesale prices, parity index, etc.

The computation of month-wise indices of wages of rural skilled workers (i.e. carpenter and mason) and agricultural workers (i.e. field labour, other agricultural labour and herdsmen) was undertaken by this section and the statement of indices was forwarded to the Government of India. Also, agricultural wages are being published regularly in the Government Gazette and sent to Economic and Statistical Adviser, Government of India.

A brochure "Price Trends in 1966—Kerala" was published during the year under report. It is an annual review of price behaviour in the State. The report analyses the major developments in the economy, trends in production, prices, etc. It also contains a review of the food situation, an analysis of the indices of wholesale prices of important agricultural commodities and consumer prices and a brief discussion of the retail prices of some essential commodities.

In order to prepare a permanent record on prices data, retail and wholesale prices were tabulated systematically. As part of the programme to bring out a publication on the price trends of plantation and spices crops in the State, the prices of important spices for the past few years have been analysed.

## II. Index numbers relating to Agricultural Economy

The object of the scheme is to compute regularly index numbers of:

1. Agricultural production;
2. Index of area and productivity;
3. Wholesale price of agricultural commodities;
4. Parity between prices received and prices paid by farmers.



This section is also attending the work relating to collection and forwarding of data on prices of coconut to Indian Coconut Committee, Ernakulam. Also prices of coir and husk are collected and sent to Coir Board. The data are also published in the Government Gazette regularly. Prices of export staples at Alleppey and Mattancherry are sent to the Superintendent, Government Presses, Trivandrum for publication.

(1) *Index numbers of agricultural production.*—The index number of agricultural production is intended to measure the progress achieved in the field of agriculture in the State. The index number of agricultural production in the State for all crops have been computed for the years 1952-53 to 1967-68.

(2) *Index of area and agricultural productivity.*—The indices of area under crops and agricultural productivity are intended for a comparative study of the trends in acreages under crops and agricultural productivity. The data for the computation of these indices are taken from the land utilisation survey conducted by this department.

A technical committee on Index Numbers relating to Agricultural Economy set up by the Ministry of Food and Agriculture has suggested improvements in the construction of index numbers and recommended the following series to be computed with the triennium ending 1961-62 as the base period and utilising the prices used for computing the national income:—

- (i) Index numbers of area under crops;
- (ii) Index numbers of net area sown;
- (iii) Index numbers of cropping intensity;
- (iv) Index numbers of cropping pattern;
- (v) Index numbers of yield;
- (vi) Index numbers of productivity per hectare;
- (vii) Index numbers of agricultural production.

The above indices have been computed for the years 1962-63 to 1965-66 during the year under report.

(3) *Index numbers of wholesale prices of agricultural commodities.*—Index numbers of wholesale prices of 17 important agricultural commodities are being computed. Monthly indices are computed based on the wholesale prices made available by the primary reporting agencies of the Department. The agricultural year 1952-53 is taken as the base year. Index number of wholesale prices have been computed up to April 1968.

It may be pointed out that consequent on the fixation of maximum price by Government, rice was scarce in the open market and there

was practically no wholesale transaction in the open market. So far computing the indices the price fixed by Government for distribution through fair price shops have been taken into account.

(4) *Index numbers of parity between prices received and paid by farmers.*—The index measures the variation in the economic prosperity of the farmers in relation to changing farm price, farm cultivation cost and domestic expenditure as a result of the changes in wages, cost of implements, cost of manure, cost of maintenance of livestock, etc., as compared to the situation during the base year. The index number of parity between prices received and paid by farmers have been computed up to April 1968.

4. *Scheme for the Improvement of Market Intelligence.*—This scheme continued to be in operation during 1967-68 as a branch of the prices division of the Bureau.

The main object of the scheme is to provide for the benefit of the primary producers, a regular and prompt supply of news on market rates of the different agricultural commodities they produce.

The scheme is in operation in 35 market intelligence centres distributed throughout the State and the work in each centre is being handled by a Price Inspector or a Price Reporter. There are 12 Price Inspectors (on Rs. 190-300) and 23 Price Reporters (on Rs. 80-160) at present.

Even though the number of centres covered by the scheme is only 35 at present, it is proposed to bring 21 additional centres also under the scheme during the Fourth Plan period.

*Method of price collection.*—The reporting agency at each centre visits the important market areas in the centre and after consulting leading merchants and cultivators collect market information regarding arrivals, despatches, stock, wholesale prices, market sentiments, etc. They are also expected to visit the surrounding villages to study the crop condition and crop prospects by personal contact with the leading agriculturists.

*Periodicals issued:*

(i) *Daily Price Bulletin.*—The information on prices collected by the reporting agencies are conveyed to the State headquarters by telegram or telephone trunk calls. The headquarters prepare the daily price bulletin and send it to the regional station of the All India Radio for daily broadcast during the radio rural programme in the evening (6-20 p.m.).

(ii) *Weekly market review.*—A weekly market review in Malayalam on prices, trend of prices, etc., of important agricultural commodities in respect of the selected centres is prepared and given for broadcast in the evening of every Sunday.



(iii) Besides the above, open market price of rice prevailing at the district headquarter towns is also being collected daily and furnished to the Government of India, State Government, Food Department, and also to the Civil Supplies Wing of the Board of Revenue.

This Unit has conducted a special survey during the period under report, in order to collect information for the preparation of a brochure 'Markets in Kerala', which is expected to be published shortly.

### III. State Income Unit

The State Income Unit of this Bureau continued to function during the year under report.

Work on comparable estimates of income from the six commodity producing sectors (based on standard methodology) for the years 1950-51 to 1965-66 has been taken up and is in progress.

Comparable estimates of working force for the years 1951 and 1961 have been prepared.

Estimation of livestock population for the period 1951 to 1971 has been taken up and the estimation is nearing completion.

### IV. Trade Statistics

During the year under report this Department continued to attend to the work relating to the collection and analysis of the nature, quality and value of goods moved from and into the State by sea and rail. The data relating to seaborne trade are furnished by the Director-General of Commercial Intelligence and Statistics, Calcutta. Railborne statistics are collected from the various railway stations by the staff of this Department.

*Seaborne Trade.*—The scheme envisages collection of data on quantity and value of foreign trade regarding the goods moved through the ports of Kerala. Statements of exports by port-wise, commodity-wise and currency-wise are also prepared. Export and import statements for the years 1956-57 have been completed.

*Railborne Trade.*—The commodity-wise consolidation of the data for the year 1965 been completed. The preparation of statements for 1966 and 1967 were in progress at the end of the year. In the case of certain commodities like paddy, rice, wheat, pulses, sugar, salt, etc., statements of imports (State-wise) are prepared while the State-wise statements of exports relating to commodities like wood and timber, wood products, coir, eggs, betelnuts, fish, etc., are prepared. This Department intends to publish a "Fact Book on Seaborne Trade". Collection of data and consolidation of statements for the publication were in progress.

## V. Planning Statistics

The following are the important items of work attended to by the Planning Cell of this Bureau:—

1. Monthly progress report on Plan Schemes of this Bureau have been prepared and sent to Government in the prescribed time.
2. Prepared quarterly progress report on Plan Schemes of this Bureau and sent to Government of India.
3. Collected progress reports from various Departments concerned with plans.
4. Technical details of the Plan Schemes of this Bureau for 1968-69 have been drawn up and sent to Government.
5. Proposals for annual plan 1967-68 has been prepared and sent to Government.
6. Collected the data for the preparation of Village Index Cards.
7. Quarterly review of the work of the other sections of this Bureau was taken up in September 1967.
8. Co-ordination of the activities of the statistical units in other Departments was also attended to.

## CHAPTER IV

### OFFICIAL STATISTICS

#### I. Labour Statistics

Data based on the following Labour Enactments are collected and processed in the Labour Statistics Unit of this Bureau:—

1. Factories Act, 1958.
2. Payment of Wages Act, 1936.
3. Indian Trade Unions Act, 1926.
4. Industrial Statistics (Labour) Rules, 1951.
5. Industrial Disputes Act, 1947.
6. Maternity Benefit Act.

The statements and reports on the working of the above enactments prepared in the unit were sent to Labour Bureau, Simla.

In addition to the above, the annual lists of Registered Factories, Registered Trade Unions, Federations and Registered Plantations were also compiled.



1. *Annual Returns under the Factories Act, 1948 for the year 1966.*—

The Chief Inspector of Factories and Boilers, Trivandrum continued to function as the authority for the registration and cancellation of registration of factories. There were 2863 factories on the register as on 1st January 1966. During the year, 186 factories were newly registered and the registrations of 85 factories were cancelled. Thus, there were 2964 registered factories in the State as on 31st December 1966. This consists of 1752 factories under section 2 (i), 406 factories under section 2m (ii) and 806 factories under section 85 of the Act. Out of this, the number of working factories was 2911. There was no factory in the State defined under section 93 of the Act. 913 factories belonged to section 87 of the Act (i.e. factories carrying on operations declared as dangerous). Out of the 2964 registered factories in the State, 79 were in the public sector and the remaining 2885 in the private sector.

During the year 1966, out of the 2911 working factories, 1492 (51 per cent of the total) factories submitted their annual returns. The average daily employment in these 1492 working factories which submitted returns was 87819 and the estimated average daily employment in the 1419 factories which did not submit their annual returns was 110646. Thus the estimated total employment in the 2911 working factories was 198465. Women accounted for 33 per cent of the total employment in the factories which submitted returns. There were 41000 workers in the 913 factories which carried on operations declared as dangerous. During the year 1966; the total employment in the 79 public sector factories has been estimated at 15804 and that in the 2832 private sector factories has been estimated at 182661. A table giving particulars regarding some selected industries of the State is given as Appendix I.

*Half-yearly returns under the Factories Act for the half year ending 30th June 1967.*—Half-yearly statement on the working of the Factories Act, 1948 relating to the half year ending 30th June 1967 was also prepared. The total number of working factories as on 30th June 1967 was 2941. The employment in the 1060 factories which submitted returns was 5670. The estimated average daily employment in all the factories was 200112.

*Annual returns under the Payment of Wages Act, 1936 for the year 1966.*—Data under the Payment of Wages Act, were also collected by this Bureau from the factories. During the year 1966, out of the 2911 working factories covered by the Act, 1348 factories submitted their returns. This consists of 893 factories under section 2 m (i), 152 factories under section 2 m (ii) and the remaining 303 factories under section 85 of the Act. The collection of data is confined to the employees whose monthly earnings is less than Rs. 400 only. Data collected in these returns include "wages" as defined in the 'Payment of Wages Act' and also certain non-wage components like profit sharing bonus and money value of concessions. The average annual earnings of a



factory employee whose earnings fall below Rs. 400 p.m. worked out to Rs. 1,325. The average annual earnings of an employee, employed in the factories covered by section 2m (i) of the Factories Act, worked out to Rs. 1,495 and that in the factories under section 2m (ii) was Rs. 644. In the case of factories notified under section 85 of the Act, the amount worked out to Rs. 1,012. Details regarding the average annual earnings of factory employees in some selected industries are given in Appendix II.

3. *Annual returns under the Indian Trade Unions Act, 1926 for the year 1966.*—Annual returns prescribed under section 28 of the Indian Trade Unions Act, 1926 were also collected and processed by this Bureau. The statements on membership, income, expenditure and assets and liabilities of trade unions/federations for the year 1966 have been prepared.

The annual returns were collected by the Labour Commissioner who is the Registrar of Trade Unions and were forwarded to this office for compilation and analysis. The data related to the calendar year 1966. The various statements required by the Labour Bureau, Government of India were prepared in this Office. There were 1703 trade unions/federations on the register on 1st January 1966. During the period under report 188 trade unions were granted registration. The registration of no union was cancelled during the year. Thus there were 1891 trade unions/federations on the register as on 31st December 1966. Out of this, 4 were federations and 13 were employers unions. Out of the 1891 unions, only 203 unions submitted their returns for the year 1966. The total membership in all the 201 trade unions (excluding employers unions) submitting returns during the year was 68702. The membership in the 2 employers unions which submitted returns was 182. The average annual income of a workers trade union was Rs. 2,369 and the average annual expenditure Rs. 1,795. Statistics of trade unions for the year 1966 are given in Appendix III.

4. *Collection of Quarterly Returns under the Industrial Statistics (Labour) Rules, 1951.*—Quarterly data on employment, attendance and absenteeism, earnings, etc., in respect of tea, coffee and cardamom and rubber plantations covered by the Act, were processed. The required statements (for the 1st and 2nd quarter, 1967) were prepared and sent to Labour Bureau, Government of India.

Particulars regarding absenteeism and earnings of workers employed in the plantations during June 1967 are given in Appendix IV.

5. *Returns on Industrial disputes (Monthly).*—This Bureau attended to the collection and transmission of the data regarding industrial disputes resulting in work stoppages. The collection of data is limited to those work-stoppages only which involve 10 workers or more and



lead to a temporary stoppage of work. Details on the matter in dispute, number of workers involved, wages lost, value of production lost, result, affiliation to central organisations, nature of breach of code of discipline, etc., are collected in these returns.

The responsibility for the collection of the data is vested in the District Labour Officers of the State and the compilation of State tables is attended to in this Bureau. During the year 1967, there were 305 strikes in the State. Altogether, 152,614 workers were affected and 2,409,986 mandays were lost due to the above work-stoppages. Of these 305 strikes, 37 were token. 73 per cent of the strikes were successful and 22 per cent were partially successful. Most of the strikes (55 per cent) were for "increase in wages and allowance". Work-stoppages were comparatively larger in plantations followed by textiles and tiles. A table giving the particulars of work-stoppages is given as Appendix V.

6. *Working of the Maternity Benefit Act for the year 1966.*—The Chief Inspector of Factories and Boilers, Trivandrum and the Chief Inspector of Plantations, Kottayam collected the annual returns under the Maternity Benefit Act for the year 1966 from the registered factories and plantations respectively. The statements, containing information on the number of women who claimed maternity benefits, amount of maternity benefits paid during the year, number of complaints received and investigated, etc., were forwarded to this Bureau. The statements were consolidated in this Bureau and were sent to the Labour Bureau, Government of India.

During the year, 391 plantations and 1,102 factories were reported to have been covered by the Maternity Benefit Act. Out of this 192 plantations and 628 factories submitted their annual returns. Out of the 38,280 women employed in the 192 plantations submitting returns, 8,513 women claimed maternity benefits during the year. The amount of maternity benefits claimed was Rs. 8,24,567. Similarly, out of the 67,395 women employed in the 628 factories submitting returns, 5,930 women claimed maternity benefits and the amount of claim was Rs. 4,04,528.

Besides the above, annual reports on the working of Factories Act and Trade Unions Act for the year 1966 were also prepared and sent to Labour Bureau, Government of India. Statistics regarding the above topics were published in the "Kerala Labour and Industries Review" of the Labour and Industrial Bureau, Trivandrum and in the various publications of this Bureau.

## II. Industrial Statistics Unit

The Scheme "Industrial Statistics Unit" was sanctioned in G.O. (Rt.) No. 291/66/Plg., dated 20th October 1966 with officers and staff consisting of one Assistant Director, one Research Officer, two Research

Assistants, two Upper Division Compilers, six Lower Division Compilers one Lower Division Clerk, one Typist and one Peon. Continuation sanction has been obtained as per G.O. (Rt.) 310/67/Plg., dated 30th November 1967 for the above scheme.

The object of the scheme is to collect information on the economic structure and working of the Industrial Establishment in the State in factory and non-factory sectors. The scheme consists of two parts. The above staff sanctioned under the 1st part of the scheme is attending to the analysis of data on capital structure, employment, consumption of materials, out-put, etc., collected from the registered factory units in the State, by the National Sample Survey Organisation, under the Annual Survey of Industries.

The draft report on ASI 1962 has been prepared and submitted to the Central and State Governments. As directed by the Government, the report was sent to the Government Press for printing.

The work relating to the tabulation of the ASI schedules for the years 1963 and 1964 was completed. The analysis of the data was held up for want of the report on ASI 1964 from Central Statistical Organization, Calcutta.

Under the 2nd part of the scheme, a detailed sample survey of unregistered industrial units in the State is proposed to be taken up. The administrative sanction from the Government for implementing the 2nd part of the scheme is awaited. The work relating to the collection of details on Foreign Capital Investment (Investment by non-Indian Nationals) in this State in the various sectors like plantations, industries, etc., was being attended to by this unit during the year under report.

### **i. Annual Survey of Industries**

The annual survey of industries in the State was undertaken by the National Sample Survey Organisation, Government of India and the Additional Director of this Bureau was the Officer on special duty for the survey in the State. The over-all supervision of the work has been vested with him. The Additional Director continued to be the Officer on special duty during the year under report also.

### **ii. Industries and Plantations**

*Statistics.*—The collection and consolidation plantation statistics continued to be the main item of work of this section. The items of works attended to during the period under report are the following:

The scheme for the improvement of plantation statistics is a plan scheme of this Department. The main object of the scheme was to obtain reliable statistics on the following aspects in respect of Coffee, Rubber and Tea for the whole State. Seven rounds of the survey have been conducted so far.



1. Area under the crop.
2. Area from which yield is obtained.
3. Quantity of yield.
4. Number of workers employed.

(a) *Sample survey on Rubber.*—Statistics relating to rubber estates of 50 acres and above are collected by the Rubber Board. Details have to be collected by this Bureau through sample surveys from estates of extent below 50 acres after proper stratification. The stratification was done district-wise on the basis of size groups of estates. Estates in size groups 25–50 acres were enumerated completely. From the other estates as listed below, samples were selected for enumeration.

- (i) Less than one acre
- (ii) 1–5 acres
- (iii) 5–10 acres
- (iv) 10–25 acres

The VII round of the survey has been conducted during the year under report.

(b) *Sample survey on Coffee.*—The VII round of the survey was conducted during the year and it is in progress. It will be completed by the end of June 1968.

(c) *Collection of Tea Statistics.*—The District Statistical Officers are responsible for the collection of data from registered tea estates. Complete enumeration was done in all Districts where registered large tea estates exist. A sample survey was conducted in Kottayam District alone to estimate the area under, production and labour employed in registered small estates since there are a large number of small estates in the District. Tea statistics relating to the year 1965 has been prepared and forwarded to the Government of India. The collection of tea statistics pertaining to the year 1966 was completed during the year and the report is under preparation.

Statements showing the area under, production and human labour employed in Rubber Estates 1966, Coffee Estates 1966–67 (Agricultural year) and Tea Estates, 1965 are appended.

Statement of area under production and human labour employed in Coffee Estates of Kerala during 1966-67 (provisional estimates)

Serial number	Name of District	3	4	5	6	7	8	9	Persons employed			13	14	Quantity of coffee produced	
									10	11	12			Cherry (M. Tonnes)	Parchment (M. Tonnes)
		No. of plantations as on 30th June 1967	Total area as per previous year's statement (acres)	Area abandoned during the year (acres)	New extension during the year including the area abandoned during the previous year (acres)	Total area under coffee during the year (acres)	Area in the occupation of planters but not under cultivation (acres)	Total area under the occupation of planters (acres)	Garden labour (Permanent)	Outside labour (Permanent)	Outside labour (Temporary)	Area that has been plucked during the year (acres)	Area that has not been plucked during the year (acres)	Cherry (M. Tonnes)	Parchment (M. Tonnes)
1	Trivandrum	..	7	..	..	7	700	707	1	1	1	7	..	1	1
2	Quilon	..	313	..	..	313	1183	1496	36	1	106	82	231	3	..
3	Kottayam	..	4920	60	178	5038	5530	10568	1195	67	146	4581	457	392	159
4	Ernakulam	..	606	..	3	609	242	851	142	6	15	300	309	32	25
5	Palghat	..	8118	..	111	8229	7144	15373	6803	370	208	5235	2994	189	1785
6	Kozhikode	..	37822	217	2758	40363	2823	43186	7472	11702	1806	23521	16842	3193	3469
7	Cananore	..	6535	..	1056	7391	4538	12129	1080	2200	388	6066	1525	1234	30
	Total	..	58321	277	4106	62150	22160	84310	16729	14347	2670	39792	22358	5044	5469



## Area and production and human labour employed in Rubber Estates of Kerala State during 1966 (provisional)

Serial number	District	No. of plantations as on 31st December 1966	Planted area as per previous year's statement (Hect.)	Area abandoned during the year (Hect.)	Extension during the year including area abandoned during the previous year (Hect.)	Total area under rubber during the year (Hect.)	Area in the occupation of planters but not under cultivation (Hect.)	Total area of the estate (Hect.)	Persons employed (daily average)			Area that has been tapped during the year (Hect.)	Area that has not been tapped during the year (Hect.)	Quantity of manufactured Rubber (M. Tonnes)
									Garden Labour (Permanent)	Outside Labour (Permanent)	Outside Labour (Temporary)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Trivandrum	..	4844	..	401	5245	3302	8547	2039	1562	2520	3276	1969	1430
2	Quilon	..	25672	6	821	26487	11556	38043	14274	6824	6958	18596	7891	9498
3	Alleppey	..	2736	1	92	2827	1052	3879	1409	675	694	1747	1080	528
4	Kottayam	..	46958	363	1724	48319	1526	49845	14223	4510	7037	39038	9281	16870
5	Ernakulam	..	21423	3	682	22102	1824	22926	6434	2040	3153	13868	8234	5661
6	Trichur	..	7624	..	56	7680	4955	12635	3551	1782	5349	5232	2448	3921
7	Palghat	..	7384	3	109	7490	4356	11846	2544	1040	1621	4353	3137	2039
8	Kozhikode	..	20159	21	156	20294	16906	37200	6951	2843	4404	15324	4970	8287
9	Cannanore	..	12834	2	81	12913	7270	20183	4417	1806	2800	5964	6949	2261
..	Total	..	149634	399	4122	153357	51747	205104	55842	23082	34536	107398	45959	50495

## APPENDIX I

**Important Factory Industries (in terms of employment)  
and their centres of concentration**

(for the year 1966)

Sl. number	Nature of Industry	Number of factories	Average daily employment (estimated)	Centres where most of the factories are located
1	2	3	4	5
1	Cashew factories	212	89996	Kilikolloor, Kottiyam, Kottarakkara, Kundara, Parippally, Mukhathala.
2	Cotton textiles	240	16267	Azhikode, Chovva, Chirakkal, Kozhikode, Karamana, Quilon, Thirumala.
3	Bricks and tiles	224	13593	Chathannur, Ollur, Pudukad, Karuvannur, Feroke, Puthiyara, Angamaly, Ottappalam.
4	Chemicals	52	6431	Cochin, Alwaye, Trichur.
5	Tea factories	125	5916	Peermade, Devikulam, Mundakayam, Munnar, Wynad.
6	Coir factories	142	5884	Alleppey, Sherthalai, Cochin, Palluruthy.
7	Machinery (Engineering)	110	5613	Kalamasseri, Shornur, Palghat, Quilon.
8	Printing Presses	206	5033	Ernakulam, Cochin, Trivandrum, Changancherry, Kottayam, Trichur, Calicut, Alleppey.
9	Saw mills	239	4293	Kallai, Calicut, Mooriyad, Feroke, Chalakudy, Baliapattom, Dharmadam, Tellicherry, Kudamaloor, Kottayam, Pattathanam, Kilikolloor.
10	Repair of motor vehicles	140	3745	Kozhikode, Trichur, Kottayam, Palghat, Trivandrum, Ernakulam, Tellicherry.



## APPENDIX I—(cont.)

1	2	3	4	5
11	Rubber factories (including factories in rubber planta- tion)	66	2614	Mundakayam, Kalthu- ruthy, Palappilly, Kozhi- kode, Trivandrum.
12	Oil mills	277	2117	Alleppey, Sherthalai, Irinjalakuda, Crangan- nore, Ernakulam, Quilon.
13	Beedi and Cigar	66	2093	Ponnani, Palghat, Telli- cherry.

## APPENDIX II

## Average earnings of factory employees in some selected industries in Kerala—1966

Sl. No.	Industry	Average daily earnings Rs.	Average annual earnings Rs.
1	Cashew	2.14	493
2	Cotton textiles	5.28	1682
3	Bricks and tiles	3.88	1072
4	Chemicals	7.36	2547
5	Tea factories	3.14	958
6	Coir factories	4.56	1250
7	Machinery (Engineering)	4.95	1488
8	Printing presses	4.93	1521
9	Saw mills	4.51	967
10	Repair of automobiles	4.90	1522
11	Rubber factories	4.34	1214
12	Oil mills	3.43	868
13	Beedi and Cigar	4.08	1213

APPENDIX III  
Statistics of Trade Unions

Kerala

Year 1966

	Total No. of trade unions	No. of unions submitted returns	Membership in the unions submitted returns			General Fund			
			Total	Males	Females	Opening balance Rs.	Income Rs.	Expenditure Rs.	Closing balance Rs.
1	2	3	4	5	6	7	8	9	10
State unions	1891	203	68884	52480	16404	1,34,539	4,76,180	3,60,756	2,49,963
Unions in the private sector	1870	200	67397	50996	16401	1,27,329	3,86,792	3,50,188	1,63,933
Employees Union	1857	198	67215	50824	16391	1,27,188	3,85,980	3,49,363	1,63,805
Employer's Union	13	2	182	172	10	141	812	825	128
Employees Unions in the public sector	17	3	1487	1484	3	7,210	89,388	10,568	86,030
Central sphere	7	..	..	..	..	..	..	..	..
State sphere	10	3	1487	1484	3	7,210	89,388	10,568	86,030
Federations	4	..	..	..	..	..	..	..	..



## Earnings and absenteeism in plantations during June 1967

	Tea			Rubber			Coffee and Cardamom		
	Average monthly earnings Rs.	Average daily earnings Rs.	Absenteeism	Average monthly earnings Rs.	Average daily earnings Rs.	Absenteeism	Average monthly earnings Rs.	Average daily earnings Rs.	Absenteeism
1	2	3	4	5	6	7	8	9	10
Garden Labour Men	68	2.67	22%	81	3.06	17%	60	2.36	21%
Women	60	2.43		71	2.74		42	1.76	
Minors	41	1.56		38	1.48		31	1.42	
Outside Labour Men	63	2.47	16%	74	2.93	16%	48	1.91	13%
Women	56	2.18		63	2.42		43	1.83	
Minors	40	1.50		38	1.30		23	0.93	

APPENDIX V  
Annual Statistics relations to strikes and lockouts in Kerala during 1967

Serial number	Industry	By causes							Details of work stoppages		
		Total No. of disputes	Wages and allowances	Bonus	Working condition	Retrenchment	Others	No. of workers normally employed	No. of workers affected	Total No. of mandays lost	
1	2	3	4	5	6	7	8	9	10	11	
1	Plantation	..	22	8	..	1	15	10150	8332	74731	
2	Textiles	..	7	3	1	..	21	11933	6679	94033	
3	Coir	..	4	..	1	..	..	405	354	12724	
4	Saw Mills	..	5	..	2	..	10	1217	1085	16050	
5	Tiles	..	10	4	2	..	8	3827	2887	37986	
6	Cashew	..	9	..	1	..	1	67717	66765	1528950	
7	Others	..	113	14	3	3	57	73435	66512	645512	
	Total	..	170	29	10	4	92	168684	152614	2409986	



Serial number	Industry	Result			Method of settlement							No. of strikes continuing at the end of the year 1967
		Successful	Partially successful	Unsuccessful	Indefinite	Mediation	Conciliation	Adjudication	Direct negotiation	Others	No. of token strikes	
		12	13	14	15	16	17	18	19	20	21	22
1	Plantation	28	7	1	..	7	11	..	16	2	8	2
2	Textiles	16	8	1	..	3	16	..	6	..	6	1
3	Coir	3	2	..	..	1	2	..	2	..	..	..
4	Saw Mills	10	2	..	1	4	5	1	3	..	3	1
5	Tiles	10	8	1	..	3	9	..	4	3	3	2
6	Cashew	7	4	..	..	3	6	..	2	..	..	..
7	Others	115	26	4	4	33	77	..	29	10	17	4
	Total	189	57	7	5	54	126	1	62	15	37	10

Statement of area and production of tea and human labour employed in registered Tea estates during the calendar year ending 31st December \* 1965

Name of District	No. of plantations during the year	Total planted area as on the 31st December of last year (as per previous year's statement) Hect.	Permissible extension on virgin soil (Hect.)	Permissible replacement on Virgin Soil under		Report on Tea areas from 1st January to 31st December variation in the planted area during the year					Total planted area at the end of the year (Hect.)	Area lying fallow during the year (Hect.)	
				Section 12 (2)	Section 15	Increase due to		Decrease due to					
						Replanting on unrooted areas (Hect.)	Abandoned areas reclaimed (Hect.)	Total area acquired requisitioned or wholly in capable 12 (2) (Hect.)	Replacement under section 12 (2) Hect.	Replanting (Hect.)			Tea areas uprooted for
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Trivandrum	6	1041	..	..	..	..	12	..	..	..	..	1053	..
Quilon	21†	2863	..	..	..	..	106	..	..	..	..	2966	..
Kottayam	2370*	29078	62	..	..	..	..	..	33	38	302	28827	222
Ernakulam	4	120	..	..	..	..	26	..	..	..	19	127	..
Trichur	1	420	33	..	..	..	..	..	..	..	..	453	..
Palghat	4	570	2	..	..	..	..	..	..	..	..	572	..
Kozhikode	21	3987	13	..	..	..	308	..	..	..	..	4310	..
Cannanore	10	1563	..	..	..	..	54	..	..	..	126	1491	..
Total	2457	39642	110	..	..	70	505	8	33	38	450	39799	231

\* Including 2221 registered small estates.  
† Large estates only.



Statement of area and production of tea and human labour employed in registered Tea estates during the calendar year ending 31st December \*1965—(cont.)

Name of District	Area in the occupation of planters but not under cultivation (Hect.)					Total area of plantation (Columns 13+14+15)	Area plucked during the year (Hect.)		Area not plucked during the year (Hect.)		Production						Average No. of persons employed during the year									
	15		16		17		18		Quantity of Manufactured Tea (M. tonnes)			Garden Labour			Outside Labour											
	Area in the occupation of planters but not under cultivation (Hect.)		Total area of plantation (Columns 13+14+15)		Area plucked during the year (Hect.)		Area not plucked during the year (Hect.)		March of the succeeding year (Hect.)			Black			Green			Total			In field			In factory		
Trivandrum	797	1850	1049	4	1053	1002	1002	1896	176	47	7	1002	1896	176	47	7	1002	1896	176	47	7	1002	1896	176	47	7
Quilon	5015	7989	2904	62	2966	2924	2924	4484	290	1037	25	2924	4484	290	1037	25	2924	4484	290	1037	25	2924	4484	290	1037	25
Kottayam	21270	50319	26483	2344	28827	30585	30585	52239	3840	4470	149	30585	52239	3840	4470	149	30585	52239	3840	4470	149	30585	52239	3840	4470	149
Ernakulam	105	232	127	..	127	77	77	91	10	11	..	77	91	10	11	..	77	91	10	11	..	77	91	10	11	..
Trichur	408	861	398	55	453	883	883	1175	52	..	..	883	1175	52	..	..	883	1175	52	..	..	883	1175	52	..	..
Palghat	1934	2506	570	2	572	830	830	1215	87	438	43	830	1215	87	438	43	830	1215	87	438	43	830	1215	87	438	43
Kozhikode	11205	15516	4255	55	4310	6478	6478	8184	607	2129	193	6478	8184	607	2129	193	6478	8184	607	2129	193	6478	8184	607	2129	193
Cannanore	2234	3725	1491	..	1491	1351	1351	1602	141	587	30	1351	1602	141	587	30	1351	1602	141	587	30	1351	1602	141	587	30
Total	42968	82998	37277	2522	39799	44130	44130	70886	5203	8719	447	44130	70886	5203	8719	447	44130	70886	5203	8719	447	44130	70886	5203	8719	447

### III. Mechanical Tabulation Unit

The Mechanical Tabulation Unit of this Bureau continued to function as a medium for doing mechanically such items of work as punching, sorting and tabulating the data received from technical sections: There are two types of Machines in the Unit.

1. 40 col. M.T. Unit.—The unit consists of the following :

Hand punches	..	2
Hand verifiers	..	2
Automatic key punch	..	1
Sorter	..	1
Tabulator	..	1

#### Staff

Supervisor on Rs. 190-300	..	1
Punch Card Operators on Rs. 80-160	..	6

The unit is attending to the tabulation of data on vital statistics. Cards in respect of the coded schedules of birth and death are being punched, verified, sorted and tabulated.

Detailed statements of birth, death, infant death, still birth and maternal death for the Annual Vital Statistics Bulletin for 1966 were prepared and presented.

This Bureau has also participated in the seminar on centralised mechanical computation of Vital Statistics held at Hyderabad organized by the Registrar General, Government of India from 9-11th August 1967.

2. 80 col. M.T. Unit.—The Electronic Multiplier and Presensing Gang Punch of the unit was installed on 3rd May 1967. The Supervisor in charge of the unit was sent for training on Electronic Multiplier and Presensing Gang Punch, for a period from 29th May 1967 to 9th June 1967, at the training centre of the International Computers and Tabulators (India) Private Ltd., at Bombay as per G.O. Rt. 127/Plg., dated 24th May 1967.

The Supervisor of the 40 col. unit was in charge of the 80 col. units till 29th July 1967 when an additional post of a Supervisor for the new 80 col. unit was sanctioned by Government as per G.O. Rt. 198/67/Plg. dated 29th July 1967.

In addition to the 7 operators (2 U.D. and 5 L.D.) available for the unit, three more compilers were posted to the unit. Thus there are 10 operators and one Supervisor for the unit.



The unit consisted of the following machines.

1. Programme Board punches	..	4 Nos.
2. Programme Board verifiers	..	3 ,,
3. Sorter	..	1 No.
4. Reproducer	..	1 ,,
5. Tabulator	..	1 ,,
6. Electronic Multiplier with presensing gang punch	..	1 ,,

The schedules under the following surveys work taken up for tabulation in this unit.

1. N.S.S. 18th round schedule 12
2. Family budget survey
3. Land reforms survey
4. N.S.S. 15th round schedule 10
5. N.S.S. 20th round schedule 10
6. N.S.S. 19th round schedule 0·1 and 0·2

The tabulation of items 1 to 4 has been completed and tables presented. The punching and verification of cards in respect of the remaining items were also completed. The punching in respect of N.S.S. 20th round schedule was also commenced.

#### IV. Other items under Official Statistics

The following items of work were also attended to by the Department during the year under report.

1. Collection of educational statistics and health statistics from the concerned department.
2. Collected data on road mileage and expenditure statistics pertaining to P.W.D., Forest Department, Kerala State Electricity Board, Municipalities and Panchayats for the year 1964-65 and 1965-66 for transmission to Government of India.
3. Collected statistics relating to Municipal Finances of the State for the years 1961-62 to 1965-66. The information covers items like medical institutions, water supply sources, literacy facility, housing facilities and requirements, sources of income and items of expenditure, employment particulars etc., of all municipalities in the State.
4. Collected statistics on cinema and entertainment tax from Panchayats and Municipalities.

## CHAPTER V

### VITAL STATISTICS AND DEMOGRAPHIC RESEARCH UNIT

#### I. Vital Statistics

The Bureau of Economics and Statistics is responsible for the collection, compilation, analysis and publication of reports of vital statistics of the State.

2. *Sources of data.*—The registration work in the rural areas of erstwhile Travancore-Cochin area is attended to by the staff of the Health Department. Village Officers of the Revenue Department are responsible for this work in the rural areas of Malabar region. The Municipal/Corporation Health Staff carry out the registration work in Municipalities and Corporations. The Taluk Registrars (Tahsildars in Malabar and Medical Officers of Primary Health Centre in Travancore-Cochin rural areas) collect the filled-in birth and death report cards and pass them on to the Bureau every month. The responsibility of transmission of filled-in cards rests with the Commissioner as regards Municipalities and Corporations. The periodicity of transmission of cards relating to Corporations and Municipalities having a population of above 30,000 is one week. To facilitate speedy flow of returns the department has introduced “service unpaid system” in 1964 and the system is still in operation.

3. *Processing of data.*—The collected data are coded and passed on to the 40 column mechanical tabulation unit supplied by the Registrar General of India.

4. *Reports published.*—During the year under reference Annual Vital Statistics bulletin for 1966 was released. The bulletin includes the statement noted below:—

- (i) Statements of births, still-births, deaths, infant deaths and maternal deaths and their rates for 1966.
- (ii) Infant death in Kerala by age and sex.
- (iii) Live-birth, still-birth, all deaths, infant deaths, maternal deaths for 16 Municipalities having a population of 30,000 and above.
- (iv) Live-births, deaths, infant deaths, still-birth and maternal deaths in the 16 Municipalities.
- (v) Live-births, all deaths, infant deaths, still-birth and maternal deaths in the 16 Municipalities.
- (vi) Month-wise distribution of live-births.
- (vii) Month-wise distribution of live-births in 29 Municipalities.
- (viii) Month-wise distribution of death.



- (ix) Month-wise distribution of infant deaths.
- (x) Age-wise distribution of infant deaths.
- (xi) (a) Death from specific diseases.
- (b) Still births.
- (xii) Death by cause.
- (xiii) Sex-ratio at birth (District-wise)
- (xiv) Death classified according to age—District-wise, Sex-wise.
- (xv) Birth by religion—District-wise.
- (xvi) Death by religion—District-wise.
- (xvii) Birth by religion in 29 municipalities.
- (xviii) Death by religion in 29 municipalities.
- (xix) Death month-wise in 29 municipalities.
- (xx) Infant death—month-wise in 29 municipalities.
- (xxi) Death by age and sex in 29 municipalities.
- (xxii) Order of birth by age-group of mothers—State—rural and urban.
- (xxiii) Average number of children born to mothers of different age-groups for the State—rural and urban.
- (xxiv) Order of birth by age of mother for each town/corporation.
- (xxv) Average number of children born to mother of different age-groups in the 29 municipalities.
- (xxvi) Taluk-wise figures of births, deaths, still birth, infant death and their rates.

5. *Periodical statements.*—There are 9 outgoing periodicals including daily, weekly, monthly and annual statements including a weekly telegram. The following are the periodicals:—

- (i) Daily report of epidemic diseases.
- (ii) Weekly report of epidemic diseases.
- (iii) Weekly telegram on epidemic diseases.
- (iv) Weekly statement of death due to communicable diseases relating to towns having a population of 30,000 and over.
- (v) Weekly report of birth, death relating to the towns mentioned in item (4).
- (vi) Weekly statement of notified diseases (district-wise).
- (vii) Monthly statement of vital statistics.
- (viii) Annual statement of births and deaths.
- (ix) Annual statement of vaccination and inoculation.

The periodicals are due to Director of Health Services, New Delhi, Registrar-General of India, Director of Health Services, Trivandrum, Superintendent of Government Presses (for publication in Government Gazette), District Medical Officers and Municipal/Corporation Commissioners.

A statement giving district-wise figures of births, deaths, infant deaths, still birth and maternal deaths and their rates for 1966 is appended. It may be remarked here that the registered figures are incomplete and do not give an exact idea of the vital situation in the State. The birth and death rates estimated from sample registration scheme are 38 and 10 nearly as against the rates of 22.5 and 5.4 nearly from normal registration. Based on the events detected as not registered and adjusting the registered rates by these estimates of under-registration it is seen that the birth and death rates stand at 42 and 12 per 1,000 respectively. It is therefore necessary to have other methods of estimating the birth and death rates and getting reliable statistics on births and deaths in their various break-ups.



TABLE I  
Statement of Births, Still Births, Deaths, Infant Deaths, Maternal Deaths and their rates  
for the year 1966 obtained through registration

District	Mid year population	Live Births			Still Births		
		Number	Rate		Number	Rate	
			1965	1966		1965	1966
1	2	3	4	5	6	7	8
State							
Rural	19014308	428207	22.32	22.52	3292	8.53	7.68
Urban	17193357	313750	18.65	18.25	829	3.84	2.63
	1820951	114457	56.90	62.85	2463	22.77	21.07
Trivandrum							
Rural	1962306	43545	20.25	22.19	396	7.66	9.01
Urban	1644952	21049	13.74	12.79	60	2.89	2.84
	317354	22496	54.02	70.88	336	13.88	14.72
Quilon							
Rural	2183558	50967	24.31	23.34	518	11.89	10.06
Urban	2081178	41558	20.66	19.97	247	6.99	5.91
	102380	9409	98.46	91.90	271	37.60	28.00
Alleppey							
Rural	2037856	45208	21.57	22.19	398	5.97	8.72
Urban	1747401	31018	18.37	17.75	64	2.07	2.06
	289955	14190	40.89	48.94	334	16.37	28.00
Kottayam							
Rural	1949200	47835	24.63	24.54	379	6.03	7.86
Urban	1805293	38267	23.00	21.19	164	5.41	4.27
	143907	9568	45.16	66.49	215	9.97	21.97

TABLE I—(cont.)

District	Deaths			Infant Deaths			Maternal Deaths		
	Number	Rate		Number	Rate		Number	Rate	
		1965	1966		1965	1966		1965	1966
State	9	10	11	12	13	14	15	16	17
..	102243	5.25	4.38	11138	27.28	26.01	564	1.21	1.31
..	76007	4.55	4.42	7895	28.29	25.16	388	1.37	1.23
..	26238	11.90	14.41	3243	24.18	28.33	176	0.72	1.53
Trivandrum	11005	4.38	5.61	1302	26.82	29.90	48	0.91	1.09
..	5130	3.23	3.12	524	27.67	24.89	19	1.58	0.90
..	5875	10.35	18.51	778	25.70	34.58	29	0.11	1.27
Quilon	9683	4.99	4.43	1046	24.02	20.52	47	1.11	0.91
..	8247	4.55	3.96	883	25.67	21.25	36	1.21	0.86
..	1436	13.92	14.03	163	16.93	17.32	11	0.69	1.14
Alleppey	11746	5.80	5.76	952	21.75	21.06	88	1.02	0.83
..	8951	5.41	5.12	696	23.98	22.44	26	1.24	0.84
..	2795	8.14	9.64	256	14.69	18.04	12	0.52	0.83
Kottayam	9669	4.96	4.96	1276	30.55	26.67	88	1.36	0.78
..	7576	4.66	4.20	1100	32.01	38.74	32	1.50	0.85
..	2098	11.10	14.54	176	21.23	18.39	6	0.47	0.01



TABLE I—(cont.)

District	Mid year population	Live Births			Still Births		
		Number	Rate		Number	Rate	
			1965	1966		1965	1966
1	2	3	4	5	6	7	8
Ernakulam	2092092	50301	24.76	24.04	578	10.28	11.36
Rural	1735534	32729	19.75	18.86	103	4.01	3.14
Urban	356558	17572	49.11	49.28	475	22.31	26.32
Trichur	1844571	36888	16.67	19.73	273	3.57	7.45
Rural	1718994	24149	12.65	14.05	40	1.64	1.65
Urban	125577	12339	71.79	97.46	233	8.21	18.68
Palghat	1993791	34088	18.30	17.05	89	2.87	2.60
Rural	1881721	28149	16.70	14.96	31	1.56	1.10
Urban	117070	5939	44.02	50.73	58	10.79	9.67
Kozhikode	2943901	65088	22.21	22.11	439	12.44	6.70
Rural	2677958	49050	17.04	18.32	26	4.04	0.58
Urban	265943	16038	74.35	60.31	413	31.30	25.11
Cannanore	2002533	54787	27.49	27.36	222	10.29	4.04
Rural	1900326	47781	25.50	25.14	94	3.45	1.96
Urban	102207	7006	64.42	68.54	128	57.92	17.94

TABLE I—(cont.)

District	Deaths			Infant Deaths			Maternal Deaths		
	Number	Rate		Number	Rate		Number	Rate	
		1965	1966		1965	1966		1965	1966
	9	10	11	12	13	14	15	16	17
Ernakulam	9919	24.36	4.74	1127	20.75	22.41	58	0.34	1.14
Rural	6554	4.23	3.78	729	24.13	22.58	36	1.16	1.10
Urban	3365	8.52	9.44	388	14.13	22.08	22	0.23	1.22
Trichur	6683	3.44	2.60	733	21.60	20.14	333	0.56	0.90
Rural	4730	2.70	2.75	595	24.96	24.64	23	0.66	0.95
Urban	1903	13.56	15.15	138	18.50	11.27	10	0.34	0.81
Palghat	11207	5.85	5.61	1151	23.67	33.76	61	1.73	1.78
Rural	9361	5.37	4.97	884	33.50	31.40	54	1.72	1.81
Urban	1846	13.56	15.77	267	34.71	44.96	10	1.76	1.67
Kozhikode	18312	5.59	6.22	2000	31.84	30.73	148	1.68	2.26
Rural	13539	4.32	5.06	1223	28.89	24.93	93	1.70	1.89
Urban	4773	18.28	17.95	777	38.67	48.45	55	1.65	3.34
Cannanore	14071	6.86	7.03	1551	32.04	28.91	93	1.31	1.62
Rural	11919	6.27	6.27	1251	31.07	26.18	72	1.30	1.50
Urban	12152	17.67	21.05	300	39.12	42.62	21	1.32	2.91

\* The rates have been found to be grossly deficient. The actual rates of birth and death might be around 42 per 1000 and 12 per 1000 respectively as found by estimating under-registration through spot-checks conducted by the field-staff.



## II. Improvement of Vital Statistics (Schemes sponsored by Registrar-General of India)

The schemes noted below sponsored by the Registrar-General for Improvement of Vital Statistics were continued during 1967-68 also.

1. Sample Registrations.
2. Strengthening of Vital Statistics Organisation at the Headquarters.
3. Strengthening of District Statistical Offices.
4. Strengthening of Statistical Units in Municipalities.
5. Model Registration in Rural Health Centres.
6. Setting up of Mechanical Tabulation Unit.

The expenditure under these schemes is shared by the Central Government and State Government in a 3 : 1 ratio except for item 5 which does not incur any expenditure. When the schemes for improvement of Vital statistics were implemented the original staff of one Research Assistant and 4 Compilers who were working in the Vital Statistics section were allowed to continue.

1. *Sample Registration* :—(Report elsewhere).

2. *Strengthening of Vital Statistics Organisation in the Headquarters*.—

The staff pattern is given below :

1. Deputy Director	..	1
2. Assistant Director (Nosology)	..	1
3. Research Officer	..	1
4. Research Assistant	..	1
5. M. T. Supervisor	..	1
6. Accountant (L.D.)	..	1
7. Typist (L.D.)	..	1
8. Clerk (L.D.)	..	1
9. Punch Card Operators	..	6

Compilation, processing analysis of data, preparation of reports, etc., are attended to by the Staff.

3. *Strengthening of District Statistical Offices*.—Under the scheme one Senior Research Assistant and one L.D. Compiler had been posted in each District. They attend to the timely flow of returns from Taluk Registrars to the headquarters. The Senior Research Assistant supervises the work of the statistical staff posted in the municipalities of the District. One of the important items of the work of the Senior Research Assistant is to carry out effective spot checks in selected areas to spot out unregistered events and make arrangements to get them registered. The District Statistical Officer, Senior Research Assistant, Research Assistants and U.D. Compilers in municipalities are also the Checking Officers of registration of birth and death.

4. *Strengthening of Vital Statistical Unit in Municipalities.*—The Scheme is introduced with a view to stimulate registration of vital events especially those occur in urban areas. Expenditure for the scheme is shared by Central and State Government in 3 : 1 ratio. Under the schemes statistical staff had been posted in 2 Corporations and 29 Municipalities.

5. *Model Registration.*—(Report elsewhere).

6. *Mechanical Tabulation Unit.*—Report elsewhere.

### III. Methods of improvement of registration

1. *Inter Departmental Committee.*—The Inter Departmental Committee for improvement of registration of Vital Statistics Registration continued functioning during the year under reference also. It had its 4th meeting on 10th January 1968.

2. *Publicity.*—Department launched various publicity measures to give stimulus to registration of birth and death. Notices and pamphlets were distributed to the public through the statistical and registering staff. A film 'Vital records stressing the need and importance of registration, had been exhibited in various theatres of the State. Slides as in the case of previous year were shown in the theatres of many of the municipalities. Radio speeches were broadcast by the Deputy Director Dr. R. S. Kurup explaining the vital role of registration machinery in a developing economy. Certain other items of publicity measures which incur financial commitments are yet to be experimented.

3. *Training.*—The training of primary reporters and notifiers was completed in the State except in Cannanore District, where it is now being done by the Deputy Director himself. A State Training Officer appointed by transferring a Tabulation Officer from the Census Department trained the Senior Research Assistants who in turn trained both categories of staff. The training included a discussion on rules and regulations governing registration besides stressing the need for the same as well as the concepts and definitions involved in Vital Statistics.

### IV. Sample Registration

The Scheme of Sample Registration for registering births and deaths on a sample basis was introduced in Kerala as a pilot study during 1964–65. The pilot study started in 20 rural samples was completed by February 1965 and the pilot study in 5 urban samples was completed by December 1965. The results of the pilot study showed that there was much scope for arriving at reliable estimates of birth and death rates through sample registration. Therefore it was decided to launch full scale scheme in 150 rural samples, selecting sample villages at random after stratification. The scheme is to continue for a period of five years.



The full scale scheme commenced on 1st July 1965 in 150 rural samples.

According to the recommendations of the inter-State conference on Sample Registration held at Trivandrum in 1965 it was decided to conduct another pilot study in the ten urban samples because the feasibility of collection of information on vital events in urban areas through the informant system was not found to be satisfactory according to the experience gained in the first pilot survey. An innovation introduced in this pilot survey is to conduct sample registration in two big samples with a population of nearly 8000, by employing full time enumerators. Also a full time supervisor has been appointed for four urban samples instead of part-time supervisors in the case of other samples. The two samples with full time enumerators are Alleppey urban sample and Sherthallai urban sample. The full time enumerators and the full time supervisor are Assistant Compilers of the Census Department deputed for this work. This pilot study in the urban samples was started on 1st July 1965 and ended on 30th June 1966.

*Objects.*—The pilot study conducted in 1964–65 revealed that there was gross under-registration in the existing system of normal registration of vital events. Therefore the full scale scheme of sample registration was launched to find out suitable methods for improving normal registration and for estimating the birth and death rates with reasonable accuracy.

*Field agency and remuneration.*—Mostly primary school teachers are appointed as part-time enumerators—one for each sample. In places where primary school teachers are not available the work is entrusted with such willing persons as Panchayat Assistants, Estate Conductors, etc.

For the two big urban samples of the urban pilot scheme Assistant Compilers deputed from the Census Department were posted as full-time enumerators.

The part-time enumerators were paid a remuneration of Rs. 15 or Rs. 20 per mensem according as the population was 2000 or more. An additional allowance of Rs. 5 is being paid to those enumerators working in the hill tract and water logged areas.

*Supervision.*—The work is under overall supervision by the Deputy Director (Vital Statistics). He is assisted by two Chief Supervisors. The Chief Supervisor attached to the Head Office is in charge of the 77 rural samples and the urban samples of the Travancore-Cochin area. The Chief Supervisor, Palghat is supervising the work in the 73 rural samples and the urban samples in Malabar area. Besides the District Statistical Officers and the Senior Research Assistants conduct inspection at district level. One local Supervisor is appointed for each sample from the category of Statistical Inspectors, Research Assistants, Junior



Statistical Inspectors, etc., who conduct regular inspection and conduct half-yearly surveys.

*Training to Enumerators and Supervisors.*—The enumerators and Supervisors were given training at District headquarters before the starting of the survey in 1965. A refresher training was conducted for the enumerators in 1967. The Supervisors are given training before the commencement of each half-yearly survey.

*Progress of work.*—The enumerators do continuous registration of births and deaths. They get information about the occurrence of vital events mostly from informants selected for the purpose. The enumerators also conduct house visits to know about births and deaths. All events are registered by contacting the concerned households. The enumerators send monthly reports to the State Headquarters including details of all events registered by them in the birth and death registers during the month. Half-yearly surveys are conducted once in six months. In every seventh month the Supervisor of each sample visits each house in the sample and enumerates all births and deaths which took place during the preceding six months. Two such half-yearly surveys were conducted in 1967-68.

*Intensive Enquiry.*—As soon as the third half-yearly survey was completed an intensive enquiry was conducted in three samples by the Deputy Director (Vital Statistics), the Chief Supervisor, Trivandrum and the Chief Supervisor, Palghat—one sample was taken up by each of the above Officers. From that enquiry it was brought to light that the half-yearly surveys are not perfect. To make sure of the completeness of data collected through the IV Half-yearly Survey, an intensive enquiry in a large number of samples was made during the month of October 1967.

*Informant system.*—The informant system was introduced in Sample Registration to assist the enumerators in getting information about the occurrence of events. Another object is to study whether this system can help to improve normal registration if the same is introduced. Usually persons who know about birth and deaths in a village by virtue of their occupation are selected as informants.

*Growth of population.*—The total population of rural Kerala as on 1st July 1965 (i.e., the date of commencement of the scheme) was 16065,446 according to the base line survey. The population increased to 16,682,413 in the first one year showing an increase of 3.8 per cent. But the natural growth (difference between birth and death rates) is only 2.8 per cent for that period. During the second year of the survey the population has increased to 17,095,734 recording an increase of 2.5 per cent against a natural growth of 2.4 per cent.

Among the natural regions the maximum growth rate of 2.9 per cent is seen in the high land stratum during the year 1966-67 followed



by the low land stratum (2.7 per cent) and the mid land stratum (2.3 per cent).

The rate of natural increase for the State as a whole is 2.4 per cent during 1966-67. The rate varies slightly amongst the three regions—low land 2.3 per cent, midland 2.5 per cent and high land 2.4 per cent.

*Birth and death rates:*—The following table gives provisional figures of birth and death rates for the second year of the survey (*i. e.*, from July 1966 to June 1967) as estimated from Sample Registration. The rates will be finalised after reconciling the data with the figures compiled by the Registrar-General from the copies of monthly and half-yearly survey reports.

Serial number	Natural region	Population stratum	Stratum No.	Birth rate per 1000 population	Death rate per 1000 population
1	Low land	Below 500	A	26.40	13.98
2	Do.	500—999	B	30.06	7.84
3	Do.	1000—1999	C	33.91	9.52
4	Do.	2000 and above	D	33.18	9.72
5	Midland	Below 500	A	28.74	11.50
6	Do.	500—999	B	35.20	8.47
7	Do.	1000—1999	C	33.61	9.61
8	Do.	2000 and above	D	34.37	9.54
9	High land	Below 500	A	..	..
10	Do.	500—999	B	37.67	17.89
11	Do.	1000—1999	C	40.61	11.98
12	Do.	2000 and above	D	35.46	11.50
13	State (all States)	..	..	34.21	9.88

#### V. Strengthening of Vital Statistics Units in Corporation and Municipalities

The scheme of strengthening the Vital Statistics Units in Corporations/ Municipalities was implemented with effect from the 1st of March of 1966 as per G.O. (MS) No. 55/65/Plg., dated 30th August 1965. According to the scheme, the Corporations/Municipalities with

a population of above one lakh was included in category I and thus the following Corporations/Municipalities were selected under the scheme:

- |                           |                              |
|---------------------------|------------------------------|
| 1. Trivandrum Corporation | 4. Alleppey Municipality     |
| 2. Calicut Corporation    | 5. Mattancherry Municipality |
| 3. Quilon Municipality    | 6. Ernakulam Municipality    |

The posts of one Deputy Health Officer, one Research Assistant, one U.D. Compiler and one L.D. Compiler were sanctioned in each of the above Corporations and Municipalities.

In the II category Municipalities with a population between 30,000 and 1 lakh were included and one U.D. Compiler each was posted in the following Municipalities.—

- |                   |                |
|-------------------|----------------|
| 1. Kayamkulam     | 6. Trichur     |
| 2. Sherthalai     | 7. Palghat     |
| 3. Changanacherry | 8. Badagara    |
| 4. Kottayam       | 9. Tellicherry |
| 5. Fort Cochin    | 10. Cannanore  |

The posts of Deputy Health Officers sanctioned in the G.O. in the first category of Corporations/Municipalities have not so far been filled owing to administrative delay.

Since the implementation of the scheme, one Corporation was formed constituting the three Municipalities of Ernakulam Mattancherry and Fort Cochin. The re-organisation of the staff allotted to the above 3 Municipalities has so far not been brought into effect.

The operation of the scheme of strengthening of Vital Statistics Units in Municipalities/Corporations was extended to 14 other Municipalities and Guruvayoor Township as per the sanction issued in G.O. (Rt) 270/67/Plg., dated 4-11-1967.

The following are the 14 Municipalities where the scheme was implemented.—

- |                            |                  |
|----------------------------|------------------|
| 1. Alwaye                  | 8. Muvattupuzha  |
| 2. Attingal                | 9. Neyyattinkara |
| 3. Chittoor-Thathamangalam | 10. Palai        |
| 4. Irinjalakuda            | 11. Parur        |
| 5. Kasargode               | 12. Perumbavoor  |
| 6. Kunnankulam             | 13. Thiruvalla   |
| 7. Mavelikara              | 14. Vaikom       |

One U.D. Compiler is posted in each Municipality to attend to the Vital Statistics work.

Now the scheme of strengthening of Vital Statistics Units in Corporations/Municipalities is in operation in 28 Municipalities, 2 Corporations and in Guruvayoor Township. Seventy-five per cent of the total cost of the scheme is met by the Government of India.



*Spot checks* :—In order to estimate the extent of under-registration of births and deaths and also to make the people more registration-minded, spot checks have been conducted during 1967-68 by house visits by the staff posted in the towns.

In each town a ward or block was selected for spot checks every month. In the selected ward from the list of households, five households were selected at random and used as the key households and a cluster of 5 households if formed about this household. The particulars collected against each birth or death were verified with the registers, maintained by the registrars. Thus the total number of births and deaths enumerated and registered have been found out and the percentage of under-registration calculated.

$$\begin{array}{l} \text{Percentage of under-} \\ \text{registration of birth} \end{array} \left. \vphantom{\begin{array}{l} \text{Percentage of under-} \\ \text{registration of birth} \end{array}} \right\} \frac{\text{No. of birth not registered} \times 100}{\text{Total No. of birth enumerated}}$$

$$\begin{array}{l} \text{Percentage of under} \\ \text{registration of death} \end{array} \left. \vphantom{\begin{array}{l} \text{Percentage of under} \\ \text{registration of death} \end{array}} \right\} \frac{\text{No. of deaths not registered} \times 100}{\text{Total No. of deaths enumerated}}$$

With a view to getting a better estimate of under registration, the Municipal staff were instructed to enumerate the events occurring in the intervening households also. From the results of spot-checks thus conducted it was possible to locate the wards where there was poor registration.

In the Municipalities where there was an Research Assistant, U.D. and L.D. Compilers 3 wards were selected one each for the Research Assistant, U.D. Compiler and L.D Compiler.

*Residence Rates* :—The birth and death rates experienced by the normally resident population are known as the residence rates. All the births and deaths reported from the hospitals, nursing houses and households need not be pertaining to the normally resident population, but have been registered because the events occurred in the area (de facto registration). Such rate are known as occurrence rates.

To work out the residence rate against each event, the normal residence of the mother (birth) or of the deceased (death) should be available in the register. If so the registered residence rate under normal registration is the number of such events divided by the population of the town/city.

This has to be adjusted for events to normal residents occurring outside town/city and for under-registration. The rates for the various towns are being calculated.

Apart from these, the statistical staff are compiling the weekly births and deaths and sending to this office weekly statements. They are also responsible for the despatch of statements on diseases,

*Model Registration in Primary Health Centres* :—This scheme envisages collection of accurate, reliable and complete data on births and deaths that occur in the selected villages and also to collect correct cause-of-death statistics by a post-mortem enquiry conducted by the para-medical personnel in the Primary Health Centres.

In each Primary Health Centre 3 census villages one in which the headquarters of the Primary Health Centre is located and 2 others where the sub-centres located, have been selected. The work in each village has been entrusted with a field agent, selected from the category Family Planning Field Workers, Basic Health Workers, Mindwives, etc. The field agent will maintain a birth register and a death register for recording the particulars of events. Every month the field agent will send the particulars of events registered by him to the Medical Officer of the Primary Health Centre who in turn will forward them to this office after scrutiny. The Medical Officer/field agent has been entrusted with the work of certifying the cause of death by enquiry with the household members for cases which did not treat. The possible cause of death will be ascertained by enquiry about the symptoms of the disease prior to death and the anatomical site as detailed in instructions approved by the Director-General of Health Services and the Registrar-General of India.

Nine Primary Health Centres were selected under this scheme one in each District.

A scheme to extend the model registration activities in 9 additional centres has been drawn up and the proposal has been forwarded for Government sanction. As soon as the sanction is accorded the scheme will be extended to 18 Primary Health Centres of the State.

## VI. Demographic Research Centre

The Demographic Research Centre in the Bureau of Economics and Statistics, Trivandrum was started in August 1958 for conducting investigations on fertility and mortality and socio-economic factors associated with them. The staff of the centre consists of 1 Assistant Director, 3 Research Officers, 2 Research Assistants, 6 Compilers (U.D.), 1 Draftsman, 1 Clerk, 1 Accountant, 1 Typist and 2 Peons. A brief description of the items of work undertaken during the year under review is given below :

### A. SURVEYS

(i) *Special Demographic Survey (Pilot.)*—The report of the survey was finalised during the period under review. The survey was intended to provide estimates of birth and death rates and to study differential fertility, morbidity and attitude towards family planning. The survey covered 16 villages and 16 wards—eight villages each were selected from Trivandrum and Palghat Districts, 8 wards were selected from



Kozhikode and 4 wards each were selected from Ernakulam and Irinjalakuda Towns. The important findings of the survey are the following :

The birth and death rates obtained in the survey are very low especially in Kozhikode City. The survey was conducted during February–August 1963 and the reference period was the Calendar year 1962. It is to be doubted whether all events which took place during the reference period which was a few months earlier than the survey period, were reported to the enumerators. Migration does not seem to affect the population growth very much. Only in Ernakulam—Irinjalakuda towns total immigration is substantial (18 per cent) in the population of the town.

The study of the differential fertility has shown that Christians have the highest fertility and Hindus have the lowest fertility.

The questions on attitudes and preferences, covered the joint family system, education of daughters, age at marriage of sons and daughters, number of children desired and knowledge and practice of family planning methods. Wide spread preference for joint family system is seen in all centres. The percentage is 62 in Trivandrum and above 90 in other places. Female education is also favoured by more than 60 per cent couples. Preference for early marriages is seen in only very few cases. A substantial percentage prefers late marriages of sons and daughters. Answers, to the question on the number of children desired, were not available in a large number of cases. Among those who have given their views 41 per cent husbands in Trivandrum 20 per cent in Palghat, 40 per cent in Ernakulam—Irinjalakuda and 30 per cent in Kozhikode prefer to have 3 or less children. Only few couples know family planning methods sufficiently well, and even among these who know the methods, only a few practise the methods they know.

(ii) *Study on the effects of marumakkathayam on the fertility pattern of Kerala.*—The report on the study of the effect of marumakkathayam on the fertility pattern of Kerala was issued in two volumes.

## B. ANALYTICAL STUDIES

(i) *Study of the Demographic particulars of sterilised persons.*—Information on the demographic particulars of persons sterilised are being collected every year from the hospital records and analysed. The socio-economic and demographic particulars of sterilised persons were used to study the popularity of the method among different sections of the population and also the qualitative analysis of the operation. The data for 1964–65 were used for district-wise studies. Similar studies were conducted using data for 1965–66. During the periods under review, reports for Quilon and Ernakulam were published.

(ii) *Demographic report for Kerala 1901-61.*—Under the directions of the Demographic Advisory Committee, the preparation of the Demographic report for Kerala 1901-61 was undertaken by the centre. The information available from census reports, birth and death registration and surveys conducted by the Department are used for the preparation of the report. The report was finalised during the year under report.

#### C. STUDIES IN PROGRESS

(i) *Papers in the following topics were being finalised.*—

- (a) Study of fertility in two generations ;
- (b) Social and cultural aspects of the fertility of women in Kerala.
- (c) Some aspects of migration in Kerala.

(ii) *Evaluation of the Family Planning Activities in Perumkadavila Block.*—As a first step in the evaluation of family planning programme, a study was started in Perumkadavila Block in Trivandrum District. The details of sterilisation operations and IUCD insertions were collected from the records of the primary health centre. A household survey also will be started shortly. Approximately 2 per cent of the couples will be covered by the survey. The list of eligible couples is used as the frame for selection. From the list of eligible couples in each Panchayat a 2 per cent sample of couples is selected by systematic sampling. In addition to this a sample of sterilised persons and females who have adopted I.U.C.D. is selected. Those persons will be contacted and details regarding the after-effects of sterilisation and I.U.C.D. insertion if any will be collected.

#### D. SEMINARS AND CONFERENCES

District level Conferences of Panchayat Presidents were held on 28th February 1968 and 30th March 1968 in Trivandrum, on 23rd March 1968 in Trichur, on 24th March 1968 in Ernakulam, and 31st March 1968 in Alleppey. Dr. R. S. Kurup, Deputy Director, addressed these conferences and spoke on the need to control the population growth in the State urgently.

He also addressed a meeting held on 10th February 1961 at Pallichal and a meeting at Puthanthope on 11th February 1968.

The meeting of the State Family Planning Council was held on 18th March 1968. Dr. R. S. Kurup, Deputy Director who is a member of the Council attended the meeting and partook in the discussions.



## E. PUBLICATIONS

1. Report on special demographic survey (March 1968).
2. Study of the effect of Marumakkathayam on the fertility pattern of Kerala—Part I (November 1967) (By G. Surendranathan Nair).
3. Study of the effect of Marumakkathayam on the fertility pattern of Kerala—Part II (May 1968).
4. Demographic particulars of sterilised persons in Ernakulam District 1965–66 (by T. P. Rajagopal and K. K. Sukumaran) (January 1968).
5. Demographic particulars of sterilised persons in Quilon District (1965–66) (By M. Mohemmed Yusuf and A. Shahul Hammeed).
6. Sterilisation operations in Kerala (By Dr. R. S. Kurup—Proceedings of the World Population Conference, Sydney 1967).
7. Impact of population growth on per capita income in India by Dr. R. S. Kurup (published in Kerala Labour and Industrial Review, January 1967).
8. Population, employment and under-employment in Kerala by Dr. R. S. Kurup (published in Kerala, Labour and Industrial, Review April 1967).
9. On response bias in Statistical Surveys by Dr. R. S. Kurup and V. Sankaranarayanan Potti (published in Kerala Labour and Industrial Review January 1968).
10. The need for increased attention to Family Planning in the context of the Economic Development in Kerala State—By Dr. R. S. Kurup (published in the participant Journal, N. Delhi 1968).
11. Demographic report of Kerala 1901–61 draft sent for comments—1968.

## CHAPTER VI

## ADMINISTRATIVE INTELLIGENCE UNIT

## I. Administrative Intelligence

As per G.O. MS. No. 943/62/DD, dated 28th December 1962 the following items of work are being attended to by the Administrative Intelligence Unit of the Bureau :—

1. Conduct of Family Register Survey and preparation of Block Survey Reports.
2. Introduction and maintenance of records, returns and registers for Gramsevaks to collect Community Development Statistics.
3. Preparation of monthly, quarterly and annual (Part I and Part II) Progress Reports.
4. Verification and field checking of data.
5. Choice of progress—Indicators keeping in view of the shifting emphasis of the various aspects of the programme.
6. Assessments of achievements—Physical and financial against targets for the current and cumulative periods under review at Block, District and State levels.
7. Seasonal comparison of achievements in Blocks as well as inter-block comparison of performance.
8. Any other subject included from time to time.

Beyond these items of work, this section has to submit several reports to Government quarterly and annually as follows :—

- (a) Quarterly Progress Reports on C. D. Programme.
- (b) Do. on Rural Man-power Programme
- (c) Do. on Local Development Works.
- (d) Do. Applied Nutrition Programme.
- (e) Do. on special programmes, namely Yuvak and Mahila Mandals, Fisheries Development and Poultry Development Programme.
- (f) Annual Progress Report—Part I
- (g) Annual Progress Report—Part II
- (h) Annual Progress Report on Tribal Development Blocks.

At present the data required for the preparation of these reports are being collected from Community Development Blocks through the



District Statistical Offices. The data received is consolidated and studied in the Bureau before the review for each quarter is prepared.

During this year the following reviews and reported have been prepared and submitted to Government :—

*C. D. Programme.*—The data relating to this have been collected, compiled and consolidated from all the 144 Blocks in the State and progress reports and their reviews have been submitted to Government for the period up to 30th September 1967. Copies of the review are being sent to the Blocks, District Statistical Officers, District Collectors and Heads of Departments.

*Rural Man-power Programme.*—For the Rural Man-power Programme, the primary data have to be collected from 36 selected Blocks. Quarterly reports and their reviews have been submitted to Government for 4 quarters covering the period 1st January 1967 to 31st December 1967. Copies of the review are being sent to the concerned Block Development Officers, District Statistical Officers and District Collectors.

*L. D. Works.*—The data regarding this item also have to be collected from all the 144 Blocks of the State. The reports for 4 quarters covering 1st January 1967 to 31st December 1967 have been submitted to Government.

*A. N. P.*—This item is implemented only in 13 Blocks. Quarterly reports for 4 quarters up to 31st December 1967 have been submitted to Government.

*Special Programme.*—The quarterly reports on special programmes namely Yuvak and Mahila Mandals Programme, Intensive Fisheries Development Programme and Intensive Poultry Development Programme are also prepared in this section. Yuvak and Mahila Mandals Programme pertains to all Blocks except Post Stage II Blocks. Fisheries Development Programme in 10 Blocks and Poultry Development Programme in 2 centres namely Pettah and Muvattupuzha have been implemented. The quarterly reports regarding the above 3 items for 8 quarters, i.e. from 31st March 1966 to 31st December 1967 have been submitted to Government.

*Annual Progress Reports.*—Part I for the year ending March 1967 on C.D. Programme was consolidated and submitted to Government.

*Annual Progress Report.*—Part II for the year ending June 1967 is being finalised for submission to Government.

*Annual Progress Report.*—On Tribal Development Blocks for the year ending March 1967 have also submitted to Government.

Monthly reviews on C.D. Programme prepared by the District Statistical Officers of this Bureau have also been submitted to Government from April 1967 to March 1968. All the reports are being submitted to the Government of India also by the State Government.

## II. Evaluation study on Applied Nutrition Programme

The Applied Nutrition Programme was started in Kerala during the year 1963-64 as subsidiary plan of operations No. 3 to the Master Plan of Operations for an Applied Nutrition Programme in India, In G.O. (MS) 368/64/A and RDD., dated 19th June 1964 Government accorded sanction for the conduct of evaluation studies on ANP in the five Blocks of Trivandrum Rural, Athiyannur, Kottarakkara, Ollukkara and Taliparamba where the programme was introduced in 1963-64. The scheme envisages the pre-action phase, action phase and post-action phase study of the programme.

The pre-action phase study envisages a survey of the existing conditions at the time of opening of the project. The action phase study relates to the survey and study of the implementation of the A.N.P. including its organisational aspect. The post-action phase study envisages the assessment of the impact, the programme is making, in the area of operation.

The study was, at the first, entrusted to the Evaluation Unit attached to the Agriculture and Rural Development Department. The field work of the pre-action phase survey was conducted by the Evaluation Unit in the five A.N.P. Blocks with the assistance of the one Junior Statistical Inspector in each Block. The work relating to the evaluation study was subsequently transferred to the Bureau of Economics and Statistics.

The data collected through the pre-action phase survey was analysed by this Bureau and the reports containing the results and findings of the study in respect of the five A.N.P. Blocks were prepared and forwarded to Government.

The action phase study of the programme was also undertaken by this Bureau in 1967-68. The field work was completed in four Blocks, viz. Trivandrum Rural, Athiyannur, Kottarakkara and Ollukkara during the year under report and the work was in progress in Taliparamba Block.

The tabulation of the data collected through the action phase survey from Trivandrum Rural and Athiyannur Blocks was started with the assistance of the Junior Statistical Inspectors of the concerned Blocks deputed to this office for attending to the above work. Government have been addressed for the deputation of the Junior Statistical Inspectors of the remaining Blocks also to this office for attending to the tabulation of data collected from those Blocks.



The sanctioned strength of the staff under this scheme is as shown below:

<i>Designation of post</i>	<i>Strength</i>
Office:—Research Assistant on Rs. 190-300	1
L. D. Compiler on Rs. 80-160	1
Field :—U.D. Investigator/Junior Statistical Inspectors on Rs. 120-230 (one for each Block)	5

A scheme for conducting an evaluation study in the eight Blocks where the programme was introduced in the year 1966-67 has been proposed to Government.

## CHAPTER VII

### OTHER SAMPLE SURVEYS AND PILOT ENQUIRIES

#### I. National Sample Survey

1. *Organisation.*—The National Sample Survey Organisation of the Government of India which came into existence in 1950 has been conducting sample surveys every year on a nation-wide basis for collecting necessary socio-economic and agricultural data required for planning and other purposes by the Central and State Governments. The State has been participating in the survey on matching basis.

2. *Period of survey.*—The period of one round of the survey is normally one Agricultural year beginning with the first of July and ending with 30th June next. The field work of the 21st round of National Sample Survey was completed by the end of June 1967 and the 22nd round was started on 1st July of 1967. The field work of 22nd round is now in progress and is scheduled to be completed by the 30th June of 1968.

*Subject coverage.*—For each round the subject coverage sample design and tabulation programme are finalised by the Central Statistical Organisation, Government of India. The technical work relating to sample design, preparation of the schedules of enquiry, etc. are done by the Indian Statistical Institute, Calcutta. During the 22nd round of National Sample Survey 360 rural villages and 144 urban blocks have been selected for the collection of socio-economic data in the State Sector. In all the 360 rural villages crop surveys are also conducted besides the socio-economic survey. The data on socio-economic characteristics are collected by the method of personal interview and the data on crop surveys by direct observation in the field.

4. The following schedules are canvassed during the 22nd round of the National Sample Survey in the State Sector:—

<i>Sl. No.</i>	<i>Schedule No.</i>	<i>Description</i>
1	0.1	General Schedule (Listing of households and selection of households).
2	5.0	Land Utilisation Survey
3	5.01	List of plots for the Land Utilisation Survey.
4	5.02	List of households for the L.U.S.
5	5.1	Crop cutting experiments.
6	5.2	Driage experiments.
7	9	Farming practices.
8	12	Population, births and deaths.
9	16	Integrated household survey.

*Urban sample:*

1	0.2	General schedule (listing of households and selection of households)
2	10	Urban labour force.
3	12	Population, births and deaths.
4	16	Integrated household survey.

5. *Sample design (Rural).*—The sample design for the rural sector is a stratified two-stage one in which the first stage units are census villages (1961 census) and they are selected with probability proportional to size. The State has been divided into 15 strata. From each stratum 4 sub-samples of 6 villages each have been selected. The second stage units are households for the socio-economic survey and clusters of plots for the crop survey schedules.

6. *Sample design (Urban).*—The design is a stratified two-stage one where strata are formed on the basis of the populations of towns and cities. The State has been divided into two strata. The first stratum consists of the towns and cities with a population less than 50000. The remaining towns and cities constituted stratum 2. The first stage units are urban blocks which are selected P. P. S. systematically in the form of 4 independent and interpenetrating sub-samples. A total of 144 blocks have been selected for the 22nd round in the State. The second stage units are households which are selected systematically with equal probability. The design is self weighting at the State level.

7. *Staff pattern.*—The staff pattern for the scheme is as follows:—

	<i>Number</i>
Assistant Director on Rs. 350-700	1
Research Officer on Rs. 300-600	1
Scrutiny Officer on Rs. 300-600	4
Research Assistant on Rs. 190-300	2



	<i>Number</i>
Statistical Inspector on Rs. 190-300 ..	8
U.D. Compiler on Rs. 120-230 ..	2
L.D. Compiler on Rs. 80-160 ..	6
L.D. Investigator on Rs. 80-160 ..	33
L.D. Typist on Rs. 80-160 ..	1
Peon on Rs. 60-80 ..	1

8. *Expenditure.*—The budgeted expenditure for the survey for the year 1967-68 is Rs. 2,16,600. 50 per cent of the recurring expenditure for the survey is met by the Government of India.

9. *Tabulation.*—Tabulation and analysis of data collected from State samples of National Sample Survey are being attended to by the Bureau. The tabulation and analysis of data relating to the following schedules were completed during the year under report:—

1. Consumer expenditure ..	17th round
2. Do. ..	18th ,,
3. Employment and unemployment in rural areas ..	16th ,,
4. Urban labour force ..	17th ,,
5. Do. ..	18th ,,

The tables prepared by this Bureau for the State samples in respect of the above item were exchanged with the tables prepared by the Indian Statistical Institute for the Central samples.

The tabulation relating to the following schedules were also taken up during the year under report:—

1. Ownership of land and operational holding ..	17th round
2. Population, births and deaths ..	,,

10. *Reports.*—The following reports were published during the year 1967-68:—

1. Report on employment and unemployment, in rural areas based on the 14th round of N.S.S.
2. Report on the survey to estimate the area under improved agricultural practices in Community Development areas—Kharif 1963-64 (the report is based on a special survey which is not included in the general rounds of the N.S.S.)
3. Report on consumer expenditure in Kerala based on the 14th round of N.S.S.
4. Report on consumer expenditure in Kerala based on the 15th round of N.S.S.
5. Report on consumer expenditure in Kerala based on the 16th round of N.S.S.

} Published in one volume.

## II. Coconut and Arecanut Survey

The field work of the 7th round of the sample survey for the correct estimation of area under and yield of coconuts and arecanuts has been completed by the end of June 1966. The survey was discontinued from July 1966. The analysis work has been completed during 1967-68 and the report for the seventh (last) round of the survey 1965-66 has been published during February 1968.

## III. Wage Structure Survey

During the year under report this Department continued the survey on the collection of wage rates in the sectors of construction, Trade and Commerce in the 17 Municipalities including all District Headquarters and also in 27 Panchayats, at the rate of 3 in each District.

## IV. Evaluation Unit

The State Evaluation Committee constituted as per the G.O. (Ms.) 47/66/Plg., dated 14th October 1966 has been abolished and the functions of the committee have been taken over by the State Planning Board as per G.O. (P) No. 44/67/Plg., dated 7th September 1967. Plan evaluation is now done through the Planning Department of the Secretariat, utilising the services of this Bureau and the concerned departments under the guidance of the concerned member of the State Planning Board [vide G.O. (Ms.) No. 64/67/Plg., dated 25th November 1967].

2. In the G.O. (Ms.) 47/66, dated 14th October 1966 one Deputy Director alone was sanctioned for the Evaluation Unit. The remaining staff for the Unit had to be made available from other sections by suitable redistribution of work. In G.O. (Rt) 71/67/Plg., dated 1st April 1967 one post of Research Assistant and one post of Compiler (L.D.) have been created and in G.O. (Rt.) 332/67/Plg., dated 21st December 1967 one post of Research Assistant one Post of Compiler (L. D ) and one post of Typist (L.D.) have been additionally created. All the above posts sanctioned in 1967-68 have been filled up during the year under reference.

3. *Studies undertaken by the Unit during the year.*—The following new studies have been taken up by the Unit during the year:

1. Study on Improved Agricultural Practices (Autumn crop).
2. Study on Improved Agricultural Practices (Winter and Summer crops)
3. Study on Seed Farms and Seed Distribution Scheme.

The field survey of the above studies have been completed and tabulation and analysis of the data have been in progress.

Two reports, one on the study on Rural Works Programme and another on the study of High Yielding Variety Programme have been



published and the draft report on the survey on the Soil Conservation Programme has been finalised during the reference period (The field survey of these studies was started on 1966-67 and completed in 1967-68).

### V. Study of Resources

The Statistical Unit for resources for planning was sanctioned as per G.O. Rt. No. 40/68/Plg., dated 7th February 1968, to work under the overall control of the Economic Adviser of the State Planning Board. The sanctioned strength of the unit is Research Officer 1, Research Assistants 2, U.D. Compiler 1 and L.D. Compilers 3. The unit was formed, with one Research Officer, 2 Research Assistants and 1 U.D. Compiler, by the middle of March 1968 and work on the estimation of resources for the IV Plan was initiated.

### VI. Family Budget Survey

The analysis of the data relating to the following centres were in progress at the end of the previous financial year:

1. Quilon
2. Kottayam
3. Chalakkudy
4. Munnar
5. Meppady

The analysis work was completed and the report of the Family Budget Survey was completed during the year under report.

### VII. Co-operation

The response from co-operative societies in respect of the studies initiated during the previous year was not good. The data obtained was not sufficient to finalise reports. Hence it was planned that the Evaluation Unit proposed to be set up in the State Planning Board will conduct exhaustive studies in the field of co-operation.

### VIII. Training

The training programme of the Department for the year 1967-68 consisted of two parts (1) Inservice training for the subordinate technical personnel and (2) training of Senior Officers outside the State for the programmes organised by the Government of India and other Institutions.

During the year under report two courses of the Inservice Training were conducted and 55 persons were trained. The following seven Senior Officers were deputed for the training mentioned against them:

1. Sri Kuruvila Mathen, Assistant Director for Fourteenth Senior Officers training course conducted by Central Statistical Organisation.

2. Sri K. Balakumaran Nair, Assistant Director for training on Sociological and Economic problems in the field of Housing at New Delhi from 13th November to 23rd December 1967.

3. Sri N. Gopalakrishnan Nair, Deputy Director for the training in "Manpower Planning" at the Institute of Applied Manpower Research, New Delhi from 20th November 1967 to 2nd December 1967.

4. Sri P. B. Lekshmanan, Research Officer for the training in "Manpower Planning" at the Institute of Applied Manpower Research, New Delhi from 20th November 1967 to 2nd December 1967.

5. Sri A. Shahul Hameed, Senior Research Assistant for "Junior Officers Training Course" conducted by Central Statistical Organisation.

6. Sri M. K. Shanmugham, Research Assistant for 3 months training in "Large Scale Sample Surveys" conducted by Central Statistical Organisation.

7. Sri P. S. Gopinathan Nair, District Statistical Officer for the one year certificate course in Demography at the Demographic Research and Training Centre, Chembur, Bombay.

Sri N. George John, Assistant Director was in charge of the training programme of the Department for the year.

### IX. Employment Division

A draft report of the Employment Survey conducted during the year 1965 and 1966 has been prepared during the end of the previous year. This report was finalised during the year under report and the same was submitted to Government. The item is now under print in the Government Press, Trivandrum.

### X. Manpower Planning Unit

The Manpower Planning Unit, constituted with one Research Officer, two Research Assistants and one Compiler in the Planning Department, was transferred to the Bureau of Economics and Statistics in November 1966. Subsequently the unit was strengthened by one Research Officer, one Research Assistant, one Compiler and one Typist [vide G.O. (Rt.) 195/67/Plg., dated 27th July 1967]. The present staff position is as follows :—

Research Officers	..	2
Research Assistants	..	3
L.D. Compilers	..	2
L.D. Typist	..	1



The unit is functioning under the direct control of the Deputy Director (Econometrics) with the supervision and overall control of the State Manpower Officer.

Consequent on the formation of the State Planning Board, the unit was transferred to the Planning Board and forms part of the Economic Division. The unit attends to the work relating to the manpower problems in the State. It undertakes studies relating to the perspective requirements and availability of key categories of technical and professional manpower. Two studies have been completed and the reports were prepared during the year under review.

(i) *Requirements and availability of Medical and Public Health personnel in Kerala.*—This is the first in the series of studies taken up. The objective of the study was to ascertain the areas of surplus or deficit of medical personnel and to suggest possible remedial measures. The study covers almost all categories of Medical and Public Health personnel in the State. The report attempts to assess the existing levels of medical facilities in Kerala and to project the demand and supply of important categories of Medical and Health personnel over a period of fifteen years. The desirable norms recommended by the Mudalliar and Bhowe Committees have been followed for the study. The main conclusions derived from the study are the following :—

- (1) At the present rate of intake, doctors will be in surplus by 1981.
- (2) While general Nurses will be in deficit, Auxiliary Nurses will be in surplus.
- (3) Whereas there will be deficit in Pharmacists and Laboratory Technicians, there will be surplus in the category of Radiographers and X-ray technicians.

(ii) *Demand and supply of Engineering personnel in Kerala.*—The purpose of the study was to estimate the requirements and availability of graduate Engineers, diploma holders and craftsmen over a period of ten years. Different methods have been used. The stock of Engineering personnel in all sectors of the economy at the end of the Third Plan period has been estimated and future requirements and availability assessed, up to 1975-76. The report throws light on the extent of surplus likely to be generated among engineering personnel in the State.

The following studies are in progress :—

(i) *School enrolment and trained teaching personnel in Kerala.*—The study attempts to project school enrolment up to the year 1976 and to assess the requirements of trained teaching personnel in the State.

(ii) *Study on Agricultural Manpower of the State.*—The study attempts to ascertain the quantitative and qualitative characteristics of

the existing stock of trained agricultural personnel working in the State. Mailed questionnaire method is adopted for the survey. The scrutiny work of the filled in schedules received is in progress.

(iii) *A study on the utilisation pattern of educated persons in Kerala.*—The object of the study is to ascertain the utilisation pattern of educated persons with a view to provide an insight into the employability and pattern of employment of graduates and post-graduates in different faculties and diploma holders in technical subjects. The preliminary work for the collection of data for the survey is in progress.

(iv) *Revision of Fact Book on Manpower.*—The unit has undertaken the work of revision of the Fact Book on Manpower. A few sections have been revised and the work in respect of other sections is in progress.

### XI. Pepper Survey

Survey to estimate area under and production of pepper.

According to G.O. MS. 58/66/Plg., dated 10th November 1966 from the Planning 'C' Department, the survey for collection of data on area under cultivation and production of pepper in Kerala was organised in this department with effect from 10th November 1966. The survey is sponsored by the Institute of Agricultural Research Statistics, New Delhi. The field work is being carried out by this department. The analysis of data and preparation of report will be done by the I.A.R.S. The entire cost of the field work will be borne by the I.A.R.S., New Delhi.

There are two rounds of the survey. The first round of the survey was started on 10th November 1966 and completed on 9th November 1967. The second round of the survey which was started on 10th November 1967 was in progress at the end of the year.

#### STAFF PATTERN

##### Headquarter Staff :

Assistant Director	..	1	(350-700)
Upper Division Clerk	..	1	(120-230)
Peon	..	1	(60-80)

##### Field Staff :

Supervisors	..	3	(300-600)
Investigators	..	20	(80-160)

##### Objects :

The objects of the survey are :

1. To estimate area under cultivation and production of pepper;
2. to collect data on other important features of the crop such as classification by age, variety, fruit bearing capacity, etc.; and
3. to study the cultivation practices followed by the farmers.



*Sampling design* :—The survey covers the entire State except the districts of Trichur and Palghat where area under pepper is very small. The programme during the reference period was to enumerate all the plots in the sample villages and the collection of data on yield and cultivation practices in a sub-sample of villages. For this the districts were grouped into three zones such that the area under pepper in each zone is roughly equal. Within the zone contiguous taluks approximately homogeneous with respect to intensity of pepper cultivation were grouped to form strata. Within the stratum the village was the primary unit of sampling. The total sample size for the survey was 120 villages. The allocation of these sample villages among the strata was made in proportion to the area under pepper in each stratum. Within the stratum the villages were selected at random. All the plots in the sample villages were visited for enumeration of pepper standards. Collection of data on yield and cultivation was confined to a sub-sample of 60 villages selected at random from the 120 villages. 10 plots were selected at random from each of the 60 villages selected for studying cultivation practices of the crop. Collection of data on yield was confined to 5 plots selected at random from the 10 plots selected for studying cultivation practices. In each of the plot selected for harvesting two clusters of three bearing pepper standards were selected at random. The yield of pepper from each of these selected pepper standards was noted by repeated visits by the Investigators. 500 gms. of sample pepper was collected from each plot and sent to the headquarters for drriage experiments. The samples were dried and their weights were noted at the headquarters.

*Progress of work during the reference period* :—During the reference period the field work of the first round was completed. All the filled in schedules of the 1st round were sent to I.A.R.S., New Delhi for analysis. The field work of the second round was started on 10th November 1967. The crop cutting experiments of all the 60 sample villages of the second round were completed by the end of February, 1968. The plot-to-plot enumeration of the 120 sample villages is expected to be completed by the end of October, 1968.

## CHAPTER VII

### PUBLICATIONS

The Publication Section of this Bureau is mainly responsible for the collection, compilation and publication of important statistics relating to the State. Enquiries for Statistical data received from other State Governments, Government of India, Sister Departments and other agencies have been dealt with in this section. The following are the important publications prepared in this section during 1967-68:

## I. Statistical Hand Book of Kerala—1966

This is the third issue of the Annual Series. This publication presents in a condensed form of all important statistical data of current interest relating to the State.

## II. District Statistical Hand Books

District Statistical Hand Book—1966 for the following Districts have been prepared during the period:—

- |              |               |
|--------------|---------------|
| 1. Trichur.  | 3. Ernakulam. |
| 2. Alleppey. | 4. Quilon.    |

This publication will go a long way in filling up the gaps in the availability of district-wise statistical information.

Data for District Statistical Hand Book 1967 are being collected at district level.

## III. Annual Statistical Abstract—1964-65 and 1965-66

Statistical Abstract 1964-65 and 1965-66 have been finalised and sent for printing. The publication gives a broad and detailed picture of the Statistical Information relating to Kerala State on the following topics:—

1. Area.
2. Climate.
3. Agriculture.
4. Livestock and Veterinary Service.
5. Medical and Vital Statistics.
6. Prices.
7. Administration.
8. Transport and Communication.
9. Finance and Planning.
10. Labour and Employment, etc.

All Indian tables on important topics have been included in this abstract.

## IV. Kerala in Maps—1967

This publication is third in a series published by the Bureau presenting the salient features of the Kerala Economy at the end of III Five-Year Plan in a pictorial form. It is under print.

## V. Brochure on Basic Statistics relating to Kerala Economy

This is a first of its kind prepared by this Bureau depicting the picture of the growth of the Kerala Economy during 1956-57 to 1965-66. This was under print at the end of the year.



Reference is made to other ad-hoc publications of the Bureau in various other parts of this report.

The graphic unit attached to this Section has been rendering in addition to the work in the Department, assistance to the Planning Department, Board of Revenue (Taxes) and the O and M Division of the Secretariat.

### VI. Other publications

1. Working Class Family Budget Survey in Kerala—1965-66.
2. Land Reforms Survey in Kerala—1966-67.
3. Industrial undertakings in Kerala State (Owned, managed and with shares by the Government of Kerala)—1962-63.
4. An Economic and Functional classification of the Kerala Government—Budgets 1963-64 to 1967-68.
5. Season and Crop Report for Kerala State—1965-66.
6. Report on the Crop Cutting Survey on Autumn Crop of paddy 1967.
7. Report on the Crop Cutting Survey on Winter and Summer crop of paddy—1967.
8. Agricultural Statistics—Kerala—1966-67.
9. Consolidated results of crop estimation surveys on paddy and tapioca—1965-66.
10. Consolidated results of crop estimation surveys on paddy and tapioca—1966-67.
11. N.S.S. Report No. 5—Report on Employment and Unemployment in rural areas (July 1958 to June 1959).
12. National Sample Survey Report No. 6—Report on the Survey to estimate the area under Improved Agricultural practices in Community Development Areas—Kharif—1963-64.
13. N.S.S. Report No. 7—Report on Consumer Expenditure in Kerala based on the 14th, 15th and 16th rounds of National Sample Survey.
14. N.S.S. Report No. 8—Report on the Consumer Expenditure in Kerala based on the 17th round of National Sample Survey (September 1961 to July 1962).
15. N.S.S. Report No. 9—Report on the Survey to estimate the area under Improved Agricultural Practices in Community Development Areas—Rabi—1963-64.
16. Working Force Estimates—Kerala 1951 and 1961.

(Sd.)

*Director, Bureau of Economics and  
Statistics, Trivandrum.*

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