# ADMINISTRATION REPORT
## OF THE
# STATISTICS DEPARTMENT

**FOR THE YEAR 1960-61**

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# ADMINISTRATION REPORT
OF THE
# STATISTICS DEPARTMENT

## FOR THE YEAR 1960-61

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## PLANNING (C) DEPARTMENT

**No. G.O. (Rt.) 50/62/Plg., dated 8th February 1962**

*Abstract.*—Statistics Department—Administration Report for 1960-61 —Reviewed.

*Read* :—Letter No. M1-13357/61/SD, dated 30th November 1961 from the Director of Statistics.

### ORDER

1. Recorded.

2. The Department of Statistics continued to be the Central Agency for the systematic collection, compilation, analysis and objective interpretation of all statistics relating to the State.

3. The Head of the Department is the Director of Statistics. Sri N. Gopalakrishnan Nair, Assistant Director was in additional charge of the post of Director of Statistics till 20th June 1960 afternoon. From 21st June 1960 forenoon to 3rd January 1961 afternoon Sri K. C. Cheriyan, Assistant Director was in additional charge of the post. From 4th January 1961 forenoon Sri N. Gopalakrishnan Nair was again in additional charge of the post of the Director.

4. The Director of Statistics was assisted by the Assistant Directors, Research Officers, Analysts and Compilers in the office and by the District Statistical Officers, Statistical Inspectors and Investigators in the field. The expenditure of the Department on various schemes of statistical studies during the year 1960-61 amounted to Rs. 9,48,403.

5. The Land Utilisation Survey started during the previous year was continued during the year under review. As in the previous year the service of the village revenue staff was utilised though the collection of data was done independently by both branches.

6. As in the previous year separate random sample crop-cutting survey experiments were conducted on the Autumn (Kanni), Winter (Kumbhom) and Summer (Punja) crops of paddy with the purpose of estimating the average yield per acre and the total out-turn of rice during each season. Reports on the 1960 crops were published.

7. Two rounds of a survey to estimate the extent of farm land converted for non-agricultural purpose during the years 1958-59 were conducted. The analysis of the data obtained from the first round was completed. Reports on the 1960 crops were issued during the year under review.

8. The survey on cultivable waste lands started in 1955-56 was continued during the period. Report on the analysis of the data collected from 15 taluks was published.

9. Tables of Agricultural Statistics for 1957-58 and 1958-59 were prepared. Season and crop report for the years 1957-58 and 1958-59 in one volume was prepared during the year. The Department continued to prepare the forecast reports on the area and production of 25 important crops. Statements giving daily, monthly and annual rain-fall were also prepared and sent to the departments concerned. The Department also attended to the various items of work connected with the visit of the Three Man Committee on crop and livestock estimates.

10. The Scheme "National Index of Field Experiments" started in 1959 was continued during the year under report as a Plan Scheme of the Department. Seventy field experiments conducted during 1959-60 and 11 experiments conducted during 1960-61 were analysed and reported.

11. The Department continued to collect, compile and publish the price statistics of important commodities in the State. Wholesale prices of about 21 agricultural commodities were collected from 39 centres. Weekly retail prices of necessaries were collected from 41 centres. The data collected were regularly published in the Gazette and were also used in the construction of consumer price index numbers.

12. As in the previous year monthly working class consumer price index numbers for 12 important centres were published. In addition to it, computation of the index numbers for Shertalai was started in May 1960.

13. The Statistical Cell continued to function. Main items attended to by it were—

(1) Progress report on Plan Schemes for the first quarter of 1960-61.

(2) Annual progress report on Plan Schemes for 1959-60.

(3) Progress report on Plan Schemes of the Statistics Department for the first nine months of 1960-61.

(4) Monthly and quarterly progress reports on the Plan Schemes of the Statistics Department.

14. The National Income Unit continued to function. The provisional estimates of State Income for the years 1955-56 to 1957-58 were published during the year. Statistical data of exports from and import into the State through ports and railways were continued to be collected and compiled. The Department also collected data on the Inter-State movements of goods by road through the check posts maintained by the Sales Tax Department on the frontiers of the State.

15. The Department continued to function as the co-ordinating agency for the collection of statistics under the Industrial Statistics (Labour) Rules from registered factories within the purview of the Factories Act 1948 and also for Plantations as defined in the Plantation Labour Act 1951. 2,188 Factories registered under the Factories Act

were working in the State during the half year ending 30th June 1960. The average daily employment in the 1,116 working Factories which submitted returns was 80,310, while the estimated employment for the 1,072 Factories which did not submit returns was 72,601.

16. Nine hundred and fifty-three Factories employing 83,247 persons submitted annual returns under the Payment of Wages Act for the year 1959. A total gross wages of Rs. 5,93,21,328 was paid to the above workers during that year.

17. At the end of the year there were 1,663 Trade Unions of which about 53 per cent submitted annual returns. They had an income of about Rs. 10·59 lakhs during the year and the expenditure was Rs. 9·88 lakhs. During 1959, 402 accidents were reported from the establishments covered by the Workmen's Compensation Act, and Rs. 31,543 was given as compensation to the workers. In 1959 under the Maternity Benefit Act, 9,417 women workers in the Factories and 8,958 women workers in the Plantations claimed maternity benefits. Of the above 17,654 claims were accepted and an amount of Rs. 11,41,200 were given as maternity benefit during the year.

18. The work of collecting and consolidating Industrial and Plantation Statistics were continued to be attended to by the Department. Technical details of the Schemes for the Improvement of Plantation Statistics and for a study for framing norms for assessment of future man-power requirement in the Industrial Sector were finalised.

19. The Department collected and consolidated the statistics of all the educational institutions in Kerala (except those under the University) for the year 1958-59. Statistical data regarding the transfers of agricultural land registered in the various Sub-Registry Offices were continued to be collected. Analysis of the data for 1959 was done and it was found that altogether 3,12,225 deeds pertaining to transfer of agricultural land were registered in the State. During the year under review 20 per cent sample was selected on a systematic basis for detailed analysis. The Department continued to attend to the collection and compilation of statistics relating to road mileage and expenditure. The data for 1959-60 were collected and furnished to the Government of India.

20. The Department was responsible for the compilation, analysis and publication of vital statistics in the State.

21. The following are the more important publications brought out by the Department during the year under review :—

(1) The Annual Statistical Abstract.

(2) Quarterly Bulletin of Statistics.

(3) Statistical Outline of Kerala 1960.

(4) Kerala in Maps 1960.

22. The Department also conducted Several Sample Surveys and Pilot Surveys sponsored by the Government of India, the I.C.C.C., I.C.A.R., etc.

23. On the whole the working of the Department during the year under review was fruitful and satisfactory.

(By order of the Governor)

PADMA RAMACHANDRAN,

*Deputy Secretary*

To

The Superintendent, Government, Presses (with copy of the Administration Report for printing).

The Director of Statistics.

The Public (Administration Report) Department.

# ADMINISTRATION REPORT OF THE STATISTICS DEPARTMENT FOR THE YEAR 1960-61

## CHAPTER I—ADMINISTRATION

### I. Introductory

The Department is the Central Agency in the State for the systematic collection, compilation, analysis and objective interpretation of all Statistics relating to the State.

The Head of the Department is the Director of Statistics. The Director has under him on the technical side Assistant Directors, Research Officers, Analysts and Compilers. In Office Administration he is assisted by the Personal Assistant to the Director of Statistics, Superintendents and staff consisting of Clerks, Accountants and Typists. The field organisation consists of the District Statistical Officers, Special Officers, Statistical Inspectors and Investigators.

### II. Personnel

1. *Director of Statistics.*—Shri N. Gopalakrishnan Nair, Assistant Director was in charge of the post of Director of Statistics till 20th June, 1960 Afternoon. From 21st June 1960 forenoon to 3rd January 1961 afternoon Shri K. C. Cheriyan, Assistant Director was in additional charge of the post. From 4th January 1961 forenoon Shri N. Gopalakrishnan Nair was in full charge of the post of Director of Statistics and he continued as such during the year under report.

2. *Assistant Directors.*—Sarvasree N. Gopalakrishnan Nair, K. C. Cheriyan, P. P. Philipose and R. Sivasankara Kurup continued as Assistant Directors throughout the period under report. Shri K. C. Cheriyan, Assistant Director returned from training in France on the forenoon of 9th June, 1960 after completing an eight months' training course in General Planning and Planning Administration with special reference to Perspective Planning.

Shri M. S. Venkitaraman, Assistant Director was officiating as Assistant Director of Statistics during the year under report except for the period from 7th December 1960 to 1st January 1961, when he was reverted to the cadre of District Statistical Officer for want of vacancy. Shri Venkitaraman continued to be on Foreign Service as Statistician in the Indian Central Coconut Committee, Ernakulam throughout the year under report.

Shri N. Karunakara Menon was officiating in the other duty vacancy of Shri M. S. Venkitaraman. Shri N. Karunakara Menon was officiating as Assistant Director up to 6th December 1960 afternoon, when he was reverted for want of vacancy. He was holding the post of Special Officer for the Survey of Cost of Cultivation of Coconuts and this post was included in the cadre of District Statistical Officers.

From 2nd January 1961 he was promoted to the post of Assistant Director of Statistics in the post sanctioned for the Scheme 'Pilot Investigation for Collection of Statistical Data on Yield and Extent of Cardamom' and he continued as such for the rest of the period.

Shri G. Kuttappan Pillai, District Statistical Officer, Quilon, was promoted as Assistant Director with effect from 18th February 1961 forenoon and he continued as such during the remaining period of the year.

3. *Personal Assistant to the Director of Statistics.*—Shri S. Bhagavatheeswara Iyer continued as Personal Assistant to the Director of Statistics throughout the period.

4. *Research Officers.*—Shri T. Kuruvilla Mathen who was deputed for training in Medical Statistics in All-India Institute of Hygiene and Public Health, Calcutta, assumed charge of the post after his return from the training on 6th December 1960. Sarvasree P. C. Kurian, K. A. George, B. Thrivikraman Pillai, V. Sankaranarayanan Potti, K. Rama Varma, N. George John and K. Eswarankutty continued as Research Officers during the period under report.

Shri T. R. Thankappan Achari was on deputation as Economist-cum-Statistician in the Indo-Norwegian Project, Neendakara and Shri K. Narayanan Nair continued as Research Officer in the Bureau of Economic Studies, Trivandrum.

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

| Serial No. | Name of District | Name of the District Statistical Officer | Period of charge during the year under report | |
|---|---|---|---|---|
| | | | From | To |
| 1 | Trivandrum | Shri S. Cecil | 1-4-1960 | 31-3-1961 |
| 2 | Quilon | „ C. R. Gopinathan Nair .. | 1-4-1960 | 27-9-1960 A.N. |
| | | „ G. Kuttappan Pillai .. | 27-9-1960 A.N. | 17-2-1961 „ |
| | | „ G. Sreedharan Nair .. | 17-2-1961 „ | 31-3-1961 |
| 3 | Kottayam | „ G. Kuttappan Pillai .. | 1-4-1960 | 9-6-1960 |
| | | „ N. Krishna Pillai .. | 10-6-1960 | 24-7-1960 |
| | | „ G. Kuttappan Pillai .. | 25-7-1960 | 27-9-1960 A.N. |
| | | „ K. N. Gopala Panicker .. | 27-9-1960 | 31-3-1961 |
| 4 | Alleppey | „ K. Balakumaran Nair .. | 1-4-1960 | 31-3-1961 |
| 5 | Ernakulam | „ N. Krishna Pillai .. | 1-4-1960 | 9-6-1960 |
| | | „ G. Velayudhan Thampi .. | 10-6-1960 | 31-3-1961 |
| 6 | Trichur | „ R. Gopalakrishnan Nair .. | 1-4-1960 | 31-3-1961 |
| 7 | Palghat | „ K. Ramanarayanan Nair .. | 1-4-1960 | 1-5-1960 |
| | | „ R. Gopalakrishnan Nair, District Statistical Officer, Trichur (additional charge) .. | 2-5-1960 | 6-5-1960 |
| | | „ K. Mailerumperumal Pillai .. | 7-5-1960 | 31-3-1961 |

| Serial No. | Name of District | Name of the District Statistical Officer | Period of charge during the year under report | |
|---|---|---|---|---|
| | | | From | To |
| 8 | Kozhikode | Shri G. Velayudhan Thampi .. | 1-4-1960 | 10-4-1960 |
| | | „ K. N. Gopala Panicker, District Statistical Officer, Cannanore (additional charge) .. | 11-4-1960 | 10-6-1960 |
| | | „ K. Ramanarayanan Nair .. | 11-6-1960 | 31-3-1961 |
| 9 | Cannanore | „ K. N. Gopala Panicker .. | 1-4-1960 | 13-7-1960 |
| | | „ P. K. Ramakrishnan Nair, Statistical Inspector (additional charge) .. | 14-7-1960 | 24-7-1960 |
| | | „ N. Krishna Pillai .. | 25-7-1960 | 5-1-1961 F.N. |
| | | „ P. S. Gopinathan Nair .. | 5-1-1961 F.N. | 31-3-1961 „ |

Shri K. Mailerumperumal Pillai, District Statistical Officer, Trivandrum who was deputed for the Statistical Officers' Training Course for six months from 14th September 1959 returned after the training on 14th March 1960 and proceeded on leave till 6th May 1960. He was posted as District Statistical Officer, Palghat on 7th May 1960.

Shri P. Sankunny Nair, Special Officer for enquiry into Cost of Cultivation of Cocoanuts was deputed as Statistical Officer, Dairy Survey Scheme in the Co-operative Department with effect from 6th December 1960 afternoon.

Shri N. Krishna Pillai, District Statistical Officer was appointed to the post of Special Officer for collection of Statistical Data on the Yield and Extent of Cardamom Cultivation with effect from 6th January 1961.

Shri P. Achuthan Nair was promoted and posted as Special Officer for the Scheme for 'Enquiry into Cost of Cultivation of Cocoanuts' with effect from 2nd January 1961 forenoon.

Shri P. S. Gopinathan Nair was promoted and posted as District Statistical Officer, Cannanore from 5th January 1961.

Shri G. Sreedharan Nair was promoted and posted as District Statistical Officer, Quilon from 17th February 1961 afternoon.

6. Sanctioned strength of the Department as on 31st March 1961 was as follows:—

| | | *Rs.* | | |
|---|---|---|---|---|
| Director of Statistics | .. | 500—800 | 1 | |
| Assistant Directors | .. | 250—550 | 5 | |
| Personal Assistant to Director | .. | 200—400 | 1 | Permanent. |
| Research Officers | .. | 200—400 | 8 | |
| District Statistical Officers | .. | 200—400 | 9 | |
| Special Officers | .. | 200—400 | 2 | |
| Analysts | .. | 150—250 | 31 | |
| Statistical Inspectors | .. | 150—250 | 47 | 29 posts permanent. |

| | | Rs. | | |
|---|---|---|---|---|
| Supervisor, Mechanical Tabulation Unit | .. | 150—250 | 1 | |
| Superintendents | .. | 150—250 | 3 | |
| Fair Copy Superintendent | .. | 125—225 | 1 | |
| Upper Division Clerks | .. | 80—180 | 6 | One post permanent. |
| Upper Division Compilers | .. | 80—180 | 18 | |
| Upper Division Investigators | .. | 80—180 | 45 | |
| Upper Division Typists | .. | 80—180 | 3 | |
| Lower Division Clerks and Accountants | .. | 40—120 | 21 | |
| Lower Division Compilers | .. | 40—120 | 137 | |
| Lower Division Investigators | .. | 40—120 | 230 | 17 posts permanent. |
| Lower Division Typists | .. | 40—120 | 17 | |
| Typist-cum-Clerks | .. | 40—120 | 2 | |
| Punch Card Operators | .. | 40—120 | 7 | |
| Draftsmen | .. | 50—150 | 3 | |
| Duffadar | .. | 35— 45 | 1 | |
| Peons | .. | 30— 40 | 25 | Two posts permanent. |

## III. General

The following officers were deputed for the various training courses:—

(*i*) Shri P. P. Philipose, Assistant Director was deputed for the Senior Statistical Officers' Training Course at the Central Statistical Organisation, Government of India, New Delhi for the period from 26th October 1960 to 22nd November 1960.

(*ii*) Shri C. R. Gopinathan Nair was deputed to the Statistical Officers' Training Course jointly organised by the Central Statistical Organisation, New Delhi and Indian Statistical Institute, Calcutta. The training was for a period of 9 months from 27th September 1960. He specialised in the subject 'National Income and Regional Income Estimation'.

(*iii*) Sarvasree R. Sivasankara Kurup, Assistant Director and B. Thrivikraman Pillai, Research Officer were allowed to conduct a study tour from 11th February 1961 to 28th March 1961. They conducted on the spot study of the working of Demographic Research and Training Centres at Bombay, Delhi and Calcutta.

The expenditure of the Department under different Schemes for the year was as follows:

| Total Rs. | Regular staff (Statistical Bureau) Rs. | For work on the lines of National Sample Survey Rs. | Five-Year Plan Schemes Rs. | Non-Plan Schemes fully financed by ICCC, ICAC, ICAR, etc. Rs. |
|---|---|---|---|---|
| 9,48,403 | 4,18,088 | 66,390 | 3,17,203 | 1,46,722 |

# CHAPTER II—AGRICULTURAL STATISTICS

## I. Land Utilisation

Kerala, being a non-reporting area, has to depend on sample surveys for data relating to area under different crops in the State. But, due to the heterogeneous nature of cultivation and the extreme diversity of the crop pattern in the State, sample surveys will yield reliable estimates only if the sample size is considerably large. As in the previous year, the service of the Village Revenue Staff was utilised during the year under review also. The collection of data by the Village Officers and by the Investigators of this Department was done independently. For the sake of identification of the two surveys they were referred to as 'Survey by Village Officers' and 'Departmental Survey'.

The object of the survey was to get estimates of the area under different land uses and crops in the State and also to collect ancillary information on certain cultivation practices. As in the previous year, the survey was conducted in three rounds spread over the three seasons, viz., (1) from June to September (for Autumn crops), (2) from October to January (for Winter crops) and (3) from February to May (for Summer crops). The sampling design for the survey remained the same as for the previous year only for the first round of the survey during 1960-61, viz., from June to September 1960. From the second round (from October 1960 to January 1961) onwards some changes were effected in the sampling design of the survey. The changed design of the survey is given below:—

### 1. Survey by the Village Officers:

This survey was conducted only in the first two rounds, viz., from June to September and from October to January. For the third round of Land Utilisation Survey, viz., from February to June there was no Village Officers' Survey. The survey was conducted in all the villages, detailed enumeration being conducted in the selected clusters in each village. Sample size, sample selection, etc., of clusters were as given below:

(*i*) *Travancore-Cochin Area* (*Trivandrum, Quilon, Alleppey, Kottayam, Ernakulam and Trichur Districts*).—Villages in Travancore-Cochin Area were grouped into two categories according to the area, the first category consisting of those villages which have an area less than or equal to 5,000 acres and the second category consisting of villages which have an area more than 5,000 acres. In the villages belonging to the first category, 10 different and non-overlapping clusters of plots (a cluster consisting of 10 plots) were selected for detailed enumeration. From the second category of villages 8 different and non-overlapping clusters of plots were selected. The selection was by simple random sampling.

(*ii*) *Malabar Area* (*Palghat, Kozhikode and Cannanore Districts*).—For the Revenue Villages in these Districts, there was no stratification of villages based on area. From all the villages 6 different and

non-overlaping clusters of plots were selected by simple random sampling for detailed enumeration.

The sample selection for the above survey was done by the field staff of this Department and the details of the selected plots were forwarded to the concerned village officers. The actual enumeration in the selected plots was done by the Village Officers and the results recorded in the schedule prescribed for them.

**2. Departmental Survey:**

Details of sample size, sample selection, etc., for the survey were as follows:

In each taluk a sample of 10 different villages was selected with probability proportional to the area of the villages. If in a taluk the number of villages was less than ten, then the survey was conducted in all the villages of that taluk.

The sample size of clusters to be selected from each of the selected villages was the same as that for the Village Officers' Survey.

In the first two rounds of the survey when there used to be the Village Officers' Survey the total sample size of clusters in each of the selected villages was divided into two halves as Sample I and Sample II. Sample I was a sub-sample of the clusters selected for the survey by Village Officers. For this the clusters of plots were selected by simple random sampling method from the list of clusters selected for Village Officers' Survey for that particular village. Sample II was an independent sample selected from the general sampling frame by simple random sampling subject to the condition that none of the plots selected for Village Officers' Survey should appear in this sample. For the third round of survey (from February to June) when there was no Village Officers' Survey, all the clusters were selected by simple random sampling from the general sampling frame.

In actual field work of the Departmental survey 537 villages were selected during each round. Details of the number of plots actually enumerated during each round of the survey are given below:

| *Serial No.* | *Round of Survey* | | *No. of plots enumerated* |
|---|---|---|---|
| 1. | June 1960 to September 1960 | .. | 32,770 |
| 2. | October 1960 to January 1961 | .. | 41,455 |
| 3. | February 1961 to May 1961 | .. | 37,785 |
| | Total | .. | 112,010 |

In respect of the Village Officers' Survey, the Department has been experiencing difficulty in getting the filled-in-schedules from all the villages. This is borne out by the percentage of villages from which filled-in-schedules in respect of Village Officers' Survey have been

received from the various districts during each round of the survey given in the following table :—

**Survey by the Village Officers**

| Serial Number | District | Percentage of villages from which schedules have been forwarded | |
|---|---|---|---|
| | | June 1960—September 1960 | October 1960—January 1961 |
| 1 | Trivandrum .. | 19·57 | .. |
| 2 | Quilon .. | 14·14 | 1·01 |
| 3 | Alleppey .. | 52·48 | 20·79 |
| 4 | Kottayam .. | 24·24 | 24·24 |
| 5 | Ernakulam .. | 69·03 | 20·35 |
| 6 | Trichur .. | 37·39 | 10·16 |
| | Palghat .. | 40·39 | 28·15 |
| | Kozhikode .. | 52·25 | 42·34 |
| 9 | Cannanore .. | 49·60 | 42·40 |

The analysis work of the data collected for the year 1959-60 was completed during the year under review. The results obtained are being utilised for preparing the Agricultural Statistical Returns relating to this State. The figures obtained as the results of the survey may be seen in the chapter relating to 'Other Agriculture Statistics' in this volume.

## II. Crop Cutting Survey

Separate random sample crop-cutting survey experiments on paddy were conducted by this Department on the Autumn (Kanni), Winter (Kumbhom) and Summer (Punja) crops of paddy during 1960-61. The purpose of the survey is to estimate the average yield per acre and the total outturn of rice during each one of the seasons based upon scientifically designed statistical surveys.

1. *Autumn (Kanni) Crop of Paddy*—1960.—The harvest period of this crop ranges from August to October. The survey was conducted in 50 taluks wherein the reference crop was cultivated. A multi-stage random sampling design was adopted for the survey, the taluk formed the stratum village the primary unit of sampling, the field, the secondary unit and a square plot of side 16½′ the ultimate unit of sampling. The number of villages allotted to each taluk was six and the selection

of villages was done by random sampling. From each selected village a random sample of five paddy growing plots was chosen and the crop grown in a randomly selected square plot of side 16½′ was harvested. The harvested produce was winnowed and weighed correct to the nearest quarter of a pound. 1,348 experiments could be conducted during the season out of a total of 1,500 experiments planned.

The field work of the survey was done by the Investigators of this Department under the supervision of the Statistical Inspectors and District Statistical Officers, analysis of the data collected was done in the Office of the Director of Statistics. The report will be published shortly.

2. *Winter (Kumbhom) Crop of Paddy*—1961.—The period of harvest of this crop is January-February. The sampling design and other details were the same as those for the survey on the previous autumn crop. 1373 experiments were conducted during the season. Analysis of the data is in progress.

3. *Summer Crop (Punja)*—1961.—The harvest season of this crop ranges from March to May. The survey covered all the district except Trivandrum wherein the reference crop is not cultivated. The analysis of the data is in progress.

On completion of the analysis of the data on Winter and Summer Crops 1961, the report will be published.

The reports on the 1960 crops were issued during the year under review.

4. *Survey to estimate the conversion of farm land for non-agricultural purposes.*—The purpose of the survey is to estimate the extent of farm land converted for non-agricultural purposes during the years 1955 to 1959. The survey was conducted along with Land Utilisation survey 1960-61 and according to its design. Two rounds of the survey were conducted during the reference period. The analysis of the data obtained from the 1st round has been completed. The analysis of the 2nd round data is in progress.

## III. Cultivable Waste Land Survey

The survey on Cultivable Waste Lands which was initiated in 1955-56, was due to be completed by the end of the 2nd Five-Year Plan. But on account of practical difficulties experienced in the field, the survey could not progress at the pace expected. The survey could be completed only in 31 taluks by the end of the Second Five-Year Plan. The work was in progress in the Palghat, Kozhikode and Cannanore Districts during the year.

The survey is expected to be completed in the remaining taluks by the end of September 1961.

The report on the analysis of the data collected from 15 taluks was published during the period. An integrated report on the Cultivable Waste Land Survey for the 25 taluks, reports on which have been already published in 4 parts was also prepared during this period. The sub-joined table gives the summary position in regard to the presence of waste lands of various categories in the 25 taluks.

**Area under different types of waste lands (Area in acres)**

*Column* 3 :—Figures within brackets relate to percentage of waste lands to total area of the taluk.

*Columns* 4, 5, 6 *and* 7 :—Figures within brackets relate to percentages of each type of waste land to the total area under waste lands.

| Taluk | Area of the taluk (acres) | Area under | | | | |
|---|---|---|---|---|---|---|
| | | All waste | Current fallow | Other fallow | Cultivable waste | Uncultivable waste |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. Neyyattinkara .. | 140209 | 8205 (5·85) | 1795 (21·88) | 1991 (24·26) | 2190 (26·69) | 2229 (27·17) |
| 2. Nedumangad .. | 229002 | 9789 (4·27) | 2650 (27·07) | 4717 (48·19) | 1584 (16·18) | 838 (8·56) |
| 3. Trivandrum .. | 76878 | 4848 (6·31) | 757 (15·61) | 560 (11·55) | 1337 (27·58) | 2194 (4526) |
| 4. Chirayinkil .. | 94069 | 4367 (4·64) | 1502 (34·39) | 851 (19·49) | 1661 (38·04) | 353 (8·08) |
| Trivandrum District .. | 540158 | 27209 (5·04) | 6704 (24·64) | 8119 (29·84) | 6772 (24·89) | 5614 (20·63) |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 5. Karunagappally .. | 49857 | 380 (0·76) | 34 (8·94) | 21 (5·52) | 249 (65·52) | 76 (20·02) |
| 6. Kottarakkara .. | 136305 | 6476 (4·75) | 432 (6·67) | 672 (10·37) | 4215 (65·10) | 1157 (17·86) |
| 7. Pathanamthitta ... | 129619 | 4743 (3·66) | 188 (3·96) | 895 (18·87) | 2262 (47·69) | 1398 (29·48) |
| 8. Kunnathoor .. | 96354 | 4784 (4·97) | 405 (8·47) | 519 (10·85) | 3198 (66·85) | 662 (13·83) |
| 9. Pathanapuram .. | 304848 | 155885 (51·14) | 150 (0·09) | 233 (0·15) | 893 (0·57) | 154609 (99·19) |
| Total (Part of Quilon District) .. | 716983 | 172268 (24·02) | 1211 (0·70) | 2340 (1·36) | 10817 (6·28) | 157902 (91·66) |
| 10. Changanacherry .. | 64736 | 3107 (4·79) | 858 (27·62) | 370 (11·92) | 758 (24·39) | 1121 (36·07) |
| 11. Kottayam .. | 133379 | 4820 (3·61) | 2555 (52·97) | 837 (17·37) | 1108 (22·99) | 322 (6·68) |
| 12. Meenachil .. | 178583 | 11327 (6·34) | 2422 (21·38) | 1980 (17·48) | 4415 (38·98) | 2510 (22·16) |
| 13. Vaikom .. | 81720 | 8161 (9·98) | 1127 (13·81) | 177 (2·17) | 2370 (29·04) | 4487 (54·98) |
| Total (Part of Kottayam District) .. | 458418 | 27415 (5·98) | 6960 (25·39) | 3364 (12·27) | 8651 (31·56) | 8440 (30·78) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 14. Thodupuzha .. | 115934 | 12143 (10·47) | 1957 (16·12) | 2383 (19·62) | 4355 (35·86) | 3448 (28·40) |
| 15. Muvattupuzha .. | 162968 | 18073 (11·09) | 9857 (54·54) | 828 (4·58) | 5046 (27·92) | 2342 (12·96) |
| 16. Kanayannur .. | 79752 | 8529 (10·69) | 43 (0·50) | 105 (1·23) | 8295 (97·26) | 86 (1·01) |
| 17. Cochin .. | 34898 | 856 (2·45) | 14 (1·63) | 2 (0·23) | 823 (96·16) | 17 (1·98) |
| 18. Parur .. | 47351 | 1305 (2·76) | 196 (15·02) | 69 (5·29) | 300 (22·98) | 740 (56·71) |
| 19. Alwaye .. | 80625 | 1204 (1·49) | 111 (9·22) | 154 (12·79) | 587 (48·75) | 352 (29·24) |
| 20. Kunnathunad .. | 114975 | 5840 (5·08) | 206 (3·53) | 364 (6·23) | 4608 (78·87) | 664 (11·37) |
| Ernakulam District .. | 636503 | 47950 (7·53) | 12384 (25·83) | 3905 (8·14) | 24012 (50·08) | 7649 (15·95) |
| 21. Mukundapuram .. | 155515 | 9171 (5·90) | 1170 (12·75) | 712 (7·76) | 5595 (61·01) | 1694 (18·48) |
| 22. Cranganore .. | 18062 | 154 (0·85) | 36 (23·37) | 37 (24·03) | 77 (50·00) | 4 (2·60) |
| 23. Chowghat .. | 63519 | 492 (0·77) | 6 (1·22) | 4 (0·81) | 371 (75·41) | 111 (22·56) |
| 24. Trichur .. | 127824 | 1921 (1·50) | 161 (8·38) | 214 (11·14) | 1112 (57·89) | 434 (22·59) |
| 25. Talappilly .. | 159494 | 29268 (18·35) | 2327 (7·95) | 1861 (6·36) | 14823 (50·66) | 10252 (35·03) |
| Trichur District .. | 524414 | 41006 (7·82) | 3700 (9·02) | 2828 (6·90) | 21983 (53·61) | 12495 (30·47) |

Area figures given are as per professional survey (excluding the unsurveyed portion).
Figures within brackets denote the percentages.

## IV. Other Agricultural Statistics

The Department attended to the following items of work relating to agricultural statistics during the year under report :—

(1) *Preparation of the Agricultural Statistics Returns and the Season and Crop Reports.*—The tables of Agricultural Statistics for 1957-58 and 1958-59 were prepared. The following table gives the area under different utilisations for the latter year :—

| Serial No. | Classification of area | Area (acres) | Percentage to the total area |
|---|---|---|---|
| 1 | Area according to Village Papers .. | 9534611 | 100·00 |
| 2 | Forests .. | 2589105 | 27·16 |
| 3 | Land put to non-agricultural uses .. | 492328 | 5·16 |
| 4 | Barren and unculturable land .. | 415180 | 4·35 |
| 5 | Permanent pastures and grazing lands .. | 110762 | 1·16 |
| 6 | Land under miscellaneous tree crops .. | 493595 | 5·16 |
| 7 | Culturable waste .. | 467968 | 4·91 |
| 8 | Current fallow .. | 178142 | 1·87 |
| 9 | Other fallow .. | 200617 | 2·10 |
| 10 | Net area sown .. | 4586914 | 48·11 |
| 11 | Area sown more than once .. | 949799 | 9·96 |
| 12 | Total cropped area .. | 5536713 | 58·07 |

The area covered by the important crop and their production are given below :—

| Serial No. | Crop | Area (acres) | Production |
|---|---|---|---|
| 1 | Paddy .. | 1898804 | 1430000 Tons |
| 2 | Cocoanut .. | 1175425 | 3248 M. Nuts |
| 3 | Arecanut .. | 123833 | 6795 ,, |
| 4 | Tapioca .. | 553207 | 1527300 Tons |
| 5 | Sugarcane .. | 21759 | 35021 Tons of gur |
| 6 | Cashewnut .. | 114189 | 71368 Tons |
| 7 | Tea .. | 92988 | 39737 ,, |
| 8 | Coffee .. | 40060 | 6961 ,, |
| 9 | Rubber .. | 270626 | 22158 ,, |
| 10 | Cardamom .. | 73756 | 1316 ,, |

The estimates from forecast reports are furnished in the case of forecast crops. In the case of other crops, the estimates furnished are from the land utilisation survey of the Department in the case of the Travancore-Cochin portion of the State and in the case of the Malabar region the estimates are based on the Revenue returns.

The returns of Agricultural Statistics for 1959-60 are under preparation.

The season and crop report for the years 1957-58 and 1958-59 in one volume was prepared during the year. Government have approved it and sent it to the Government Press for printing.

(2) *Preparation of forecast reports.*—The Department continued to prepare the forecast reports on the area and production of important crops in the State. These were sent to the Government of India and the State Government.

The condition factors on the extent and yield of these crops in each taluk were reported by the Statistical Inspectors after proper enquiry at the important production centres. The district and State figures are worked out based on these reports by the Department. Forecast reports are prepared for 25 crops.

(3) *Collection of rainfall data.*—The data are received from 81 centres in the State. Statements giving daily, monthly and annual rainfall are prepared and are sent to the concerned Departments.

The statement attached gives the average annual rainfall in each district during the year under report.

**Average Rainfall**
(in millimetres)

| Districts | April 1960 | May 1960 | June 1960 | July 1960 | August 1960 | September 1960 | October 1960 | November 1960 | December 1960 | January 1961 | February 1961 | March 1961 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Trivandrum .. | 188·1 | 600·1 | 251·0 | 389·1 | 201·5 | 362·3 | 207·8 | 480·2 | 38·8 | 67·7 | 48·7 | 9·4 | 2,944·7 |
| Quilon .. | 234·6 | 661·2 | 273·0 | 495·8 | 283·4 | 411·1 | 251·4 | 571·4 | 35·1 | 48·5 | 58·9 | 15·6 | 3,340·0 |
| Alleppey .. | 244·7 | 745·9 | 381·0 | 676·7 | 373·8 | 474·2 | 198·4 | 422·0 | 27·7 | 28·2 | 110·2 | 13·6 | 3,696·4 |
| Kottayam .. | 273·2 | 520·5 | 340·2 | 694·0 | 401·7 | 403·6 | 268·3 | 361·9 | 37·5 | 15·0 | 57·6 | 15·6 | 3,389·1 |
| Ernakulam .. | 240·5 | 737·7 | 552·0 | 760·4 | 377·5 | 535·9 | 311·9 | 311·5 | 31·2 | 2·6 | 21·1 | 5·5 | 3,887·8 |
| Trichur .. | 152·8 | 705·1 | 636·6 | 865·6 | 287·0 | 415·9 | 296·1 | 218·9 | 2·7 | .. | 28·0 | 24·8 | 3,633·5 |
| Palghat .. | 191·4 | 362·8 | 404·3 | 643·8 | 230·9 | 252·8 | 332·5 | 323·5 | 22·8 | 1·6 | 8·8 | 12·2 | 2,787·4 |
| Kozhikode .. | 176·9 | 464·7 | 661·1 | 919·7 | 300·2 | 321·6 | 197·3 | 342·4 | 5·8 | .. | .. | .. | 3,389·7 |
| Cannanore .. | 134·9 | 508·1 | 723·8 | 947·9 | 439·3 | 303·0 | 124·1 | 283·6 | 1·8 | 0·4 | 2·0 | 3·4 | 3,472·3 |

Besides, data on weather conditions are also collected from the N.E.S. Blocks where the meteorological instruments for measuring them have been installed. Efforts are being made to get complete coverage in this respect.

(4) *Miscellaneous items.*—The Section attended to the various items of work connected with the visit of the Three Man Committee on Crop and Livestock estimates which visited the State during the year under report Also it drew up for the Agricultural Department an experimental design for the fixation of yardsticks of additional production.

The Department, during the year under report also attended to the supply of data on agricultural statistics to official and non-official agencies, like the Census Department, the Office of the State Editor for District Gazetteers and the Chambers of Commerce.

## V. National Index of Field Experiments

(*i*) *Introduction.*—The Institute of Agricultural Research Statistics (I.C.A.R.), New Delhi has formulated the Scheme of National Index of Field Experiments, in order to prepare a list of all the agricultural experiments conducted in India. The Department of Statistics is responsible for the collection and analysis of data for the State. The Scheme was started here in 1959 with a staff consisting of one Research Officer, one Compiler and one Typist. During the year under report this staff continued. The Scheme is included as a Plan Scheme of the Department.

(*ii*) *Working.*—The various Agricultural Research Stations in the State send the details obtained through experiments conducted by them to this Department in a Proforma prescribed for this purpose. The data so collected are analysed and the results furnished to the Institute of Agricultural Research Statistics, New Delhi and also the Research Stations who furnish the data.

During the year under report data from 70 field experiments conducted during 1959-60 and 11 experiments conducted during 1960-61 were analysed and reported. The following table shows the number of experiments by design of experiments :—

| Sl. No. | Design of experiments | No. of experiments in the year | |
|---|---|---|---|
| | | 1959-60 | 1960-61 |
| 1 | Uniformity trial .. | 1 | .. |
| 2 | Randomised block experiments .. | 43 | 5 |
| 3 | Confounded factorial experiments .. | 12 | 4 |
| 4 | Split plot experiments .. | 11 | 1 |
| 5 | Latin square experiments .. | 1 | .. |
| 6 | AB — BA Method .. | 2 | 1 |
| | Total .. | 70 | 11 |

Data relating to 30 experiments received during the year 1960-61 are being analysed.

# CHAPTER III—ECONOMIC STATISTICS

## I. Prices Statistics

One of the most important regular items of work of the Department is with regard to the collection, compilation and publication of Prices Statistics of the State. Statistics of the following types of prices continued to be collected by the Department :—

1. Wholesale prices of important agricultural commodities at important markets (weekly).

2. Retail prices of necessaries at important centres in the State (weekly).

3. Agricultural wages and rural retail prices at selected centres (monthly).

4. Weekly prices of export staples at Alleppey and at Mattancherry.

5. Prices of important varieties of coir yarn and husk at the main producing centres (weekly).

6. Month-end prices and monthly arrivals of agricultural commodities at important centres in the State.

The Statistical Inspectors of the Department were mainly responsible for the price collection work and the work was supervised by the District Statistical Officers. Data on item 4 were furnished by the Chamber of Commerce at the respective centres.

The following statements of prices were published regularly in the Government Gazette in the sheets allotted for the Department :—

1. Wholesale prices of important agricultural commodities (weekly).

2. Retail prices of necessaries (weekly).

3. Prices of export staples at Alleppey and Mattancherry (weekly).

4. Average prices of different varieties of coir yarn at important producing centres (monthly).

5. Working class cost of living index numbers for selected centres in the State (monthly).

6. Agricultural wages (monthly).

The Department also continued to furnish weekly wholesale prices of specified commodities at centres selected by the Agricultural Prices Enquiry Committee, to the Directorate of Economics and Statistics, Ministry of Food and Agriculture, Government of India. Further, as per the request made by the Secretary, Indian Central Coconut Committee, weekly statements showing the wholesale prices of coconuts without husk were forwarded to the Committee regularly. Weekly statements of wholesale prices of tapioca and weekly statements of prices of coir yarn, raw and retted husk were supplied to the Secretary, Tapioca Expansion Board, Trivandrum and to the Director, Coir Board, Kalavoor respectively.

## 1. Wholesale prices

Wholesale prices of agricultural commodities were collected from 39 centres. 21 commodities were covered.

The following trends were observed in the average monthly wholesale prices of rice, wheat, coconuts, copra, coconut oil, black pepper, ginger, turmeric, lemongrass oil, banana and tapioca during the year under review :—

(1) *Rice.*—The price of rice had in general a rising trend till November 1960 after which a decline was noted. The price level during March 1961 was however higher than that during April 1960 at all the important centres, the percentage increase ranging from 9 per cent at Kozhikode to 2 per cent at Trivandrum.

(2) *Wheat.*—The price of wheat at Trivandrum experienced a slight fall during the first quarter. There was a recovery in July and fluctuations though not large were evident till December 1960. January 1961 saw a spurt in prices and this level was almost maintained during the remaining months. The price level during March 1961 was 17 per cent higher than that during April 1960.

(3) *Coconuts with husk.*—At Alleppey and Kozhikode, a declining trend was witnessed till June 1960. The period was the season of increased supply of coconuts. This was followed by an increase during the remaining period under review. The price level during March 1961 was higher than that during March 1960 by 13 per cent at Alleppey and 31 per cent at Kozhikode.

(4) *Copra.*—The price of copra registered an upward trend during the first three quarters of the period under consideration. After that the prices showed fluctuations. The price level was maximum at Changanacherry and Alleppey during December 1960, the percentage increase being 18 per cent and 19 per cent when compared to those during December 1959. The price was at the peak during November 1960 at Kozhikode Market and it was 11 per cent higher than the prices for the corresponding period of the previous year.

(5) *Coconut oil.*—The price of coconut oil showed almost the same trend as that of copra. The maximum was during December 1960 at most of the important markets in the State. Compared to December 1959, the price level at Cochin and Kozhikode during December 1960 was higher by 13 per cent and 15 per cent respectively.

(6) *Black pepper.*—The prices of black pepper which gained substantially during the period from July 1959 showed a declining trend after July 1960. The prices during July 1960 were higher than those during July 1959 by 160 per cent at Alleppey and Cochin and 156 per cent at Kozhikode. At both the centres Alleppey and Cochin, the prices were low during March 1961 and were less than the prices during March 1960 by about 27 per cent.

(7) *Ginger.*—Though the prices recorded an irregular trend during the first quarter of the period under review, the prices gradually declined after July 1960. The prices reached very low levels during March 1961. The price level at the end of 1960-61 was lower than that at the close of 1959-60 by 25 per cent at Alleppey, 28 per cent at Cochin and 31 per cent at Kozhikode.

(8) *Turmeric.*—The trend in the price of turmeric at Cochin was of an irregular nature during the year. The price level during March 1961 was however 15 per cent higher than that during March 1960.

(9) *Lemongrass Oil.*—The prices of lemongrass oil were more steady during the year under reference when compared to the past two years. The minimum price for the period under report was recorded during June 1960, but this was however higher than that for June 1959 by 87 per cent. The price of lemongrass oil during March 1961 was 27 per cent higher than the price during March 1960.

(10) *Banana.*—After June 1960 the prices registered a downward trend till November 1960. There was a slight recovery in prices during the remaining months. The price at Punalur Market during March 1961 was 26 per cent lower than that during April 1960.

(11) *Tapioca.*—After a fall during the 1st quarter of the period under consideration, the prices remained somewhat stationary. At Nedumangad, one of the most important marketing centres in the State, the prices were minimum during February 1961 and were less than those during February 1960 by 40 per cent.

**2. Retail prices**

The weekly retail prices of necessaries were collected from 41 centres in the State. The data were regularly published in the Government Gazette in the sheets allotted for the Department of Statistics and were also used in the construction of consumer price index numbers in the State. The variations in the prices of rice, blackgram, mutton, coconut, arecanut, etc., are briefly commented below :—

(1) *Rice.*—The price of rice in general, showed an upward trend at all District headquarters till November 1960. After November 1960, a downward trend was witnessed at all the centres. The price level for March 1961 was higher than that during March 1960 at all the important centres, the percentage increase ranging from 4 per cent at Alleppey to 16 per cent at Palghat.

(2) *Blackgram.*—There has not been any appreciable variation in the price of this commodity during the period under reference.

(3) *Tapioca (Raw).*—At most of the important producing centres the retail price of tapioca experienced a slight fall towards the end of the 1st quarter and the prices remained steady during the remaining months.

(4) *Milk, Mutton, Meat, Beef and Fish.*—As regards to these items the variation in the prices was not significant, except for the seasonal variation in the case of fish.

(5) *Coconuts (without husk).*—In general, the prices of coconuts witnessed a rise till December 1960 though there were a very few exceptions. The prices at Kottayam, Ernakulam and Palghat markets were at the peak during January 1961, the percentage increase being 29 per cent, 24 per cent and 12 per cent over those prevailed during January 1960.

(6) *Coconut Oil.* —As in the case of coconuts, the prices of coconut oil was on the ascent till December 1960. After that the prices declined. The price level during December 1960 was higher than that prevailed during December 1959 by 19 per cent at Trivandrum and Alleppey and 14 per cent at Kottayam and 16 per cent at Cannanore. The price level for March 1961 was higher than that during March 1960 by 8 per cent at Quilon, 6 per cent at Alleppey and 13 per cent at Trichur.

(7) *Arecanut.*—The seasonal variations in the supply of arecanut were reflected in the price trends of the commodity. The prices at almost all the centres were at the peak during June 1960 and were lowest during December 1960 and January 1961.

**3. Consumer price index numbers (Cost of living index numbers)**

The monthly working class consumer price index numbers for 12 important centres in the State continued to be computed and published in the Government Gazette. In addition to these, this Department started computation of the index numbers for Shertalai from May 1960.

The following table shows the monthly working class consumer price index numbers for the various selected centres in the State :—

**Consumer Price Index numbers for the period April 1960 to March 1961**

| Serial number | Centres | April 1960 | May 1960 | June 1960 | July 1960 | August 1960 | September 1960 | October 1960 | November 1960 | December 1960 | January 1961 | February 1961 | March 1961 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Trivandrum .. | 444 | 455 | 456 | 454 | 451 | 455 | 464 | 474 | 480 | 473 | 472 | 468 |
| 2 | Quilon .. | 444 | 455 | 458 | 453 | 457 | 460 | 467 | 464 | 460 | 462 | 469 | 471 |
| 3 | Punalur .. | 451 | 462 | 460 | 460 | 455 | 451 | 465 | 471 | 471 | 460 | 456 | 456 |
| 4 | Alleppey .. | 427 | 442 | 445 | 445 | 447 | 450 | 456 | 451 | 443 | 438 | 446 | 450 |
| 5 | Changanachery .. | 430 | 442 | 449 | 452 | 454 | 457 | 459 | 465 | 459 | 459 | 457 | 456 |
| 6 | Kottayam .. | 428 | 435 | 445 | 448 | 449 | 451 | 458 | 461 | 455 | 453 | 450 | 451 |
| 7 | Alwaye .. | 447 | 457 | 466 | 468 | 470 | 470 | 476 | 472 | 463 | 461 | 470 | 468 |
| 8 | Ernakulam .. | 443 | 457 | 467 | 472 | 472 | 475 | 485 | 490 | 484 | 479 | 480 | 483 |
| 9 | Trichur .. | 452 | 456 | 467 | 468 | 468 | 469 | 479 | 483 | 486 | 480 | 479 | 475 |
| 10 | Chalakudy .. | 461 | 465 | 478 | 479 | 481 | 485 | 488 | 490 | 480 | 479 | 479 | 482 |
| 11 | Munnar .. | 455 | 461 | 468 | 468 | 469 | 467 | 470 | 475 | 480 | 482 | 478 | 476 |
| 12 | Kozhikode .. | 461 | 476 | 479 | 483 | 477 | 481 | 480 | 481 | 474 | 471 | 476 | 485 |
| 13 | Sherthalai .. | .. | 428 | 436 | 444 | 437 | 444 | 446 | 434 | 435 | 432 | 432 | 433 |

Base for Kozhikode is average prices for the period July 1935 to June 1936 : 100.
Base for other centres is August 1939 : 100.

The indices had in general a rising trend up to November 1960. This was followed by a decline. The average index for march 1961 was 6 per cent higher than that for March 1960.

**4. Coir Prices**

The Department continued to collect and publish monthly wholesale prices of different varieties of coir yarn at important coir producing centres.

Tables showing the wholesale prices of important varieties of coir yarn at important coir producing centres in Travancore-Cochin area and Malabar area for the period under reference are given below :—

**Statement of average prices of different varieties of Coir Yarn for the period April 1960 to March 1961 (Travancore-Cochin area)**

(Unit: 1 Kandy of 672 lb.)

| Sl. No. | Variety | April 1960 Rs. | May 1960 Rs. | June 1960 Rs. | July 1960 Rs. | August 1960 Rs. | September 1960 Rs. |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Anjengo (Superior) .. | 266·31 | 265·59 | 264·94 | 265·57 | 265·38 | 265·92 |
| 2 | Anjengo (Ordinary) .. | 239·34 | 238·99 | 239·82 | 240·65 | 240·65 | 240·73 |
| 3 | Mangadan .. | 247·10 | 240·63 | 238·69 | 242·10 | 240·88 | 240·40 |
| 4 | Ashtamudi .. | 200·00 | 195·00 | 187·92 | 197·67 | 203·33 | 215·20 |
| 5 | Aratory .. | 238·32 | 238·32 | 237·72 | 237·11 | 236·48 | 241·47 |
| 6 | Parur yarn thick .. | 217·50 | 216·25 | 215·00 | 210·00 | 209·00 | 216·25 |
| 7 | Parur yarn thin .. | 238·00 | 241·00 | 243·75 | 245·00 | 245·63 | 247·75 |
| 8 | Vaikom yarn .. | 232·38 | 234·38 | 233·44 | 231·75 | 231·25 | 236·55 |
| 9 | M. K. Yarn (sandy) .. | 146·00 | 145·00 | 153·50 | 145·00 | 146·50 | 150·00 |
| 10 | M. K. Yarn (without sand) | 244·00 | 246·25 | 247·50 | 244·00 | 243·75 | 245·00 |

**Statement of average prices of different varieties of Coir Yarn for the period April 1960 to March 1961 (Travancore-Cochin area—(*cont.*)**

(Unit: 1 Kandy of 672 lb.)

| Sl. No. | Variety | October 1960 Rs. | November 1960 Rs. | December 1960 Rs. | January 1961 Rs. | February 1961 Rs. | March 1961 Rs. |
|---|---|---|---|---|---|---|---|
| | | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Anjengo (Superior) | 274·29 | 280·07 | 279·93 | 281·40 | N.Q. | 345·15 |
| 2 | Anjengo (Ordinary) .. | 240·22 | 243·89 | 254·97 | 255·30 | 299·52 | N.Q. |
| 3 | Mangadan .. | 249·02 | 251·49 | 257·73 | 263·06 | 255·57 | 292·80 |
| 4 | Ashtamudi .. | 225·44 | 237·90 | 250·50 | 256·96 | 251·63 | 269·00 |
| 5 | Aratory .. | 248·40 | 252·40 | 272·00 | 275·25 | 275·20 | 290·56 |
| 6 | Parur yarn thick .. | 231·25 | 230·00 | 238·75 | 246·75 | 265·00 | 276·75 |
| 7 | Parur yarn thin .. | 252·63 | 253·72 | 262·60 | 271·07 | 292·08 | 312·93 |
| 8 | Vaikom yarn .. | 240·63 | 244·38 | 255·75 | 255·00 | 258·13 | 277·00 |
| 9 | M. K. Yarn (sandy) .. | 150·63 | 162·28 | 162·57 | 167·49 | 181·86 | 237·49 |
| 10 | M. K. Yarn (without sand) | 248·40 | 263·54 | 266·72 | 268·59 | 287·08 | 318·82 |

**Statement of average prices of different varieties of Coir Yarn for the period April 1960 to March 1961 (Malabar area)**
(Unit: 1 Kandy of 672 lb.)

| Serial No. | Variety | April 1960 Rs. | May 1960 Rs. | June 1960 Rs. | July 1960 Rs. | August 1960 Rs. | September 1960 Rs. |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Mangadan .. | 244·16 | 257·60 | 274·40 | 273·36 | 268·60 | 277·72 |
| 2 | Ponnani .. | 248·08 | 251·36 | 236·60 | 248·48 | 257·60 | 249·76 |
| 3 | Vanna Coir .. | 201·60 | 207·20 | 210·36 | 212·34 | 201·60 | 210·45 |
| 4 | Tirur .. | 211·68 | 211·40 | 216·53 | 208·80 | 204·75 | 202·00 |
| 5 | Beypore .. | 190·33 | 189·36 | 189·40 | 184·13 | 184·40 | 191·62 |
| 6 | Quilandy .. | 223·97 | 234·60 | 226·80 | 215·52 | 216·60 | 233·76 |
| 7 | Pachachoody .. | 139·20 | 142·80 | 143·40 | 139·68 | 142·80 | 144·00 |
| 8 | Quilandy choody .. | 205·00 | 203·75 | 204·50 | 207·00 | 205·00 | 211·00 |

**Statement of average prices of different varieties of Coir Yarn for the period April 1960 to March 1961 (Malabar area)—(*cont.*)**

(Unit: 1 Kandy of 672 lb.)

| Serial No. | Variety | October 1960 Rs. | November 1960 Rs. | December 1960 Rs. | January 1961 Rs. | February 1961 Rs. | March 1961 Rs. |
|---|---|---|---|---|---|---|---|
| | | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Mangadan .. | 275·28 | 280·00 | 275·52 | 260·40 | 257·60 | 274·40 |
| 2 | Ponnani .. | 263·20 | 247·20 | 245·68 | 273·00 | 274·40 | 280·00 |
| 3 | Vanna Coi .. | 212·30 | 208·20 | 212·80 | 212·86 | 222·88 | 232·06 |
| 4 | Tirur .. | 207·50 | 224·00 | 223·95 | 219·66 | 237·86 | 253·07 |
| 5 | Beypore .. | 199·80 | 203·85 | 221·33 | 235·76 | 253·86 | 263·41 |
| 6 | Quilandy .. | 238·78 | 246·46 | 259·20 | 276·24 | 299·33 | 315·78 |
| 7 | Pachachoody .. | 145·20 | 149·16 | 156·07 | 157·33 | 156·40 | 152·61 |
| 8 | Quilandy choody .. | 209·91 | 207·98 | 210·45 | 219·22 | 229·54 | 268·40 |

Though the price trend of Anjengo Superior, Mangadan, Ashtamudi and Aratory was of an irregular nature, up to August 1960 the prices were on the increase during the remaining period of the year. The price level attained its maximum value during March, 1961 and was higher by 19 per cent for Mangadan, 30 per cent for Ashtamudi and 22 per cent for Aratory variety, when compared to the prices during April 1960. The prices for Parur yarn and M. K. Yarn (Sandy) also registered a similar trend. The prices for Beypore and Quilandy variety of coir yarn witnessed an irregular trend during the first quarter of the period under report. This was followed by a steady increase up to March, 1961, the percentage increase over the year being 43 per cent and 44 per cent respectively.

The following graphs showing the price relatives with price during April 1960 as 100 for important commodities at selected centres are given in the Appendix :—

1. Relative wholesale price of Rice.
2. Do. Copra.
3. Do. Cocoanut oil.
4. Do. Pepper.
5. Do. Ginger.
6. Do. Turmeric.
7. Do. Banana.
8. Do. Lemongrass oil.
9. Relative retail prices of Rice.
10. Do. Cocoanut.
11. Do. Cocoanut oil.
12. Do. Arecanut.
13. Relative prices of different varieties of Coir yarn.
14. Consumer price indices for Trivandrum, Alwaye and Kozhikode.

## II. Index number series relating to Agricultural Economy

The unit for the calculation of index numbers relating to Agricultural Economy continued to function during the year under report. Monthly Index numbers of parity between prices received and prices paid by farmers were computed regularly. Regular computation of monthly index numbers of wholesale prices of agricultural commodities was also started during the year. The Scheme adopted for the culculation of index of agricultural wages and the index numbers with base 1956, July=100 were sent to the Ministry of Food and Agriculture for comments. In the light of the comments from the Ministry slight modifications in methodology as well as inclusion of more centres for collection of data on agricultural wages were effected during the year under report.

The tables below show the index numbers of parity between prices received and prices paid by farmers as well as the index numbers of wholesale prices of agricultural commodities for the different months of 1960-61.

**Index number of Parity between prices received and prices paid by Farmers**

(Base 1952-53 = 100)

| Year | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1960 | .. | .. | .. | 102 | 103 | 102 | 101 | 97 | 93 | 92 | 91 | 90 |
| 1961 | 87 | 87 | 89 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

**The Index of wholesale prices of Agricultural Commodities**

(Base: 1952-53 = 100)

| Year | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1960 | .. | .. | .. | 124 | 127 | 129 | 127 | 123 | 123 | 123 | 126 | 125 |
| 1961 | 124 | 124 | 126 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

## III. Planning Statistics

The Statistical Cell for Planning Statistics established in March 1957 continued to function during the year under review. The main items of work attended to were the following:—

1. The quarterly progress report for all Plan Schemes of the State for the first quarter of 1960-61 was prepared.

2. The annual progress report on various Plan Schemes of the State for the year 1959-60 was prepared.

3. Progress report for all Plan Schemes of this Department for the first nine months of 1960-61 was prepared and furnished to Government.

4. Monthly and quarterly progress reports of all Plan Schemes of the Department due with the State Government and the Central Government were prepared and furnished in time.

5. Various items of work connected with the formulation and finalisation of the Plan Schemes of the Department were also attended to.

## IV. National Income Unit

The National Income Unit in the Department of Statistics continued to function during the year 1960-61. The provisional estimates of State Income for the years 1955-56 to 1957-58 were published during the year. There has been a number of gaps in the statistical information required for the correct estimation of regional income. During the year 1960-61 efforts were made to collect data from Panchayats, Municipalities, Transport Establishments, Banks and other institutions and revise the 'Provisional' figures. Some of the Heads of Departments also were contacted for statistical data. From the Municipalities and Panchayats, data regarding house tax assessment, professional tax assessment and collection, and break up of income and expenditure of Municipalities were obtained. All these data obtained from the field were analysed in the Department and the information has been used to revise the estimates. The income from the following sectors, for revision of provisional estimates and for building up estimates of later years, has been computed during the year:—

1. Animal Husbandry.
2. Professions.
3. Housing.
4. Factory Industries.

## V. Trade Statistics

The Department continued to attend to the work relating to the collection and compilation of statistical data of exports from and imports into the State through ports and railways.

The data on seaborne trade were collected for every month from the Customs offices at the various ports by the field staff of the Department except for Cochin. In regard to Cochin Port, daily data were supplied by the Customs Office, Cochin. Data on goods-traffic by rail were collected by the field staff of the Department from the various railway stations in the State.

The data relating to the trade through sea up to 1958-59 were compiled and studied with special reference to the various currency areas of the world. The total value of commodities exported from and imported into the State through the ports of Kerala during the Agricultural Years 1951-52 to 1959-60 is given below:—

| *Year (July/June)* | *Value in crores of Rs.* | |
|---|---|---|
| | *Exports* | *Imports* |
| 1951-52 | 83·66 | 48·05 |
| 1952-53 | 80·03 | 52·39 |
| 1953-54 | 78·73 | 57·72 |
| 1954-55 | 78·94 | 55·94 |
| 1955-56 | 83·75 | 59·37 |
| 1956-57 | 83·04 | 60·40 |
| 1957-58 | 86·15 | 57·68 |
| 1958-59 | 92·27 | 55·24 |
| 1959-60 (Provl.) | 102·88 | 59·47 |

The major commodities exported were tea, coir and coir products, rubber (raw), pepper, coffee, cocoanuts, betelnuts, cocoanut oil, cashew kernels and fish and prawns. The two statements given below show the quantity and value of exports of important commodities to foreign countries and other Indian States separately for the years 1951-52 to 1958-59.

STATEMENT No. I

**Export of important Agricultural Commodities through the Ports of Kerala during the years 1951-52 to 1958-59**

| Serial No. | Commodity | Unit | Quantity | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1951-52 | | 1952-53 | | 1953-54 | | 1954-55 | |
| | | | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Betelnuts .. | Cwt. | 39417 | .. | 58297 | .. | 43865 | .. | 44726 | .. |
| 2 | Cardamom .. | ,, | 473 | 1896 | 561 | 3690 | 824 | 2409 | 822 | 3226 |
| 3 | Cashew kernels .. | Tons | 60 | 20798 | 19 | 24606 | 36 | 25725 | 911 | 32031 |
| 4 | Cashew-shell liquid .. | Gals. | 2205 | 1283249 | 7605 | 1253594 | .. | 1342444 | .. | 1301771 |
| 5 | Coconuts .. | Nos. | 110225663 | 290 | 124657217 | .. | 99918765 | 50 | 123546968 | .. |
| 6 | Coconut oil .. | Gals. | 2309252 | .. | 4281398 | .. | 1956122 | .. | 1823155 | .. |
| 7 | Coffee .. | Cwt. | 2850 | 10677 | 5125 | 9860 | 7432 | 40197 | 5027 | 26705 |
| 8 | Coir and Coir products | ,, | 253251 | 1105440 | 167609 | 1263016 | 191479 | 1423712 | 221144 | 1422901 |
| | | Sq. yds. | 1275 | 1825640 | 3171 | 3278459 | .. | 3819498 | .. | 2906648 |
| 9 | Copra .. | Tons | 14286 | .. | 20526 | .. | 14589 | .. | 12718 | .. |
| 10 | Fish and Prawns .. | Cwt. | 3111 | 37661 | 205 | 107262 | 214 | 125339 | 55 | 99165 |
| 11 | Ginger .. | ,, | 103221 | 24385 | 88693 | 21805 | 70047 | 26701 | 60097 | 27141 |
| 12 | Lemongrass oil .. | Gals. | 767 | 121078 | .. | 102071 | .. | 163401 | .. | 142259 |
| 13 | Oilcakes .. | Tons | 3377 | .. | 3542 | .. | 2685 | .. | 3407 | 396 |
| 14 | Pepper .. | Cwt. | 88703 | 244318 | 74723 | 225743 | 98714 | 242411 | 87863 | 251960 |
| 15 | Rubber (Raw) .. | Lb. | 38656312 | 346386 | 38786032 | 252687 | 51794087 | 73992 | 46468677 | 47635 |
| 16 | Tea .. | ,, | 6297951 | 72654773 | 3886091 | 69772413 | 5071073 | 79511582 | 8635121 | 71585911 |
| 17 | Wood and Timber .. | .. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A | N.A. | N.A. |

N.A. = Not available.

STATEMENT No. I—(*cont.*)

| Serial No. | Commodity | Unit | Quantity | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1955-56 | | 1956-57 | | 1957-58 | | 1958-59 | |
| | | | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign |
| | | | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | Betelnuts .. | Cwt. | 56822 | .. | 49261 | .. | 70923 | .. | 106252 | .. |
| 2 | Cardamom .. | ,, | 885 | 4551 | 341 | 4879 | 860 | 4989 | 591 | 5192 |
| 3 | Cashew kernels .. | Tons | 47 | 30494 | 16 | 25916 | 92 | 35575 | 30 | 36680 |
| 4 | Cashew-shell liquid .. | Gals. | .. | 1048047 | .. | 1126492 | 2204 | 960854 | .. | 804902 |
| 5 | Coconuts .. | Nos. | 142303199 | .. | 135575789 | .. | 109827829 | .. | 99780991 | 103200 |
| 6 | Coconut oil .. | Gals. | 1665698 | .. | 942699 | .. | 1235204 | .. | 1995341 | .. |
| 7 | Coffee .. | Cwt. | 4959 | 25593 | 7920 | 62526 | 3028 | 53731 | 2867 | 109163 |
| 8 | Coir and Coir products | ,, | 283637 | 1450718 | 257514 | 1580137 | 349213 | 1359558 | 288902 | 1422408 |
| | | Sq. yds. | .. | .. | .. | .. | .. | .. | .. | .. |
| 9 | Copra .. | Tons | 15757 | .. | 10184 | .. | 10199 | .. | 20302 | .. |
| 10 | Fish and Prawns .. | Cwt. | 119 | 42731 | 106 | 92089 | 224 | 118244 | 361 | 91864 |
| 11 | Ginger .. | ,, | 89672 | 44659 | 164707 | 77660 | 98582 | 47220 | 59926 | 55205 |
| 12 | Lemongrass oil .. | Gals. | .. | 193672 | 82 | 266800 | .. | 320854 | .. | 296664 |
| 13 | Oilcakes .. | Tons | 3545 | 2208 | 2405 | 2361 | 2920 | 717 | 3826 | 3514 |
| 14 | Pepper .. | Cwt. | 118375 | 222100 | 117051 | 302389 | 99690 | 217459 | 104739 | 200948 |
| 15 | Rubber (Raw) . | Lb. | 47899866 | 53746 | 45472736 | 82768 | 46911908 | .. | 44431296 | .. |
| 16 | Tea .. | ,, | 9361984 | 74839638 | 10510135 | 71868600 | 10570776 | 90995512 | 9533398 | 80942187 |
| 17 | Wood and Timber .. | .. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N A. | N.A. |

N.A.=Not available.

STATEMENT No. II

**Export of important Agricultural Commodities through the Ports of Kerala during the years 1951-52 to 1958-59**

| Serial Number | Commodity | Value in rupees | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1951-52 | | 1952-53 | | 1953-54 | | 1954-55 | |
| | | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Betelnuts .. | 40,02,802 | .. | 72,37,668 | .. | 58,67,080 | .. | 63,78,339 | .. |
| 2 | Cardamom .. | 4,73,750 | 25,01,342 | 5,16,016 | 32,05,640 | 7,71,222 | 22,44,495 | 4,65,041 | 32,83,645 |
| 3 | Cashew kernels .. | 1,14,058 | 9,20,02,622 | 75,320 | 11,16,43,683 | 1,45,702 | 8,84,87,668 | 1,59,392 | 10,47,50,166 |
| 4 | Cashew-shell liquid .. | 11,167 | 58,13,473 | 40,949 | 59,37,962 | .. | 50,49,277 | .. | 45,97,074 |
| 5 | Coconuts .. | 2,46,48,508 | 51 | 2,12,38,184 | .. | 2,40,94,619 | 25 | 2,19,09,625 | .. |
| 6 | Coconut oil .. | 2,00,65,842 | .. | 2,87,85,434 | .. | 1,62,03,884 | .. | 1,36,62,576 | .. |
| 7 | Coffee .. | 6,31,477 | 36,37,668 | 9,87,192 | 32,24,948 | 13,05,347 | 1,35,69,461 | 8,69,461 | 82,88,137 |
| 8 | Coir and coir products .. | 1,61,04,141 | 8,67,31,942 | 98,97,212 | 7,17,37,472 | 92,34,539 | 8,12,48,766 | 1,00,11,321 | 8,32,30,177 |
| 9 | Copra .. | 2,41,17,019 | .. | 2,97,75,302 | .. | 1,74,38,565 | .. | 1,80,45,179 | .. |
| 10 | Fish, and prawns .. | 59,940 | 46,86,697 | 17,491 | 1,00,79,653 | 41,673 | 1,02,68,910 | 1,485 | 78,87,125 |
| 11 | Ginger .. | 1,30,48,943 | 28,62,360 | 63,61,529 | 16,37,201 | 56,38,203 | 25,50,026 | 67,49,507 | 35,33,244 |
| 12 | Lemongrass oil .. | 83,046 | 1,28,05,953 | .. | 39,73,562 | .. | 72,62,374 | .. | 1,04,72,637 |
| 13 | Oilcakes .. | 13,49,222 | .. | 14,72,710 | .. | 9,91,014 | .. | 9,98,771 | 1,30,842 |
| 14 | Pepper .. | 4,40,16,990 | 17,78,49,586 | 3,49,73,955 | 14,73,26,807 | 2,96,87,602 | 9,59,18,304 | 1,50,31,408 | 5,59,80,459 |
| 13 | Rubber (raw) .. | 4,77,47,501 | 9,67,533 | 5,03,31,945 | 5,08,585 | 6,83,42,218 | 1,48,850 | 6,04,79,532 | 85,189 |
| 16 | Tea .. | 1,28,29,825 | 15,60,24,551 | 70,22,265 | 14,55,65,134 | 1,02,23,905 | 19,02,95,533 | 2,32,74,848 | 21,96,85,467 |
| 17 | Wood and timber .. | 23,76,142 | 68,36,305 | 28,69,589 | 77,62,418 | 30,90,933 | 1,77,58,710 | 34,71,560 | 81,85,873 |
| 18 | Other important commodities | 3,76,63,758 | 2,33,65,226 | 4,17,66,740 | 3,09,74,462 | 4,10,96,050 | 2,91,70,899 | 4,11,22,818 | 4,61,73,832 |
| 19 | Sundries .. | 1,11,51,765 | | 1,33,56,573 | | 91,13,253 | | 1,05,10,220 | |

STATEMENT No. II—(cont.)

| Serial No. | Commodities | Value in rupees | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1955-56 | | 1956-57 | | 1957-58 | | 1958-59 | |
| | | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign | Coastal | Foreign |
| | | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 1 | Betelnuts .. | 83,05,589 | .. | 75,75,025 | .. | 1,34,81,338 | .. | 2,13,87,343 | .. |
| 2 | Cardamom .. | 7,53,590 | 50,16,729 | 3,34,916 | 55,15,580 | 5,50,778 | 56,21,997 | 5,64,773 | 58,39,861 |
| 3 | Cashew kernels .. | 1,58,884 | 13,07,83,379 | 88,005 | 11,93,22,757 | 4,68,965 | 13,66,61,355 | 1,40,238 | 14,31,01,918 |
| 4 | Cashew-shell liquid .. | .. | 34,80,967 | .. | 39,59,933 | 3,857 | 35,81,312 | .. | 29,59,451 |
| 5 | Coconuts .. | 2,44,53,337 | .. | 2,33,98,850 | .. | 2,25,90,148 | .. | 2,23,00,024 | 37,270 |
| 6 | Coconut oil .. | 1,20,61,743 | .. | 73,63,025 | .. | 1,14,35,595 | .. | 2,02,15,043 | .. |
| 7 | Coffee .. | 9,30,789 | 93,68,024 | 15,07,477 | 1,85,49,146 | 6,68,862 | 1,38,22,218 | 5,30,616 | 2,55,16,823 |
| 8 | Coir and coir products .. | 1,29,23,594 | 8,56,60,039 | 1,19,76,768 | 9,14,11,109 | 1,81,68,490 | 7,19,01,509 | 1,51,56,863 | 7,59,92,655 |
| 9 | Copra .. | 1,91,31,536 | .. | 1,42,12,417 | .. | 1,74,95,254 | .. | 3,43,37,771 | .. |
| 10 | Fish and prawns .. | 8,950 | 31,85,203 | 14,808 | 1,24,72,106 | 12,880 | 1,49,33,107 | 18,087 | 1,77,03,266 |
| 11 | Ginger .. | 1,11,62,962 | 58,71,057 | 1,78,32,512 | 61,88,285 | 53,83,479 | 23,13,974 | 29,67,872 | 29,46,386 |
| 12 | Lemongrass oil .. | .. | 1,30,75,675 | 4,600 | 1,47,14,218 | | 1,38,40,709 | .. | 92,74,518 |
| 13 | Oilcakes .. | 11,67,017 | 5,94,558 | 8,52,245 | 3,49,904 | 11,85,155 | 1,57,879 | 17,27,740 | 1,33,09,070 |
| 14 | Pepper .. | 1,87,25,059 | 3,78,15,311 | 1,35,70,775 | 3,48,85,820 | 1,07,70,180 | 2,26,78,639 | 1,12,93,784 | 2,20,26,559 |
| 15 | Rubber (raw) .. | 6,46,42,877 | 1,11,283 | 6,95,09,491 | 1,39,047 | 6,84,68,098 | .. | 6,61,67,608 | .. |
| 16 | Tea .. | 2,16,76,186 | 19,92,19,403 | 2,44,15,618 | 19,89,55,125 | 2,26,92,110 | 22,80,94,200 | 2,08,96,708 | 20,23,29,491 |
| 17 | Wood and timber .. | 56,61,802 | 1,14,80,425 | 44,54,337 | 65,76,230 | 58,89,036 | 1,09,17,606 | 14,78,402 | 5,45,06,571 |
| 18 | Other important commodities | 6,53,33,921 | 5,55,60,361 | 6,66,41,048 | 4,77,24,977 | 7,36,34,867 | 5,46,13,690 | 6,81,23,984 | 6,76,85,414 |
| 19 | Sundries .. | 91,91,747 | | 58,91,696 | | 95,04,171 | | 41,66,477 | |

The percentage contribution of each of the important commodities towards the total annual export value for the years 1951-52 to 1959-60 is given below. (The data for 1959-60 are provisional).

| Commodity | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Tea .. | 20·2 | 19·1 | 25·5 | 30·8 | 26·4 | 26·9 | 29·1 | 24·2 | 23·4 |
| Coir and Coir products | 12·3 | 10·2 | 11·5 | 11·8 | 11·8 | 12·4 | 10·4 | 9·9 | 8·9 |
| Cashew kernels .. | 11·0 | 14·0 | 11·3 | 13·3 | 15·6 | 14·4 | 15·9 | 15·5 | 14·9 |
| Pepper .. | 26·5 | 22·8 | 15 9 | 9·0 | 6·7 | 5·8 | 3 9 | 3 6 | 11·5 |
| Rubber (Raw) .. | 5·8 | 6·3 | 8·7 | 7·7 | 7·7 | 8·4 | 7·9 | 7·2 | 6·0 |
| Copra .. | 2·9 | 3·7 | 2·2 | 2·3 | 2·3 | 1·7 | 2·0 | 3·7 | 3·1 |
| Others .. | 21·3 | 23·9 | 24·9 | 25·1 | 29·5 | 30·4 | 30·8 | 35 9 | 32·2 |
| Total .. | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 |

As a single commodity the contribution of tea is the highest in all the years except 1951-52 and 1952-53. The percentage contribution of pepper shows a steady decline till 1958-59 owing mainly to the fall in the price of the commodity.

The following table shows the percentage contributions of the currency areas towards the annual export value during the years 1951-52 to 1958-59.

| | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Sterling (Coastal) .. | 30·2 | 30·9 | 30·1 | 28·6 | 32·2 | 32·0 | 32·0 | 31·3 |
| " (Non-coastal) .. | 30·3 | 26·8 | 31·3 | 33·6 | 29·2 | 29·0 | 30·6 | 29·4 |
| Hard .. .. | 26·1 | 32·8 | 25·2 | 26·0 | 23·4 | 22·2 | 22·6 | 19·1 |
| Soft .. .. | 13·4 | 9·5 | 13·4 | 11·8 | 15·2 | 16·8 | 14·8 | 20·2 |
| Total .. | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 |

The contribution of the sea-borne exports (foreign) through the ports in the State to the total foreign exports from India is shown in the subjoined table.

| Year | Exports (foreign) from India (crores of Rs.) | | | Exports (foreign) from ports of Kerala (crores of Rs.) | | |
|---|---|---|---|---|---|---|
| | Dollar | Sterling | Other areas | Dollar | Sterling | Other areas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1956-57 .. | 121·6 | 332·6 | 181·6 | 18·3 (15 per cent) | 23·9 (7 per cent) | 13·8 (8 per cent) |
| 1957-58 .. | 118·1 | 298·0 | 178·1 | 19·3 (16 per cent) | 26·0 (9 per cent) | 12·6 (7 per cent) |
| 1958-59 .. | 104·4 | 300·4 | 171·1 | 17·5 (17 per cent) | 27·0 (9 per cent) | 18·6 (11 per cent) |
| 1959-60 .. | 117·6 | 294·7 | 211·0 | .. | .. | .. |

(Figures in brackets show percentages to all India Export figures for each area).

The currency-wise distribution of the annual export value of some important commodities for the year 1958-59 is given below :—

| Serial No. | Commodity | Export value in lakhs of Rs. | | | | |
|---|---|---|---|---|---|---|
| | | Sterling | Sterling | Hard | Soft | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Betelnuts .. | 213·87 | .. | .. | .. | 213·87 |
| 2 | Cardamom .. | 5·65 | 3·09 | 0·87 | 54·44 | 64·05 |
| 3 | Cashew-kernel .. | 1·40 | 118·25 | 984·69 | 328·08 | 1,432·42 |
| 4 | Cocoanuts .. | 223·00 | 0·37 | .. | .. | 223·37 |
| 5 | Cocoanut oil .. | 202·15 | .. | .. | .. | 202·15 |
| 6 | Copra .. | 343·38 | .. | .. | .. | 343·38 |
| 7 | Coir and Coir products .. | 151·57 | 266·29 | 92·42 | 401·21 | 911·49 |
| 8 | Coffee .. | 5·30 | 14·07 | .. | 241·10 | 260·47 |
| 9 | Ginger .. | 29·68 | 24·27 | 3·04 | 2·15 | 59·14 |
| 10 | Pepper .. | 112·94 | 2·54 | 92·38 | 125·34 | 333·20 |
| 11 | Rubber (Raw) .. | 661·68 | .. | .. | .. | 661·68 |
| 12 | Tea .. | 208·97 | 1,407·28 | 342·50 | 273·51 | 2,232·26 |
| 13 | Others .. | 713·48 | 865·69 | 236·91 | 432·02 | 2,248·10 |
| | Total .. | 2,873·07 | 2,701·85 | 1,752·81 | 1,857·85 | 9,185·58 |
| | Sundries .. | N.A. | N.A. | N.A. | N.A. | 41·66 |
| | Grand total .. | .. | .. | .. | .. | 9,227·24 |

Sixty-three per cent of the export value of tea is accounted for by sterling (Non-coastal) areas. The highest demand for cashew-kernels was from the Hard currency areas. Cardamom, coir products, coffee and pepper mainly found their markets in the soft currency areas. Betelnuts, cocoanuts, cocoanut oil, copra, ginger and rubber were exported to other ports in India.

Studies were also made on the import trade carried on through the various ports of Kerala for the Agricultural Years 1951-52 to 1958-59.

The percentage distribution of the annual import value of some of the important commodities for the years 1951-52 to 1959-60 is given in the subjoined table (figures for 1959-60 are provisional).

| Serial No. | Commodity | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Cashewnuts .. | 5·1 | 9·6 | 4·5 | 7·0 | 8·5 | 7·5 | 10·6 | 10·9 | 11·5 |
| 2 | Copra .. | 0·8 | 0·3 | 1·2 | 3·6 | 3·7 | 4·2 | 3·7 | 5·9 | 5·2 |
| 3 | Grains (including Rice and Paddy) | 4·3 | 15·0 | 25·7 | 19·3 | 6·2 | 6·2 | 5·6 | 2·3 | 6·9 |
| 4 | Cotton and its products .. | 23·9 | 11·4 | 11·5 | 13·6 | 15·9 | 15·3 | 17·1 | 15·3 | 15·9 |
| 5 | Mineral Oils .. | 14·9 | 17·1 | 14·6 | 17·6 | 16·6 | 20·1 | 20·2 | 17·8 | 22·7 |
| 6 | Metals and Ores .. | 3·5 | 4·7 | 4·1 | 5·4 | 6·2 | 7·6 | 7·8 | 7·5 | 6·4 |
| 7 | Machinery and Mill Work .. | 5·1 | 4·5 | 4·0 | 4·0 | 3·8 | 5·7 | 4·9 | 6·5 | 4·5 |
| 8 | Coal and Coke .. | 1·0 | 1·9 | 1·7 | 2·5 | 3·3 | 2·8 | 4·0 | 3·8 | 3·8 |
| 9 | Others .. | 41·4 | 35·5 | 32·7 | 27·0 | 35·8 | 30·6 | 26·1 | 30·0 | 23·1 |
| | Total .. | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 |

* Provisional.

(*Note.*—1. Data relating to the Calicut Port for the years 1951-52 to 1953-54 are not available and hence not included.

2. Data relating to Quilon Port for the months July to December 1956 are also not included.)

The following table shows the currency-wise distribution of the import value (in lakhs of Rs.) of important commodities for the year 1958-59.

| Serial number | Commodity | Import value in lakhs of Rupees | | | | |
|---|---|---|---|---|---|---|
| | | Sterling coastal | Sterling Non-coastal | Hard | Soft | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Cashewnuts .. | .. | 159·04 | .. | 441·46 | 600·50 |
| 2 | Copra .. | 2·49 | 322·18 | .. | .. | 324·67 |
| 3 | Grains (including Rice and Paddy) .. | 106·97 | 19 61 | .. | .. | 126·59 |
| 4 | Cotton and its products . | 597·70 | 36 92 | 45·68 | 163·19 | 843·49 |
| 5 | Mineral Oil .. | 642·82 | 261·39 | 1 05 | 78·37 | 983·63 |
| 6 | Metals and Ores .. | 106·99 | 45·68 | 151·07 | 111·72 | 415·46 |
| 7 | Machinery and Mill Work .. | 1·21 | 39·12 | 29·52 | 291·30 | 361·15 |
| 8 | Coal and Coke .. | 189·57 | .. | 23·34 | .. | 212·91 |

Grains, cotton and its products, mineral oils and coal and coke were imported into the State mainly from other Indian States. Copra was largely imported from Ceylon, machinery and mill work and cashewnuts (raw) from soft currency area and metals, minerals and ores from hard currency area.

The regular collection of data on movements of goods by rail was started in the year 1959. The commodity-wise consolidation of the data up to August 1960 has been completed on a monthly basis. In regard to certain commodities like paddy, rice, cocoanuts, copra, oilcakes, oilseeds and their products, tabulation was also done on a State-wise basis in order to meet the needs of the Government of India. Monthly statements furnishing information on the inter-State movements of oilseeds and their products by rail were supplied to the Indian Central Oilseeds Committee regularly. Also information on the quantity of cocoanut and its products exported by rail from important Centres in Kerala to other States in India was furnished regularly to the Indian Central Coconut Committee in quarterly statements.

Some of the most important commodities exported to outside the State through rail during the Agricultural Year 1959-60 were Tea, cocoanuts, copra, cocoanut oil, wood and bamboo, coir and coir products and bricks and tiles (vide the subjoined statement).

**Import/Export of Important Commodities by Rail through the Stations in Kerala (1959) (Provisional)**

| Serial number | Commodity | Import from places outside the State (Quantity in quintals) | Export to places outside the State (Quantity in quintals) |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1 | Paddy .. | 988405 | 13784 |
| 2 | Rice .. | 6855677 | 32655 |
| 3 | Wheat and Wheat flour .. | 80135 | 2648 |
| 4 | Miscellaneous grains and pulses .. | 744758 | 9732 |
| 5 | Pepper .. | 1962 | 35273 |
| 6 | Ginger .. | 534 | 16558 |
| 7 | Betelnuts .. | 416 | 35409 |
| 8 | Coffee .. | 20622 | 7006 |
| 9 | Tea .. | 90918 | 78983 |
| 10 | Salt .. | 227506 | 1866 |
| 11 | Sugar .. | 210778 | 884 |
| 12 | Fish .. | 41717 | 32363 |
| 13 | Cashewnuts .. | 17900 | 17855 |
| 14 | Tobacco (Manufactured and Unmanufactured) .. | 15159 | 4329 |
| 15 | Eggs .. | 372 | 22619 |
| 16 | Cocoanuts and Copra .. | 7149 | 146987 |
| 17 | Oilseeds .. | 21854 | 703 |
| 18 | Cocoanut Oil .. | 5279 | 197845 |
| 19 | Other Vegetable Oils .. | 86676 | 40251 |
| 20 | Cotton .. | 60249 | 105962 |
| 21 | Coir and Coir Product .. | 10197 | 226913 |
| 22 | Rubber (Raw) .. | 21969 | 25581 |
| 23 | Wood .. | 200671 | 2276517 |
| 24 | Bamboo .. | 1477 | 112678 |
| 25 | Cement .. | 1019204 | 24141 |
| 26 | Soap .. | 7389 | 30759 |
| 27 | Chemical manure .. | 175513 | 717489 |
| 28 | Bricks and Tiles .. | 47274 | 1376203 |

Cocoanuts were mainly exported to stations in Bombay, Madhya Pradesh, U. P. and Punjab and copra to stations in Andhra, Madras and Mysore. The important States to which Cocoanut oil was exported were Madras, Mysore, Bombay, Bihar and West Bengal.

Rice, paddy, pulses, vegetable oils (other than coconut oil) Cement, Salt and Chemical Manures were some of the important commodities imported into the State through rail. During 1959-60

rice and paddy were mainly imported from Andhra (46·8 per cent), Madras (43·5 per cent), Mysore (4·6 per cent) and Bombay (1·4 per cent) in that order.

The Department also collected data on the inter-State movements of goods by road through the check posts maintained by the Sales Tax Department on the frontiers of the State. Data from the 21 check posts were being supplied every month by the Sales Tax Authorities in the duplicate copies of declaration forms received in the check posts from persons carrying goods across the frontier posts. The consolidation of the data was not taken up during the year due to paucity of staff. It is proposed to take up the work during 1961-62.

## CHAPTER IV—OFFICIAL STATISTICS

### I. Labour Statistics

The Director of Statistics in his capacity as the Statistics Authority collects the returns under the Industrial Statistics (Labour) Rules from registered factories which come within the purview of the Factories Act, 1948 and also from plantations within the scope of the definition in the Plantation Labour Act, 1951.

Returns under the following enactments are also received :—

(1) Factories Act.
(2) Payment of Wages Act.
(3) Indian Trade Unions Act.
(4) Workmen's Compensation Act.
(5) Maternity Benefit Act.

#### 1. Industrial Statistics (Labour) Rules

All factories registered under the Factories Act and which fall under the categories (i) employing 10 or more workers and using power and (ii) employing 20 or more workers and not using power and all plantations coming under the Plantation Labour Act, 1951, submit quarterly returns to this Department. These returns are scrutinised and tabulated in this Office. Consolidated statements giving information on number of workers, total number of man-days worked, basic wages, dearness allowance, etc., paid to workers, etc., are prepared and forwarded to the Labour Bureau, Simla regularly.

#### 2. Factories Act

Under the Factories Act, it is obligatory on the part of the factories coming under the purview of the Factories Act, i.e., factories using power and employing 10 or more workers, factories not using power and employing 20 or more workers and smaller factories registered under Section 85 of Factories Act to submit annual and half-yearly returns to the Chief Inspector of Factories and Boilers. As per the Factory Rules, 1957 these factories have to submit duplicate copies of these returns to the Director of Statistics. These returns are compiled here and the consolidated statements forwarded to the Labour Bureau, Government of India.

The number of registered factories at the beginning of the year 1959 was 2146. During the year 238 factories were registered and 91 were removed from the register. The number of registered factories at the end of the year was thus 2293.

The average daily employment in 2258 registered working factories in the State during the year 1959 was estimated at 1·58 lakhs. Only 1265 factories (56%) submitted their annual returns during the year and the average daily number of workers employed in these factories was 90,612. The employment in the remaining 993 factories was estimated and the estimated number was 67,602. Of the total employment of 90,612 in factories which submitted returns 39·2 per cent were women. Average daily employment and the number of working factories in the major industrial sectors are shown below :—

| *Name of Industry group* | *Number of working factories during the year* 1959 | *Average daily employment* |
|---|---|---|
| Food Industries .. | 705 | 77,877 |
| Cotton Textiles .. | 265 | 15,788 |
| Other Textiles (coir, etc.) .. | 187 | 14,039 |
| Metals and chemicals .. | 90 | 8,253 |
| Other manufacturing industries .. | 1,011 | 42,257 |
| Total .. | 2,258 | 158,214 |

*Working of the Factories Act for the first half of* 1960.—Two thousand one hundred and eighty-eight factories registered under the Factories Act were working in the State during the half-year ending 30th June 1960. The average daily employment in the 1116 working factories which submitted returns was 80,310 while the estimated employment for 1072 factories not submitting returns was 72,601. Details regarding the average daily employment in some important industries are shown in the sub-joined table :—

| Industry | Factories submitting returns | | Factories not submitting returns | |
|---|---|---|---|---|
| | Number | Average daily employment | Number | Average daily employment (estimated) |
| Rice Mill .. | 59 | 689 | 34 | 499 |
| Oil Mill .. | 89 | 787 | 130 | 1224 |
| Tea .. | 85 | 4501 | 35 | 1365 |
| Cashew .. | 51 | 23710 | 116 | 39755 |

| Industry | Factories submitting returns | | Factories not submitting returns | |
|---|---|---|---|---|
| | Number | Average daily employment | Number | Average daily employment (estimated) |
| Beedi .. | 30 | 755 | 40 | 1247 |
| Textiles .. | 155 | 11742 | 108 | 3905 |
| Coir .. | 45 | 5835 | 108 | 5359 |
| Saw Mill .. | 84 | 2331 | 60 | 1235 |
| Splints and Veneers .. | 42 | 2179 | 27 | 1046 |
| Paper .. | 1 | 921 | .. | .. |
| Rubber .. | 36 | 1149 | 25 | 1034 |
| Artificial Manures .. | 3 | 53 | 2 | 1550 |
| Bricks and Tiles .. | 91 | 8256 | 59 | 4175 |
| Cement .. | .. | .. | 1 | 403 |
| General Engineering.. | 23 | 1005 | 19 | 538 |

### 3. Payment of Wages Act

All factories registered under the Factories Act except those registered under section 85 come under the purview of this Act. These factories submit an annual return giving information on average daily employment, wages paid, fines realised, etc., in respect of persons employed in the factories and drawing up to Rs. 400 per mensem. Consolidated statements prepared from the returns are forwarded to the Labour Bureau from this Department.

During the year 1959, 953 factories submitted annual returns under the said Act. Of the 83,247 persons reported as employed in these factories, 83,049 persons were earning up to Rs. 200 per mensem. The total gross wages received by these 83,049 workers was Rs. 5,86,16,212. The gross wages earned by the 198 persons in the wage group earning Rs. 200 and above but less than Rs. 400 per mensem was Rs. 70,51,116. Of the gross wages received by these two categories of workers about 70 per cent was basic wages.

Average monthly earnings of a worker during 1959 in some selected industries are shown below :—

| *Industry* | | *Average monthly earning of a worker Rs.* |
|---|---|---|
| Cashew | .. | 21·79 |
| Textiles | .. | 72·96 |
| Bricks and Tiles | .. | 60·16 |
| Tea | .. | 57·67 |
| Rubber | .. | 101·50 |
| Saw Mill | .. | 68·98 |
| Splints and Veneers | .. | 28·62 |

The average monthly earnings of a worker for all the industries taken together came to Rs. 59·38.

**4. Indian Trade Unions Act**

The Registrar of Trade Unions (Labour Commissioner, Trivandrum) is responsible for the collection of annual returns under the Trade Unions Act. These returns are forwarded to this Office by the Registrar. After the scrutiny, these returns are tabulated in this Office. Consolidated statements giving particulars regarding (*i*) membership, (*ii*) income and expenditure, (*iii*) assets and liabilities, etc., are furnished to the Labour Bureau, Government of India.

A summary of the financial position of the Trade Unions during the year 1959-60 is presented in the table appended.

## Statistics of Trade Unions registered under the Indian Trade Unions Act for the year ending 31st March 1960

| Classification of Trade Unions | No. of Trade Unions at the end of the year | No. of Trade Unions which submitted returns | Number of members: At the beginning of the year | Number of members: Joined during the year | Number of members: Left during the year | Number of members: At the end of the year: Total | Number of members: At the end of the year: Male | Number of members: At the end of the year: Female | General fund: Opening balance Rs. | General fund: Income Rs. | General fund: Expenditure Rs. | General fund: Closing balance Rs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I. CENTRAL UNIONS | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| II. STATE UNIONS | | | | | | | | | | | | |
| State Unions .. | 1658 | 875 | 346541 | 33789 | 57261 | *323069 | 246556 | 76484 | 3,37,666 | 10,59,332 | 9,88,206 | 4,08,793 |
| 1. Unions in the Private Sector . | 1638 | 861 | 338802 | 33104 | 56546 | 315360 | 238968 | 76363 | 2,99,097 | 10,21,684 | 9,57,612 | 3,63,169 |
| (a) Employees Unions .. | 1630 | 855 | 337033 | 33063 | 56515 | 313581 | 237243 | 76338 | 2,81,122 | 9,99,341 | 9,40,747 | 3,39,716 |
| (b) Employers Unions .. | 8 | 6 | 1769 | 41 | 31 | 1779 | 1725 | 25 | 17,975 | 22,343 | 16,865 | 23,453 |
| 2. Unions in the Public Sector .. | 20 | 14 | 7739 | 685 | 715 | 7709 | 7588 | 121 | 38,569 | 37,648 | 30,593 | 45,624 |
| (a) Central sphere .. | 11 | 6 | 2685 | 165 | 216 | 2634 | 2549 | 85 | 2,151 | 10,549 | 7,008 | 5,692 |
| (b) State sphere .. | 9 | 8 | 5054 | 520 | 499 | 5075 | 5039 | 36 | 36,418 | 27,099 | 23,585 | 39,932 |

| | No. of Federations at the end of the year | No. of Federations which submitted returns | Number of Unions: At the beginning of the year | Number of Unions: Affiliated during the year | Number of Unions: Disaffiliated during the year | Number of Unions: At the end of the year | General fund: Opening balance Rs. | General fund: Income Rs. | General fund: Expenditure Rs. | General fund: Closing balance Rs. |
|---|---|---|---|---|---|---|---|---|---|---|
| III. FEDERATIONS .. | 5 | 4 | 27 | 13 | .. | 40 | 371 | 11,177 | 8,777 | 2,771 |

* Sex-wise distribution of 29 companies is not given.

The number of Trade Unions at the beginning of the year was 1,550 while that at the end of the year was 1,663. 201 Trade Unions were newly registered during the year under review and 88 were removed from the rolls. About 53 per cent of the Trade Unions submitted the annual returns. These Trade Unions together had an income of Rs. 10·59 lakhs during the year while the expenditure of these unions was reported to be Rs. 9·88 lakhs. Out of the five federations in the State, returns was received from 4. At the end of the year, the number of unions in these federations was 40 while that at the beginning of the year was 27. No union was disaffiliated from these federations during the year under study.

**5. Workmen's Compensation Act**

The annual returns under the Workmen's Compensation Act are forwarded to this Office by the Commissioner of Workmen's Compensation for compilation and analysis. Statements showing the number of accidents, occupational diseases and the amount of compensation paid to the workers, are prepared and furnished to the Labour Bureau.

During the year 1959 the total number of accidents reported from the establishments covered by this Act was 402 and Rs. 31,543 was given to the workers as compensation. No occupational disease was reported during the year.

**6. Maternity Benefit Act**

Returns received from the Chief Inspector of Factories and Chief Inspector of Plantations are compiled in this Office. Two statements showing number of women who claimed maternity benefit, amount of maternity benefit paid, etc., are prepared and sent to the Labour Bureau. Number of women who claimed maternity benefit during 1959 was 9,417 in the factories and 8,958 in the plantations. Of these 17,654 claims were accepted and paid either fully or partially. An amount of Rs. 11,41,200 was given as maternity benefit during the year.

**7. Industrial Disputes**

Monthly review of work-stoppages is the main periodical regarding industrial disputes regularly forwarded to the Labour Bureau from this Department. The returns are collected from the various District Labour Offices in the State. The aim of preparing this statement is to bring out information on work-stoppages leading to loss in economic activities and consequently loss in production. The appended statement shows the details regarding work-stoppages in various industries during the year 1960.

**Particulars of Work-stoppages during 1960**

| Serial number | Industry | Total number of disputes | By causes | | | | | Details of work-stoppages | | | Result | | | | Method of settlement | | | | | No. of token strikes included in column 3 | No. of strikes continuing |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Wages | Bonus | Working condition | Retrenchments | Others | No. of workers normally employed | No. of workers affected | Total number of man-days lost | Successful | Unsuccessful | Partially successful | Indefinite | Conciliation | Direct negotiation | Adjudication | Mediation | Others | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | All .. | 274 | 159 | 38 | 6 | 4 | 67 | 161950 | 159067 | 1057155 | 199 | 4 | 23 | 13 | 197 | 12 | 13 | 3 | 14 | 31 | 4 |
| 1 | Plantation .. | 25 | 5 | 1 | .. | 1 | 18 | 8702 | 8036 | 29907 | 18 | 1 | 1 | 3 | 14 | 2 | .. | .. | 7 | 1 | 1 |
| 2 | Textiles .. | 14 | 1 | 3 | 3 | .. | 7 | 3250 | 2926 | 33057 | 8 | .. | .. | 1 | 6 | .. | .. | 3 | .. | 5 | .. |
| 3 | Coir .. | 1 | .. | .. | 1 | .. | .. | 275 | 101 | 1191 | .. | .. | 1 | .. | 1 | .. | .. | .. | .. | .. | .. |
| 4 | Saw Mills .. | 6 | 2 | 1 | .. | 1 | 2 | 336 | 318 | 1763 | 3 | .. | 2 | .. | 3 | .. | 2 | .. | .. | .. | 1 |
| 5 | Matches .. | 4 | .. | .. | .. | .. | 4 | 229 | 127 | 200 | 1 | .. | .. | 1 | 1 | .. | .. | .. | 1 | 2 | .. |
| 6 | Tiles .. | 40 | 2 | 26 | .. | 1 | 11 | 4000 | 3614 | 98067 | 22 | .. | 8 | 1 | 18 | 3 | 7 | .. | 3 | 8 | 1 |
| 7 | Cashew .. | 140 | 133 | .. | 2 | .. | 5 | 139993 | 139046 | 851314 | 128 | .. | 5 | 2 | 133 | 1 | .. | .. | 1 | 5 | .. |
| 8 | Miscellaneous .. | 44 | 16 | 7 | .. | 1 | 20 | 5165 | 4899 | 41656 | 19 | 3 | 6 | 5 | 21 | 6 | 4 | .. | 2 | 10 | 1 |

Besides the above, fortnightly statement regarding strikes and threatened strikes prepared from the returns received from the District Labour Officers are periodically sent to the Regional Labour Commissioner, Madras. This Department is also responsible for the collection and consolidation of returns on exchange of statistical data regarding lay-offs, retrenchments, closures, etc. Statements prepared from these are sent to the State Labour Commissioner and to the Commissioners of some sister States.

## II. Industrial Statistics and Plantation Statistics

The collection and consolidation of Industrial and Plantation Statistics continued to be attended by this Department.

The technical details of the scheme for the improvement of Plantation Statistics were finalised and the scheme included in the Third Five-Year Plan. Also the technical details of a study for framing norms for assessment of future man-power requirment in the Industrial Sector were finalised. This was done in collaboration with the Director, Bureau of Economic Studies.

### 1. Census of Manufacturing Industries, 1958

This was conducted as part of the All India Census of Manufacturing Industries and covered all registered factories in the State employing 20 or more persons with power and engaged in one or more of the 29 industries specified by the Department of Industrial Statistics, Government of India. The consolidated data (provisional) for the year 1958 are given in the subjoined table.

**Census of Manufacturing Industries, 1958—Economic structure of certain selected Industries in Kerala State**

(Figures are provisional)

| Serial number | Industry | No. of factories covered by the census | No. of factories covered by this table | Fixed capital Rs. | Working capital Rs. | Total productive capital Rs. | Persons employed | Salaries and wages Rs. | Ex-factory purchase value of raw materials and fuels Rs. | Ex-factory net selling value of products and by-products Rs. | Depreciation Rs. | Value added by manufacture Rs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Rice Mills .. | 6 | 4 | 5,23,082 | 1,09,167 | 6,32,248 | 112 | 56,941 | 11,93,643 | 13,84,856 | 13,039 | 1,78,174 |
| 2 | Oil Mills .. | 24 | 21 | 42,95,056 | 2,41,83,144 | 2,84,78,200 | 776 | 5,02,359 | 2,82,04,880 | 3,01,16,857 | 89,514 | 18,22,463 |
| 3 | Soap .. | 4 | 4 | 42,59,860 | 1,05,13,403 | 1,47,73,263 | 768 | 14,97,529 | 1,70,16,639 | 2,39,06,621 | 4,49,166 | 64,40,816 |
| 4 | Ceramics .. | 5 | 4 | 16,13,486 | 12,21,587 | 28,35,073 | 403 | 3,93,768 | 1,93,102 | 7,36,001 | 54,684 | 4,88,215 |
| 5 | Plywood and Tea chests .. | 11 | 11 | 38,96,620 | 27,30,082 | 66,26,702 | 1544 | 14,45,290 | 62,67,218 | 1,06,05,639 | 5,04,717 | 38,33,704 |
| 6 | Matches .. | 9 | 5 | 4,98,143 | 2,49,862 | 7,48,005 | 385 | 1,17,545 | 3,27,665 | 5,28,393 | 25,392 | 1,75,336 |
| 7 | Textiles .. | 25 | 23 | 3,71,28,285 | 2,44,05,366 | 6,15,33,651 | 10595 | 1,12,92,667 | 3,88,26,722 | 5,56,84,387 | 23,26,112 | 1,45,31,553 |
| 8 | Chemicals .. | 9 | 8 | 4,30,30,993 | 2,46,05,274 | 6,76,36,267 | 2477 | 58,07,158 | 1,96,80,225 | 3,75,19,572 | 38,16,985 | 1,40,22,362 |
| 9 | General Engineering .. | 62 | 46 | 1,37,72,222 | 1,06,23,516 | 2,43,95,738 | 4676 | 57,95,810 | 1,02,70,478 | 1,91,07,914 | 8,44,047 | 79,93,399 |
| 10 | Miscellaneous .. | 10 | 9 | 2,79,25,174 | 3,19,96,075 | 5,99,21,249 | 4489 | 93,52,552 | 5,70,46,167 | 9,20,24,731 | 29,26,908 | 3,20,51,656 |
| | State .. | 165 | 135 | 13,69,42,920 | 13,06,37,476 | 26,75,80,396 | 26225 | 3,62,61,619 | 17,90,26,739 | 27,16,14,971 | 1,10,50,554 | 8,15,37,673 |

From 1959 onwards the Census of Manufacturing Industries was replaced by the Annual Survey of Manufacturing Industries and the work of collection of data in this behalf is attended to by the Field Wing of the National Sample Survey.

## 2. Survey for the Collection of Industrial Statistics

In the Census of Manufacturing Industries conducted by the Government of India, only industries of all-India importance were covered. Consequently industries which are peculiar to the State and which occupy an important place in the States economy happened to be excluded from the purview of the census. In order to obviate this short-coming of the Census of Manufacturing Industries and also to build up a series of industrial statistics for the State, a sample survey was initiated by the Department covering all the important industries in the State. To start with, the data for the years 1956-57 and 1958 were collected together. The scrutiny and analysis of the data are in progress. The survey for the year 1959 is in progress.

## 3. Framing of Norms for Assessment of Man-power Requirements in Industrial Sector

In any system of planned development of economy, it is necessary to assess the reqirements of man-power of various categories for implementation of the developmental schemes. For this purpose norms for different sectors showing the interrelationship between employment on the one hand investment and output on the other, have to be found. It is proposed to conduct a man-power study in the State in order to frame norms for assessment of man-power requirements during the Third and Fourth Plan periods.

The design and other technical details of the study was finalised by the Department in consultation with the Director, Bureau of Economic Studies. The study which is for framing norms for the organised industrial sector will be confined for the present to the important manufacturing industries in the State and is to be started shortly.

## 4. Plantation Statistics

The technical details of the scheme for the improvement of Plantation Statistics were finalised. The main object of the scheme is to frame reliable estimates of the area under and production of rubber, coffee and tea in the State through sample surveys. The surveys are proposed to be conducted every year.

1. *Rubber*.—Statistics relating to rubber estates of 50 acres and above are collected by the Rubber Board. Details have to be collected by the Department through sample survey from estates of extent below 50 acres. The design adopted for the survey is that of stratified sampling. The stratification is done on the basis of districts

and size groups of estates. The distribution of rubber estates in the State is as follows :—

| Strata/Districts | 0—1 acre | 1—5 acres | 5—10 acres | 10—25 acres | 25—50 acres | Above 50 acres | Total |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Trivandrum .. | 11 | 275 | 157 | 156 | 38 | 26 | 663 |
| 2. Quilon .. | 785 | 4388 | 794 | 437 | 141 | 88 | 6633 |
| 3. Alleppey .. | 231 | 1216 | 108 | 40 | 7 | 2 | 1604 |
| 4. Kottayam .. | 8145 | 22363 | 2156 | 783 | 171 | 118 | 33736 |
| 5. Ernakulam .. | 740 | 5109 | 867 | 405 | 112 | 57 | 7290 |
| 6. Trichur .. | 8 | 68 | 57 | 48 | 28 | 20 | 229 |
| 7. Palghat .. | 1 | 7 | 8 | 14 | 10 | 36 | 76 |
| 8. Kozhikode .. | 3 | 322 | 171 | 88 | 29 | 63 | 676 |
| 9. Cannanore .. | 9 | 107 | 60 | 41 | 9 | 13 | 239 |
| Total .. | 9933 | 33855 | 4378 | 2012 | 545 | 423 | 51146 |

It is proposed to enumerate completely all the estates in the group 25–50. From the other strata, 804 estates in all will be sampled for enumeration. The frame for selection of units has already been got prepared through the field staff of this Department.

2. *Coffee.*—In the case of coffee also, stratified sampling is adopted. The following table shows the distribution of coffee estates in the State :—

| Strata/Districts | Below 1 acre | 1—5 acres | 5—10 acres | 10—25 acres | 25—100 acres | 100 and above | Total |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Trivandrum .. | .. | .. | .. | .. | .. | .. | .. |
| 2. Quilon .. | 101 | 44 | 2 | .. | 3 | 2 | 152 |
| 3. Alleppey .. | .. | .. | .. | .. | .. | .. | .. |
| 4. Kottayam .. | 1281 | 1520 | 167 | 49 | 22 | 24 | 3063 |
| 5. Ernakulam .. | 73 | 53 | 5 | 4 | 4 | 2 | 141 |
| 6. Trichur .. | .. | .. | .. | .. | .. | .. | .. |
| 7. Palghat .. | 5 | 26 | 1 | 2 | 6 | 6 | 46 |
| 8. Kozhikode .. | 584 | 1932 | 686 | 368 | 91 | 28 | 3689 |
| 9. Cannanore .. | 523 | 1360 | 380 | 111 | 30 | 6 | 2410 |
| State .. | 2567 | 4935 | 1241 | 534 | 156 | 68 | 9581 |

3. *Tea.*—It is proposed to sample 437 estates for enumeration. According to the revised procedure adopted for the collection of tea statisticts in collaboration with the Directorate of Economics and Statistics, Government of India and the Tea Board, the District Statistical Officers are the District Authorities for this purpose from the year 1959. Data are to be collected both from the 1,799 registered and 4,085 unregistered estates. The registered estates are being covered by a Census enquiry. In Kottayam District where about 96 per cent of the unregistered estates are concentrated a 5 per cent sample of unregistered tea estates is selected for sample enquiry. The allocation of the total sample into different strata (size groups) is made in proportion to the area in the stratum.

The distribution of the sample of unregistered tea estates in Kottayam District over the different strata is given below :—

| Strata | Total number of estates (acres) | Area (acres) | Number of estates selected for sample survey (acres) |
|---|---|---|---|
| 1. Below 1 acre .. | 491 | 316 | 5 |
| 2. 1—5 acres .. | 2392 | 6237 | 109 |
| 3. 5—10 acres .. | 398 | 2597 | 45 |
| 4. 10—25 acres .. | 113 | 1612 | 28 |
| 5. 25 acres and above .. | 19 | 743 | 13 |
| Total .. | 3953 | 11505 | 200 |

## III. Education Statistics

During the year under review, this Department collected and consolidated the statistics of all the educational institutions in Kerala (except those under the University of Kerala) for the year 1958–59. The data were supplied to the Ministry of Education, Government of India in the form prescribed by them.

The form gives detailed information regarding the number of institutions—type-wise and management-wise, enrolment, expenditure, teachers, examination results, compulsory education, education in rural areas, financial assistance to students, education of scheduled castes, tribes and backward communities and the Inspectorate and Directorate of the State education.

Under the scheme of the collection of data, the Assistant Educational Officers of the Education Department were responsible for the collection of data from institutions up to the Middle School standard in the sub-district. The consolidated data for the sub-district were furnished to this Department by the Assistant Educational Officers. The returns relating to other institutions in an Educational District were collected by this Department through the District Educational Officers. Statistics of the special and professional institutions were also directly collected by this Department.

The appended statement gives the number of educational institutions, number of scholars and number of teachers for 1958–59, as per the statistics collected by this Department.

**A Summary of Educational Statistics of Kerala for the year 1958-59 (School-Standard only)**

| Serial No. | Type of Institutions | No. of Institutions | | Enrolment | | No. of teachers |
|---|---|---|---|---|---|---|
| | | Government | Private | Boys | Girls | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Nursery .. | .. | 13 | 400 | 403 | 38 |
| 2 | Primary/Junior Basic .. | 2804 | 3984 | 944010 | 817609 | 43348 |
| 3 | Middle/Senior Basic.. | 532 | 1366 | 385983 | 300614 | 25402 |
| 4 | High/Post Basic .. | 239 | 607 | 335898 | 240126 | 22822 |
| 5 | Professional and Special .. | 79 | 216 | 11733 | 4600 | 994 |
| | All Types .. | 3654 | 6186 | 1678024 | 1363352 | 92604 |

## IV. Statistics relating to Transfer of Agricultural Land

This Department continued to collect the data regarding transfers of agricultural land registered in the various Sub-Registry Offices of the State. The data were furnished by parties to the documents in the form prescribed by this Department and were received through the Sub-Registrars. The analysis of the data for 1959 was done with the aid of the Mechanical Tabulation Unit installed in the Department.

During the year 1959, altogether 3,12,225 deeds pertaining to transfers of agricultural land were registered in the State. The registration of documents was more or less evenly distributed over the different quarters. During the year under review a 20 per cent sample was selected on a systematic basis for the detailed analysis. For calculating the extent of land involved in the transfers all the documents were taken.

The following particulars for a deed were collected and analysed:—

1. Area transferred by type of land,
2. Kind of deed,
3. Value of deed,
4. Cause of deed,
5. Religion of transferor and religion of transferee,
6. Occupation of transferor and occupation of transferee, and
7. Area left with the transferor and transferee after transaction.

The grouping of deeds by kind was done as follows:—

1. Lease,
2. Sale,
3. Mortgage with possession,
4. Mortgage without possession,
5. Reconveyance,
6. Gifts,
7. Bhoodan,
8. Receipt,
9. Partition, and
10. Others,

Casuses of deeds were classified as follows:

1. Dowry,
2. Marriage expenses,
3. Clearance of debt,
4. Purchase of other land,
5. Building construction,
6. Education,
7. Agriculture,
8. Trade,
9. Medical,
10. Partition,
11. Security, and
12. Others.

The occupation of the parties was broadly grouped under agricultural and non-agricultural.

The following are some of the important results obtained in the analysis of the data:—

(*i*) The total number of deeds regarding transfers of agricultural land registered during 1959 was 3,12,225 involving 4,40,298 acres of land.

The distribution according to kind of deed is as follows:—

| Serial No. | Kind of deed | Percentages of deeds to total | Total area involved | Percentage of area to total area |
|---|---|---|---|---|
| 1 | Total .. | 100·00 | 4,40,298 | 100·0 |
| 2 | Lease .. | 6·3 | 29,013 | 6·6 |
| 3 | Sales .. | 34·7 | 1,02,348 | 23·3 |
| 4 | Mortgage with possession .. | 11·3 | 15,956 | 3·6 |
| 5 | Mortgage without possession .. | 12·8 | 55,489 | 12·6 |
| 6 | Reconveyance .. | 7·6 | 28,157 | 6·4 |
| 7 | Gifts .. | 3·0 | 19,101 | 4·3 |
| 8 | Bhoodan .. | .. | 1 | .. |
| 9 | Receipt .. | 3·6 | 13,513 | 3·1 |
| 10 | Partition .. | 4·1 | 90,262 | 20·5 |
| 11 | Others .. | 16·6 | 86,418 | 19·6 |

(*ii*) The total area involved in the transfer by way of sales, mortgages (with and without possession), gifts and partition was 2,83,156 acres. The distribuion of this area according to type of land is as follows:—

| Kind of deed | Irrigated single crop | Unirrigated single crop | Irrigated double crop | Unirrigated double crop | Garden land | Total |
|---|---|---|---|---|---|---|
| Total | 14,880 | 23,836 | 14,264 | 27,608 | 2,02,568 | 2,83,156 |
| Sales | 4,210 | 8,323 | 3,990 | 10,322 | 25,503 | 1,02,348 |
| Mortgage with possession | 517 | 1,126 | 847 | 1,713 | 11,753 | 15,596 |
| Mortgage without possession | 4,100 | 4,202 | 2,190 | 4,919 | 40,078 | 55,489 |
| Gifts | 1,139 | 2,136 | 1,146 | 1,927 | 12,753 | 19,101 |
| Partition | 4,914 | 8,049 | 6,091 | 8,727 | 62,481 | 90,262 |

Garden land constituted about 70 per cent of the total area transferred by way of sales, mortgages with possession, mortgages without possession, gifts and partition, irrigated single crop, 6 per cent, unirrigated single crop about 9 per cent, irrigated double crop, 5 per cent and unirrigated double crop about 10 per cent.

(*iii*) The average extent of land involved in a deed of mortgage with possession was 0·36 acres and average value per acre was Rs. 988. The average area involved in a sale deed during the year was 0·83 acres and the average sale value per acre was Rs. 972. It may be noted that almost all transfers by way of mortgage with possession occurred in the former Travancore-Cochin area. This explains the higher average value for mortgage with possession when compared to sale deed.

(*iv*) The most important single reason for tranfer of agricultural land was clearance of family debt constituting 21·7 per cent of the total. The next important reason was purchase of other land (12·2 per cent). The pattern of distribution was almost the same from quarter to quarter.

(*v*) The transferors were agriculturists in the case of about 78 per cent of the documents executed during the year and agriculturists were transferees in about 66 per cent of the documents as may be seen from the subjoined table :—

| | *Occupation of Transferee* | *Occupation of Transferor* | |
|---|---|---|---|
| | | *Agriculture* | *Non-agriculture* |
| All | 312,225 | 243,170 | 69,055 |
| | (100·00) | (77·88) | (22·12) |
| Agriculture | 205,505 | 173,060 | 32,445 |
| | (65·82) | (55·43) | (10·39) |
| Non-agriculture | 106,720 | 70,110 | 36,610 |
| | (34·18) | (22·45) | (11·73) |

(The figures in brackets are percentages)

(*vi*) During the year under review the area of sale deeds involving partition of existing holdings was about 61 per cent of the total area transferred by way of sales. For mortgage with possession the area involving partition of existing holdings was about 68 per cent and for gifts it was about 45 per cent.

Considering the number of deeds, in the case of about 64 per cent of the sales, about 66 per cent of the mortgage with possession and about 56 per cent of the gifts, the existing holdings underwent partition.

## V. Public Works Department Statistics

The Department continued to attend to the collection and compilation of statistics relating to road mileage and expenditure.

The data on road mileage (extra-municipal) and expenditure in the synoptic form for 1959-60 were collected and furnished to the Government of India during the year. The data are given below :—

| Serial No. | Type of road | Mileage as on 31-3-1960 | | | Expenditure during the year 1959-60 (Rs. in lakhs) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Under charge of Chief Engineer | | *Local roads | Original works | | Local roads | Maintenance | | Local roads |
| | | | | | Under charge of Chief Engineer | | | Under charge of Chief Engineer | | |
| | | ** Urban area | Rural area | | Urban area | Rural area | | Urban area | Rural area | |
| 1 | Bituminous or Tarred .. | .. | 1629 | 2 | .. | .. | .. | .. | .. | .. |
| 2 | Concrete .. | .. | 73 | 11 | .. | .. | .. | .. | .. | .. |
| 3 | Water bound macadom and pavements and stones .. | .. | 3132 | 178 | Break up not available | | .. | .. | .. | .. |
| 4 | Lower Type .. | .. | 2776 | 1512 | .. | .. | .. | .. | .. | .. |
| | Total .. | .. | 7610 | 1703 | 65·38 | 4·23 | .. | 100·01 | 1·03 | .. |

NOTE :—1. National Highways included. Administration expenses, expenditure on establishment, tools and plants and loan charges, etc., ignored.

2. The mileage and expenditure for roads under N.E.S. and Community Development Blocks not given.

3. * Roads under the control of Panchayat.

4. ** Roads within the limits of a Municipality or Corporation. (The figures are provisional.)

District-wise information on roads in the State for 1958-59 and 1959-60 was also collected for supply to the Government of India and the State Government (vide the following statement for 1958-59).

More detailed information on roads and bridges were also collected for 1958-59 and 1959-60 in the proforma mentioned below :—

(*i*) Statement showing mileage of extra-municipal roads maintained by Public Authorities (Five-Year Plan and outside).

(*ii*) Statement showing mileage of extra-municipal roads maintained by the Forest Department, Irrigation Department and the Military Engineering Service.

(*iii*) Statement of expenditure incurred on extra-municipal roads maintained by Public Authorities (Five-Year Plan and outside).

(*iv*) Statement showing particulars of and expenditure on major bridges.

(*v*) Statement showing mileage and expenditure on public roads in urban areas.

**District-wise Rural road mileage and expenditure statistics for the year 1958-59**

| District | I Metalled | | | | II Non-metalled | | | | III Motorable | | | | IV Unmotorable | | Expenditure (break up not available) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Concrete | Black top | Water bound | Total | Gravel | Soil stabilised | Earth surface | Total | I and II total | All weather | Fair weather | Total | Unmotorable | Total motorable and unmotorable | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | Rs. 16 |
| Trivandrum .. | 12 | 213 | 362 | 587 | 459 | 5 | 45 | 509 | 1096 | 1034 | 18 | 1052 | 44 | 1096 | 8,77,456 |
| Quilon .. | .. | 50 | 293 | 343 | 186 | 168 | 361 | 715 | 1058 | 622 | 252 | 874 | 184 | 1058 | 19,68,052 |
| Kottayam .. | 11 | 111 | 506 | 628 | 4 | 7 | 1179 | 1190 | 1818 | 943 | 63 | 1006 | 812 | 1818 | 18,81,679 |
| Alleppey .. | 19 | 84 | 167 | 270 | 337 | 32 | 743 | 1112 | 1382 | 990 | 100 | 1090 | 292 | 1382 | 7,90,032 |
| Ernakulam .. | .. | 169 | 361 | 530 | 141 | 72 | 525 | 738 | 1268 | 720 | 233 | 953 | 315 | 1268 | 27,21,513 |
| Trichur .. | 16 | 188 | 361 | 565 | 44 | 5 | 228 | 277 | 842 | 829 | 8 | 837 | 5 | 842 | 11,37,927 |
| Palghat .. | 7 | 150 | 436 | 593 | 2 | 16 | 106 | 124 | 717 | 308 | 176 | 484 | 233 | 717 | 17,62,866 |
| Kozhikode .. | 2 | 208 | 464 | 674 | 93 | 53 | 35 | 181 | 855 | 552 | 227 | 779 | 76 | 855 | 22,28,476 |
| Cannanore .. | .. | 66 | 264 | 330 | 51 | 262 | 537 | 850 | 1180 | 394 | 561 | 955 | 225 | 1180 | 29,69,902 |
| Total (State).. | 67 | 1239 | 3214 | 4520 | 1312 | 620 | 3759 | 5696 | 10216 | 6392 | 1638 | 8030 | 2186 | 10219 | 1,63,37,903 |

SOURCE: (1) Executive Engineer (PWD), (2) Community Development Block, (3) Irrigation Department, (4) Forest Department, (5) Municipalities.
(The figures are provisional)

# CHAPTER V—VITAL STATISTICS AND DEMOGRAPHIC RESEARCH

## I. Vital Statistics

The Department of Statistics is responsible for the compilation, analysis and publication of vital statistics in the State.

### A. Source of data

1. *Birth and Death Returns.*—The data relating to the former Travancore-Cochin area continued to be supplied by the Health Services Department and that relating to Malabar Region by Revenue Officers, in the case of rural areas. The data relating to municipalities are supplied by the Municipal Commissioners.

2. *Data on Epidemic, Notified Diseases and Vaccination.*—Data relating to municipal towns continued to be supplied to this Department by the Municipal Commissioners. The data relating to other areas are supplied by the concerned officers of the Health Services Department. The Department is tabulating births and deaths by date of registration since January 1960 instead of by date of occurrence as required by the Registrar General of India. During the year under review also much difficulty was felt in the tabulation of data owing to the inordinate delay of the reporting agencies in Travancore-Cochin area to send the returns in time. The matter was taken up with the concerned officers.

### B. Publications of the Section

The quartely bulletin of the vital statistics continued to be issued from this Section. The contents of the same are mainly the following :—

(*i*) The number of live births according to religion and sex.

(*ii*) The number of deaths according to religion and principal diseases.

(*iii*) Infant deaths and maternal deaths.

(*iv*) Still births.

(*v*) Incidence of small-pox

(*vi*) Births, deaths, infant deaths, maternal deaths, etc., in towns with population of 30,000 and over.

(*vii*) Order of birth by age of mother relating to towns having a population of one lakh and over.

(*viii*) Vital rates.

(*ix*) Comparison with the last quarter.

(*x*) Population figures.

The following statements were also issued from this Department in the period under review:—

(*i*) Daily report of epidemic diseases.

(*ii*) Weekly report of epidemic diseases.

(*iii*) Weekly telegrams of epidemic diseases.

(*iv*) Weekly statement of deaths from communicable diseases in towns with a population of 30,000 and over.

(*v*) Weekly statement of notified diseases relating to various Districts of the State.

(*vi*) Monthly statements of vital statistics.

(*vii*) Quarterly statements of vital statistics.

(*viii*) Annual statements of vital statistics.

(*ix*) Annual statements of vaccination and inoculation.

The number of registered births for the State during the year 1960 is 376,664 the birth rate working out as 23·92 per mile. The number of registered deaths is 109,243 and the death rate works out to 6·94 per mile of population. The number of infant deaths reported was 14,987 and the infant death rate per mile of live births is 39·79. The number of still births and maternal deaths reported were 4,450 and 796 their rates being 11·68 and 2·09 respectively per mile of total births (still+live).

A district-wise statement of vital events registered in 1960 is enclosed.

**District-wise figures of births, deaths, infant deaths, still births and maternal deaths and their rates for the year 1960**

| | | Live births | | Deaths | | Infant deaths | | Still births | | Maternal deaths | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| State | .. | 376664 | 23·92 | 109243 | 6·94 | 14987 | 39·79 | 4450 | 11·68 | 796 | 2·09 |
| | Rural .. | 313801 | 22·13 | 92967 | 6·56 | 12988 | 41·39 | 2197 | 6·95 | 671 | 2·12 |
| | Urban .. | 62863 | 40·09 | 16276 | 10·38 | 1999 | 31·80 | 2253 | 34·60 | 125 | 1·92 |
| Trivandrum District | .. | 40022 | 25 59 | 9423 | 6·02 | 1156 | 28·88 | 631 | 15·52 | 61 | 1·50 |
| | Rural .. | 2581 | 19·82 | 6434 | 4·94 | 806 | 31·22 | 55 | 2·13 | 54 | 2·00 |
| | Urban .. | 14203 | 54·42 | 2989 | 11·45 | 350 | 24·64 | 576 | 38·97 | 7 | 0·47 |
| Quilon District | .. | 43405 | 24·96 | 9395 | 5·40 | 1137 | 26·20 | 708 | 16 05 | 88 | 1·90 |
| | Rural .. | 38588 | 23·27 | 8718 | 5·26 | 1086 | 28·14 | 395 | 10·13 | 80 | 2·05 |
| | Urban .. | 4817 | 59·47 | 677 | 8·36 | 51 | 10·59 | 313 | 61·01 | 8 | 1·56 |
| Alleppey District | .. | 39504 | 22·06 | 11257 | 6·29 | 1009 | 25·54 | 194 | 4·89 | 64 | 1·61 |
| | Rural .. | 31627 | 20·60 | 9248 | 6·02 | 811 | 25·64 | 96 | 3·03 | 54 | 1·70 |
| | Urban .. | 7877 | 30·77 | 2009 | 7·85 | 198 | 25·14 | 98 | 12·29 | 10 | 1·25 |
| Kottayam District | .. | 43935 | 28·07 | 10500 | 6·71 | 1811 | 41·22 | 383 | 8·64 | 76 | 1·71 |
| | Rural .. | 39562 | 27·55 | 9556 | 6·65 | 1742 | 44·03 | 342 | 8·57 | 73 | 1·83 |
| | Urban .. | 4373 | 33·90 | 944 | 7·32 | 69 | 15·78 | 41 | 9·29 | 3 | 0·68 |
| Ernakulam District | .. | 38297 | 21·24 | 9098 | 5 05 | 1148 | 29 98 | 444 | 11·46 | 72 | 1·86 |
| | Rural .. | 27791 | 18·66 | 6748 | 4·53 | 900 | 32·38 | 175 | 6·26 | 56 | 2·00 |
| | Urban .. | 10506 | 33·46 | 2350 | 7·48 | 248 | 23·61 | 269 | 24·97 | 16 | 1·48 |
| Trichur District | .. | 27503 | 17·14 | 7176 | 4·47 | 953 | 34·65 | 331 | 11·89 | 42 | 1·51 |
| | Rural .. | 22276 | 15·03 | 6224 | 4·20 | 888 | 39·86 | 102 | 4·56 | 40 | 1·79 |
| | Urban .. | 5227 | 42·50 | 952 | 7 74 | 65 | 12·44 | 229 | 41·97 | 2 | 0·37 |
| Palghat District | .. | 40705 | 22 92 | 16312 | 9·18 | 2718 | 66·77 | 424 | 10 31 | 100 | 2·43 |
| | Rural .. | 36996 | 22·15 | 14935 | 8·94 | 2509 | 67·82 | 307 | 8·23 | 95 | 2·55 |
| | Urban .. | 3709 | 34·99 | 1377 | 12·99 | 209 | 56·35 | 117 | 30·58 | 5 | 1·31 |
| Kozhikode District | .. | 56861 | 24·26 | 20707 | 8·83 | 2694 | 47·38 | 889 | 15·39 | 184 | 3·19 |
| | Rural .. | 47985 | 22·42 | 16894 | 7·89 | 2045 | 42·62 | 417 | 8·62 | 133 | 2·75 |
| | Urban .. | 8876 | 43·51 | 3813 | 18·60 | 649 | 73·12 | 472 | 50·49 | 51 | 5·46 |
| Cannanore District | .. | 46432 | 29 75 | 15375 | 9·85 | 2361 | 50·85 | 445 | 9·51 | 109 | 2·33 |
| | Rural .. | 43157 | 29·42 | 14210 | 9·69 | 2201 | 51·00 | 308 | 7·09 | 86 | 1·98 |
| | Urban .. | 3275 | 34·84 | 1165 | 12·39 | 160 | 48·85 | 138 | 40·43 | 23 | 6·74 |

## II. Demographic Research Unit

The Demographic Research Unit in the Department of Statistics was sanctioned by Government in G.O. (Ms.) No. 470, dated 2nd July 1958. The Unit began functioning from 14th August 1958. The Unit was started mainly for conducting investigations on fertility and mortality rates and socio-economic factors associated with them. During the year under review the following items of work were undertaken by the Centre.

### 1. Surveys

*A. Survey on Attitude to Family Planning.*—A pilot survey on attitude to family planning was conducted in Trivandrum City during 1958 to January 1959. The survey was intended to

(1) estimate the percentage of persons who favour family planning;

(2) estimate the percentage of persons who prefer known methods of contraception;

(3) study of fertility according to income and occupation ; and

(4) study of spacing of births.

Information on demographic particulars of all the household members and fertility particulars of couples were collected. After the completion of the Pilot Survey, it was extended to all the District Headquarters and to the Municipal Town of Attingal. The field work of the survey was over in 1959-60. The number of households enumerated in each of the towns were the following:—

| *Town* | *No. of households enumerated* |
|---|---|
| Trivandrum | 1311 |
| Quilon | 595 |
| Kottayam | 487 |
| Alleppey | 627 |
| Ernakulam | 569 |
| Trichur | 503 |
| Palghat | 510 |
| Kozhikode | 459 |
| Cannanore | 356 |
| Attingal | 385 |

The data collected were tabulated and analysed. Tabulation and analysis is over for all Centres except Trichur. A preliminary report issued in May, 1960 on the survey in Trivandrum was revised and the final report approved by Government is being printed at Government Press, Trivandrum. Preparation of reports on other Centres are almost over and the reports will be finalised. The important findings of the survey are given below:—

TABLE I

**Knowledge of family planning**

Percentage distribution of husbands in the various Centres according to their knowledge of family planning.

| Centre | Not concerned | | Knowledge of family planning | | |
|---|---|---|---|---|---|
| | Oldage | Refused and not recorded | Nil | Vague | Sufficiently good |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Trivandrum .. | 15·32 | 1·46 | 66·42 | 9·30 | 7·50 |
| Quilon .. | 0·32 | 1·01 | 43·60 | 20·76 | 34·31 |
| Alleppey .. | 1·22 | 1·33 | 86·95 | 3·36 | 7·14 |
| Kottayam .. | 0·20 | 1·39 | 44·24 | 29·00 | 25·17 |
| Ernakulam .. | 0·74 | 20·05 | 62·88 | 5·44 | 10·89 |
| Palghat .. | .. | 2·71 | 83·16 | 9·30 | 4·83 |
| Kozhikode .. | 0·40 | 6·02 | 79·04 | 9·75 | 4·79 |
| Cannanore .. | 0·99 | 3·77 | 32·38 | 57·34 | 5·52 |
| Attingal .. | .. | 5·20 | 20·38 | 23·67 | 50·75 |

TABLE II

**Percentage of couples who favour family planning revealed by their view on the number of children desired**

(Couples who prefer to have four or less children)

| *Centre* | *Percentage of couples* | |
|---|---|---|
| | *Husband* | *Wife* |
| Trivandrum .. | 72 | N.A. |
| Quilon .. | 61 | 56 |
| Alleppey .. | 67 | 70 |
| Kottayam .. | 64 | 68 |
| Ernakulam .. | 42 | 42 |
| Palghat .. | 38 | 38 |
| Kozhikode | Only very small percentage give any information. | |
| Cannanore .. | 54 | 50 |
| Attingal .. | 54 | 56 |

TABLE III

**Average number of children born alive and living to all married females in the various centres**

| Centre | | Average number of children | |
|---|---|---|---|
| | | Born alive | Living |
| Trivandrum | .. | 3·82 | 3·12 |
| Quilon | .. | 3·94 | 3·12 |
| Alleppey | .. | 4·00 | 2·94 |
| Kottayam | .. | 4·18 | 3.67 |
| Ernakulam | .. | 3·83 | 3·12 |
| Palghat | .. | 4·41 | 3·32 |
| Kozhikode | .. | 3·46 | 2·78 |
| Cannanore | .. | 3·49 | 2·66 |
| Attingal | .. | 4·22 | 3·46 |

TABLE IV

**Average interval (months) between effective marriage and 1st termination and between successive terminations**

| Centre | | Interval (months) between | |
|---|---|---|---|
| | | Effective marriage and first termination | Successive terminations |
| Trivandrum | .. | 35 | 27 |
| Quilon | .. | 32 | 27 |
| Alleppey | .. | 36 | 27 |
| Kottayam | .. | 39 | 27 |
| Ernakulam | .. | 37 | 32 |
| Palghat | .. | 39 | 27 |
| Kozhikode | .. | 36 | 31 |
| Cannanore | .. | 40 | 27 |
| Attingal | .. | 30 | 28 |

*B. One per cent Sample Census of Population, Births, and Deaths.*—The field work of the one per cent Sample Census was conducted in February 1961. The selection of sample and preparation of questionnaire and instructions to field workers were done in the Centre.

## 2. Statistical Analysis

*Family Planning Case Cards.*—A survey was conducted by Family Planning Social Workers attached to Attipra Clinic in Trivandrum on the Demographic aspects of the people around the clinic. A general survey of the people around the clinic was followed by a special survey of couples. The data collected up to the end of 1959 were taken up for analysis during 1959-60. The analysis was completed during the year and a draft report was issued in August 1960. The salient features brought out by the analysis were that the structure of the population in the village reveals that it is necessary to encourage family planning. Out of 3,004 females in the village 188 females in the village between 25

and 44 years and having 5 or more children are to be actively considered for application of family planning methods. 79 couples are at present visiting the clinic.

### 3. Research Studies

The Research Studies undertaken in the Centre during the year under review are the following:—

(*a*) *The effect of Marumakkathayam on the Fertility pattern in Kerala.*—Collection of data from the Sub-Registry Office, Trivandrum is over. During the discussions with Registrar-General of India on 16th February 1961, he suggested a household survey to find out the fertility during the transition stage (*i.e.*, change from Marumakkathayam to Makkathayam). The Survey will be started soon.

(*b*) *Origin and growth of Towns.*—A study is proposed to be conducted on the origin and growth of important Towns in Kerala. The study of Trivandrum City is taken up first. The relevant data for this study are being collected.

(*c*) *A comparative study of the demographic characteristics of certain occupational groups.*—The data collected by various surveys of the Department were used for this study. The occupational groups considered were toddy tappers, tea plantation workers and agricultural labourers. These groups were compared with respect to size of household, age and sex composition, economic status, marital status, fertility, literacy, earnings and expenditure, debt position and elasticity of expenditure. The important findings of the study the report of which was published in December 1960, are the following:—

The average household size of toddy tappers and agricultural labourers are about 6 while that of the plantation workers is about 5. The sex ratio (females per 1,000 males) is 951 for agricultural labourers, 960 for toddy tappers and 1,038 for tea plantation workers. The percentage of self supporting persons were 26 among agricultural labourers, 21 among toddy tappers and 42 among tea plantation workers. The average monthly expenditure is Rs. 137 for toddy tappers and Rs. 139 for tea plantation workers. The average amount of loans outstanding against toddy tappers' households and tea plantation workers are Rs. 125 and Rs. 278 respectively.

Considering all aspects, tea plantation-workers can be considered to be more prosperous.

(*d*) *A comparative study of the Demographic Characteristics of the States in India and other Countries.*—The demographic characteristics of Kerala will be compared with those of the States of India and other countries. Data required for the study are being collected from census tables, statistical abstracts, demographic year book, etc.

(*e*) *A study on the Incidence of Small-pox in the Travancore-Cochin part of Kerala State.*—Data on attacks and deaths due to small-pox are available for Travancore-Cochin part of Kerala State. For the present study, date from January 1951 to December 1959 were used. The

data used were collected by the staff of the Health Department. The important inferences derived from the study are given below :—

1. The average rate of incidence of small-pox is nearly 15 per lakh persons varying from 6 to 25.

2. The average rate of death due to small-pox is 5·4 varying from 3 to 11 per lakh persons.

3. Death rates among those attacked by small-pox is 0·37 varying from 0·28 to 0·43.

4. There is definite seasonality in the incidence of the disease, January to April being the peak period. Deaths also show the same seasonal nature.

A report on the study was issued on December 1960.

(*f*) *Mortality table for Kerala* (1941—1950).—A mortality table for Kerala State for 1941—1950 was constructed on the same lines as that constructed by Census Actuary for India for males and females separately. The mortality table was published in December 1960. Broadly the life tables for Kerala show a distinctly lower level of mortality compared to others. For Kerala, expectation of life increases from its value at birth up to age 3 and then begins to decrease. The expectations of life at various ages are given below for Kerala, South Zone and India.

| Age | Expectation of life | | | | | |
|---|---|---|---|---|---|---|
| | Kerala | | South Zone | | India | |
| | Male | Female | Male | Female | Male | Female |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0 | 39·89 | 42·34 | 36·22 | 37·23 | 32·45 | 31·66 |
| 1 | 46·44 | 48·49 | .. | .. | .. | .. |
| 2 | 47·77 | 49·55 | .. | .. | .. | .. |
| 3 | 48·07 | 49·56 | .. | .. | .. | .. |
| 4 | 47·88 | 49·30 | .. | .. | .. | .. |
| 5 | 47·51 | 48·98 | 44·26 | 45·47 | 40·86 | 40·91 |
| 10 | 44·37 | 46·34 | 42·04 | 43·32 | 38·97 | 39·45 |
| 15 | 40·47 | 42·71 | 38·97 | 39·94 | 36·24 | 36·56 |
| 25 | 32·32 | 33·99 | 32·21 | 32·30 | 29·78 | 29·30 |
| 45 | 18·58 | 19·53 | 19·63 | 20·25 | 17·63 | 18·61 |
| 65 | 8·89 | 8·99 | 8·73 | 8·99 | 8·18 | 9·29 |

**4. Training**

*Training of Gramasevaks and Health Inspectors in Collection, Compilation and analysis of date with special reference to vital statistics and Population Census.*—This is done under the auspices of the Environmental Sanitation Pilot Project, Trivandrum. The Assistant Director (Demography) has taken up this work. The trainees are given an elementary course on the concepts of statisics with special reference to Vital Statistics and Population Census. 25 trainees are trained up every month.

**5. Study tour**

Sri R. Sivasankara Kurup, Assistant Director and Sri B. Thrivikraman Pillai, Research Officer, conducted a study tour for 6 weeks from 11th February 1961 to 28th March 1961 as sanctioned in G.O. (Rt)236/Plg., dated 2nd February 1961. They visited the Offices of the Director General of Health Services, New Delhi, Registrar General, New Delhi, Demographic Research Centre, New Delhi, All India Institute of Hygiene and Public Health, Calcutta, Demographic Reserach Centre, Indian Statistical Institute, Calcutta, Demographic Research and Training Centre, Bombay and Gokhale Institute of Economics and Polities, Poona. They had valuable discussions with eminent demographer in India. 65 papers on demography collected from the various centres visited have been placed in the library. The Officers have suggested the following studies which are being taken up :—

(1) Intensive village survey in Sreekaryam Village in the model of Delhi Survey.

(2) Study on sterilised persons as done in the Poona Institute.

(3) Follow-up study of visitors to Family Planning Clinics as done in the Delhi Centre.

(4) A survey on Marumakkathayam as per directions of the Registrar General.

(5) A study on birth weight of infants as done in the Calcutta Centre.

**6. Publications**

During the year under review, the following publications were issued from the Centre :—

(1) Draft report on the analysis of data collected by Family Planning Clinic, Attipra.

(2) A comparative study of the Demographic Characteristics of various occupational groups.

(3) Mortality tables for Kerala (1941—1950).

(4) A note on the incidence of small-pox in Travancore-Cochin part of Kerala State.

(5) Attitude to Family Planning—Report on the survey conducted in Trivandrum City.

**7. Visitors**

The following is a list of visitors to the Centre :—

1. Dr. V. K. R. V. Rao—Chairman, Demographic Advisory Committee
2. Col. B.L. Raina—Director, Family Planning
3. Mr. Ashok Mitra—Registrar-General of India
4. Dr. Anderson—World Health Organisation
5. Dr. D. V. Glass—London School of Economics
6. Mr. P. C. Mathew—Director, Central Statistical Organisation
7. Dr. Parker Mauldin—Associate Director, Population Council, New York
8. Dr. Ronald Friedman—Head of the Department of Sociology, University of Michigan
9. Mr. Rajeswar Prasad—Chief Director, National Sample Survey

## CHAPTER VI—OTHER SAMPLE SURVEYS

### I. National Sample Survey

During the year under review the 15th Round National Sample Survey was completed and the 16th Round was started. The programme of work for the present round envisages collection of data on :—

1. Ownership of land and details of Operational Holding ;
2. Area under crops and yield of important cereals (Rural);
3. Household indebtedness (Rural and Urban);
4. Employment and unemployment (Rural);
5. Retail prices of important commodities (Rural);
6. Consumer Expenditure (Rural and Urban);
7. Attitude towards Family Planning (Urban);
8. Urban Labour Force (Urban);
9. Population, Births and Deaths (Urban).

The schedules and instructions prepared by the Indian Statistical Institute are being canvassed for the Survey. Altogether 144 villages and 64 urban blocks were selected for enumeration in this round.

*Sampling design (Rural)* : In the State contiguous districts having similar crop patterns and population densities were grouped together to form regions. Within a region, contiguous tahsils fairly homogenous with respect to population densities were grouped together to form compact strata such that the rural populations of the strata were approximately equal. The number of strata formed in a region was one-eighteenth of the allocation to that region. The State was divided into eight rural strata and villages were selected from the above strata with equal probability.

*Sampling design (Urban)* : The whole of India was divided into two sectors—the first sector consisting of towns and cities with a population (1951 Census) of 50,000 and above and the second consisting of

the rest of the Urban areas. In the first sector, States formed the strata, whereas in the second sector Regions within States were the strata. The allocation to the States was rounded off to the nearest multiple of 16.

Field work relating to the survey is being attended to by 16 Investigators in Rural Samples and 4 Investigators in Urban Samples. There are two leave reserve Investigators also posted for the survey. Supervision of field work is done by 4 Statistical Inspectors posted at Quilon, Kottayam, Trichur and Kozhikode.

*Analysis* : Analysis of the data collected through the various rounds of National Sample Survey is being done in the Department. During the year under report analysis relating to the following schedules were completed :—

1. Livestock products (15th round);
2. Land Utilisation ( do. );
3. Small Scale Maufacture and Handicrafts (14th round);
4. Population, Births and Deaths; ( do. );
5. Income and Expenditure (13th round);
6. Income and Expenditure (14th round) (not completed);

In addition to the above the scrutiny of the filled-in schedules was also attended.

A sample check of the 1961 Population Census was also undertaken by the National Sample Survey Directorate during the close of the year under review. This Department has also participated in the check. The sampling design was the same as that adopted in the 16th Round. Altogether 23 Rural and 12 Urban Samples were selected for the survey. The following Schedules are being canvassed.—

1. Schedule L (C)—Listing of houses and sample selection ;
2. „ A —Listing of members ;
3. „ B —Household particulars.

The full expenditure on the scheme is met by the Government of India.

## II. Fixed Point Fixed Time Survey

The survey was carried out on behalf of the Director, Bureau of Economic Studies. The Schedules, Instructions and other details of the survey were prepared in the Bureau of Economic Studies. The field work and supervision of the survey were carried out by the Department of Statistics. The purpose of the survey was to enquire into the changes in the economic variables. Four rounds of the survey were conducted during the year 1960-61. The period of the survey was the first week of May, August, November 1960 and second week of March 1961. The households surveyed for the previous two rounds during 1959-60 were enumerated during these rounds also. Analysis of the data is being done in the Office of the Director, Bureau of Economic Studies.

### III. Sample Survey for the correct Estimation of Area under and yield of Coconuts and Arecanuts in the State

The first round of the Coconut and Arecanut Sample Survey was completed towards the end of June 1960 and the report on the findings of the survey was finalised towards the end of January 1961. The reports were separately prepared for the Coconut and Arecanut Crops.

The second round of the survey was started in July 1960. For this round also 200 villages were selected among which 50 were those retained from the previous round. Towards the end of March 1961, work relating to the enumeration of palms for area estimation was completed in 177 villages and that relating to the collection of data for the study of cultivation practices was completed in 102 villages, out of the 200 villages selected for the work. Collection of data relating to yield estimation, was in progress in all the selected villages.

Due to the heavy workload involved in the tabulation and analysis work four additional posts of Compilers were sanctioned towards the end of the period under reference. Tabulation of the data relating to those villages where the work was completed was in progress.

The selection of villages for the 3rd round of the survey due to start in July 1961 was completed and the list of sample villages supplied to the field.

The expenditure on the Scheme is shared equally by the Indian Central Coconut Committee and Indian Central Arecanut Committee. The expenditure for the year under report was about Rs. 64,020.

### IV. Survey for the Enquiry into the Cost of Cultivation of Coconuts

The Indian Central Coconut Committee is the sponsor of the scheme and it is sanctioned by the Government of India. The over all technical supervision rests with the Indian Council of Agricultural Research.

The entire cost is met by the Indian Central Coconut Committee. The expenditure for the year under report was Rs. 52,980.

The survey is conducted in two rounds each of one year duration, corresponding to the agricultural years 1960-61 and 1961-62 respectively.

The field work with regard to the first round fell was done during the year under report. Data for the following schedules were collected by the field staff during the period :—

1. Schedule I—General particulars of the selected village.
2. " III—Demographic particulars of households.
3. " IV—Details on daily operation in the selected holdings.
4. " V—Crop Cutting Results.
5. " VI—Disposal details of the produce in the selected holdings.
6. " VII—Disease particulars.

The Office Staff attended to the scrutiny of the schedules and getting them corrected wherever necessary.

The Special Officer conducted monthly inspections on the field work and gave necessary guidance to the field staff, for the improvement of their work. The Research Officer was responsible for clearing any technical difficulty with regard to the scheme. The Assistant Director in charge of the Scheme continued to supervise the work both in the field and in the office. The advice from the Indian Council of Agricultural Research was obtained in all technical matters of importance.

## V. Surveys sponsored by the Indian Council of Agricultural Research

1. *Sample Survey of Village Panchayats.*—With a view to assess the health of the Panchayat movement in the State, a Sample Survey of Panchayat was conducted during the year 1959-60. The survey was conducted at the request of the Ministry of Community Development and Co-operation and the survey was carried out under the technical supervision and Administrative Control of the Department of Statistics. The collection of data alone could be completed during the year 1959-60. The analysis of the data was completed and the report was published during the year under report.

2. *Sample Survey of Physically handicapped employment seekers :*—A sample survey of physically handicapped employment seekers was conducted by the Statistics Department during the year under report.

The object of the survey was to collect information on the number of physically handicapped persons in the State, the number of employment seekers among them, the nature of the employment they are seeking and their educational qualification and skill.

The survey covered all the nine districts of the State. The data relating to the Survey was collected by the Investigators by visiting the household. The survey began on the 1st of November 1960 and was scheduled to be completed by the end of April 1961. But it could be completed only in June 1961. The tabulation and analysis of the data is being done by the Department of Statistics and the report will be prepared and published during 1961-62.

3. *Pilot Survey on Cashew Cultivation.*—The Pilot Survey on Cashew Cultivation sponsored by the Indian Council of Agricultural Research to estimate the area under and yield of cashewnut in Kerala, to collect information on the Cultivation practices of the crop and to evolve a suitable sampling technique for collection of such data in future was started in January 1960. It was continued during the year under report and the field work was completed in February 1961.

The survey was conducted in 24 taluks, important for cashewnut cultivation in the State and the Sampling Plan adopted for the survey was one of stratified multi-stage sampling.

The field work alone was done by the staff of the Department of Statistics. The analysis of data is to be done by the Indian Council of Agricultural Research. The estimated cost of the survey was

Rs. 21,660 and the entire cost of the scheme was borne by the Indian Council of Agricultural Research.

### VI. The Pilot Sample Survey of Registrants at the Employment Exchange, Trivandrum

In order to ascertain the proportion of the applicants on the Live Register of the employment exchange who are employed persons, a Pilot Sample Survey was conducted by the Department during 1960-61. The survey was confined to the registrants at the Trivandrum Employment Exchange. Though 300 households were selected for the survey only 210 households could actually be enumerated due to various reasons. The analysis of the data is in progress and the report will be issued shortly.

### VII. Pilot Survey on Banana Crop

This survey was also sponsored by the Indian Council of Agricultural Research and the Planning and Organization of the Survey was done by the Department of Statistics. The field work was done by the field-men of the Agriculture Department under the Administrative Control of the Department of Agriculture.

The object of the survey was to collect reliable information on the extent of Banana Cultivation, Yield and Cultivation practices of banana crop and to evolve a suitable sampling technique for the collection of such data in future.

The survey was conducted in the four important banana growing districts namely, Kozhikode, Palghat, Trichur and Ernakulam. The survey was started in January 1960 and was expected to be completed in March 1961. The period of the survey was further extended to three months more, with a view to collect the yield data in harvest for a complete agricultural year.

As per the plan 90 villages were selected for enumeration of banana plants. Information on yield and cultivation practices was obtained from 180 banana orchards and 300 survey numbers, growing plantain crops. The analysis of the data will be done by the Indian Council of Agricultural Research. The estimated cost of the scheme was Rs. 28,500 and the entire cost of the scheme was borne by the Indian Council of Agricultural Research.

### VIII. Pilot Investigation on Cardamom Cultivation

The survey was sponsored by the Indian Council of Agricultural Research and the field work was done by the Department of Statistics. The object of the survey was to obtain by the method of random sampling information on the area under and yield rate of cardamom crop in the State, to collect information on the various cultivation practices and to evolve a suitable sampling technique for the collection of such data in future.

The survey was conducted in the Kottayam and Ernakulam Districts which covers nearly 90 per cent of the area under Cardamom in the State. The survey was started on the last week of June 1960 and was completed in June 1961. There is a special officer specially posted for the survey.

The tabulation and analysis of data will be done by the Indian Council of Agricultural Research. The estimated cost of the scheme was Rs. 28,000 and the entire amount was borne by the Indian Council of Agricultural Research.

## CHAPTER VII—SECOND FIVE-YEAR PLAN SCHEMES OF STATISTICS DEPARTMENT, 1960-61

There were nine Plan Schemes of the Department in the year 1960-61. They were :

1. Estimation of area under and production of minor crops.
2. Survey of Cultivable Waste Lands.
3. Analysis of data from Schemes (1) and (2) above.
4. Construction of Index number series relating to Agricultural Economy.
5. National Index of Field Experiments.
6. Planning Statistics.
7. Diagnostic Studies and Supervision.
8. National Income Unit.
9. Demographic Research Unit.

All these schemes were continuing ones having been implemented in the earlier years. The total Budget provision for these schemes for the year was Rs. 3·79 lakhs. The expenditure on these schemes during the year under review came to Rs. 3·11 lakhs or 82 per cent. The object and scope of the schemes are briefly given below :—

1. *Estimation of area under and production of Minor Crops.*—The object of the scheme was to frame reliable estimates of area under and production of minor crops in the State through Sample Surveys. As Kerala State is mainly a non-reporting area, the regular conduct of this survey is the only means to frame reliable estimates of area and production of all commercially important crops though considered to be minor in regard to area.

2. *Survey of Cultivable Waste lands.*—The object of the scheme was to assess the location, extent and size distribution of Waste Lands in the State and the reasons for leaving them uncultivated.

3. *Analysis of data from Schemes* (1) *and* (2) *above.*—The object of the scheme was to process and analyse the data obtained from the two surveys referred to above.

4. *Construction of Index Number Series relating to Agricultural Economy.*—The object of the scheme was to construct the following Index Numbers on a regular and continuing basis :—

(1) Index of Agricultural production

(2) Index of export of agricultural commodities

(3) Index of wholesale and retail prices of agricultural commodities

(4) Index of Agricultural Wages and

(5) Index of parity between prices received and prices paid by farmers.

Monthly indices were computed in respect of items (3), (4) and (5) mentioned above and yearly indices in regard to items (1) and (2).

5. *National Index of Field Experiments.*—The object of the scheme was to render technical assistance to the Department of Agriculture in the fields of designing agricultural field experiments and analysing the results accruing therefrom. The results of the analysis were being reported to the concerned Agricultural Research Stations.

6. *Planning Statistics.*—The Statistical Cell for planning established in the Department in March 1957 was attending to the compilation and maintenance of complete and up-to-date data relating to the various individual plan schemes of the State..

7. *Diagnostic Studies and Supervision.*—The object of the scheme was to establish District Statistical Offices in all Districts of the State with a view to conduct effective supervision of the work of the field staff in order to improve the quality and timeliness of the data, to co-ordinate the statistical activities at the District Level and to conduct Diagnostic Studies and reconcile the discrepancies in the data available with different agencies.

8. *National Income Unit.*—The object of the scheme was to estimate the regional income of the State of Kerala.

9. *Demographic Research Unit.*—The object of the scheme was to undertake studies on the following :—

(*i*) Age specific maternity rates with special reference to income, occupation and food habits ;

(*ii*) Age specific death rates with reference to income, occupation and cause of death ;

(*iii*) Incidence of physical defects like blindness, deafness, deafmutism, etc. ;

(*iv*) Incidence of diseases ;

(*v*) The macro-economic implications of the population size, e.g., population and investment, change in income, and consumption pattern.

The unit established in August 1958 continued to function during the year under review.

## CHAPTER VIII—PUBLICATIONS

The work of this section relates mainly to the collection, compilation and publication of the data relating to the more important aspects of the States Administration and Economy. The regular publications issued in this respect are (i) Annual Statistical Abstract and (ii) Quarterly Bulletin of Statistics. In addition to these periodical publications giving information of a basic nature (for the State) and charts and diagrams representing the Socio-economic aspects of the State are also

prepared for publication. The details of the publications issued by the Department during the year are given below :—

1. *Annual Statistical Abstract.*—During the period, the third issue of the Annual Statistical Abstract (for the year 1958–59) was prepared and sent to the Government Press for printing. Compared to the abstract for the year 1957–58, the coverage and scope of this issue have been widened. Details on the area and population, Agriculture, Veterinary Service, Industries, Labour and Employment, Education, Registration, Judicial, Planning and Development, Prices, etc., are presented in the various Statistical Tables included in the Publication.

2. *Quarterly Bulletin of Statistics.*—This is a publication giving data on the quarterly changes in the important sectors of economic and social activity. During the year, the third and fourth issues of the Bulletin were published. The coverage of the bulletin has been enlarged by including data on working of courts, index of agricultural wages, small savings, registration of factories, etc. Annual data on some of the important aspects of the States administration and economy have also been included in the later issues.

The sale of the publication is arranged through the Government Press, Trivandrum.

3. *Statistical Outline of Kerala*, 1960:—is a handy reference book, giving basic information about Kerala State. In order to facilitate a comparative study, data relating to the other Indian States have also been incorporated in the publication.

During the year under review, 1000 copies of the publication were printed, (700 copies for sale and 300 copies for distribution on a complimentary basis). The sale of the publications has been entrusted with the Superintendent of Government Presses, Trivandrum.

4. *Kerala in Maps*, 1960.—It contains 34 big size maps representing the important aspects of Kerala. Though prepared during last year it was got printed only during the year under review. Out of the 1000 copies already printed, about 700 copies are kept in the Government Press, Trivandrum, for sale. Some copies were distributed on a complimentary basis and few other copies on a reciprocal basis.

During the year, steps were taken to augument the sales of the various publications of the Department. Wide publicity on the contents and utility of the data included in the publications is proposed to be given by advertising in the local dailies and also in newspapers with circulation all over the country. The publication of the issues of the Annual Statistical Abstract for the years 1952–56 to 1956–57, 1957–58 and 1958–59 is held up due to the delay in printing them in the Government Presses.

The supply of statistical information required by various official and non-official agencies in the State and also out-side the State was also, attended to.

A list of the Departmental Publications is given below :—

## Important Statistical Publications of the Kerala State Statistics Department

| Regular | | | | | Ad-hoc publications issued during 1956—61 | |
|---|---|---|---|---|---|---|
| Title | Periodicity | Month and year of 1st issue | Month and year of last issue | Remarks | Title | Month and year of issue |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. Basic Statistics | .. | 1957 | .. | .. | 1. Report on Survey of Cultivable Waste Land. | Four Parts 1957 1958 1959 1960 |
| 2. Statistical Outline of Kerala | .. | 1960 | .. | .. | 2. Origin Destination Survey (T.C. State) | 1959 |
| 3. Review of Economic Trends | Monthly | May 1958 | July 1958 | It has since been discontinued | 8. Report on Census of Handloom (T.C. State) | 1959 |
| 4. Vital Statistics Bulletin | Quarterly | 1st quarter 1956 | 2nd quarter 1960 | .. | 4. Report on Prohibition Survey | 1960 |
| 5. Prices Bulletin | ,, | July 1956 | March 1958 | No issue for December 1956 and 1957 | 5. Report on Family Budget Survey of Toddy Tappers | 1960 |
| 6. Report on transfers of Agricultural Land | Quarterly Annual | 1st quarter 1956 ,, | Last quarter 1957 1958 | .. | 6. Report on Census of Land Holdings and Cultivation (T.C. State) (Parts I and II) (4 volumes) (confidential) | .. 1958 |

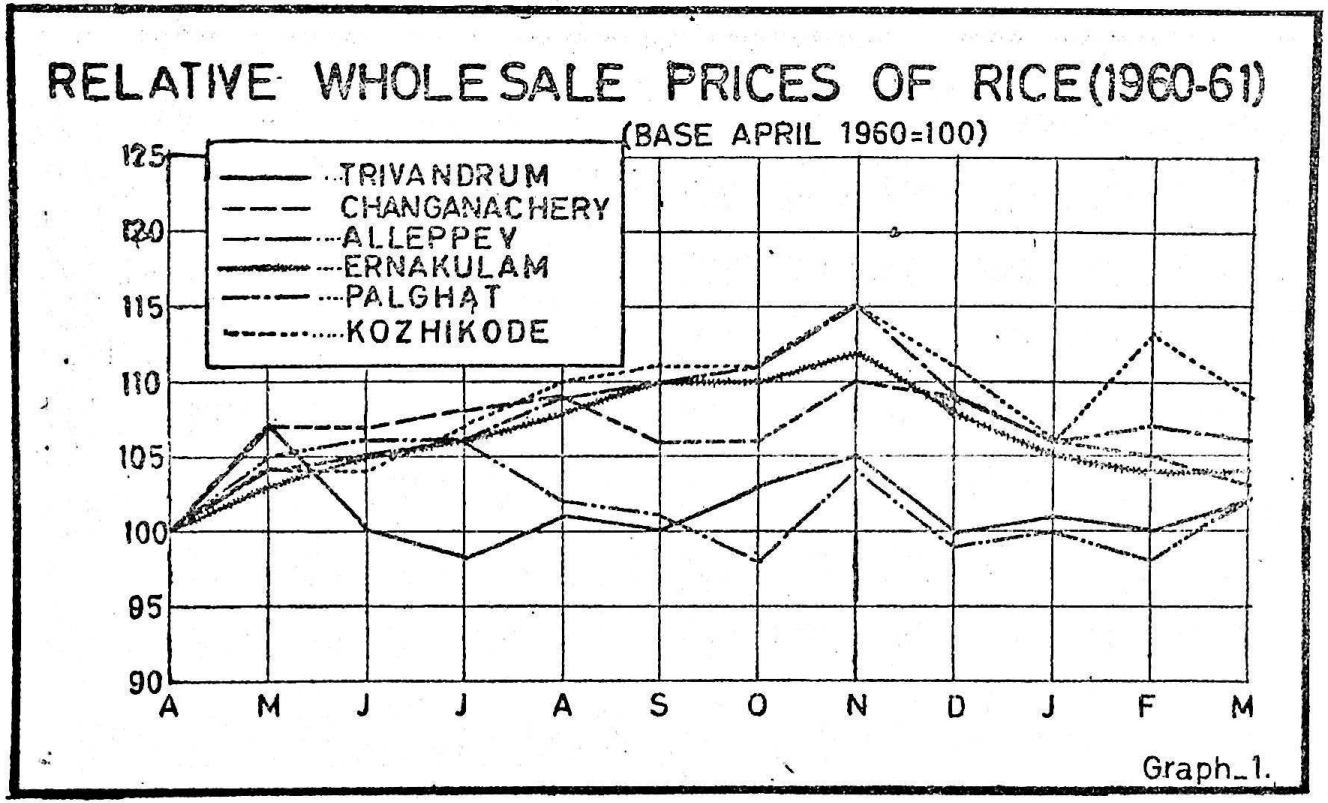
**Important Statistical Publications of the Kerala State Statistics Department—(*cont.*)**

| Regular | | | | | Ad-hoc publications issued during 1956—61 | |
|---|---|---|---|---|---|---|
| Title | Periodicity | Month and year of 1st issue | Month and year of last issue | Remarks | Title | Month and year of issue |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Quarterly Bulletin of Statistics | Quarterly | September 1958 | June 1959 | .. | 7. Report on Nutritional Diet Survey of workers in Tea Plantations | 1960 |
| 8. (*a*) Report on the Crop Cutting Survey on Kumbhom Crop of Paddy | Half-yearly | 1951 | 1961 | .. | 8. Kerala in Maps | 1960 |
| (*b*) Report on the Crop Cutting Survey on Kanni Crop of Paddy | ,, | 1951 | 1960 | .. | 9. Pilot Survey of Beggars and destitutes in Trivandrum City | 1960 |
| 9. Season and Crop Report (T.C. State) | Annual | 1952-53 to 1955-56 | .. | .. | 10. A Note of Vital events in the residuary Travancore-Cochin area of Kerala | 1959 |
| 10. Season and Crop Report (Kerala) | ,, | 1956-57 1957-58 1958-59 | .. | .. | 11. Trend in Registered Births and Deaths | 1959 |

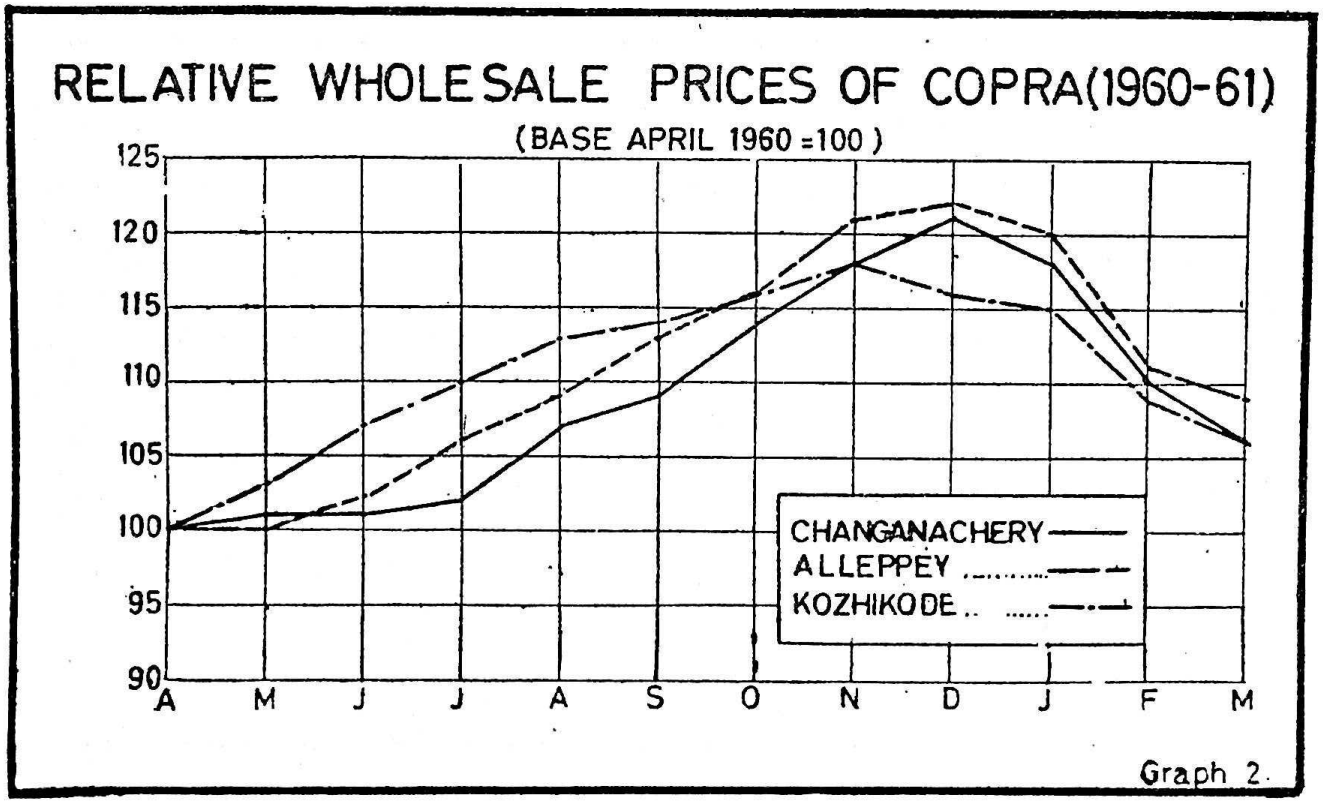
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11. | Budget at a Glance | ,, | 1958-59 | 1959-60 | .. | 12. Report on the Pilot Survey on attitude to Family Planning in Trivandrum City | February, 1961 |
| 12. | Review of Prices | ,, | 1956-57 | .. | .. | 13. Mortality Tables for Kerala (1941-50) | Decembre, 1960 |
| 13. | Administration Report of the Department | ,, | 1955-56 | 1959-60 | .. | 14. Note on the incidence of Smallpox in the Travancore-Cochin Part of Kerala | ,, |
| 14. | Statistical Abstract (T.C. State) | ,, | 1951-52 to 1955-56 (under print) | .. | .. | 15. A study of the Demographic Characteristic of certain Occupational groups in Kerala | December, 1960 |
| 15. | Statistical Abstract (Kerala) | ,, | 1956-57<br>1957-58<br>1958-59 | (under print)<br>(under print)<br>(under print) | .. | 16. Report on the employment Survey in Malabar | 1958 |
| | | | | | | 17. Regional Income of Kerala at current prices—1955-56 to 1957–58 provisional | May 1960 |
| | | | | | | 18. Report on the Sample Survey of Village Panchayats in Kerala | February, 1961 |
| | | | | | | 19. Report on the Sample Survey of physically handicapped Employment Seekers in Kerala | August, 1961 |
| | | | | | | 20. The age at marriage, age at first delivery and age at widowhood | 1961 |

## APPENDIX

GRAPH 1



GRAPH 2


RELATIVE WHOLESALE PRICES OF COPRA(1960-61)
(BASE APRIL 1960 =100 )
125
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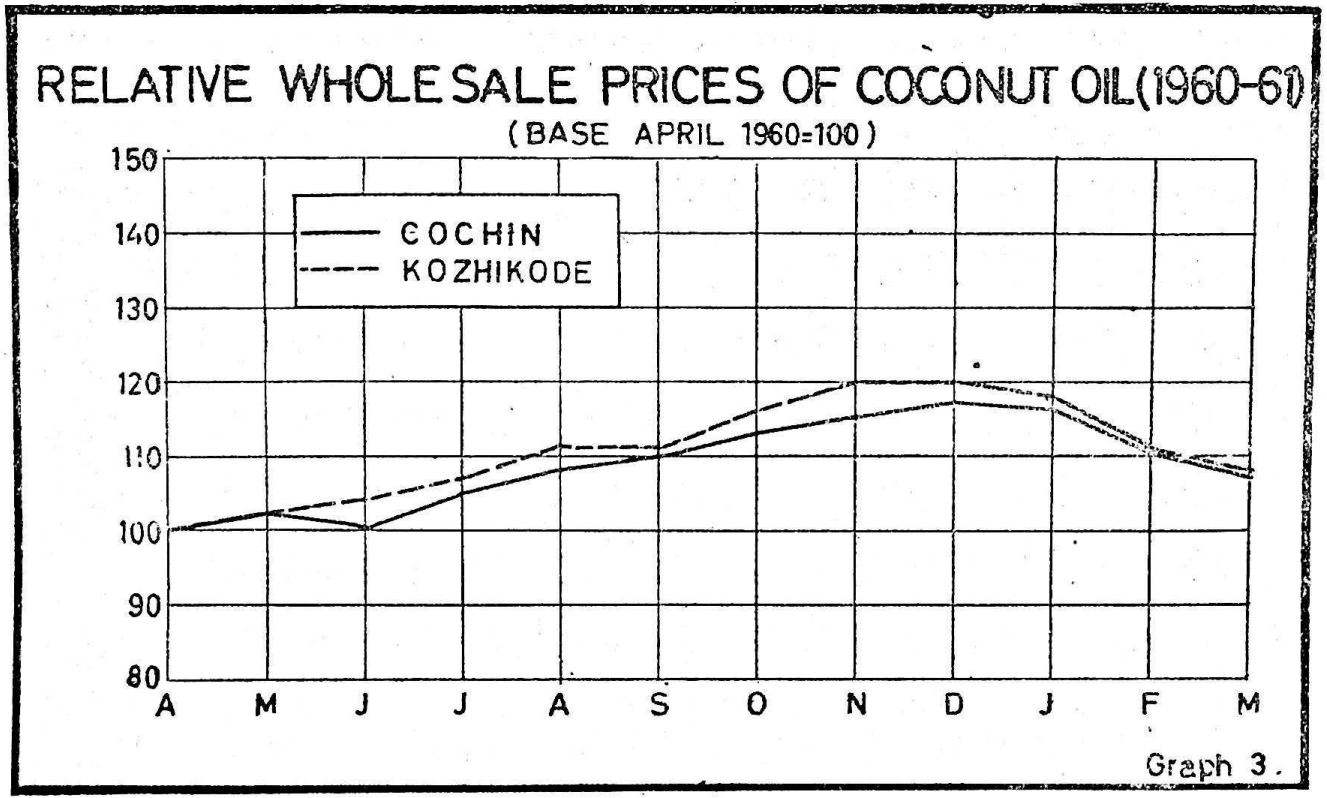
CHANGANACHERY
ALLEPPEY
KOZHIKODE
Graph 2.

GRAPH 3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(BASE APRIL 1960=100)
COCHIN
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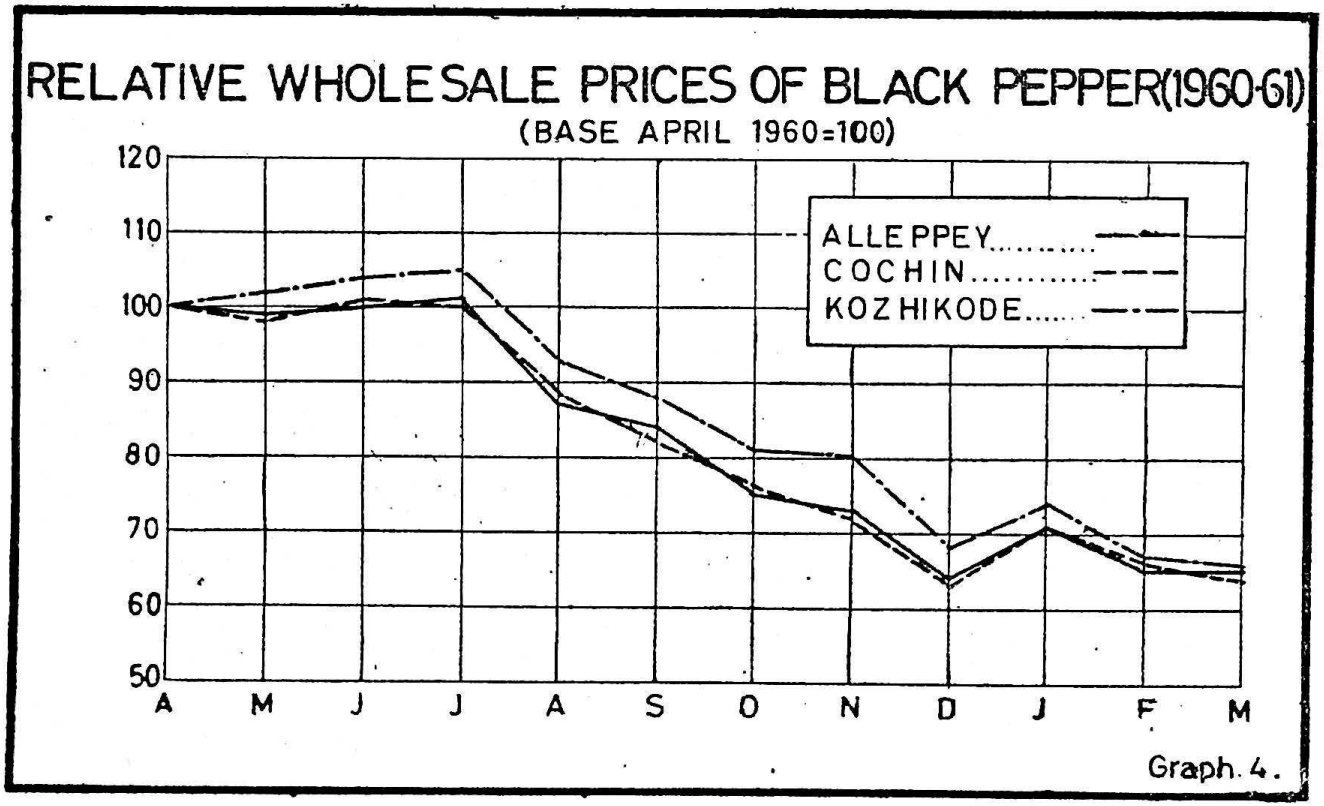
Graph 3.

GRAPH 4


RELATIVE WHOLESALE PRICES OF BLACK PEPPER(1960-61)
(BASE APRIL 1960=100)
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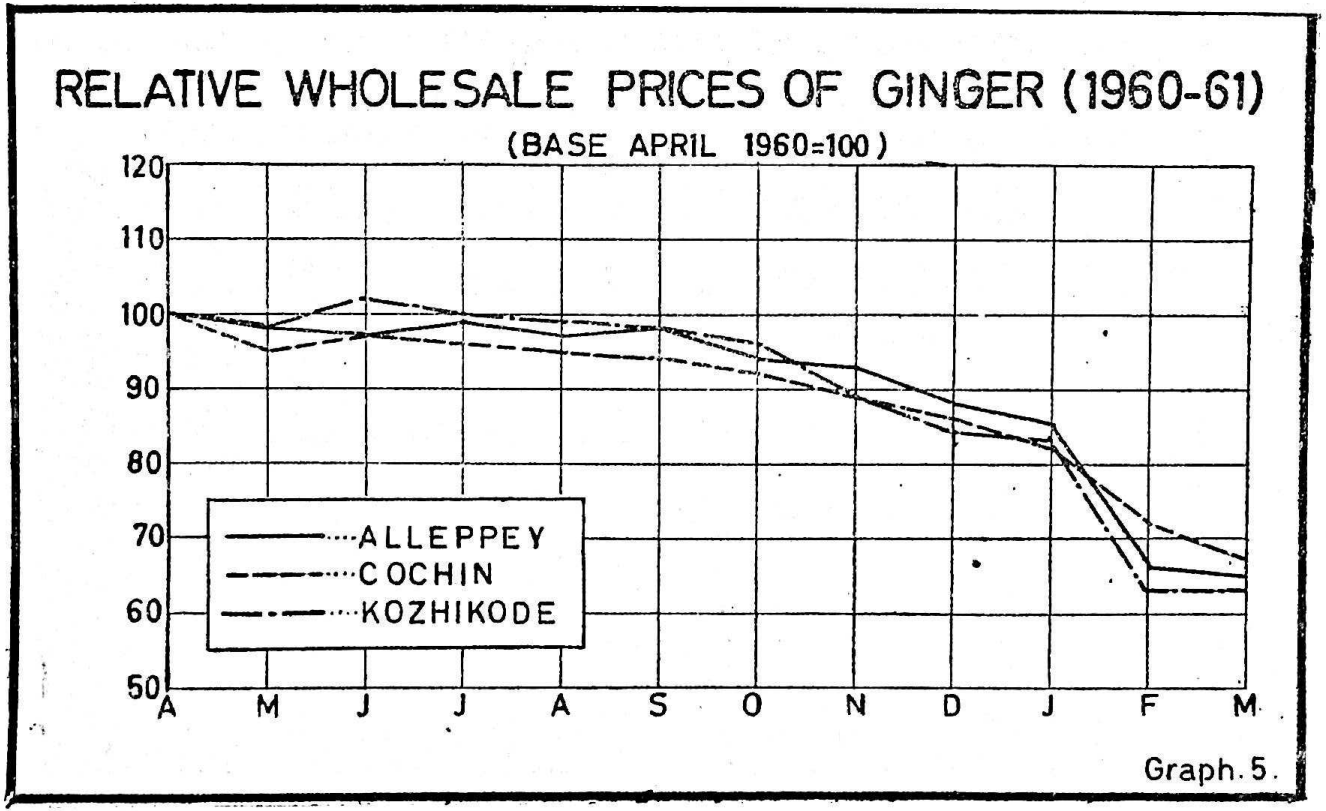
ALLEPPEY
COCHIN
KOZHIKODE
Graph. 4.

GRAPH 5


RELATIVE WHOLESALE PRICES OF GINGER (1960-61)
(BASE APRIL 1960=100)
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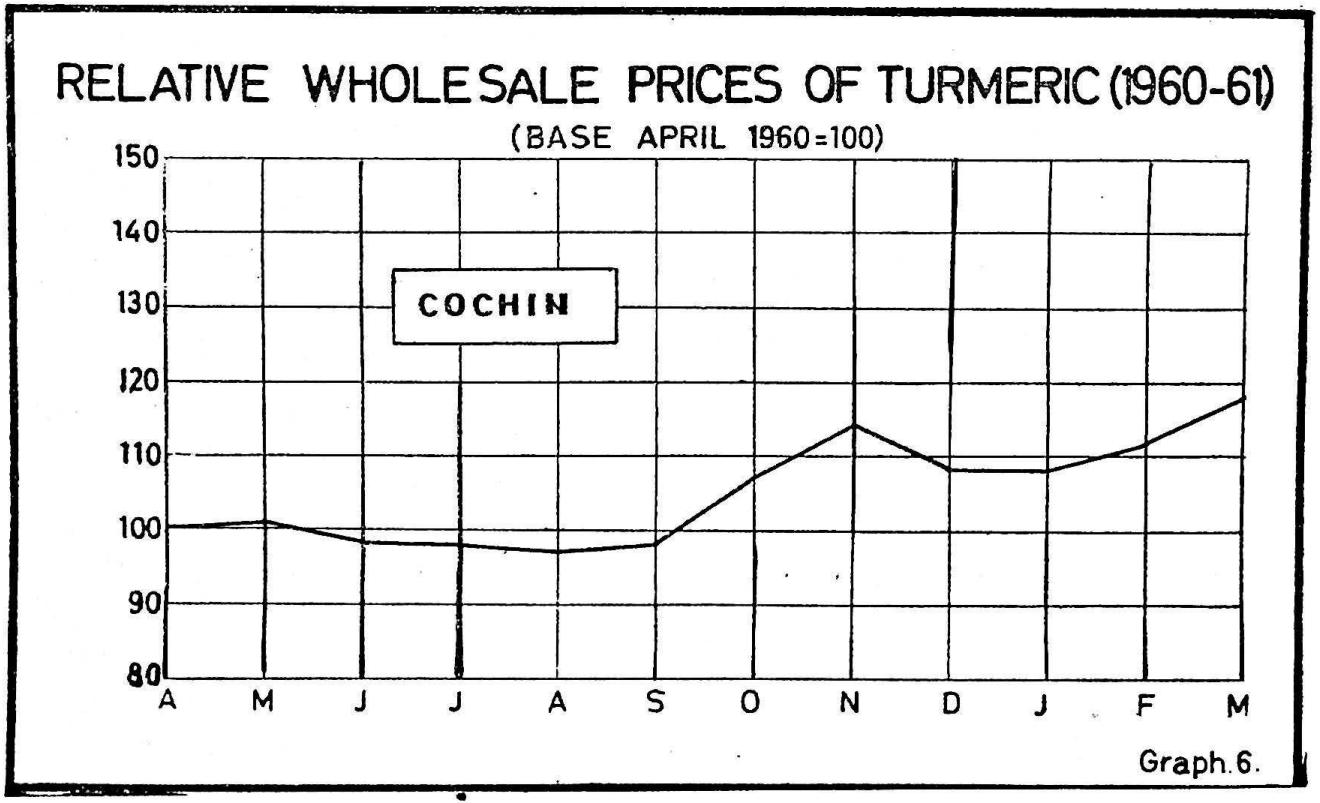
ALLEPPEY
COCHIN
KOZHIKODE
Graph. 5.

GRAPH 6


RELATIVE WHOLESALE PRICES OF TURMERIC (1960-61)
(BASE APRIL 1960=100)
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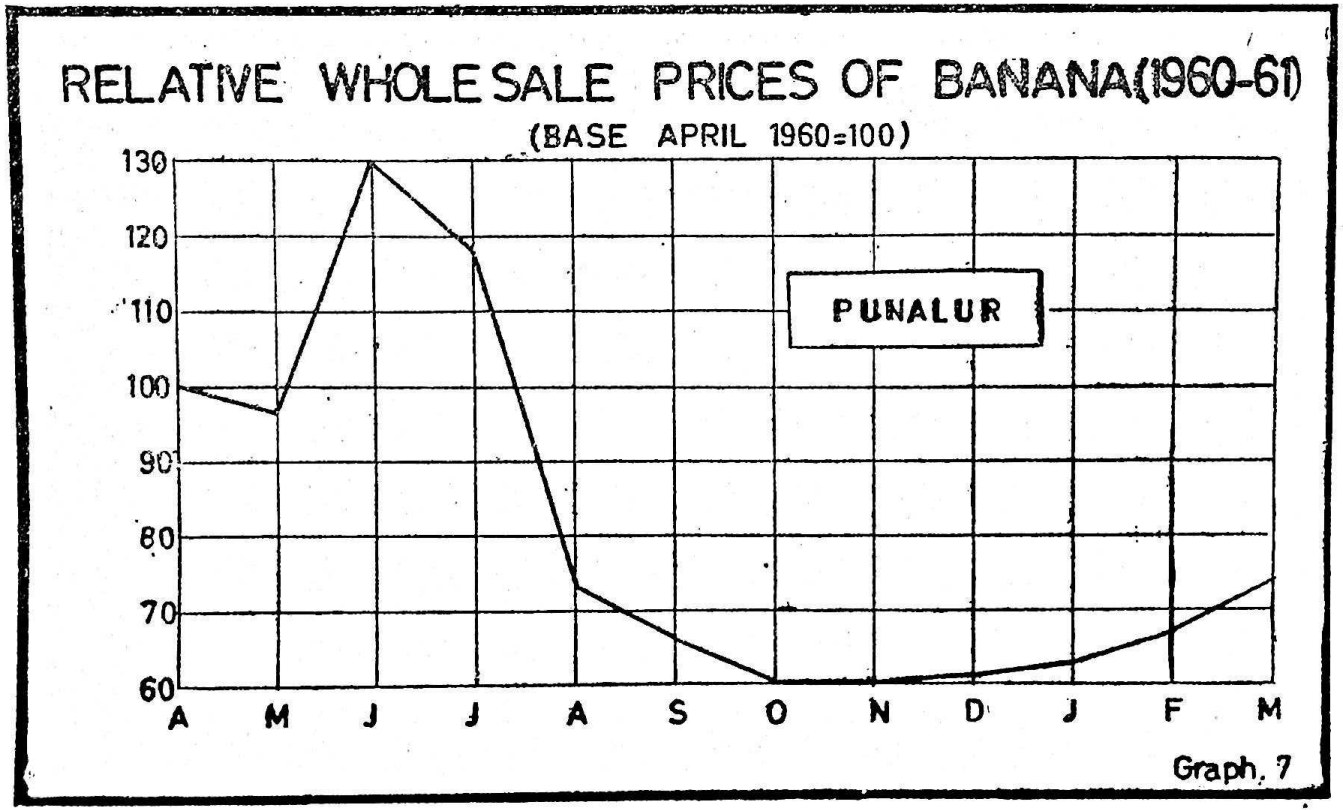
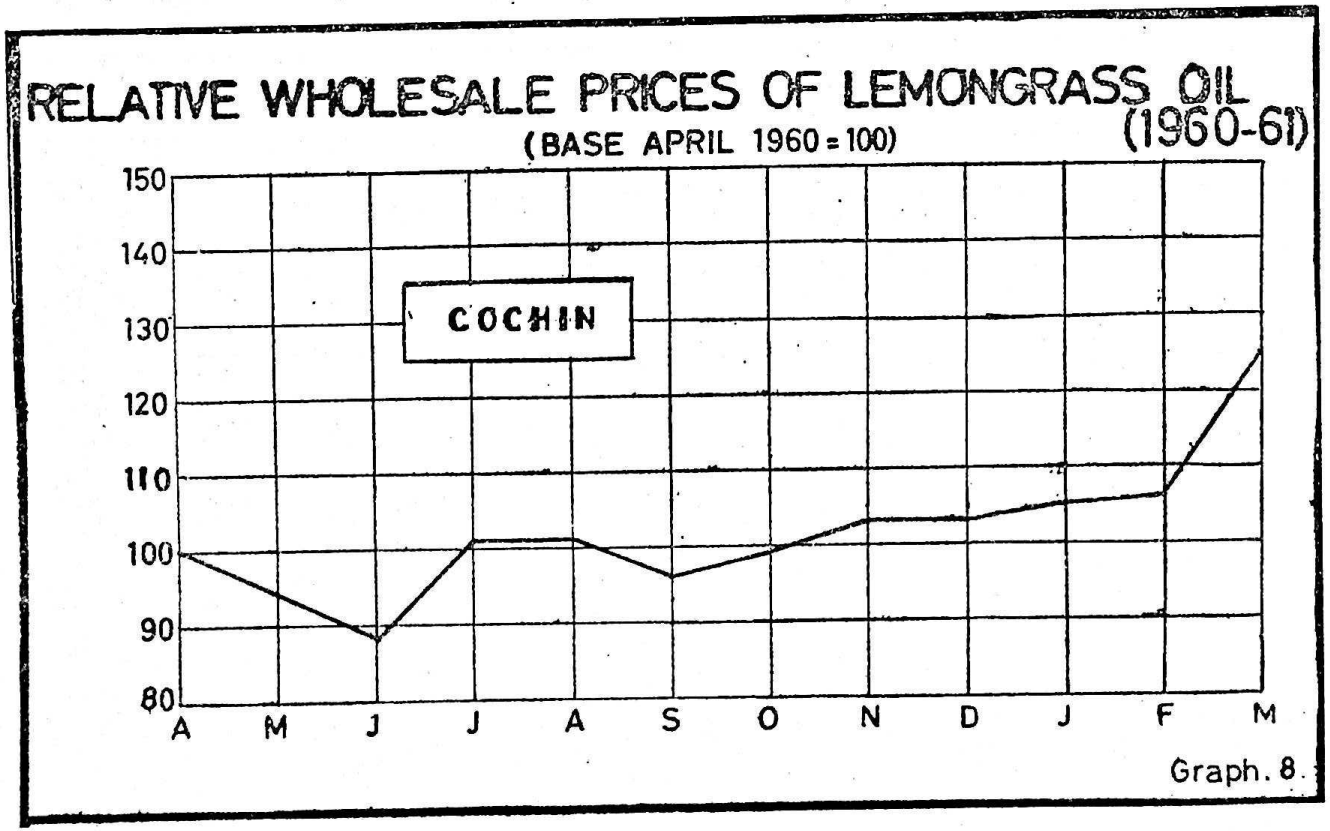
Graph.6.

GRAPH 7


RELATIVE WHOLESALE PRICES OF BANANA(1960-61)
(BASE APRIL 1960=100)
130
120
110
100
90
80
70
60
A
M
J
J
A
S
O
N
D
J
F
M
PUNALUR
Graph. 7

GRAPH 8


RELATIVE WHOLESALE PRICES OF LEMONGRASS OIL
(1960-61)
(BASE APRIL 1960 = 100)
COCHIN
150
140
130
120
110
100
90
80
A
M
J
J
A
S
O
N
D
J
F
M
Graph. 8.



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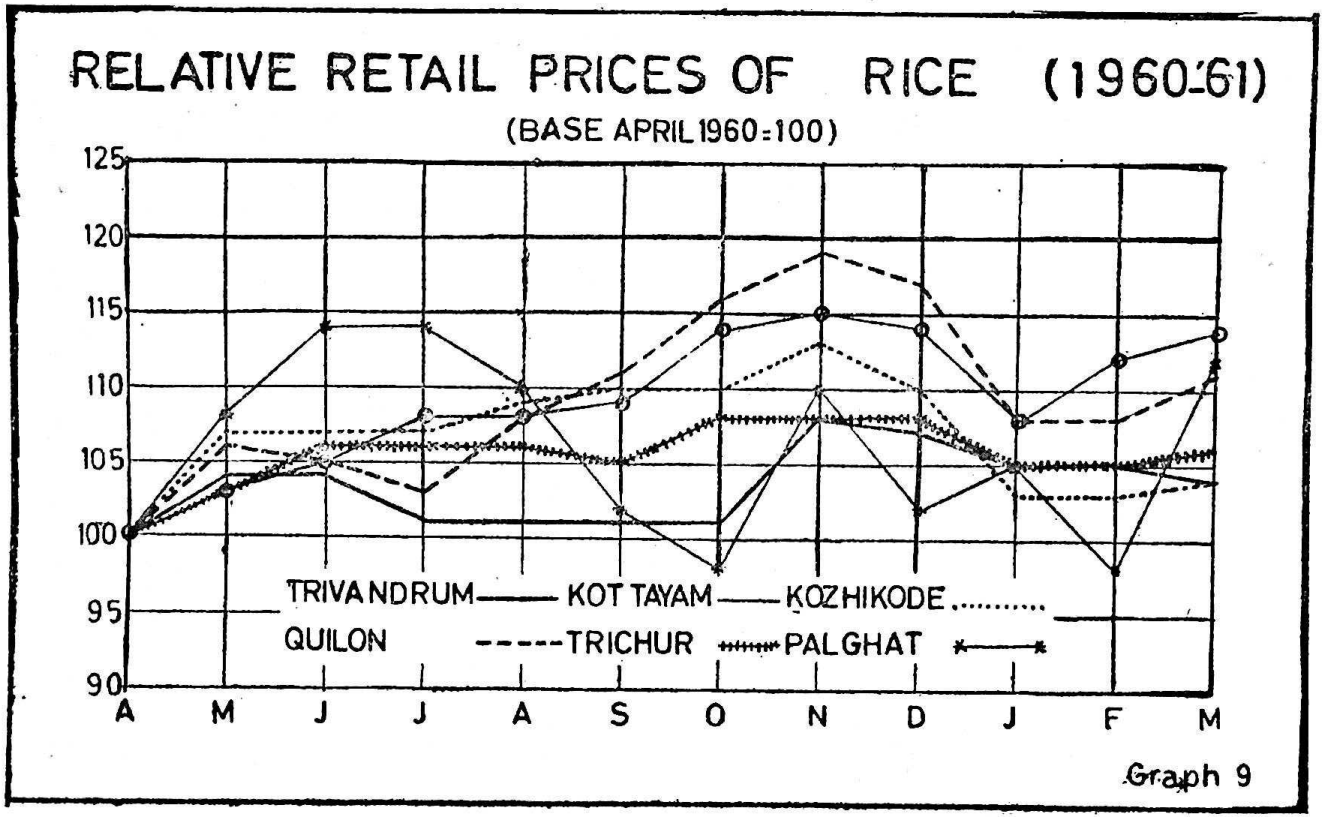
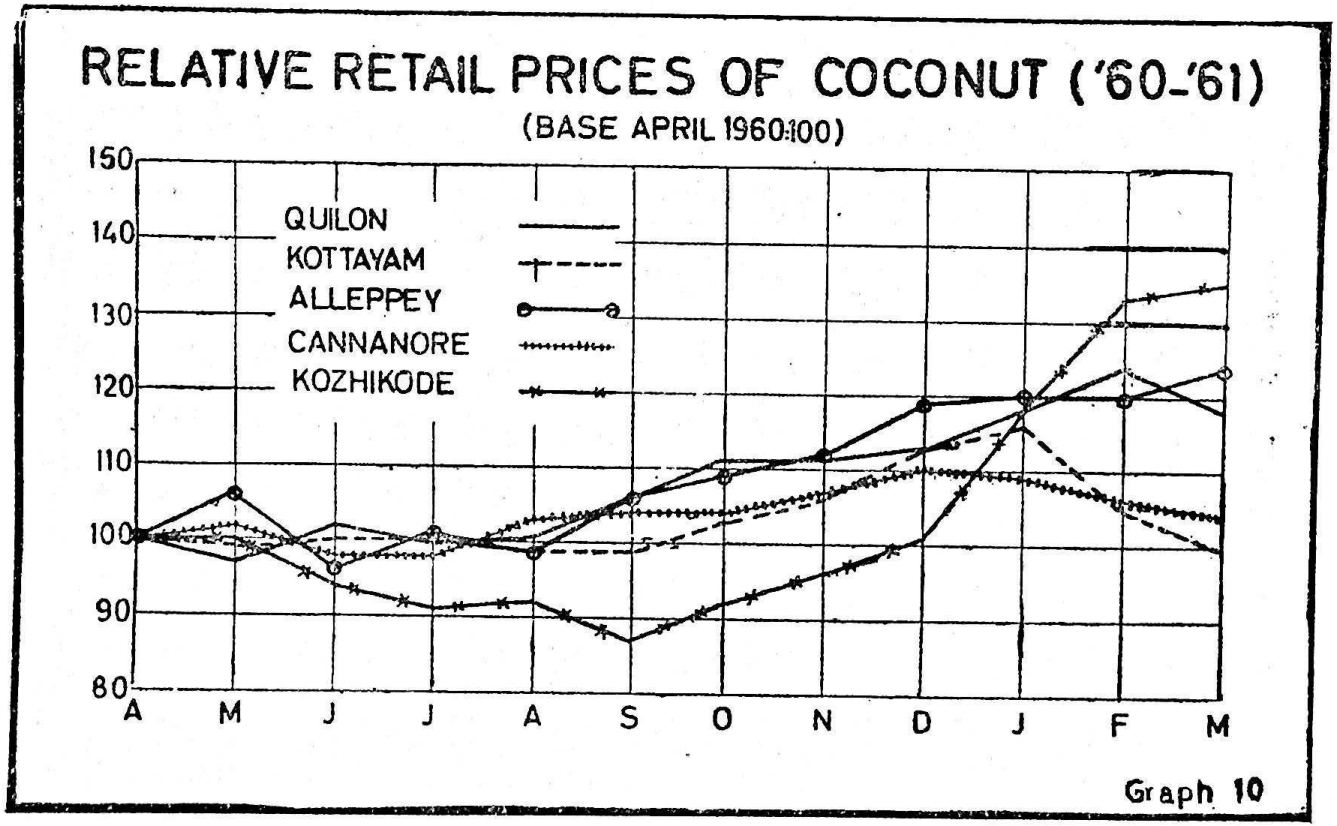
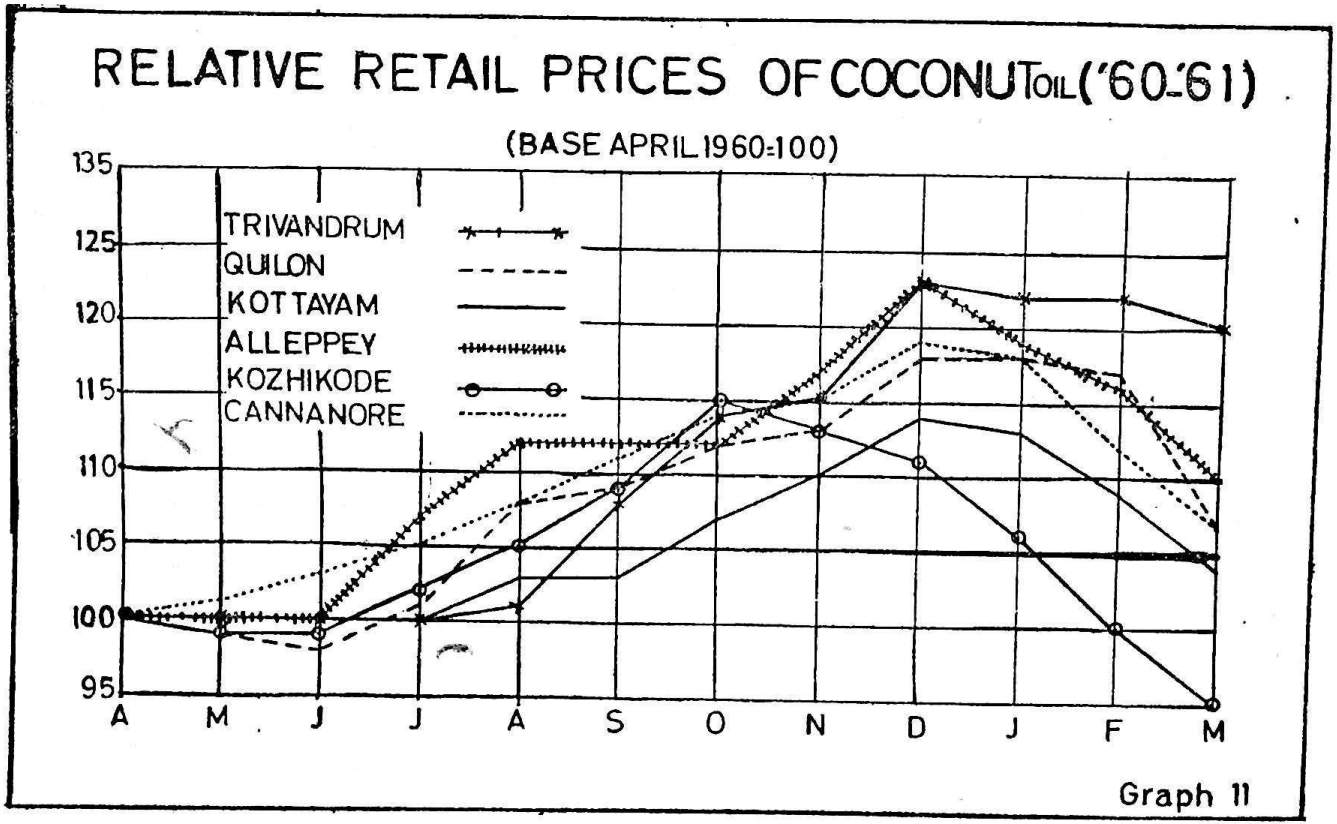
GRAPH 9


RELATIVE RETAIL PRICES OF RICE (1960-61)
(BASE APRIL 1960=100)
125
120
115
110
105
100
95
90
A
M
J
J
A
S
O
N
D
J
F
M
TRIVANDRUM
KOTTAYAM
KOZHIKODE
QUILON
TRICHUR
PALGHAT
Graph 9

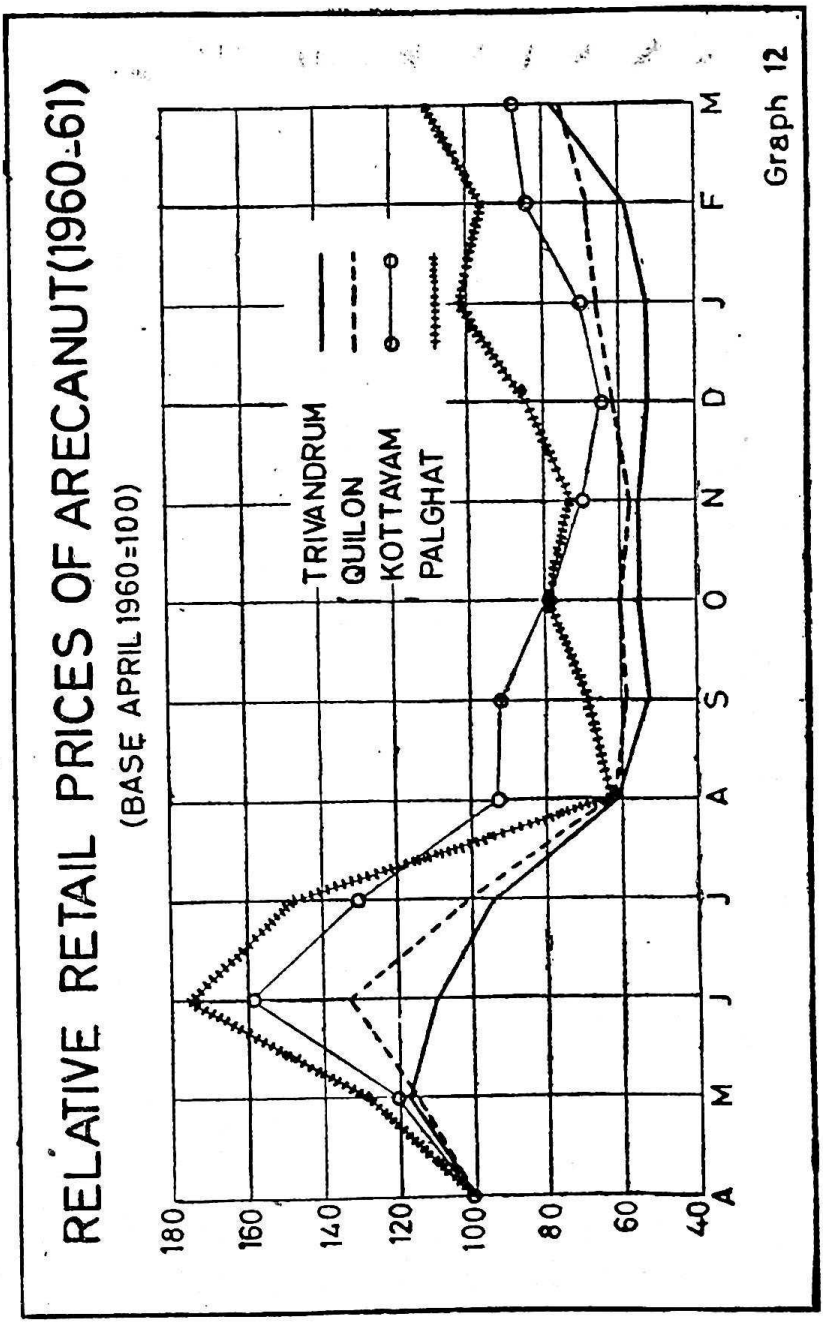
GRAPH 10


RELATIVE RETAIL PRICES OF COCONUT ('60-'61)
(BASE APRIL 1960:100)
QUILON
KOTTAYAM
ALLEPPEY
CANNANORE
KOZHIKODE
150
140
130
120
110
100
90
80
A
M
J
J
A
S
O
N
D
J
F
M
Graph 10

GRAPH 11

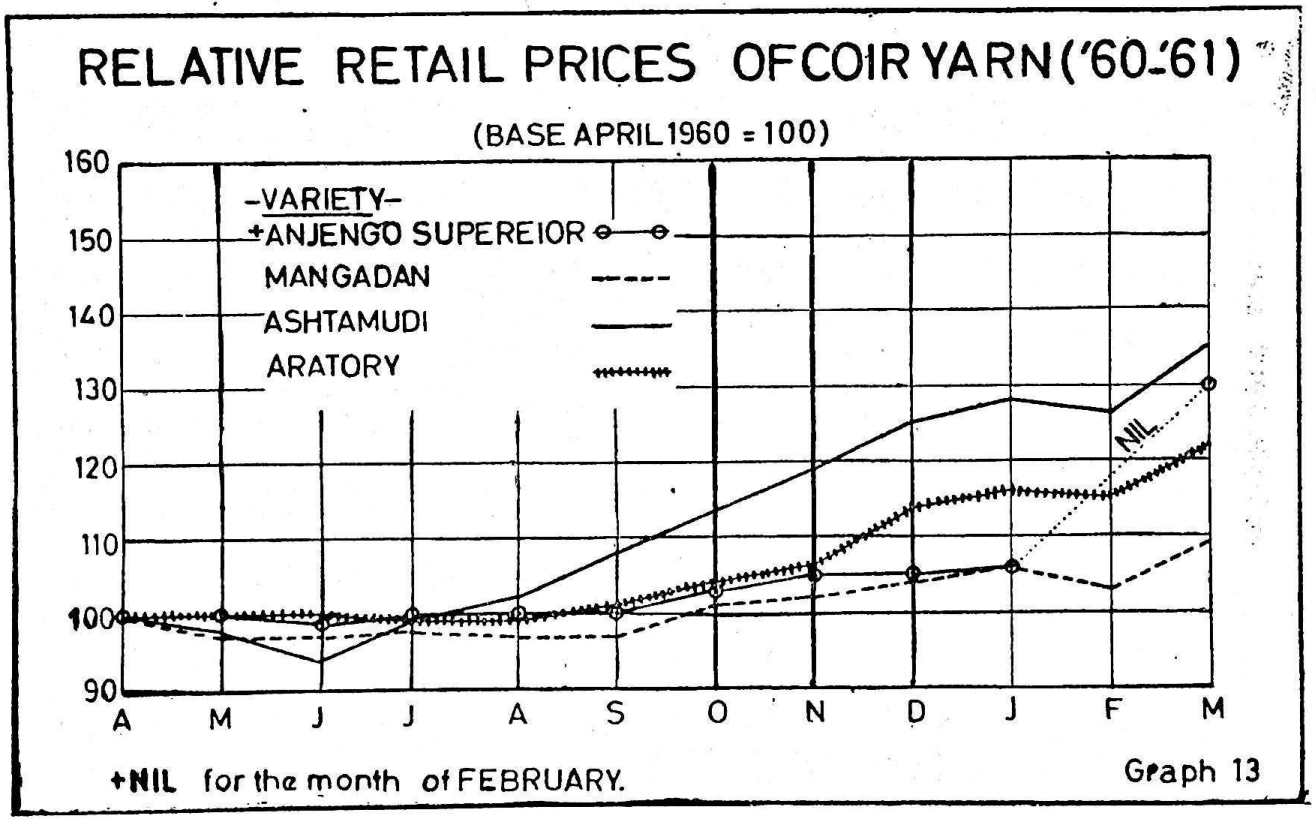

RELATIVE RETAIL PRICES OF COCONUT OIL ('60-'61)
(BASE APRIL 1960=100)
135
125
120
115
110
105
100
95
TRIVANDRUM
QUILON
KOTTAYAM
ALLEPPEY
KOZHIKODE
CANNANORE
A
M
J
J
A
S
O
N
D
J
F
M
Graph 11

GRAPH 12

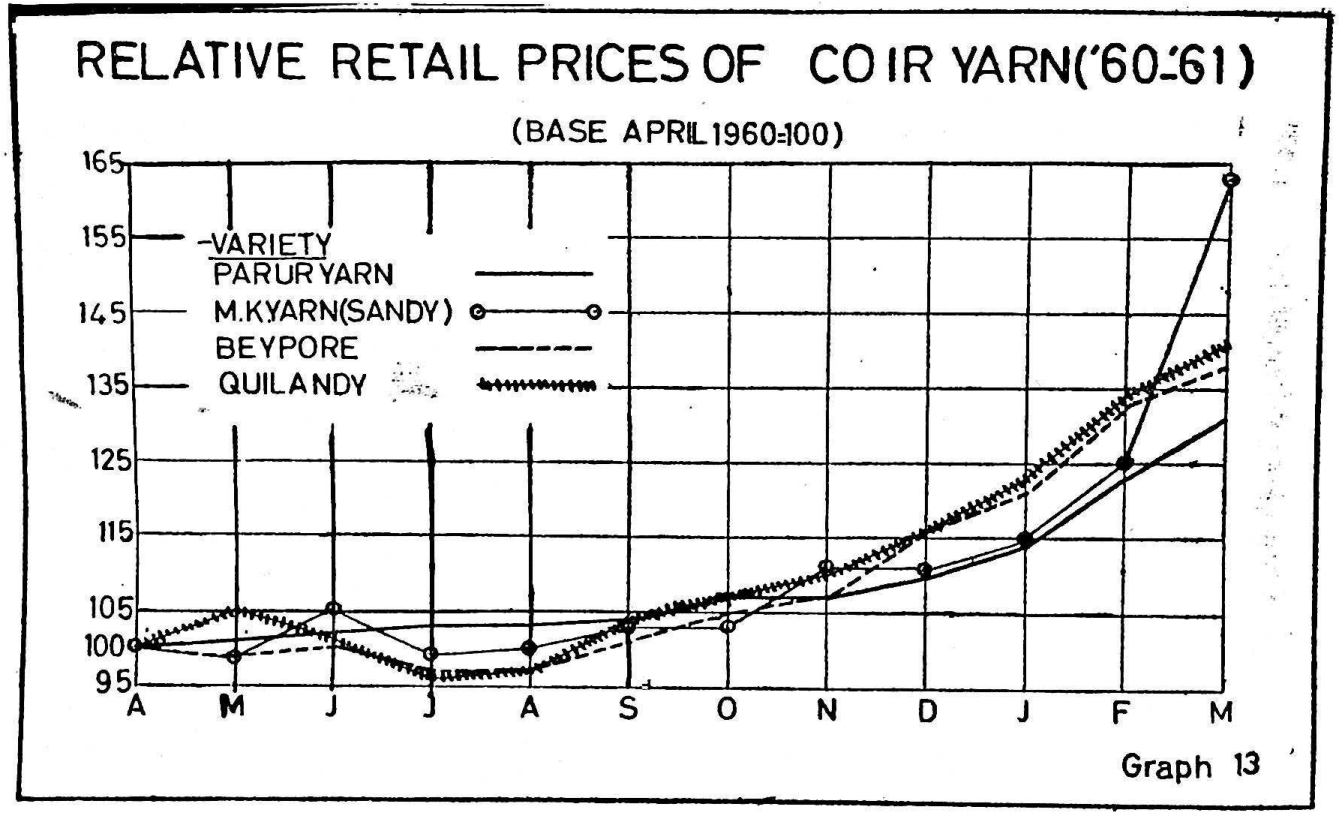



Graph 12

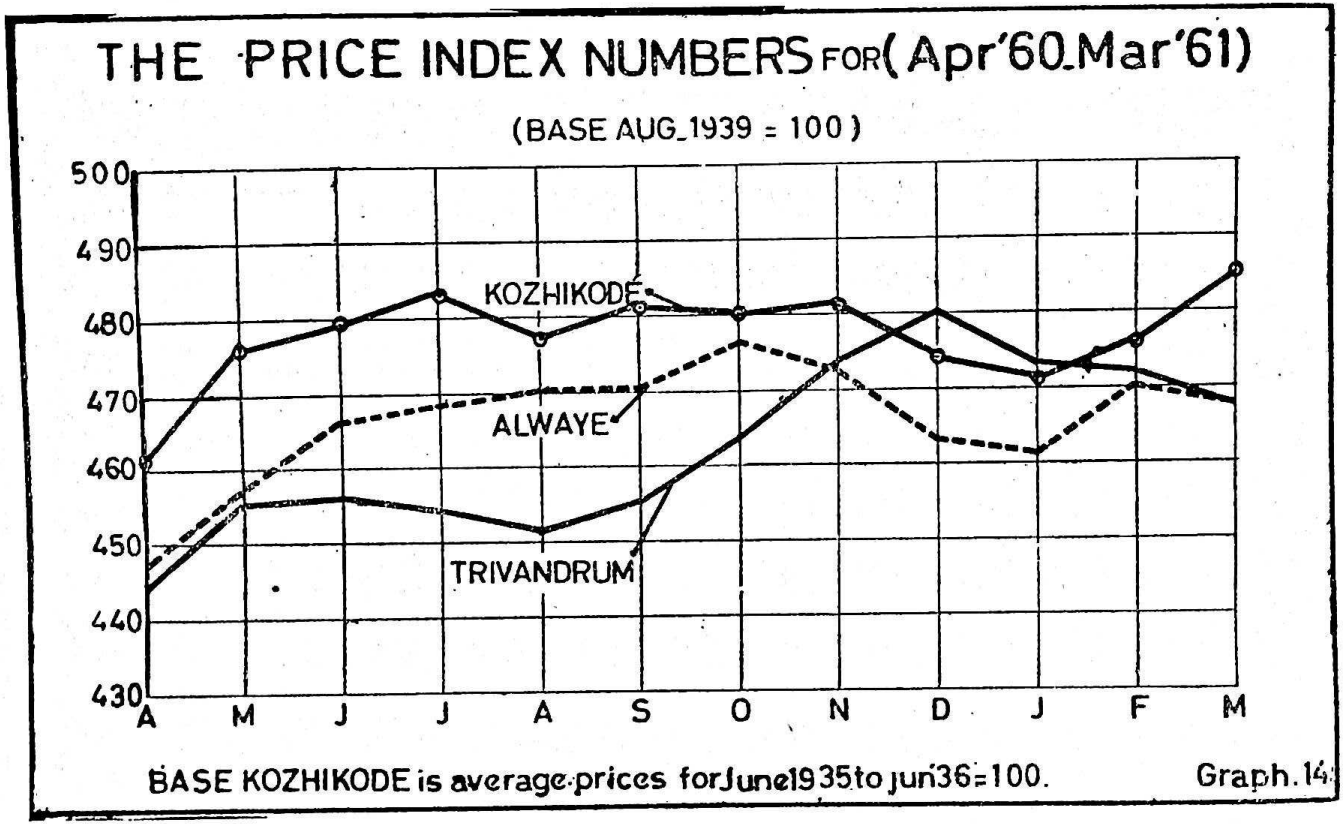
GRAPH 13 (i)


RELATIVE RETAIL PRICES OF COIR YARN ('60-'61)
(BASE APRIL 1960 = 100)
-VARIETY-
+ANJENGO SUPEREIOR
MANGADAN
ASHTAMUDI
ARATORY
160
150
140
130
120
110
100
90
A
M
J
J
A
S
O
N
D
J
F
M
NIL
+NIL for the month of FEBRUARY.
Graph 13

GRAPH 13 (ii)


RELATIVE RETAIL PRICES OF COIR YARN('60-'61)
(BASE APRIL 1960=100)
165
155
145
135
125
115
105
100
95
-VARIETY
PARUR YARN
M.K YARN(SANDY)
BEYPORE
QUILANDY
A
M
J
J
A
S
O
N
D
J
F
M
Graph 13

GRAPH 14


THE PRICE INDEX NUMBERS FOR (Apr'60_Mar'61)
(BASE AUG_1939 = 100)
500
490
480
470
460
450
440
430
A
M
J
J
A
S
O
N
D
J
F
M
KOZHIKODE
ALWAYE
TRIVANDRUM
BASE KOZHIKODE is average prices for June1935 to jun'36=100.
Graph. 14

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**Names of Agents appointed for the sale of Government publications in the erstwhile Malabar area**

1. Sri Justus Paul, Propretor, J. S. Paul and Sons, Book Sellers, Cannanore.
2. Messrs. Moulavi Book Depot, Book Sellers, M. A. Bazaar, Kasargode.
3. Sri G. Uithal Prabhu, News Agent, Manjeswar.
4. Messrs. Touring Book Stall, Calicut.
5. Messrs. K. R. Brothers, Calicut.
6. Messrs. K. P. Ahmed Kunhi and Bros., Camp Bazaar, Cannanore.
7. Sri Kottayi Gopalan, Book Seller and Stationery Merchant, Main Road, Tellicherry.