

**SEASON AND CROP REPORT**  
**FOR**  
**KERALA STATE**

**1964-65**

**BUREAU OF ECONOMICS AND STATISTICS**  
**TRIVANDRUM**

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# SEASON AND CROP REPORT—1964-65

## FOREWORD

This report is the sixth in the series of Season and Crop Reports relating to Kerala State. It deals with the different aspects of agricultural economy of the State pertaining to the year 1964-65. In this report area and production estimates are given in metric units. To enable comparison over time, the estimates of the previous years have also been reworked in terms of metric units.

The report consists of four parts as detailed below:

Part I	Narrative Part
Part II	Summary Tables
Part III	Detailed Tables
Part IV	Appendix

Trivandrum,  
2-6-1966.

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*Additional Director.*

**CONTENTS**  
**PART I—REPORT**

	<i>Page No.</i>
1. Introduction	1
2. Population	2
3. Rainfall	3
4. Soil	3
5. Communication facilities	4
6. Classification of area	4
7. Area under Crops	9
8. Irrigation	13
9. Weather and crop Conditions	13
10. Production of Important Crops	15
11. Farm Prices and Value of Production	17
12. Agricultural Wages	17
13. Livestock and Poultry	17
14. Sowing, Harvesting and Peak marketing periods	17

**PART II—SUMMARY TABLES**

A. Classification of Area	20
B1. Source of Irrigation	22
B2. Area under crops irrigated	23
C. Area under crops	24
D. Production of important crops	27
E. Average yield per acre of certain crops	28
F. Average price and value of production	29
G. Livestock, Poultry and Agricultural machinery	30
H. Sowing, harvesting and Peak marketing seasons of principal crops.	32

**PART III—DETAILED TABLES**

1.1 Normal rainfall	36
1.2 Average monthly rainfall	37
2.1 Classification of area in each district	38
2.2 Classification of area as percentage to the total area according to village papers	40
3.1 Area under crops in each district	42
3.2 Percentage of area under crops to the total area in each district	51

	<i>Page No.</i>
4.1 Out-turn of important crops in each district	55
5.1 Average farm prices of important commodities	57
6.1 Agricultural wages	58
7.1 Number of livestock, poultry and agricultural machinery and implements.	60

#### PART IV—APPENDICES

1. Index Numbers of agricultural production	66
2. Cost of Living Index Numbers in selected centres	67
3. Index of Parity between prices received and prices paid by farmers	67
4. Quarterly retail prices of certain commodities	68
5. Statistics of export of important agricultural commodities through the ports of Kerala	69
6. Notes on certain crops.	78
(1) Tea	
(2) Coffee	
(3) Rubber	
(4) Cardamom	
(5) Pepper	
(6) Ginger	
(7) Lemongrass	
7. Classification of soils in Kerala	86
8. Conversion ratios between raw material and processed product.	88
9. Average analysis of important fertilisers.	89
10. Insect pests affecting paddy crops their distribution and some practical methods of control	91
11. List of Centres selected for collecting meteorological information	95
12. Glossary of English, Botanical and Malayalam Names of Crops.	96
13. Graphs and Charts.	

## CONTENTS

### PART I—REPORT

1. Introduction
  2. Population
  3. Rainfall
  4. Soil
  5. Communication facilities
  6. Classification of area
  7. Area under crops
  8. Irrigation
  9. Weather and Crop Conditions
  10. Production of Important Crops
  11. Farm Prices and Value of Production.
  12. Agricultural wages
  13. Livestock and Poultry
  14. Sowing, Harvesting and Peak marketing periods.
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## SEASON AND CROP REPORT 1964-65.

### 1. Introduction:

Kerala with an area of 38855 Sq. Kilometres lies in the South West corner of Indian Union. It lies between 8°18' and 12°48' north latitudes and 74°52' and 77°22' east longitudes. The State has a coastal line of 560 Kilometres. The width of the State varies from 130 Kilometres in the middle to 32 Kilometres in the extreme ends.

Topographically the State is divided into three natural regions viz., the low land, the midland and the highland. The high land which lies in the eastern boundary of the State includes the high ranges in the western ghats. The low land is the narrow strip of land which falls along the coastal belt of the State. The midland lies in between them. For administrative purposes the State is divided into nine districts viz., Trivandrum, Quilon, Alleppey, Kottayam, Ernakulam, Trichur, Palghat, Kozhikode and Cannanore.

A heavy annual rainfall, a warm humidity of the atmosphere and fairly uniform temperature through out the year are characteristic features of the State. The seasons of the State are mainly controlled by the south west monsoon and north east monsoon.

The State has 44 rivers, out of which 41 are west flowing rivers while the rest are east flowing ones. The west flowing rivers after traversing the high mountainous regions descend rapidly to the midland and are therefore rich in hydel power. These rivers then flow into the plains of the coastal region. The State has a number of lagoons and backwaters. The backwaters are inter connected by a net work of canals. The important rivers in the State are Bharathapuzha, Periyar and Pamba.

The rivers during the course of their flow collect rain water and sub-soil water and carry it to all regions of the State. They are full during the two monsoons and do not dry up completely even during the driest month. The annual rainfall is heavy and fairly regular and uniform. Two noteworthy features of the distribution of the rainfall are its progressive increase from south to north and a similar increase from the Stations on the coast to Stations at the foot of the ghats.

Diversity of crops and heterogeneity of cultivation are the important features of agriculture in the State. While the highland is mainly cultivated with plantation crops and the lowland is virtually monopolised by paddy and cocoanut, the midland is under a host of both major and minor crops. The important crops in the region are Pepper, Rubber, Cocoanut, Arecanut, Tapioca, Ginger etc.

## 2. Population:

The population in the State according to 1961 census was 169.03 lakhs and the density per Sq. Kilometre was 435. The estimated population as on 1st March 1964 was 180.58 lakhs. As per the 1961 census, 143.49 lakhs persons live in rural areas while only 25.54 lakh persons are in urban areas. The districtwise distribution of population is as follows:—

District	Population 1961 Census			
	Total lakhs	Rural lakhs	Urban (lakhs)	Density per Sq. Km.
Trivandrum	17.44	12.96	4.48	798
Quilon	19.41	17.97	1.44	410
Alleppey	18.11	15.01	3.10	988
Kottayam	17.33	15.67	1.66	273
Ernakulam	18.60	14.65	3.95	557
Trichur	16.40	14.54	1.86	557
Palghat	17.77	16.05	1.72	346
Kozhikode	26.17	21.84	4.33	393
Cannanore	17.80	14.80	3.00	314
STATE	169.03	143.49	25.54	435

The State has 27 Municipalities and 2 Corporations covering an area of 474 Sq. Km. and 16.18 lakh population.

Kerala is the State having the highest percentage of literacy in India, the percentage being 46.85. The percentage of male literacy is 54.97 while that of females is 38.90. The district-wise population during 1964 is as follows:—

District	Population (lakhs)	Density (Per sq. km.)
Trivandrum	18.64	853
Quilon	20.74	438
Alleppey	19.35	1055
Kottayam	18.51	291
Ernakulam	19.87	595
Trichur	17.52	595
Palghat	18.98	370
Kozhikode	27.95	420
Cannanore	19.02	335
STATE	180.58	465

The pressure of population on land is very heavy as can be seen from the high density of population. The percapita land is only 0.23 hectare including forests. The percapita land available for cultivation is only 0.15 hectare and the percapita cultivated area (Net area sown and current fallow) is 0.12 hectare.

### 3. Rainfall:

The State has a normal annual rainfall varying between 2000 mm. and 3600. The total rainfall during the year 1964-65 varied between 2300 mm. 4000 mm. in the different districts. The normal annual rainfall and the total rainfall during the year 1964-65 are given below:—

District	Normal rainfall (mm.)	Actual rainfall 64-65 (mm.)
Trivandrum	2002-1774	2394
Quilon	2761-2714	2704
Alleppey	3021-2895	3111
Kottayam	2995-3043	3146
Ernakulam	3578-3529	4019
Trichur	3159-3161	3642
Palghat	2499-2459	2842
Kozhikode	3461-3384	3505
Cannanore	3438-3338	3160

The detailed statement showing the district-wise monthly normal rainfall and actual rainfall during 1964-65 are given in tables 1.1 and 1.2 respectively of the detailed tables.

### 4. Soil:

The soil of Kerala is divided into seven classes as detailed below:—

1. The hill and forest soil seen all along the eastern portion of the State.
  2. The sandy soil seen all along the coastal belt.
  3. The laterite soil in the midland portion.
  4. Black soil which occur as a patch on the eastern border of Palghat District.
  5. Peat or Kari soil in Alleppey District.
  6. The Alluvial soil which occurs along the eastern and southern parts of the Vembanad lake in Ernakulam, Kottayam and Alleppey District and also in small patches in Trichur District.
  7. The red soil seen in the extreme tip of Trivandrum taluk.
- The classification of soil in each district of Kerala is given in appendix.



## 5. Communication Facilities:

With regard to communication facilities this State is far ahead compared to other neighbouring States. The State is linked with other States by air ways and roadways and railways. The rail link connects the important centres in the State as well as those in the neighbouring States of Madras and Mysore. The backwaters along the coastal region affords cheaper transportation facilities from Trivandrum in the south to Tirur in the north. The system of water transport is more prevalent in Alleppey and Ernakulam districts.

## 6. Classification of area:

The classification of area in the State is given in Table A of summary tables and the district-wise break up of the same is given in table 2.1 of the detailed tables.

(i) *Total area.*—The total area of the State according to village papers is 3858523 hectares. The district-wise breakup of the area is as follows:

District	Area in hectares	Percentage
Trivandrum	216096	5.6
Quilon	169051	12.2
Alleppey	186790	4.8
Kottayam	626225	16.2
Ernakulam	317428	8.2
Trichur	294262	7.6
Palghat	510424	13.2
Kozhikode	661586	17.2
Cannanore	576661	15.00
STATE	3858523	100.00

The Malabar districts of Palghat, Kozhikode and Cannanore account for 45% of the area of the State. Kozhikode is the largest district in the State while Alleppey is the smallest one.

(ii) *Forest.*—The area under forests in the State was 1051703 hectares during 1964-65. There was a slight decrease in area under forests during the year under report compared to the previous year. The district-wise area under forests during 1963-64 and 1964-65 are given in the table below:—

District	Forest area (hectares)	
	1963-64	1964-65
Trivandrum	44613	44613
Quilon	211898	210857
Alleppey	513	513
Kottayam	248756	248238
Ernakulam	55260	55212
Trichur	132920	132919
Palghat	99664	99663
Kozhikode	194048	193756
Cannanore	67099	35932
STATE	1054771	1051703

75% of the forest area in the State lies in the districts of Quilon, Kottayam, Trichur and Kozhikode.

(iii) *Land put to Non-agricultural uses.*—The area under non-agricultural uses during 1964-65 was 221887 hectares while the corresponding area during the previous year was 217946 hectares only. A comparative statement showing the district-wise area under this item during the two years is given below:—

District	Area under non-agricultural uses (hectares)	
	1963-64	1964-65
Trivandrum	13033	13616
Quilon	13419	13701
Alleppey	10878	11270
Kottayam	14251	14523
Ernakulam	20293	20702
Trichur	14605	15170
Palghat	61600	61600
Kozhikode	27481	28664
Cannanore	42386	42641
STATE	217946	221887

The area under non-agricultural uses is found to be very large in Palghat and Cannanore districts compared to other districts in the State.

(iv) *Barren and Un-cultivable land*.—The extent of area under this type of land was 115941 hectares during the year under review. The corresponding estimate for the previous year was 116896 hectares.

(v) *Permanent Pastures and Grazing land*.—Permanent pastures occupy 34435 hectares in the State. About 40% of this area lies in Cannanore district.

(vi) *Land under Miscellaneous tree Crops*.—The area under miscellaneous tree crops not included in the net area sown was 208928 hectares during 1964-65. The area during 1963-64 was only 207353 hectares. About 50% of this area is in Cannanore district.

(vii) *Cultivable Waste Land*.—During the year under review, an area of 118761 hectares was classified as 'cultivable waste'. The extent of cultivable waste land during 1963-64 was 124935 hectares. The district-wise break-up of this area is given in the following table:—

District	Cultivable Waste land (hectares.)	
	1963-64	1964-65
Trivandrum	1174	907
Quilon	3926	3729
Alleppey	2529	2566
Kottayam	19998	21000
Ernakulam	8558	8387
Trichur	4353	2791
Palghat	21788	20783
Kozhikode	27752	26908
Cannanore	34857	31690
STATE	124935	118761

About two-third of the cultivable waste land in the State lies in the Malabar districts of Palghat, Kozhikode and Cannanore. Cultivable waste is least in Trivandrum district.

(viii) *Fallow land other than Current fallow.*—During the year under report 'other fallow lands' occupied 34124 hectares. The extent of this land during 1963-64 was 42093 hectares. About 80% of 'other fallow land' is accounted for by the 3 Malabar districts. The district-wise break-up of the area is as follows:—

District	Other fallow lands (in hectares)	
	1963-64	1964-65
Trivandrum	3109	1965
Quilon	1656	1604
Alleppey	461	460
Kottayam	1528	1030
Ernakulam	1760	1484
Trichur	651	627
Palghat	5625	5658
Kozhikode	7536	6581
Cannanore	19758	14715
STATE	42093	34124

(ix) *Current fallow.*—An area of 35734 hectares was treated as current fallow during the year 1964-65 and the corresponding area during 1963-64 was 38109 hectares. The area in each district during the two years was as follows:—

District	Current fallow (in Hectares)	
	1963-64	1964-65
Trivandrum	1856	1169
Quilon	1709	1869
Alleppey	1924	639
Kottayam	4818	3648
Ernakulam	2646	2178
Trichur	1808	2007
Palghat	8600	9341
Kozhikode	10792	8278
Cannanore	3956	6605
STATE	38109	35734

About 70% of the current fallow is concentrated in Palghat, Kozhikode and Cannanore Districts. Land kept as current fallow is least in Alleppey District.

(x) *Net area sown*.—The net area sown in the State was 2037010 hectares during 1964-65 as against 2021987 hectares during 1963-64. The increase over 1963-64 is 15023 hectares. The net area sown in each district was as follows:—

District	Net area sown (hectares)	
	1963-64	1964-65
Trivandrum	150105	151474
Quilon	217900	218874
Alleppey	160019	160186
Kottayam	294447	295304
Ernakulam	206553	208047
Trichur	134597	135521
Palghat	246455	248028
Kozhikode	336488	339828
Cannanore	275423	279748
STATE	2021987	2037010

(xi) *Total Cropped area*.—The cropped area in the State was 2489447 hectares during 1964-65 as against 2461661 hectares during 1963-64. The increase in cropped area was 27786 hectares during the year. The district-wise cropped area in the State during the years 1963-64 and 1964-65 was as follows:—

District	Cropped area (in hectares)	
	1963-64	1964-65
Trivandrum	196082	197222
Quilon	276995	278711
Alleppey	220201	219781
Kottayam	323021	327851
Ernakulam	237753	236977
Trichur	202452	207531
Palghat	324430	333105
Kozhikode	368671	371295
Cannanore	312056	316974
STATE	2461661	2489447

41% of the cropped area in the State is in Palghat, Kozhikode and Cannanore districts.

(xii) *Area sown more than once*.—Area sown more than once was 452437 hectares during the year under report. It was only 439674 hectares during 1963-64. The increase in area during 1964-65 was 12773 hectares i. e. 3%

over the previous year. The intensity of cropping in the State is very high and this is evident from the large area accounted under area sown in more than once. The net area sown and the cropped area in each district are given in the table below:—

District	Net area sown (hectares)	Cropped area (hectares)	% of cropped area to net area
Trivandrum	151474	197222	130
Quilon	218874	278711	127
Alleppey	160186	219781	137
Kottayam	295304	327851	111
Ernakulam	208047	236977	114
Trichur	135521	207531	153
Palghat	248028	333105	134
Kozhikode	339828	371295	109
Cannanore	279748	316974	113
STATE	2037010	2489447	122

The percentage of cropped area to net area sown is found to be very high in Palghat and Alleppey districts which shows that the intensity of cropping (multiple cropping) is very high in these two districts compared to other districts.

#### 7. Area under crops:

The details regarding the area under the different crops in the State are given in Table C of the summary tables and the district-wise break up is given in table 3.1 of the detailed tables.

(i) *Food Crops*: Food crops occupy 65% of the cropped area in the State. The percentage of area under food crops to total cropped area in the different districts are given in the following table:—

District	Area under food crops (hectares)	Percentage to total of the State	Percentage to total cropped area
Trivandrum	128161	8.0	65.0
Quilon	169971	10.6	61.0
Alleppey	139473	8.6	63.5
Kottayam	169459	10.5	51.7
Ernakulam	145195	9.0	61.3
Trichur	156462	9.7	75.4
Palghat	271877	16.9	81.6
Kozhikode	205187	12.8	55.3
Cannanore	223156	13.9	70.4
STATE	1608941	100.0	64.6

The districts of Palghat, Kozhikode and Cannanore account for about 45% of the food crop area in the State. The percentage of food crop area to total crop area is highest in Palghat district.

(a) *Paddy*: The area under paddy during the year 1964-65 was only 801121 hectares though the corresponding figure for 1963-64 was 805083 hectares. The fall in area is due to the fall in harvested area during the Autumn Crop of paddy which was adversely affected by the untimely rain. The harvested area under paddy in each of the 9 districts during 1963-64 and 1964-65 are given below:—

District	Area under paddy (Hectares)	
	1963-64	1964-65
Trivandrum	38788	38602
Quilon	49604	49469
Alleppey	82318	81911
Kottayam	40690	40775
Ernakulam	83559	83040
Trichur	108491	107586
Palghat	194858	194666
Kozhikode	111040	109844
Cannanore	94736	95228
STATE	805084	801121

50% of the paddy area in the State is in Trichur, Palghat and Kozhikode districts. The percentage distribution of paddy area in each district and the percentage of paddy area to total crop area in each district are given in the following table:—

District	Area under paddy (Hectares)	Percentage to total	Percentage to cropped area in district
Trivandrum	38602	4.8	19.6
Quilon	49469	6.2	17.7
Alleppey	81911	10.2	37.3
Kottayam	40775	5.1	12.4
Ernakulam	83040	10.4	35.0
Trichur	107586	13.4	51.8
Palghat	194666	24.3	58.4
Kozhikode	109844	13.7	29.6
Cannanore	95228	11.9	30.0
STATE:	801121	100.0	32.2

The highest percentage of paddy area to total crop area is in Palghat district. Trichur district follows suit.

(b) *Other Cereals and Millets.*—Jowar, Ragi, Chama, Thina, etc. are also cultivated in the State to some extent. The area under these crops came to 13224 hectares during 1964-65. Out of this 5183 hectares were under Ragi and 1321 hectares under Jowar. Jowar is mainly cultivated in Palghat District. Trichur, Kozhikode and Cannanore districts are important for Ragi cultivation. Cereals and millets other than these occupy 6720 hectares. Of this 5328 hectares are in Palghat and Kozhikode districts.

(c) *Pulses.*—The area under pulses in the State was 43595 hectares during the year under review. About 50% of the area under pulses is in Palghat, Kozhikode and Cannanore Districts.

(d) *Sugarcane.*—The area under sugarcane in the State was 9510 hectares during 1964-65. The important sugarcane districts are Alleppey and Kottayam.

(e) *Pepper.*—During the year under report Pepper was cultivated in an area of 99552 hectares. There was no appreciable change in area under pepper during the year, compared to the previous year. Cannanore, Kozhikode and Kottayam are the important pepper growing districts. About 45% of the pepper area is in Cannanore district.

(f) *Chillies.*—Chillies was cultivated in 3294 hectares during 1964-65. It is cultivated only in the 3 districts of Malabar area. The major chillies producing district is Cannanore.

(g) *Ginger.*—The extent of area under ginger during the year under report was 11973 hectares. The important ginger growing districts are Kottayam and Kozhikode.

(h) *Turmeric.*—Turmeric is cultivated in an area of 4614 hectares. It is mainly cultivated in Kottayam, Palghat and Kozhikode districts.

(i) *Cardamom.*—Out of the 28684 hectares under cardamom in the State, 24324 hectares are in Kottayam district. Other cardamom producing districts are Ernakulam, Palghat and Kozhikode.

(j) *Betelnut (Arecanut).*—Arecanut was cultivated in an area of 59488 hectares during 1964-65. Eventhough Arecanut is cultivated in all districts fairly on a large scale, Kozhikode and Cannanore districts occupy about 40% of the area under the crop. The area under Arecaunt increased by 2793 hectares during 1964-65 compared to the previous year.

(k) *Mangoes.*—The area under Mango occupies about one third of area under fresh fruits in the State. About 20% of the area under the crop is in Quilon District. The extent of area in other districts is more or less uniform.

(l) *Banana and Plantain.*—Occupy 45199 hectares during the year under report. About 50% of the area is in Palghat, Kozhikode and Cannanore districts.



Other fruit crops such as Pineapple, Pappaya, Kudampuli etc. occupy another one third of the area under fresh fruits.

(m) *Casheunut*.—The area under cashew cultivation was 85974 hectares during 1964-65. The increase in area during the year was 3606 hectares. The important cashew growing districts are Quilon, Kozhikode and Cannanore. Cannanore district accounts for one third of the total area under cashew in the State.

(n) *Tapioca*.—The area under tapioca during the year under review was 209371 hectares. Eventhough the third plan aims at a reduction of a lakh hectares in the tapioca area, there was no appreciable decrease in the area during 1964-65 compared to 1963-64.

## (ii) Non-food Crops

(a) *Groundnut*.—is cultivated in Trivandrum and Palghat districts only. Out of the 14523 hectares under the crop during the year, 13883 hectares are in Palghat district. There was no appreciable increase in the area under the crop during the year 1964-65.

(b) *Sesamum*.—It is mainly cultivated in Quilon and Alleppey districts. The area under the crop was 12007 hectares during 1964-65. The corresponding figure during 1963-64 was 11991 hectares.

(c) *Cocoanut*.—Cocoanut trees occupy about 65% of the non-food crop area in the State. Though cocoanut is cultivated in all the disiricts fairly on a large scale. Kozhikode stands first among the districts accounting for one fifth of the cocoanut area in the State.

(d) *Cotton*.—is mainly cultivated in Palghat district. During the year 1964-65, the area under cotton was 8695 hectares out of which 7703 hectares was in Palghat district.

(e) *Tobacco*.—is cultivated in Cannanore district only. The area under the crop during 1964-65 was 705 hectares.

(f) *Tea*.—Tea, which is one of the important foreign exchange earning crops of the State is cultivated in 39356 hectares during 1964-65. About 75% of this area is in Kottayam district. Other important tea growing districts are Quilon, Kozhikode and Cannanore (Wynad).

(g) *Coffee*.—This is another important plantation crop of the State cultivated in an area of 21733 hectares during the year under review. Palghat, Kozhikode and Cannanore are the important coffee growing districts in the State.

(h) *Rubber*.—occupies about three fourths of the area under plantation crops in the State. The area under Rubber during 1964-65 was 146952 hectares registering an increase of 4046 hectares compared to the previous year. Important rubber growing districts are Kottayam, Quilon, Kozhikode, Ernakulam and Cannanore.

### 8. Irrigation:

The net area irrigated in the State was 351,640 hectares during 1964-65. The corresponding estimate during 1963-64 was 347,233 hectares. Only 17% of the net area sown is found to be irrigated. The gross area irrigated increased from 488,897 hectares in 1963-64 to 494,095 hectares during 1964-65. The percentage of gross area irrigated to total cropped area is only 20. Details regarding the source-wise and crop-wise irrigation are given in tables B1 and B2 of summary tables.

### 9. Weather and Crop conditions during 1964-65:

1. *Trivandrum District*: The rainfall condition in Chirayinkil and Nedumangad taluks during the Kharif season was normal and during the Rabi season it was very poor. In Trivandrum and Neyyattinkara taluks the rainfall was normal during both the seasons. There was plenty of rain during July and October.

The untimely rain and the attack of pests and diseases affected the Autumn crop of paddy and the Rabi crops like tapioca, pulses, plantain etc. in Chirayinkil and Nedumangad taluks. The condition of crops during the Kharif season was somewhat satisfactory in the other two taluks of the District. No serious damages to crops were reported.

(ii) *Quilon District*: During the Kharif season rainfall was heavy compared to the normal rainfall in all the taluks except Quilon and Karunagapally. Slight damage to the paddy crop was reported due to floods. The condition of other crops was somewhat satisfactory during the season.

During the Rabi season drought conditions prevailed in the whole District and the crops like paddy, pepper, cocoanut, banana and cashewnut were affected by drought.

(iii) *Alleppey District*: During the year, rain started only by the 1st week of June. Then followed a lull period from 2nd week onwards upto the 1st week of July. Heavy rain started from the 1st week of July and it continued so till the end of the month.

During the Rabi season there was no sufficient rain. North east monsoon started late.

The condition of Kharif crops was unsatisfactory and that of the Rabi crop somewhat satisfactory during the year under report.

(iv) *Kottayam District*: Throughout the district the rainfall was normal during the Kharif season and below normal during the Rabi season. The condition of Kharif crop was average in Vaikom, Meenachil, Devicolam, Udumbanchola, Peermade and Kanjirappally taluks and below average in Kottayam and Changanacherry taluks whereas, the condition of Rabi crop was below average in Vaikom, Kottayam and Changanacherry taluks and satisfactory in Devicolam, Udumbanchola, Kanjirappally and Peermade taluks. No considerable loss due to the damage was reported during the year.

(v) *Ernakulam District*: Rainfall was heavy during the Kharif season in the whole district. During the Rabi season the rainfall was average in all the taluks except Parur and Kanayannur where the rainfall was below average.

Drought affected the crops in Muvattupuzha and Thodupuzha taluks during the Kharif season. The condition of crops in Parur, Kanayannur and Cochin taluks was not satisfactory. During the Rabi season also the condition of crops was not at all satisfactory in the District. There were losses due to drought and attacks of pests in Muvattupuzha and Thodupuzha taluks.

(vi) *Trichur District*: The South West monsoon started late in the District during the year under report. The rainfall was below average during both the Kharif and Rabi seasons.

Due to inordinate delay of the monsoon, sowing of Autumn crop was delayed and the crop conditions were not good.

Due to lack of rain in the Rabi season paddy crop was affected seriously. Considerable loss to crop was reported in Thalappilly, Trichur and Chowghat taluks.

(vii) *Palghat District*: During the Kharif season rainfall was sufficient in Palghat, Alathur and Ottappalam taluks and scarce in Chittoor, Ponnani and Perinthalmanna taluks. The rainfall was satisfactory in the District during the Rabi season.

The condition of crops was satisfactory during the Kharif season in Palghat, Alathur and Ottappalam taluks. Drought prevailed in Chittur, Ponnani and Perinthalmanna taluks and the condition of crops was not satisfactory. Loss due to heavy rain in some parts of Palghat and poor yield due to heavy drought in Chittoor were reported during the Kharif season.

In the Rabi season damages caused by flood and salt water entering were reported in Ponnani taluk. Except for those slight damages, the condition of Rabi crops was satisfactory throughout the District.

(viii) *Kozhikode District*: The rainfall condition in the Kharif and Rabi seasons were normal throughout the District. The crop condition was also satisfactory in both the seasons. No considerable loss to crops have been reported except in Tirur taluk where flood and Sea erosion caused damages to paddy and coconut trees.

(ix) *Cannanore District*: During the Kharif season rainfall was average in almost all the taluks of the District and satisfactory in the Rabi season. The weather and climatic conditions were normal and hence the condition of crops was satisfactory during both the seasons. There were no instances of severe crop damages reported anywhere in the District during the year.

### 10. Production of Important Crops:

The production figures of all important crops in the State during the past few years are given in Table D of the summary tables. The district-wise production figures are given in table No. 4.1 of the detailed tables. The trend in the production of some of the important crops are discussed below:

(i) *Paddy*: During the year under review the production of Rice was 1121383 tonnes only though the production during 1963-64 was 1128059 tonnes. The low production during 1964-65 was due to the untimely rain which affected the Autumn crop of paddy. The district-wise production of rice during the two years is given below:

DISTRICT	Production of rice (tonnes)	
	1963-64	1964-65
Trivandrum	56537	52964
Quilon	69278	63374
Alleppey	112141	118117
Kottayam	58894	55061
Ernakulam	110182	100456
Trichur	147471	142170
Palghat	332762	343940
Kozhikode	121698	123469
Cannanore	119096	121832
STATE:	1128059	1121383

During 1964-65, nearly one-third of the rice produced in the State was from Palghat district. Palghat, Kozhikode and Cannanore districts account for 55% of the rice production in the State.

(ii) *Pulses*.—During the year under report 17061 tonnes of pulses were produced. The production during 1963-64 was a little high viz. 17128 tonnes.

(iii) *Sugarcane*.—In 1964-65 there was no appreciable increase in gur production. The production estimate of gur during the year was 44034 tonnes. Kottayam and Alleppey districts contribute to 77% of the gur production in the State.

(iv) *Pepper (Black)*.—Pepper production during the year 1964-65 was 22228 tonnes though the estimate for 1963-64 was 22424 tonnes. Important pepper producing districts are Cannanore, Kozhikode, Kottayam and Trivandrum.

(v) *Ginger (dry)*.—The production of Ginger during 1964-65 was 11328 tonnes. There was no substantial change during the year compared to 1963-64. The important ginger producing districts are Kottayam and Kozhikode.

(vi) *Turmeric (Cured)*.—During 1964-65 the production of Turmeric in the State was 3910 tonnes. Kottayam, Palghat and Kozhikode districts produce more than 75% of the turmeric production in the State.

(vii) *Cardamom processed*.—Till 1963-64 the production of cardamom was estimated on the basis of conventional yield rate viz. 40 lbs. of processed cardamom per acre. The Indian Council of Agricultural Research conducted a pilot survey in 1959 to estimate the yield rate of cardamom. The results of the survey revealed that the yield rate is 50 lbs. per acre (56 Kg. per hectare). During 1964-65 the total production was estimated 1606 tonnes based on the Indian Council of Agricultural Research results viz. 56 Kg./Hectare. Hence it may be noted that even though the absolute production estimate during 1964-65 is very high compared to 1963-64, there is actually no notable increase in production. The production figures of 1964-65 are therefore not comparable with that of the previous years. For comparison over time the index numbers of agricultural production may be referred to. The important cardamom producing district is Kottayam.

(viii) *Betelnut (Arecanut)*.—The betelnut production during 1964-65 was 8945 million nuts as against 8091 million nuts during 1963-64. Quilon, Trichur, Kozhikode and Cannanore districts account for 68% of the production in the State.

(ix) *Banana and other Plantain*.—During 1964-65, 341386 tonnes of Banana and other plantain were produced in the State. The corresponding estimate of the previous year was 325829 tonnes. The production had increased by 5%. About a third of the Banana and Plantain production in the State is accounted for by Kozhikode and Cannanore districts. Quilon district leads other districts with regard to Banana production.

(x) *Cashewnut*.—96463 tonnes of Cashewnuts have been produced in 1964-65. The production has increased by nearly 5% during the year. The production during 1963-64 was only 92316 tonnes.

(xi) *Tapioca*.—The total production of tapioca in the State was estimated on the basis of crop cutting results conducted by the Bureau during 1964-65. The estimated production during the year was 2763197 tonnes as against 2523699 tonnes during 1963-64. The important tapioca producing districts are Trivandrum, Quilon and Kottayam accounting for three-fourths of the tapioca produced in the State.

(xii) *Groundnut*.—A quantity of 21838 tonnes of groundnut have been produced during 1964-65 as against 20775 tonnes during 1963-64.

(xiii) *Sesamum*.—The production of sesamum during the year under report was 2399 tonnes. The yield fell down by 197 tonnes during the year compared to 1963-64.

(xiv) *Cocoanut*.—During 1964-65 the production of cocoanut was estimated at 3278 million nuts. Eventhough the production has showed an increase compared to 1963-64, the yield rate fell down from 2422 nuts per acre in 1963-64 to 2362 nuts in 1964-65. One-fourth of the cocoanut production in the State is from Kozhikode district. Next comes Alleppey district.

(xv) *Cotton*.—The cotton production in the State was 9851 bales during 1964-65 against 8030 bales during 1963-64. Palghat district accounts for 80% of the production.

(xvi) *Tobacco*.—During the year, it was estimated that the tobacco production was 930 tonnes in the State.

(xvii) *Tea*.—Tea production in the State was 42075 tonnes during 1964-65. The increase during the year was 2.5% compared to 1963-64. Kottayam and Kozhikode are the important tea producing districts of the State.

(xviii) *Coffee*.—The coffee production in the State was 9685 tonnes during 1964-65 as against 8568 tonnes during 1963-64. Kozhikode district accounts for about 62% of the production in the State.

(xix) *Rubber*.—During 1964-65, 40065 tonnes of rubber was produced in the State. The increase in production compared the previous year was 6273 tonnes ie. 18.5%. Kottayam and Quilon districts account for about 55% of the rubber production in the State.

(xx) *Lemongrass Oil*.—A quantity of 1602 tonnes of lemongrass oil was produced during 1964-65. The corresponding estimate of 1963-64 was 1616 tonnes. Kottayam and Ernakulam districts account for 55% of the lemongrass oil production in the State. Other districts important for the crop are Kozhikode and Cannanore.

## 11. Farm Price of Certain Commodities:

The farm price of certain agricultural commodities are given in Table F (Summary tables) and table 5.1 (of detailed tables). The value of production of these commodities is also given in table F.

## 12. Agricultural Wages:

Detailed statement showing agricultural wages prevailed in the different districts among the different class of cultivators are given in table No. 6.1

## 13. Livestock, Poultry and Agricultural implements:

The details regarding livestock, poultry etc. obtained through the 1961 census are given in table G of summary tables and table No. 7.1 of detailed tables.

## 14. Sowing, Harvesting and Peak marketing period:

A detailed statement showing the sowing, harvesting and the peak marketing period of important seasonal crops of the State are given in table No. H. of summary tables.

**PART—II**  
**SUMMARY TABLES**

- A. Classification of area
  - B1. Source of Irrigation
  - B2. Area under crops irrigated
  - C. Area under crops
  - D. Production of Important Crops
  - E. Average yield per acre of certain crops
  - F. Average price and value of production
  - G. Livestock, Poultry and agricultural machinery
  - H. Sowing, Harvesting and Peak marketing seasons of Principal Crops.
-

**Table**  
**CLASSIFICATION OF AREA**

Head of Classification	1952—53		1955—56		1960—61	
	Area	%	Area	%	Area	%
1	2	3	4	5	6	7
Total area by village papers	3808861	100.00	3808861	100.00	3858523	100.00
Forests	947251	24.87	1007624	26.46	1056143	27.37
Land put to non-agricultural uses	205011	5.38	204971	5.38	204644	5.30
Barren and uncultivable land	214849	5.64	204328	5.36	151344	3.92
Permanent Pastures and grazing land	55722	1.46	47080	1.24	45232	1.17
Land under miscellaneous free crops	186322	4.89	197011	5.17	204363	5.30
Cultivable waste	181578	4.77	151602	3.98	143409	3.72
Current fallow	44010	1.66	56552	1.48	67124	1.74
Other fallows	197259	5.18	108524	2.85	62542	1.62
Net area sown	1776859	46.65	1831169	48.08	1923722	49.86
Total cropped area	2089108	54.85	2178310	57.19	2348856	60.87
Area sown more than once	312249	8.20	347141	9.11	425134	11.02



—A  
(AREA IN HECTARES)

1961—62		1962—63		1963—64		1964—65	
Area	%	Area	%	Area	%	Area	%
8	9	10	11	12	13	14	15
3858523	100.00	3858523	100.00	3858523	100.00	3858523	100.00
1056143	27.37	1056135	27.37	1054772	27.34	1051703	27.26
209486	5.43	213962	5.55	217946	5.65	221887	5.75
146120	3.79	121460	3.15	116896	3.03	115941	3.01
44539	1.15	34847	0.90	34432	0.89	34435	0.89
202194	5.24	208864	5.41	207353	5.37	208928	5.41
140898	3.65	126778	3.29	124935	3.24	118761	3.08
60961	1.58	43279	1.12	38109	0.99	35734	0.93
66409	1.72	43885	1.14	42093	1.09	34124	0.88
1931773	50.07	2009313	52.07	2021987	52.40	2037010	52.79
2341200	60.68	2446624	63.41	2461662	63.79	2489447	64.52
409427	10.61	437311	11.33	439675	10.39	452437	11.73

**Table—B-1.**  
**SOURCES OF WATER SUPPLY AND NET AREA IRRIGATED (IN HECTARES)**

Sources	1955—56	1960—61	1961—62	1962—63	1963—64	1964—65
1	2	3	4	5	6	7
Net area irrigated by:—						
1 Government canals	67368	133049	140418	147929	155917	162330
2 Private canals	5738	5738	5738	5738	5738	7815
3 Tanks	41598	46952	48251	49578	51537	55720
4 Wells	2032	2032	2032	2032	2032	4030
5 Other sources	130940	130940	130940	130940	132009	121745
6 Total	247676	318711	327379	336217	347233	351640
*7 Percentage of net area irrigated to net area sown	13.53%	16.57%	16.95%	16.73%	17.17%	17.26%
8 Area irrigated more than once in an year	101766	137545	138686	139924	141664	142455
9 Total irrigated area	349442	456256	466065	476141	488897	494095
10 Percentage of total irrigated area to total cropped area	16.04%	19.42%	19.91%	19.45%	19.86%	19.85%

Table-B-2

## GROSS AREA UNDER CROPS IRRIGATED IN KERALA (IN HECTARES)

Name of crop	1955-56		1960-61		1961-62		1962-63		1963-64		1964-65	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
11	2	3	4	5	6	7	8	9	10	11	12	13
Paddy	240986	69.0	347799	76.2	357609	76.7	367686	77.2	380441	77.8	390675	79.1
(Sugarcane	2796	0.8	3650	0.8	4209	0.9	4306	0.9	4306	0.9	4305	0.9
Other food crops	66163	18.9	65310	14.3	64750	13.9	64652	13.6	61213	12.5	56430	11.4
Total food crops	309945	88.7	416759	91.3	426568	91.5	436644	91.7	445960	91.2	451410	91.4
Total non-food crops	39497	11.3	39497	8.7	39497	8.5	39497	8.3	42937	8.8	42685	8.6
All Crops	349442	100.0	456256	100.0	466065	100.0	476141	100.0	488897	100.0	494095	100.0

Table—C  
AREA UNDER CROPS IN KERALA (AREA IN HECTARES)

Name of crop	1952-53	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65
I	2	3	4	5	6	7	8
Paddy	742160	759353	778910	752688	802660	805084	801121
Jowar	1235	1862	1473	1420	1420	1410	1321
Ragi	4591	4702	5573	5204	5210	5216	5183
Other Cereals & Millets	5450	5422	5846	6742	6728	6728	6720
Total Cereals & Millets	753436	771339	791802	766054	816018	818438	814345
Tur	4541	12460	8932	8382	8819	8810	8545
Other Pulses	30223	32291	35188	35146	35162	35042	35150
Total Pulses:	34764	44751	44120	43528	43981	43852	43595
Sugarcane	6497	7294	9146	9223	9332	9486	9510
Palmyrah	3938	5456	5050	5213	5141	8140	5360
Total Sugar Crops:	10435	12750	14196	14436	14473	14626	14870
Pepper	78806	86487	99755	99844	99240	99382	99552
Chillies (Dry)	4139	4046	3318	3322	3322	3294	3294
Ginger	14072	10456	12004	12045	12068	11958	11973
Turmeric	4511	4552	4665	4844	4832	4615	4614
Cardamom	25540	28069	28607	28683	28683	28683	28684
Areca nut	59996	58098	54256	56740	55300	56695	59488
Other Condiments and Spices	16017	16002	18630	18761	18940	18866	19317
Total Condiments and Spices:	203081	207710	221235	224239	222385	223493	226922

Table C--(Contd.)

1	2	3	4	5	6	7	8
Mangoes	50984	57106	59579	61182	62628	63664	63317
Citrus fruits	3312	2312	1959	1959	1959	1959	1959
Banana	31014	47067	10014	8666	10570	10288	10724
Other plantains	..	..	34410	34009	32782	32853	34475
Other fresh fruits	35080	50940	58154	59196	59010	68755	64030
Cashewnuts	35409	37464	54318	55028	82127	82368	85974
Other dried fruits	16396	6051	24	24	24	24	24
Total fruits	172195	200940	218458	220064	249100	259911	260503
Tapioca	204723	222132	242201	236675	221617	209906	209371
Sweet Potatoes	6117	8401	8031	8084	8359	8916	10194
Other Vegetables	39785	39786	25014	26450	25913	25345	29141
Total Vegetables	250625	270319	275246	271209	255889	244167	248706
Total Food Crops	1424536	1507809	1565057	1539530	1601846	1604487	1608941
Groundnut	11053	13197	16030	16030	16030	14512	14523
Castor	672	703	214	277	389	362	355
Sesamum	18562	20125	12087	11948	11913	11991	12007
Coconut	430401	447945	500758	504820	539258	544986	558991
Other Oil seeds	10801	11205	9699	10707	11050	11211	11264
Total Oil Seeds	471489	493175	538788	543782	578640	583062	597140

Table C—(Concl'd.)

1	2	3	4	5	6	7	8
Cotton	6406	8767 67	9822 36	9583 36	7730 36	7963 36	8695 36
Other Fibres	..	8834	9858	9619	7766	7999	8731
<b>Total Fibres</b>	6406	8834	9858	9619	7766	7999	8731
Tobacco	523	571	743	703	703	704	705
Tea	44986	39883	37631	37410	38552	38405	39356
Coffee	12599	14295	16798	18799	19172	20022	21733
Rubber	62586	64708	122865	133076	137909	142906	146952
Other drugs plantation crops	2040	101	1406	1406	1406	1406	1406
Total drugs and plantation crops etc.	122734	119558	179443	191394	197742	203443	210152
Fodder	605	605	466	472	470	458	462
Green manure crops	1448	1448	1429	7126	7784	8027	9135
Lemongrass	NA	14085	25712	25395	24764	25138	24036
Other Non-Food Crops	61889	32796	28103	23882	27612	29048	30850
<b>Total Non-Food Crops</b>	664572	670501	783799	801670	844778	857175	880506
Total area under all crops	2089108	2178310	2348856	2341200	2446624	2461662	2489447
Area sown more than once	312249	347141	425134	409427	437311	439675	452437
<b>Net area sown</b>	1776859	1831169	1923722	1931773	2009313	2021987	2037010

Table D  
**PRODUCTION OF IMPORTANT CROPS IN KERALA**

Production

Name of crops	Unit	Production								
		1952-53	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65		
I	2	3	4	5	6	7	8	9		
Rice/ (Paddy)	000 Tonnes	722 (1099)	884 (1345)	1068 (1625)	1004 (1528)	1093 (1664)	1128 (1716)	1121 (1706)		
Jowar	do. Tonnes	496	333	640	620	620	594	558		
Ragi	do.	5548	6213	8006	7624	7615	7547	7457		
Pulses	do.	13637	17556	17546	17159	17264	17061	17061		
Sugarcane (Gur)	do.	29464	33982	38090	37704	41701	44089	44034		
Pepper (Black)	do.	22627	27672	27026	26975	24461	22423	22228		
Ginger (Dry)	do.	10175	11111	11263	11364	11430	11291	11328		
Turmeric (Dry)	do.	5056	5101	4181	4335	4313	3912	3910		
Cardamom (Processed)	do.	1231	1259	1280	1283	1283	1283	1606		
Arecanut	do.	4448	6460	7737	8091	8312	8522	8945		
Chillies (Dry)	Million nuts Tonnes	N. A.	N. A.	2225	2225	2254	2235	2240		
Barana	do.	208745	316794	65100	56333	77012	74957	78135		
Other Plantain	do.	...	...	262766	261023	250334	250872	263251		
Cashewnut	do.	54751	58786	84630	85800	92041	92312	96463		
Tapioca (Raw)	do.	1514	1594	1683	1445	1540	2524	2763		
Groundnut	000 Tonnes Tonnes	13937	14468	13797	13750	13533	20774	21838		
Sesamum	do.	2978	3099	2586	2580	2577	2596	2399		
Coconut	do.	30220	30396	3220	3247	3305	3262	3278		
Tea	Million nuts Tonnes	5110	6253	7409	8275	8481	41039	42075		
Coffee	do.	19261	21174	23045	24982	29056	8588	9685		
Rubber	do.	6934	9444	10481	10175	7412	33790	40065		
Cotton	Bales (of 180 Kg.)	...	700	1006	930	919	7932	9851		
Tobacco	do. Tonnes	...	...	1016	1703	1624	920	920		
Lemongrass oil	do.	...	...	...	...	...	1642	1602		

**Table E**  
**AVERAGE YIELD PER HECTARE OF CERTAIN CROPS**

Name of crop	Unit	1952-53	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65
		3	4	5	6	7	8	9
1 Paddy	Kg./Hectare	1482	1772	2086	2030	2074	2133	2131
2 Jowar	do.	321	447	435	437	437	421	422
3 Ragi	do.	1208	1321	1437	1465	1462	1447	1439
4 Sugarcane (Gur)	do.	4535	4659	4165	4088	4469	4648	4630
5 Pepper (Black)	do.	287	321	271	270	247	225	223
6 Ginger (Dry)	do.	723	1063	938	944	947	944	946
7 Turmeric (Dry)	do.	1121	1121	897	894	892	847	847
8 Cardamom	do.	48	45	45	45	45	45	56
9 Arecanut	Nuts/Hectare	74130	111195	142601	142596	150311	150310	150360
10 Banana	Kg./Hectare	6731	6731	6501	6501	7286	7286	7286
11 Other plantains	do.	1547	1569	7622	7622	7622	7636	7636
12 Cashewnuts	do.	7398	7061	1558	1588	1121	1121	1121
13 Tapioca	do.	1261	1096	6949	6949	6949	12022	13198
14 Groundnut	do.	319	321	861	860	844	1431	1504
15 Sesamum	do.	6919	6919	214	216	216	216	200
16 Coccoanuts	Nuts/Hectare	195	193	6430	6430	6128	5985	5864
17 Cotton	Kg./Hectare	671	762	192	192	174	179	204
18 Tea	do.	406	372	1073	1017	1005	1068	1069
19 Coffee	do.	308	327	442	440	443	428	446
20 Rubber	do.	308	327	187	187	211	236	273



**Table F**  
**AVERAGE PRICE AND TOTAL VALUE OF PRODUCTION—1964-65**

Name of crop	Unit	Average Farm Price (Rs)	Value of production (Rs. in lakh)
1 Paddy	Tonnes	657.80	11227
2 Coconut (with husk)	1000 nuts	267.70	8775
3 Arecanut	"	34.20	3059
4 Tapioca (Raw)	Tonnes	173.90	4805
5 Cashewnut	"	834.80	805
6 Banana	100 Nos.	10.30	538
7 Ginger (Dry)	Tonnes	3110.90	352
8 Pepper (Black)	"	3426.90	762
9 Sugarcane	"	N. A.	N. A.

**Table—G**  
**NUMBER OF LIVESTOCK, POULTRY AND AGRICULTURAL MACHINERY**

Sl. No.		1956 Census	1961 Census
1	2	3	4
1	2	3	5
1	Cattle	Male over 3 years:	
		(a) Breeding	11026
		(b) Working	553155
		(c) Others	37718
		Total	601899
		Females over 3 years:	
		(a) Breeding: (1) In Milk	396375
		(2) Dry	454233
		(3) Not calved	120976
		(b) Working	7083
	(d) Others	19223	
	Total	997950	
	Young Stock	910527	
	Total Cattle	2510376	
2	Buffaloes	Males over 3 years:	
		(a) Breeding	4046
		(b) Working	247313
		(c) Others	5895
		Total	257254
		Females over 3 years:	
		(a) Breeding: (1) In Milk	61336
		(2) Dry	52128
		(3) Not calved	11624
		(b) Working	10109
	(c) Others	3288	
	Total	138485	
	Young Stock	91914	
	Total Buffaloes	487653	
3	Sheeps	(a) One year and above	39143
		(b) Below one year	158677
		Total	97820
4	Goats	(a) One year and above	563135
		(b) Below one year	592435
		Total	955570
			29319
			515241
			21471
			566031
			428194
			502935
			207277
			11274
			12306
			1161986
			1025148
			2753165
			10627
			267871
			6614
			285112
			59542
			49341
			16846
			7266
			2188
			135113
			64864
			485089
			18949
			5292
			24241
			869414
			442848
			1312262

1	2	3	4	5
5	Horse and Ponies	(a) Three years and above	1008	366
		(b) Below three years	682	42
		Total	1690	408
6	Mules		2	31
7	Donkeys		1415	377
8	Camels			
9	Pigs		113711	122381
		Total Livestock	4168237	4697954
10	Poultry	(a) Fowls	6462799	8708664
		(b) Ducks	332085	387072
		(c) Others	..	..
11	Ploughs	(a) Wooden	570327	562281
		(b) Iron	10225	6441
			27283	21037
12	Carts			
13	Sugarcane Crushers	(a) Power	230	175
		(b) Bullocks	1155	1071
14	Oil engines		2504	3372
15	Electric pumps		723	2565
16	Tractors		187	276
17	Chains	(a) More than five seers	1858	2058
		(b) Less than five seers	2366	2164

**Table—H**  
**SOWING, HARVESTING AND PEAK MARKETING SEASONS**  
**OF PRINCIPAL CROPS IN KERALA STATE**

Sl. No.	Crop	(3)	Sowing	Harvesting	Peak Marketing
(1)	(2)	(3)	(4)	(5)	(6)
1.	Rice	Autumn Winter Summer	April—June August—October November—December January—March	August—October December—February February—March April—May	September—October January—February March—April May—June
2.	Ragi	1st crop 2nd crop	April—July September—October	August—October December—January	September—October December—January
3.	Small Millets (Samai)	Kharif Rabi	May September	August December	August December
4.	Red gram	1st crop 2nd crop 3rd crop	May—June August—October February	August—September November—January April	September—October January April
5.	Horse gram	1st crop 2nd crop	August—October February—March	November—January April—May	January—February May—June
6.	Green gram		May—June	August—September	September—October
7.	Black gram	1st crop 2nd crop	May—June October—November	August—October January—February	October February

8. Other pulses	May—June October	August—September December—January	August—September January
9. Sugarcane	1st crop 2nd crop	November—February January—March	November—December February
10. Ginger (Raw)	April—May	November—January	December—January
11. Pepper	..	November—January	December—January
12. Sesamum	1st crop 2nd crop 3rd crop	February—March August—October December—January	July—August December—January April—May
13. Cotton	August—September	February—March	February—March
14. Sweet Potatoes	1st crop 2nd crop 3rd crop	June—July December—January March—April	September—October December—January February—March
15. Turmeric	April—May	December—January	January—February
16. Lemongrass	October—November March—May	June—September	September
17. Tapioca	1st crop 2nd crop 3rd crop	July—September	August—September December—January June—July

## PART III

### DETAILED TABLES

#### *Details of Tables.*

#### *Table No.*

- |     |  |
|-----|--|
| 1.1 | Normal Rainfall  |
| 1.2 | Average monthly rainfall   |
| 2.1 | Classification of area as percentage to total area according to Village papers |
| 3.1 | Area under crops in each District.   |
| 3.2 | Percentage of area under crops to the total area in each District.             |
| 4.1 | Out-turn of important crops in each District.                                  |
| 5.1 | Average farm prices of certain commodities.                                    |
| 6.1 | Agricultural wages.  |
| 7.1 | Number of Livestock, Poultry and agricultural machinery and implements.        |

Table 1.1.  
NORMAL RAINFALL IN KERALA (IN MILLI METRES)

District	July	August	September	October	November	December	January	February	March	April	May	June	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Trivandrum..	257.4	204.5	168.9	280.2	210.2	70.1	21.2	18.0	48.0	118.1	213.9	391.1	12001.6
Quilon ..	449.6	318.1	226.1	344.9	242.9	64.8	24.1	32.1	84.6	166.3	260.3	547.4	2761.2
Alleppey ..	548.1	371.3	272.3	328.1	224.0	64.0	27.6	31.6	59.7	134.1	293.7	656.1	3020.6
Kottayam ..	628.0	412.4	263.5	330.8	213.6	72.2	31.2	27.0	59.5	133.1	237.4	585.8	2994.5
Ernakulam ..	785.9	523.5	296.6	365.7	216.9	54.6	18.0	23.6	54.4	136.1	310.1	792.1	3577.5
Trichur ..	747.6	441.7	245.5	305.7	163.5	32.8	10.1	9.2	28.4	91.1	283.5	800.3	3159.4
Palghat ..	657.1	361.9	175.7	257.4	144.3	30.4	9.1	9.3	26.6	80.0	175.2	532.2	2459.2
Kozhikode ..	1005.9	530.5	239.2	286.6	160.1	33.4	9.0	6.8	18.4	84.0	233.5	853.9	3461.3
Cannanore ..	1063.5	584.7	239.4	218.0	106.0	22.8	5.3	4.8	11.2	58.6	200.6	923.0	3437.6

Table 1.2

## AVERAGE MONTHLY RAINFALL IN KERALA DURING 1964-1965 (IN MILLI METRES)

District	July 1964	August 1964	September 1964	October 1964	November 1964	December 1964	January 1965	February 1965	March 1965	April 1965	May 1965	June 1965	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Trivandrum..	489.1	155.5	253.0	500.9	186.3	3.8	16.5	1.3	33.5	141.2	237.1	375.7	2393.9
Quilon ..	539.2	255.2	410.6	351.8	242.8	14.6	8.5	2.1	3.0	205.2	247.5	423.7	2704.2
Alleppey ..	755.0	304.4	379.9	430.5	221.1	1.4	38.6	2.4	42.0	84.2	339.9	511.8	3111.2
Kottayam ..	787.8	539.3	394.8	425.9	151.1	15.6	6.0	Nil	41.7	136.4	240.6	406.5	3145.7
Ernakulam ..	992.0	527.4	541.1	462.9	189.4	19.7	41.6	7.8	40.0	200.5	362.0	635.0	4019.4
Trichur ..	973.3	555.1	568.4	256.5	263.8	30.2	2.4	Nil	5.3	88.5	277.3	621.5	3642.3
Palghat ..	604.9	593.6	304.3	384.8	208.3	13.9	Nil	Nil	9.4	136.5	120.7	465.6	2842.0
Kozhikode ..	857.5	538.3	495.9	281.9	169.0	28.9	3.0	Nil	16.4	90.4	172.5	851.2	3505.0
Cannanore ..	825.6	707.9	284.6	112.0	96.7	29.7	Nil	Nil	Nil	53.6	94.1	956.1	13160.3



Table 2.1

CLASSIFICATION OF AREA IN EACH DISTRICT OF KERALA  
(AREA IN HECTARES) DURING 1964-65

District	Total Geographical area according to Village papers	Forests	Land put to non-agri-cultural uses	Barren and uncultivable land	Permanent pastures and other grazing land	Land under Misc. tree crop not included in net area sown
1	2	3	4	5	6	7
Trivandrum	216096	44613	13616	955	599	798
Quilon	469051	210857	13701	12398	1341	4678
Alleppey	186790	513	11270	1740	271	9145
Kottayam	626225	248238	14523	21575	4503	16404
Ernakulam	317428	55212	20702	8928	3334	9156
Trichur	294262	132919	15170	3328	544	1355
Palghat	510424	99663	61600	28095	6266	30990
Kozhikode	661586	193756	28664	14143	2782	40646
Cannanore	576661	65932	42641	24779	14795	95756
STATE	3858523	1051703	221887	115941	34435	208928

Table 2.1

CLASSIFICATION OF AREA IN EACH DISTRICT OF KERALA  
(AREA IN HECTARES) DURING 1964-1965

District	Cultivable waste	Fallow land other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area
	8	9	10	11	12	13
Trivandrum	907	1965	1169	151474	45748	197222
Quilon	3729	1604	1869	218874	59837	278711
Alleppey	2566	460	639	160186	59595	219781
Kottayam	21000	1030	3648	295304	32547	327851
Ernakulam	8387	1484	2178	208047	28930	236977
Trichur	2791	627	2007	135521	72010	207531
Palghat	20783	5658	9341	248028	85077	333105
Kozhikode	26908	6581	8278	339828	31467	371295
Cannanore	31690	14715	6605	279748	37226	316974
STATE	118761	34124	35734	2037010	452437	2489447

**Table 2.2**  
**CLASSIFICATION OF AREA AS PERCENTAGE TO TOTAL AREA**  
**ACCORDING TO VILLAGE PAPERS**

District	Classification						
	Area accord- ing to Village papers	Forests	Land put to non-agri- cultural uses	Barren and Uncultivated lands	Permanent Pastures and other grazing lands	Land under Miscellaneous tree crops and groves not included in net area sown	
1	2	3	4	5	6	7	
Trivandrum	100.00	20.64	6.30	0.44	0.28	0.37	
Quilon	100.00	44.95	2.92	2.64	0.29	1.00	
Alleppey	100.00	0.27	6.03	0.93	0.15	4.90	
Kottayam	100.00	39.64	2.32	3.45	0.72	2.62	
Ernakulam	100.00	17.39	6.52	2.81	1.05	2.89	
Trichur	100.00	45.18	5.16	1.13	0.18	0.46	
Palghat	100.00	19.53	12.07	5.50	1.23	6.07	
Kozhikode	100.00	29.29	4.33	2.14	0.42	6.14	
Cannanore	100.00	11.43	7.39	4.30	2.57	16.61	
STATE	100.00	27.26	5.75	3.01	0.89	5.41	

**CLASSIFICATION OF AREA AS PERCENTAGE TO TOTAL AREA  
ACCORDING TO VILLAGE PAPERS**

District	Classification					Total cropped area				Area sown more than once
	Cultivable waste	Other fallow lands	Current fallow	Net area sown	Food crops	Non-food crops	Total			
1	8	9	10	11	12	13	14	15	41	
Trivandrum	0.42	0.91	0.54	70.10	59.31	31.96	91.27	21.17		
Quilon	0.80	0.34	0.40	46.66	36.24	23.18	59.42	12.76		
Alleppey	1.37	0.25	0.34	85.76	74.67	42.99	117.66	31.90		
Kottayam	3.35	0.16	0.58	47.16	27.06	25.29	52.35	5.19		
Ernakulam	2.64	0.47	0.69	65.54	45.74	28.91	74.65	9.11		
Trichur	0.95	0.21	0.68	46.05	53.17	17.35	70.52	24.47		
Palghat	4.07	1.11	1.83	48.59	53.26	12.00	65.26	16.67		
Kozhikode	4.07	0.99	1.25	51.37	31.01	25.11	56.12	4.75		
Cannanore	5.50	2.55	1.15	48.50	38.70	16.27	54.97	6.47		
STATE:	3.08	0.88	0.93	52.79	41.70	22.82	64.52	11.73		

**Table 3.1**  
**AREA UNDER CROPS IN EACH DISTRICT OF KERALA (Area in Hectares)**  
**DURING 1964-65.**

		Food crops							
		Rice				Jowar			
District		Autumn	Winter	Summer	Total	Khharif	Rabi	Total	
1	2	3	4	5	6	7	8		
Trivandrum	18790	19812	..	38602	..	..	..	..	..
Quilon	21144	27479	846	49469	..	..	..	..	..
Alleppey	22028	17644	42239	81911	..	..	..	..	..
Kottayam	7059	19364	14352	40775	..	..	..	..	..
Ernakulam	41328	36318	5394	83040	..	..	..	..	..
Trichur	37912	60672	9002	107586	..	..	..	..	..
Palghat	115543	76325	2798	194666	..	1285	..	1285	..
Kozhikode	64964	43761	1119	109844	..	..	..	..	..
Cannanore	66421	27635	1172	95228	..	36	..	36	..
STATE:	395189	329010	76922	801121	..	1321	..	1321	..

**Table 3.1—(contd.)**  
**AREA UNDER CROPS IN EACH DISTRICT OF KERALA (Area in Hectares)**

District	Food crops													Total foodgrains
	Cereals					Pulses								
	Ragi	Other cereals	Total Cereals and millets	Tur	Kharif	Rabi	Other pulses		Total pulses	Total	Total	Total	Total	
							Kharif	Rabi						
1	9	10	11	12	13	14	15	16	17					
Trivandrum	419	..	38602	..	1230	1437	2667	2667	41269					
Quilon	41	58	49888	..	4350	2542	6892	6892	56780					
Alleppey	47	945	82010	..	491	567	1058	1058	83068					
Kottayam	54	339	41767	306	296	174	470	776	42543					
Ernakulam	1237	..	83433	69	675	1223	1898	1967	85400					
Trichur	921	4079	108323	955	2450	5497	7947	8902	117725					
Palghat	1539	1249	200951	4861	3315	4610	7925	12786	213737					
Kozhikode	925	50	112632	2190	255	3039	3294	5484	118116					
Cannanore	..	..	96239	164	1642	1257	2899	3063	99302					
STATE:	5183	6720	814345	8545	14704	20346	35050	43595	857940					

**Table 3.1—(contd.)**  
**AREA UNDER CROPS IN EACH DISTRICT OF KERALA (Area in Hectares)**

District	Food Crops											Total
	Condiments and Spices										Others	
	Sugar cane	Others	Total	Pepper	Chillies	Ginger	Turmeric	Cardamom	Betelnuts	Others		
I	18	19	20	21	22	23	24	25	26	27	28	
Trivandrum	..	376	376	8429	..	..	79	..	4384	4261	17153	
Quilon	968	29	997	4764	..	158	22	..	6619	3560	15123	
Alleppey	5645	15	5660	1275	..	60	28	..	3312	1122	5797	
Kottayam	1497	236	1733	14305	..	3667	1250	24324	4804	2351	50701	
Ernakulam	460	360	820	6807	..	1163	380	1042	5043	2132	16567	
Trichur	..	457	457	738	..	76	59	..	7865	1894	10632	
Palghat	..	3068	3675	3480	..	923	1329	1847	4342	2894	16743	
Kozhikode	..	781	781	15989	..	672	1236	1079	12004	902	36325	
Cannanore	..	38	371	43765	..	478	231	392	11115	201	57881	
	9510	5360	14870	99552	3294	11973	4614	28684	59488	19317	226922	

STATE :

Table 3.1 (contd.)  
**AREA UNDER CROPS IN EACH DISTRICT OF KERALA (AREA IN HECTARES)**

District	Food crops									
	Fruits (Fresh)					Fruits (Dry)				
	Mangoes	Citrus fruits	Bananas	Others	Total	Cashew nuts (dried)	Others (dried)			
1	29	30	31	32	33	34	35			
Trivandrum	6383	..	2253	6263	14899	3479	..			
Quilon	12017	..	5741	9964	27722	10499	..			
Alleppey	5083	..	2870	6639	14592	2750	..			
Kottayam	8390	..	4747	12305	25442	1388	..			
Ernakulam	8984	..	2650	9318	20952	7497	..			
Trichur	4641	..	3659	2906	11206	7996	..			
Palghat	5041	..	8903	3034	16978	8012	..			
Kozhikode	7246	96	6694	6705	20731	13238	12			
Cannanore	5532	1863	7692	6896	21983	31115	12			
STATE:	63317	1959	45199	64030	174505	85974	24			



Table—3.1 (contd.)

## AREA UNDER CROPS IN EACH DISTRICT OF KERALA (AREA IN HECTARES).

District	Fruits		Vegetables					
	Total (dried)	Total fruits	Tapioca	Sweet potatoes	Onions	Others	Total vegetables	
1	36	37	38	39	40	41	42	
Trivandrum ..	3479	18378	48114	965	4	1902	50985	
Quilon ..	10499	38221	53089	618	307	4836	58850	
Alleppey ..	2750	17342	24060	221	39	3286	27606	
Kottayam ..	1388	26830	41413	255	3	5981	47652	
Ernakulam ..	7497	28449	11381	434	119	2025	13959	
Trichur ..	7996	19202	5107	672	45	2622	8446	
Palghat ..	8012	24990	6276	1817	21	4618	12732	
Kozhikode ..	13250	33981	12208	441	151	1784	15984	
Cannanore ..	31127	53110	7723	3371	26	1372	12492	
STATE :	85998	260503	209371	10194	715	28426	248706	



**Table 3.1—(contd.)**  
**AREA UNDER CROPS IN EACH DISTRICT OF KERALA (AREA IN HECTARES)**

District	Oil seeds					Fibres				
	Non food crops					Cotton	Jute	Hemp	Others	Total
	Cocoanut	Others	Total							
1	50	51	52	53	54	55	56	57		
Trivandrum	58711	873	60278	..	..	..	..	..	..	
Quilon	73455	231	76896	..	..	..	..	..	..	
Alleppey	70784	395	75234	..	..	..	..	..	..	
Kottayam	67065	6064	73358	..	..	..	..	..	..	
Ernakulam	46966	1928	49863	243	..	..	..	..	243	
Trichur	36835	1103	39111	7703	..	..	..	..	7703	
Palghat	21589	573	37736	749	..	..	..	..	749	
Kozhikode	113642	8	114315	..	..	..	..	..	36	
Cannanore	69944	66	70349	..	..	..	..	..	36	
STATE:	558991	11241	597140	8695	..	..	..	..	8731	

Table 3.1—(contd.)  
AREA UNDER CROPS IN EACH DISTRICT OF KERALA (AREA IN HECTARES).

District.	Non food crops—(contd.)							Fodder crops
	Drugs, Narcotics and Plantation crops							
	Tobacco	Tea	Coffee	Rubber	Others	Total		
1	58	59	60	61	62	63	64	
Trivandrum	..	905	3	4844	..	5752	21	
Quilon	..	2846	127	24920	..	27893	44	
Alleppey	..	..	..	2737	..	2737	36	
Kottayam	..	28934	1951	46943	..	77828	84	
Ernakulam	..	181	246	19684	..	20111	216	
Trichur	..	420	..	7564	..	7984	25	
Palghat	..	570	2369	7296	372	10607	24	
Kozhikode	..	3988	14852	20190	1034	40064	8	
Cannanore	705	1512	2185	12774	..	17176	4	
STATE	705	39356	21733	146952	1406	210152	462	

**Table 3.1—(contd.)**  
**AREA UNDER CROPS IN EACH DISTRICTS OF KERALA (AREA IN HECTARES).**

District	Non food crops					Net area sown
	Green manure crops	Other non-food crops	Total non-food crops	Total area sown under all crops	Area sown more than once	
1	65	66	67	68	69	70
Trivandrum	589	2421	69061	197222	45748	151474
Quilon	1029	2878	108740	278711	59837	218874
Alleppey	1258	1043	80368	219781	59595	160186
Kottayam	513	6609	158392	327851	32547	295304
Ernakulam	678	20914	91782	236977	28930	208047
Trichur	1005	2701	51069	207531	72010	135521
Palghat	46	5112	61228	333105	85077	248028
Kozhikode	2703	8269	166108	371295	31467	339828
Cannanore	1314	4939	93818	316974	37226	279748
STATE	9135	54886	880506	2489477	452437	2037010

**PERCENTAGE OF AREA UNDER CROPS TO THE TOTAL CROPPED AREA IN EACH DISTRICT OF KERALA**

31

District	Total cropped area	Total food crops	Total non-food crops	Net area sown	Area sown more than once	Food-crops					Total pulses	Total food-grains	
						Cereals and Millets							
						Rice	Others	Total	7	8			9
1	2	3	4	5	6	7	8	9	10	11			
Trivandrum	100.00	64.98	35.02	76.80	23.20	19.57	..	19.57	1.35	20.92			
Quilon	100.00	60.98	39.02	78.53	21.47	17.75	0.15	17.90	2.47	20.37			
Alleppey	100.00	63.46	36.54	72.88	27.12	37.27	0.04	37.31	0.49	37.80			
Kottayam	100.00	51.69	48.31	90.07	9.93	12.44	0.30	12.74	0.24	12.98			
Ernakulam	100.00	61.27	38.73	87.79	12.21	35.04	0.17	35.21	0.83	36.04			
Trichur	100.00	75.39	24.61	65.30	34.70	51.84	0.60	52.44	4.29	56.73			
Palghat	100.00	81.62	18.38	74.46	25.54	58.44	1.89	60.33	3.84	64.17			
Kozhikode	100.00	55.26	44.74	91.53	8.47	29.58	0.75	30.33	1.48	31.81			
Cannanore	100.00	70.40	29.60	88.26	11.74	30.64	0.32	30.36	0.97	31.33			
STATE	100.00	64.63	35.37	81.82	18.18	32.18	0.53	32.71	1.75	34.46			

Table 3.2—(contd.)

District	Food-crops												Total Fruits	
	Condiments and Spices						Fresh fruits							Dry fruits (Cashewnuts)
	Sugar	Pepper	Cardamom	Beternuts	Others	Total	Mangoes	Bananas	Others	Total				
12	13	14	15	16	17	18	19	20	21	22	23			
0														
Trivandrum	0.19	4.27	..	2.22	2.21	8.70	3.24	1.14	3.18	7.56	1.76	9.32		
Quilon	0.35	1.71	..	2.37	1.35	5.43	4.31	2.06	3.58	9.95	3.77	13.72		
Alleppey	2.57	0.58	..	1.51	0.55	2.64	2.31	1.31	3.02	6.64	1.25	7.89		
Kottayam	0.53	4.36	7.42	1.47	2.21	15.46	2.56	1.45	3.75	7.76	0.42	8.18		
Ernakulam	0.34	2.87	0.44	2.13	1.55	6.99	3.79	1.12	3.93	8.84	3.16	12.00		
Trichur	0.22	0.36	..	3.79	0.97	5.12	2.24	1.76	1.40	5.40	3.85	9.25		
Palghat	1.10	1.04	0.55	1.30	2.14	5.03	1.51	2.67	0.91	5.09	2.41	7.50		
Kozhikode	0.21	4.31	0.29	3.23	1.95	9.78	1.95	1.80	1.83	5.58	3.57	9.15		
Cannanore	0.11	13.81	0.12	3.51	0.82	18.26	1.75	2.43	2.76	6.94	9.82	16.76		
STATE	0.60	4.00	1.15	2.39	1.58	9.12	2.54	1.82	2.65	7.01	3.45	10.46		

District	Food crops						Non-food crops						
	Vegetables			Total fruits and vegetables	Total Food Crops	Oil Seeds							
	Tapioca	Others	Total			Sesamum	Coconut	Groundnut	Others	Total			
				24	25						26	27	28
0	24	25	26	27	28	29	30	31	32	33			
Trivandrum	24.40	1.45	25.85	35.17	64.98	0.01	29.77	0.32	0.46	30.56			
Quilon	19.05	2.06	21.11	34.83	60.98	1.14	26.36	..	0.09	27.59			
Alleppey	10.95	1.61	12.56	20.45	63.46	1.83	32.21	..	0.19	34.23			
Kottayam	12.64	1.90	14.54	22.72	51.69	0.03	20.46	..	1.89	22.38			
Ernakulam	4.81	1.09	5.90	17.90	61.27	0.40	19.82	..	0.82	21.04			
Trichur	2.46	1.61	4.07	13.32	75.39	0.56	17.75	..	0.54	18.85			
Palghat	1.88	1.94	3.82	11.32	81.62	0.48	6.48	4.17	0.20	11.33			
Kozhikode	3.29	1.02	4.31	13.46	55.26	0.17	30.61	..	0.01	30.79			
Cannanore	2.44	1.50	3.94	20.70	70.40	0.10	22.07	..	0.02	22.19			
STATE	8.41	1.58	9.99	20.45	64.63	0.48	22.45	0.58	0.46	23.97			



Table 3.2—(Concl'd.)

## Non-Food Crops

District	Drugs, Narcotics and Plantation crops										Other non-food crops	Total non-food crops	
	Fibres		Drugs, Narcotics and Plantation crops										Total
	Cotton	Others	Total	Tea	Coffee	Rubber	Others	Total					
34	35	36	37	38	39	40	41	42	43				
0													
Trivandrum	..	..	..	0.46	..	2.46	..	..	2.92	1.54	35.02		
Quilon	..	..	..	1.02	0.05	8.94	..	..	10.01	1.42	39.02		
Alleppey	..	..	..	..	..	1.25	..	..	1.25	1.06	36.54		
Kottayam	..	..	..	8.82	0.60	14.32	..	..	23.74	2.19	48.31		
Ernakulam	..	..	..	0.08	0.10	8.31	..	..	8.49	9.20	38.73		
Trichur	0.12	..	0.12	0.20	..	3.64	..	..	3.84	1.80	24.61		
Palghat	2.31	..	2.31	0.17	0.71	2.19	0.11	0.11	3.18	1.56	18.38		
Kozhikode	0.20	..	0.20	1.07	4.00	5.44	0.28	0.28	10.79	2.96	44.74		
Cannanore	..	0.01	0.01	0.48	0.69	4.02	0.23	0.23	5.42	1.98	29.60		
STATE	0.35	0.01	0.36	1.58	0.87	5.90	0.09	0.09	8.44	2.60	35.37		

Table 4.1.

TOTAL OUT TURN OF IMPORTANT COMMODITIES IN EACH DISTRICT  
DURING 1964-65

District	1	2	3	4	5	6	7	8	9	10	11
	Rice M.Tons.	Jowar M.Tons.	Ragi M.Tons.	Other cereals and Millets M.Tons.	Pulses M.Tons.	Sugar- cane (gur) M.Tons.	Pepper (Dry) M.Tons.	Dry Ginger M.Tons.	Cured Turmeric M.Tons.	Process- ed Car- damom M.Tons.	
Trivandrum	52964	..	..	..	1005	..	3157	..	71	..	
Quilon	63374	..	410	..	2739	4008	2025	237	20	..	
Alleppey	118117	..	39	24	360	28354	370	83	25	..	
Kottayam	55061	..	44	439	337	5760	4451	3229	1087	1362	
Ernakulam	100456	..	52	151	734	1708	2025	1239	340	58	
Trichur	142170	..	1415	..	3394	..	323	126	51	..	
Palghat	343940	538	1376	1871	5052	2751	502	1693	1000	104	
Kozhikode	123469	..	2550	620	2344	..	2516	4315	1108	60	
Cannanore	121832	20	1571	23	1096	1453	6859	406	208	22	
STATE	1121383	558	7457	3128	17061	44034	22228	11328	3910	1608	

Table 4.1—(contd.)

District	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Arca nut (Million nuts)	Banana (Tonnes)	Other plantain (Tonnes)	Cashewnut (Tonnes)	Tapioca (Tonnes)	Groundnuts (Tonnes)	Sesamum (Tonnes)	Coconut (Million nuts)	Cotton (Bales of 180kg. each)	Tobacco (Tonnes)	Tea (Tonnes)	Coffee (Tonnes)	Rubber (Tonnes)	Lemon grass oil (Tonnes)
0														
Trivandrum	681	3701	13325	3903	591802	668	13	324	..	..	1011	2	1022	1
Quilon	1333	15337	27764	11780	626450	..	874	436	..	..	2289	3	8330	3
Alleppey	516	5479	16173	3086	350314	..	231	514	..	..	..	..	383	1
Kottayam	482	12889	22740	1557	727626	..	33	341	..	..	29996	527	13427	107
Ernakulam	609	5873	14081	8412	134296	..	280	283	..	..	46	57	4366	783
Trichur	1170	6659	20961	8972	35902	..	325	222	465	..	726	..	3380	43
Palghat	548	4095	63692	8989	78764	21170	353	99	8003	..	726	1947	1275	11
Kozhikode	2216	12437	38004	14853	150158	..	173	772	1383	..	6205	6061	6617	341
Cannanore	1390	11665	46511	34911	67885	..	117	287	..	920	1076	1088	1265	312
STATE	8945	78135	263251	96463	2763197	21838	2399	3278	9851	920	42075	9685	40065	1602

Table 5.1

AVERAGE FARM (HARVEST) PRICE (IN RUPEES) OF CERTAIN  
COMMODITIES FOR THE YEAR 1964-65

Sl. No.	Name of crop	Unit	Trivandrum	Qulion	Alleppey	Kottayam	Ernakulam	Trichur	Palghat	Kozhikode	Cannanore
1	2	3	4	5	6	7	8	9	10	11	12
1	Paddy	Quintal	88.46	82.54	78.40	69.86	73.44	68.76	48.64	72.20	63.52
2	Coconut (with husk)	1000 Nos.	262.10	269.20	280.60	282.50	295.20	290.00	..	246.40	241.90
3	Areca nut (Ripe ordinary)	"	35.80	32.40	..	..	34.20	40.60	35.40	30.90	34.60
4	Tapioca	Quintal	15.15	17.38	..	17.96	..	14.77	..	24.33	..
5	Cashewnut (with shell)	"	71.64	82.50	..	..	..	..	72.67	81.38	88.75
6	Banana	100 Nos.	11.88	9.89	..	10.51	..	8.67	12.16	10.82	9.91
7	Ginger	Quintal	..	..	..	296.83	308.33	..	..	322.40	..
8	Pepper	Quintal	336.25	339.35	..	..	360.00	..	..	..	341.54

**Table**  
**AVERAGE DAILY WAGES FOR DIFFERENT**  
(Wage in

Districts	July 1964	August 1964	Sept. 1964	Oct. 1964	Nov. 1964
1	2	3	4	5	6
<b>CARPENTER</b>					
Trivandrum ..	3.34	3.34	3.34	3.34	3.34
Quilon ..	3.71	3.71	4.14	4.14	4.14
Alleppey ..	4.13	4.25	4.63	4.63	4.88
Kottayam ..	4.50	4.50	4.50	4.50	5.13
Ernakulam ..	4.75	4.75	4.75	4.75	4.75
Trichur ..	4.63	4.63	4.73	4.73	4.73
Palghat ..	3.75	3.50	3.50	3.50	3.75
Kozhikode ..	4.25	4.43	4.50	4.50	4.67
Cannanore ..	4.13	4.13	4.13	4.13	4.13
<b>MASON</b>					
Trivandrum ..	3.84	3.84	3.84	3.84	3.84
Quilon ..	3.56	3.56	3.56	3.56	3.56
Alleppey ..	4.25	4.38	4.63	4.75	4.75
Kottayam ..	4.19	4.19	4.19	4.19	4.81
Ernakulam ..	4.75	4.75	4.75	4.75	4.75
Trichur ..	4.88	4.88	4.98	4.98	4.98
Palghat ..	3.75	3.75	3.75	N. Q.	3.75
Kozhikode ..	4.42	4.56	4.70	4.70	4.75
Cannanore ..	3.88	3.88	3.88	3.88	3.88
<b>FIELD LABOUR (MEN)</b>					
Trivandrum ..	2.56	2.63	N. Q.	2.63	2.63
Quilon ..	2.13	2.13	2.53	2.53	2.66
Alleppey ..	2.50	2.50	3.50	2.63	2.63
Kottayam ..	2.06	2.06	2.06	2.06	2.44
Ernakulam ..	3.53	3.53	3.53	3.53	3.53
Trichur ..	2.88	2.88	2.98	2.98	2.98
Palghat ..	2.23	2.46	2.46	2.46	2.54
Kozhikode ..	2.50	2.75	2.83	2.83	2.83
Cannanore ..	3.12	3.12	3.12	3.12	3.12

# 6.1 DISTRICTS OF KERALA

Rupees)

Dec. 1964	Jan. 1965	Feb. 1965	March 1965	April 1965	May 1965	June 1965	Average 1964-65
7	8	9	10	11	12	13	14
3.34	3.34	3.34	3.34	3.45	3.67	3.67	3.40
4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.07
4.88	5.00	5.00	5.25	5.25	5.25	5.25	4.87
5.13	5.13	5.13	5.63	5.63	5.63	5.63	5.09
5.00	5.00	5.00	5.00	5.00	5.00	5.38	4.93
4.75	4.75	4.88	5.13	5.13	5.38	5.38	4.90
3.75	3.75	3.75	3.88	3.88	3.88	3.88	3.73
4.67	4.75	4.75	4.75	4.83	4.92	5.00	4.67
4.25	4.25	4.25	4.25	4.63	4.63	4.63	4.30
3.84	3.84	3.84	3.84	4.06	4.06	4.06	3.90
4.03	4.03	4.03	4.03	4.03	4.03	4.03	3.83
4.75	4.75	4.75	5.00	5.00	5.00	5.00	4.75
4.81	4.81	4.81	5.31	5.31	5.31	5.31	4.77
5.00	5.00	5.00	5.00	5.00	5.00	5.38	4.93
5.00	5.00	5.13	5.25	5.25	5.25	5.25	5.07
3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
4.75	4.83	4.83	4.83	4.83	4.92	5.00	4.76
4.00	4.00	4.00	4.00	4.25	4.25	4.25	4.01
2.63	2.63	2.63	2.63	2.88	2.88	2.88	2.69
2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.55
2.75	2.75	2.75	2.88	2.88	2.88	2.88	2.79
2.44	2.50	2.50	2.50	2.50	2.63	2.63	2.37
3.66	3.80	3.80	3.80	3.80	3.80	3.95	3.69
3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.98
2.66	2.66	2.66	2.52	2.52	2.52	2.52	2.52
2.83	2.92	2.92	2.96	2.96	2.96	2.96	2.85
3.22	3.22	3.22	3.22	3.35	3.35	3.35	3.21

Table 7.1

NUMBER OF LIVESTOCK, POULTRY AND AGRICULTURAL MACHINERY AND  
IMPLEMENTS IN KERALA (1961 Census)

District	Cattle												
	Males over three years						Females over three years (Breeding)						
	Breeding	Working	Others	Total	In Milk	Breeding Dry	Not calved	Working	Others	Total	Young stock	Total	
1	2	3	4	5	6	7	'8	9	10	11	12	13	
STATE	29319	515241	21471	566031	428194	502935	2027277	11274	12306	1161986	1025148	2753165	
Trivandrum	1361	17461	1422	20244	22916	21885	11863	543	661	57868	48703	126815	
Quilon	2303	49300	2755	54358	47236	64808	25310	659	1498	139511	131864	325733	
Alleppey	1267	16739	1060	19066	52357	65916	31859	319	1668	152119	128072	299257	
Kottayam	2622	29819	1726	34167	63397	75240	27859	687	1422	168605	156287	259059	
Ernakulam	2335	86664	2038	91037	41216	45245	18110	1373	1158	107102	105097	303236	
Trichur	1379	56311	1504	59194	31112	30398	11266	530	724	74030	74457	207681	
Palghat	4576	85951	2984	93511	51582	53846	18490	2160	1138	127216	111564	332291	
Kozhikode	6698	102165	4944	113807	59566	72496	35247	3200	1735	172244	130009	416060	
Cananore	6778	70831	3038	80647	58812	73101	27273	1803	2302	163291	139095	383033	

Table 7.1 (Contd.)

## Buffaloes

District	Males over three years					Females over three years				
	Breeding	Working	Others	Total	In Milk	Breeding Dry	Not calved	Working	Others	Total
	14	15	16	17	18	19	20	21	22	23
STATE	10627	267871	6614	285112	59542	49341	16846	7266	2118	135113
Trivandrum	708	20678	527	21913	7754	6331	2347	446	249	17177
Quilon	479	13776	575	14830	3826	3717	1390	239	128	9300
Alleppey	216	7577	164	7957	2323	2082	734	125	96	5360
Kottayam	402	5171	233	5806	2776	2485	949	219	202	6631
Ernakulam	379	11329	323	12031	3598	1857	754	372	204	6785
Trichur	793	37271	597	38661	10555	6128	2301	464	175	19623
Palghat	4001	122475	2505	128981	12488	9475	2682	2599	311	27555
Kozhikode	2018	30912	1087	34017	9245	9125	3575	2012	412	24369
Cannanore	1631	18682	603	20916	6977	8091	2114	790	341	18313



Table 7.1 (Contd.)

District	Sheep						Goats				Horses and Ponies		
	Young stock	Total	One year and above	Below one year	Total	One year and above	Below one year	Total	3 years and above	Below 3 years	Total		
0	24	25	26	27	28	29	30	31	32	33	34		
STATE	64864	485089	18949	5292	24241	869414	442848	1312262	336	42	408		
Trivandrum	5171	44261	1049	494	1543	115819	66641	182460	42	..	42		
Quilon	4233	28363	4151	1690	5841	99069	50576	149645	4	..	4		
Alleppey	1695	10512	1528	610	2138	60869	27499	88363	4	..	4		
Kottayam	2758	15195	1308	474	1782	92341	45020	137361	110	12	122		
Ernakulam	2216	21032	173	142	315	94383	50840	145223	11	..	11		
Trichur	9541	67825	226	102	335	81997	45036	127033	7	4	11		
Palghat	22200	178736	8607	1328	9935	120772	53293	174065	131	16	147		
Kozhikode	9793	68179	1758	399	2157	147001	73889	220890	32	10	42		
Cannanore	7257	46486	149	46	195	57163	30054	87217	25	..	25		

Table 7.1 (Contd.)

District	Mules	Donkeys	Camels	Pigs	Total Livestock	Poultry			
						Fowls	Ducks	Oth- ers	Total
0	35	36	37	38	39	40	41	42	43
STATE	31	377	..	122381	4697954	8708664	387072	..	9095736
Trivandrum	..	4	..	8048	363173	762577	4756	..	767333
Quilon	1	..	..	1086	510673	807726	5518	..	813244
Alleppey	..	..	..	110	404889	882125	202644	..	1084769
Kottayam	10	159	..	61656	575344	1136275	74040	..	1210315
Ernakulam	..	..	..	45933	515750	1201635	45157	..	1246792
Trichur	..	..	..	2498	405383	920975	43147	..	964122
Palghat	4	202	..	719	696099	901442	4745	..	906187
Kozhikode	16	11	..	1043	708398	1388764	6186	..	1394950
Cannanore	..	1	..	1288	518245	707145	876	..	708024

Table 7.1 (Contd.)

District	Ploughs			Sugarcane Crushers					Grains		
	Wooden	Iron	Charts	Power	Bullocks	Oil Engines	Electric pumps	Tractors	More than 5 seers	Less than 5 seers	Persian Wheels
0	44	45	46	47	48	49	50	51	52	53	54
STATE	562281	6441	21037	175	1071	3372	2565	276	2058	2164	..
Trivandrum	26691	217	1905	11	53	4	15	3	216	437	..
Quilon	51355	1544	2295	4	217	28	22	4	99	213	..
Alleppey	24475	2446	1015	42	186	407	358	73	138	193	..
Kottayam	38802	232	1676	16	223	213	294	93	136	141	..
Ernakulam	78417	338	1037	20	138	245	676	22	80	125	..
Trichur	56337	220	2697	8	48	532	774	20	190	234	..
Palghat	144736	598	8558	63	86	845	353	23	504	194	..
Kozhikode	79108	242	1162	4	39	378	58	26	397	277	..
Cannanore	62360	604	695	7	81	720	15	12	298	350	..

## PART—IV

## APPENDICES

1. Index Numbers of Agricultural Production
  2. Cost of Living Index Numbers in selected Centres
  3. Index of Parity between prices received and prices paid by farmers
  4. Quarterly retail prices of certain commodities
  5. Statistics of export of Important Agricultural Commodities through the Ports of Karala.
  6. Notes on certain Crops:
    - (1) Tea
    - (2) Coffee
    - (3) Rubber
    - (4) Cardamom
    - (5) Pepper
    - (6) Ginger
    - (7) Lemongrass
  7. Classification of soils in Kerala
  8. Conversion ratio between raw material and processed product
  9. Average analysis of important fertilisers.
  10. Insect pests affecting paddy crops, their distribution and some practical methods of control;
  11. List of Centres selected for collecting meteorological information.
  12. Glossary of English, Botanical and Malayalam names of Crops
  13. Graphs and Charts.
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## APPENDICES

The following items relating to agricultural economy are dealt within this section.

1. Index number relating to area under crop, agricultural production and productivity
2. Working class cost of living indices
3. Parity indices
4. Quarterly retail prices of important commodities.

**1 (a) Index number relating to area under crops:**

The index of area under crops compared to the base year 1956-57 changed from 110.1 in 1963-64 to 111.2 in 1964-65 in respect of 'all crops'. So far as 'food grains' were concerned the index was slightly pulled down during 1964-65 compared to 1963-64. This was due to the vast paddy area affected by floods during the Autumn (virippu) crop of 1964. In the case of plantation crops the area index increased from 147.2 to 152.1 during the year under review. Other important crops which showed an increase were Arecanut, Banana and Cashewnut. The crop-wise indices are given in table I of the appendix.

**(b) Index of Agricultural Production:**

The 'All crop' index showed an increase by 3 points during 1964-65 compared to the previous year. The crop-wise indices are given in table II of this appendix. The index of 'foodgrains' decreased slightly compared to 1963-64. This was due to the low production of rice during the Autumn crop of paddy 1964 which was heavily affected by flood. The production of non-food grains was on the increase during 1964-65. The index was 117.6 during the year though it was only 112.8 during 1963-64.

**(c) Index of Productivity:**

Crop-wise productivity indices are given in table III of the appendix. The index of productivity of food grains was more or less constant during 1963-64 and 1964-65. The 'non food grains' index showed a slight increase during 1964-65.

## 2. Working Class Cost of Living Indices:

The average cost of living indices in the 12 selected centres of the State during 1963-64 and 1964-65 are given in the following table:—

Centre	Average cost of Living Index	
	1963-64	1964-65
Trivandrum	519	584
Quilon	535	606
Punalur	535	586
Alleppey	520	573
Changanacherry	512	595
Kottayam	521	595
Alwaye	541	611
Ernakulam	546	605
Trichur	538	605
Chalakkudy	542	600
Munnar	487	533
Kozhikode	566	636

The indices given above show an increasing trend. Monthly indices in these centres are given in table IV.

## 3. Parity Index:

Parity Index is a ratio of two indices viz. index of prices received by farmers and prices paid by farmers. Index of prices paid by farmers itself is a product of two indices viz. index of farm cultivation cost and index of domestic expenditure. The index number of prices received, index of farm

cultivation cost and index of parity for the different months of 1964-65 are given in table V of the appendix. The index of parity during 1963-64 and 1964-65 are as follows:—

Month	Index of Parity	
	1963—64	1964—65
July ..	82	83
August ..	79	81
September ..	79	80
October ...	79	85
November ..	79	90
December ..	80	97
January ..	80	96
February ..	81	97
March ..	82	103
April ..	85	108
May ..	84	110
June ..	84	112

The table shows that the indices have an increasing trend from September onwards which bring to light that economic prosperity of the farmer is brighter during the period compared to 'July-September'.

#### 4. Quarterly Retail Price:

District-wise quarterly retail price of the following 12 important commodities for the 4 quarters of 1964-65 are given in table VI.

- |                           |                        |
|---------------------------|------------------------|
| 1. Coconut (without husk) | 7. Sugar               |
| 2. Coconut oil            | 8. Chillies            |
| 3. Rice (Control)         | 9. Coffee Powder       |
| 4. Blackgram              | 10. Tea                |
| 5. Gingelly oil           | 11. Tobacco (Jaffna)   |
| 6. Tapioca                | 12. Tobacco (Ordinary) |

(i) *Cocconut* : During the year under review the price of 100 cocoanuts varied between Rs. 21.32 and Rs. 47.60. Compared to other districts, Kottayam District experienced the highest price throughout the year.

(ii) *Cocconut oil* : The price per litre of oil was at a minimum of Rs. 2.55 (Alleppey) during the first quarter and Rs. 3.96 during the fourth quarter at Quilon. The price was higher in Quilon and Palghat districts compared to other districts.

(iii) *Rice* : The price of rice which was a controlled commodity varied between 69 Ps. to 94 Ps. per kilogram during 1964-65.

(iv) *Blackgram* : The price per kilogram of blackgram was at a minimum of 84 Ps. in Kozhikode district during the first quarter and a maximum of Rs. 1.11 at Trivandrum during the fourth quarter.

(v) *Gingelly oil* : The price per litre of oil varied between Rs. 3.17 and Rs. 3.94 during the year under review.

(vi) *Tapioca (Raw)* : The price of Tapioca was highest in Cannanore district during 1964-65 compared to other districts. The maximum price during the year was 44 pies per kilogram of tapioca.

(vii) *Sugar* : The price per kilogram of sugar varied between Rs. 1.25 and Rs. 1.36 during the year.

(viii) *Chillies* : The retail price of chillies was at a minimum of Rs. 2.21 per kilogram during the fourth quarter at Kozhikode. The price was highest in Palghat district during the second quarter viz. Rs. 3.14 per kilogram.

(ix) *Coffee Powder* : The price per kilogram of coffee powder varied between Rs. 5.15 and 8.75 during the year under review.

(x) *Tea* : The price per kilogram of Tea varied between Rs. 4.79 and Rs. 7.38 during the year 1964-65. In Trivandrum the price remained constant at Rs. 7.13 per kilogram. Similarly the price at Cannanore stood at Rs. 6.30 throughout the year.

(xi) *Tobacco (Jaffna)* : The retail price data are available for Trivandrum, Quilon and Alleppey districts only. The price was more or less constant in each districts throughout the year. It was Rs. 8.74 per kilogram in Trivandrum, 6.29 to 6.36 in Quilon and Rs. 7.75 in Alleppey District.

(xii) *Tobacco (Ordinary)* : The price per kilogram of tobacco varied between Rs. 4.32 and Rs. 6.42 during 1964-65. In Trivandrum and Alleppey districts the price was constant throughout the year.

## 5. Export of Agricultural Commodities :

The Statistics of export of important agricultural commodities in the State through the ports of Kerala are given in Table VII. The Statement relates to foreign export only.



**Table I**  
**INDEX NUMBERS OF AREA UNDER CROPS (KERALA)—BASE YEAR 1956-1957=100**

Name of crops (1)	1952-1953 (2)	1955-1956 (3)	1960-1961 (4)	1961-1962 (5)	1962-1963 (6)	1963-1964 (7)	1964-1965 (8)
All Crops	94.4	98.8	108.6	107.9	110.0	110.1	111.2
A. Food grain	94.8	99.2	100.9	97.6	103.7	104.0	103.5
I. Cereals	97.2	99.6	102.0	98.5	105.0	105.3	104.8
Paddy	97.3	99.6	102.0	98.6	105.1	105.4	104.9
Jowar	62.9	94.9	75.0	72.3	72.3	71.8	67.3
Ragi	92.2	94.5	111.9	104.5	104.7	104.8	104.2
II. Pulses	72.4	93.1	91.0	90.7	91.6	91.3	90.8
B. Non-food grains	93.4	98.4	114.4	115.6	114.7	114.6	116.9
1. Oil seeds	93.4	97.4	108.9	109.7	109.9	110.6	113.0
Coconut	93.6	97.4	108.9	109.8	110.0	111.2	114.1
Groundnut	88.8	98.8	119.9	119.6	119.9	108.5	108.6
Sesamum	93.8	101.7	61.0	60.3	60.1	60.5	60.6
Lemongrass	89.8	89.8	154.9	154.9	154.9	151.5	144.8
2. Fibres	70.5	96.5	108.1	105.5	85.1	87.7	95.8
Cotton	70.5	96.5	108.1	105.5	85.1	87.7	95.8
3. Plantation crops	83.7	86.7	129.7	138.5	143.1	147.2	152.1
Tea	99.5	100.0	95.0	94.5	97.3	96.9	99.3
Coffee	84.4	95.7	115.5	129.2	131.8	137.6	149.4
Rubber	76.0	78.7	149.3	161.7	167.6	173.6	178.5
4. Miscellaneous crops	96.8	103.1	116.4	115.9	112.3	110.1	111.5
Sugarcane	83.8	94.1	118.0	119.0	120.4	122.3	122.7
Pepper	90.6	99.4	114.7	114.8	114.1	114.2	114.4
Cardamom	90.7	99.7	100.3	100.6	100.6	100.6	100.6
Ginger	138.9	103.2	118.4	118.8	119.0	117.9	118.0
Turmeric	96.4	97.3	99.8	103.6	103.3	98.7	98.7
Arecanut	103.3	100.0	109.3	114.3	116.4	119.3	125.1
Banana	74.1	112.4	102.2	100.9	109.7	105.0	109.4
Cashewnut	94.7	100.2	145.2	147.1	140.6	141.0	147.2
Tobacco	105.1	114.8	149.2	141.3	141.3	141.4	141.4
Tapioca	98.2	106.5	116.1	113.4	106.2	100.6	100.3

Table II  
INDEX NUMBERS OF AGRICULTURAL PRODUCTION—BASE YEAR 1956-1957=100

Name of crops (1)	Weights (2)	1952-	1955-	1960-	1961-	1962-1963	1963-1964	1964-1965
		1953 (3)	1956 (4)	1961 (5)	1962 (6)	(7)	(8)	(9)
All Crops	100.00	89.3	98.7	112.1	110.4	114.7	116.8	120.0
A. Foodgrains.	29.18	81.3	100.3	119.8	112.9	122.8	126.6	125.8
I. Cereals	28.90	81.4	100.4	120.1	113.1	123.1	126.9	126.1
Paddy	28.63	81.4	99.6	120.2	113.1	123.2	127.1	126.3
Jowar	0.02	50.7	94.7	72.7	70.4	70.4	67.5	63.4
Ragi	0.25	81.4	91.3	117.6	112.0	111.9	110.9	109.6
Pulses	0.28	73.1	94.1	93.9	91.8	92.4	91.7	91.3
II. Non-foodgrains	70.82	92.6	98.1	108.9	109.3	111.4	112.8	117.6
I. Oil seeds	30.28	93.2	97.2	102.3	103.2	104.7	104.2	104.7
Coconut	28.81	93.4	97.4	102.5	103.4	105.2	103.8	104.3
Groundnut	0.53	87.6	91.0	86.8	86.5	85.1	130.6	137.3
Sesamum	0.47	91.7	100.2	40.1	40.0	40.0	40.3	37.2
Lemongrass	0.47	89.8	89.8	168.4	169.8	160.6	161.6	157.7
III. Fibres	0.31	70.2	95.6	106.1	103.0	75.3	80.3	98.5
Cotton	0.31	70.2	95.6	106.1	103.0	75.3	80.3	98.5
III. Plantation crops	15.24	86.4	90.9	112.3	112.6	119.4	129.5	141.1
Tea	9.38	87.1	87.5	116.3	109.5	111.6	118.1	121.1
Coffee	1.71	76.1	93.1	110.3	123.2	126.3	127.6	144.2
Rubber	4.15	89.1	97.8	106.4	115.3	134.1	156.0	185.0
IV. Miscellaneous crops.	24.99	95.8	103.7	114.6	114.8	115.2	113.4	119.2
Sugarcane	0.75	82.3	94.9	106.4	105.3	116.5	123.1	123.0
Pepper	2.81	83.0	101.6	99.2	99.0	89.8	82.3	81.6
Cardamom	1.28	88.6	99.8	100.2	100.2	100.2	100.2	100.4
Ginger	0.74	93.5	102.2	103.6	104.5	105.1	103.8	104.1
Turmeric	0.28	120.5	121.6	99.7	103.4	102.9	93.3	93.2
Arecanut	7.68	103.3	100.0	116.9	122.2	125.5	128.6	135.0
Banana	1.22	74.1	112.4	102.2	88.4	120.8	117.5	122.4
Cashewnut	1.93	94.4	100.2	144.2	146.2	156.8	157.3	164.4
Tobacco	0.18	105.2	114.9	150.4	139.0	137.3	137.4	137.4
Tapioca	8.12	98.2	108.3	116.4	113.7	106.5	100.9	110.5

Table III

## INDEX NUMBERS OF AGRICULTURAL PRODUCTIVITY—BASE YEAR 1956-1957 = 100

Name of crop (1)	1952-1953 (2)	1955-1956 (3)	1960-1961 (4)	1961-1962 (5)	1962-1963 (6)	1963-1964 (7)	1964-1965 (8)
All crops	94.6	99.9	103.2	102.3	104.2	106.1	107.9
A. Foodgrains	85.8	96.6	118.7	115.7	118.4	121.7	121.5
I. Cereals	83.7	100.3	117.7	114.8	117.2	120.5	120.3
Paddy	83.7	100.0	117.8	114.7	117.2	120.6	120.4
Jowar	80.6	99.8	96.9	97.4	97.4	94.0	94.2
Ragi	88.3	96.3	105.1	107.2	106.9	105.8	105.2
Pulses	101.0	101.1	102.2	101.2	100.9	100.4	100.6
II. Non-food grains	99.1	99.7	95.2	94.5	97.1	98.4	92.7
1. Oil seeds	99.8	99.8	93.9	94.1	95.3	94.2	93.3
Coconut.	99.8	100.0	94.1	94.2	95.6	120.4	91.4
Groundnut	98.6	92.1	72.4	72.3	71.0	126.4	126.4
Sesamum.	97.8	98.5	65.7	66.3	66.6	66.6	61.4
Lemongrass	100.0	100.0	108.8	109.7	103.8	106.7	108.9
2. Fibres	99.6	99.1	98.1	97.6	88.5	91.6	102.8
Cotton	99.6	99.1	98.1	97.6	88.5	91.6	102.8
3. Plantation Crops	103.2	104.8	87.0	81.3	83.4	88.0	92.8
Tea	87.5	87.5	122.4	115.9	114.7	121.9	122.0
Coffee	90.2	97.3	95.5	95.4	95.8	92.7	96.5
Rubber	117.2	124.3	71.3	71.3	80.0	89.9	103.6
4. Miscellaneous Crops	99.0	100.6	98.4	99.1	102.6	103.0	106.9
Sugarcane	98.2	100.9	90.2	88.5	96.8	100.7	100.2
Pepper	91.6	102.2	86.5	86.2	78.7	72.1	71.3
Cardamom	97.7	100.1	99.9	99.0	99.6	99.6	99.8
Ginger	67.3	99.0	87.5	88.0	88.3	88.0	88.2
Turmeric	125.0	125.0	99.9	99.8	99.6	94.5	94.4
Arecanut	100.0	100.0	106.9	106.9	107.8	107.8	107.9
Banana	100.0	100.0	100.0	87.6	110.1	119.9	111.9
Cashewnut	99.7	100.0	99.8	99.4	111.5	111.6	111.7
Tobacco	169.0	101.7	100.8	98.4	97.2	97.2	97.2
Tapioca	169.0	101.7	100.3	100.3	100.3	100.3	110.2

Table IV

WORKING CLASS COST OF LIVING INDEX NUMBERS FOR SELECTED CENTRES.  
(BASE YEAR 1939=100)

Year/Month	Trivandrum	Quilon	Punalur	Alleppey	Changanacherry	Kottayam	Alwaye	Ernakulam	Trichur	Chalakudy	Munnar	Kozhikode
1.	2	3	4	5	6	7	8	9	10	11	12	13
1964	563	567	560	553	556	550	588	571	574	578	500	596
July	566	568	560	554	558	552	590	573	578	580	501	599
August	577	595	586	568	584	593	614	607	609	509	524	625
September	582	607	598	576	596	602	622	619	621	617	539	640
October	574	591	582	561	588	589	608	600	604	609	535	629
November	585	600	584	564	592	595	612	602	599	606	537	640
December	588	611	588	574	597	600	609	606	594	605	539	644
1965	585	612	583	572	601	595	604	603	595	602	540	645
January	582	611	580	572	607	600	605	600	600	607	537	640
February	595	628	600	586	613	615	618	618	618	624	542	655
March	601	638	607	593	621	624	631	630	629	628	550	663
April	607	640	598	598	624	628	633	632	636	634	552	655
May	607	640	598	598	624	628	633	632	636	634	552	655
June	584	606	586	573	595	595	611	605	605	600	533	636
Average	584	606	586	573	595	595	611	605	605	600	533	636

Table V

INDEX NUMBERS OF PARITY BETWEEN PRICES  
RECEIVED AND PRICES PAID BY FARMERS

(Base—1952-53=100)

Name and month	Index of prices received	Index of Farm culti- vation cost	Index of parity
1	2	3	4
1964 July	121	150	83
August	119	151	81
September	123	156	80
October	131	157	85
November	140	160	90
December	150	160	97
1965 January	151	163	96
February	153	164	97
March	161	165	103
April	172	167	108
May	179	168	110
June	182	168	112

**Table VI**  
**QUARTERLY RETAIL PRICES (IN RS.) OF CERTAIN COMMODITIES**  
**IN EACH DISTRICT FOR 1964-65**

Sl. No.	Commodity	Unit	Quarter of each year	1964 July to 1965 June												
				5	6	7	8	9	10	11	12	13				
1	Coconut (without husk)	100 Nos.	I	23.31	23.62	24.75	32.78	27.16	24.14	24.80	21.32	22.39				
			II	24.95	26.87	26.12	36.67	29.53	25.25	33.87	25.72	23.89				
			III	28.94	30.99	29.64	39.99	32.50	29.29	38.03	39.04	27.97				
			IV	36.32	36.24	36.44	47.60	40.67	36.09	44.18	34.31	40.37				
2	Coconut Oil	Litre	I	2.79	2.84	2.55	2.73	2.71	2.80	2.97	2.75	2.69				
			II	2.98	3.09	2.76	2.95	2.98	2.97	3.15	2.90	2.77				
			III	3.32	3.47	3.03	3.27	3.21	3.34	3.41	3.25	3.27				
			IV	3.82	3.96	3.59	3.85	3.88	3.92	3.99	3.86	3.92				
3	Rice (control)	K. G.	I	*0.81	0.85	0.82	0.83	0.86	0.94	0.78	0.87	0.83				
			II	0.78	0.81	0.79	0.77	0.77	0.77	0.75	0.77	0.76				
			III	0.70	0.71	0.70	0.71	0.71	0.71	0.70	0.70	0.71				
			IV	0.69	0.69	0.69	0.69	0.69	0.69	0.72	0.69	0.69				
4	Black gram	K. G.	I	0.98	0.96	0.94	0.97	0.90	0.90	0.97	0.98	0.84	0.90			
			II	1.04	0.96	0.95	0.99	0.94	0.99	1.00	0.89	0.94				
			III	1.10	1.03	0.96	0.99	0.95	0.98	1.02	0.93	0.96				
			IV	1.11	0.97	0.95	0.99	0.93	0.98	1.02	0.92	0.95				
5	Gingelly Oil	Litre	I	3.18	3.64	3.54	3.13	3.35	3.22	3.49	3.45	3.17				
			II	3.38	3.69	3.60	3.33	3.66	3.26	3.52	3.76	3.44				
			III	3.49	3.80	3.84	3.47	3.63	3.58	3.84	3.62	3.59				
			IV	3.52	3.80	3.87	3.66	3.79	3.54	3.91	3.82	3.94				

\* OM—Price of Rice is being quoted in the 1st Quarter.

Table VI—(contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13
6	Tapioca (Raw)	Kg.	I II III IV	0.13 0.22 0.31 0.29	0.15 0.18 0.27 0.27	0.16 0.22 0.29 1.27	0.19 0.25 0.28 0.26	0.14 0.24 0.26 0.25	0.11 0.20 0.24 0.22	0.13 0.21 0.20 0.22	0.17 0.24 0.31 0.32	0.30 0.40 0.40 0.44
7	Sugar	"	I II III IV	1.25 1.28 1.32 1.33	1.26 1.29 1.36 1.34	1.27 1.29 1.34 1.34	1.28 1.29 1.33 1.34	1.28 1.30 1.32 1.31	1.30 1.29 1.31 1.32	1.27 1.28 1.31 1.29	1.30 1.30 1.29 1.30	1.29 1.29 1.28 1.28
8	Chillies	"	I II III IV	2.64 2.63 2.71 2.55	2.36 2.33 2.51 2.30	2.48 2.57 2.40 2.48	2.43 2.49 2.62 2.48	2.48 2.57 2.61 2.48	2.63 2.56 2.75 2.60	3.03 3.14 3.08 2.90	2.24 2.33 2.31 2.21	2.41 2.53 2.52 2.28
9	Coffee Powder	"	I II III IV	7.90 7.90 8.46 8.75	6.68 6.70 7.90 8.03	6.79 7.00 7.06 7.13	6.63 6.71 6.94 6.74	5.54 6.02 6.35 8.45	8.19 8.33 8.72 9.00	7.75 7.81 7.98 8.00	5.15 5.34 5.64 5.65	5.80 6.08 6.72 6.94
10	Tea	"	I II III IV	7.13 7.13 7.13 7.13	4.90 4.79 4.85 5.02	5.60 5.50 5.50 5.50	5.25 5.30 5.42 5.58	6.16 6.15 6.19 6.36	6.55 6.55 6.60 6.65	7.52 7.38 7.38 7.03	5.24 5.32 5.46 5.59	6.30 6.30 6.30 6.30
11	Tobacco (Jaffna)	"	I II III IV	8.74 8.74 8.74 8.73	6.29 6.32 6.33 6.36	7.63 7.75 7.75 7.75	5.56 5.49 5.38 5.28	6.08 6.14 6.42 6.38	4.55 4.38 4.38 4.38	5.40 4.88 4.93 4.94	5.89 6.00 6.00 5.66	5.10 5.10 5.06 5.22
12	Tobacco (Ordinary)	"	I II III IV	4.38 4.38 4.38 4.38	4.38 4.38 4.38 4.41	4.88 4.88 4.88 4.88	4.88 4.88 4.88 4.88	4.88 4.88 4.88 4.88	4.38 4.38 4.38 4.38	4.94 4.94 4.94 4.94	5.66 5.66 5.66 5.66	5.22 5.22 5.22 5.22

Table VII

FOREIGN EXPORT OF IMPORTANT AGRICULTURAL  
COMMODITIES THROUGH THE PORTS OF KERALA  
DURING THE YEAR 1964-65.

Sl. No.	Name of commodity	Unit	Quantity	Value (Rs. Lakhs)
1	2	3	4	5
1.	Betelnut	Tonnes	10768.60	753.96
2.	Cardamom	"	286.79	47.91
3.	Cashew kernal	"	51765.77	2799.34
4.	Cashew shell liquid	"	13019.99	204.07
5.	Coconut	Lakh No.	759.99	226.05
6.	Coconut oil	000'litre	11470.75	336.53
7.	Coconut oil cake	tonnes	4076.00	14.65
8.	Copra	"	19333.07	493.05
9.	Coffee	"	10521.14	442.82
10.	Coir and coir products	"	87228.70	1252.82
11.	Fish & meat	"	10738.95	576.60
12.	Ginger	"	6886.79	230.22
13.	Lemongrass oil	000'litres	1109.19	132.78
14.	Pepper	Tonnes	24596.65	969.21
15.	Rubber	"	31421.26	1058.19
16.	Rubber manu- facture	"	1390.00	54.59
17.	Tea	"	44066.66	2357.86
18.	Wood & timber	"	..	178.49
19.	Sundries	"	..	1677.99
Total				13810.13



## 6. NOTES ON CERTAIN CROPS IN KERALA

### 1. Tea:

Today India is the largest producer of tea in the world. Tea is one of the principal foreign exchange earners. Tea industry also substantially contributes to the national exchequer and also provides employment to a large number of people. India accounts for about 46 per cent of the world production of tea.

*Climate*:—The best climate for the tea plantation is a hot moist climate, the temperature varying from 55°F to 95°F and an annual rainfall ranging between 100 to 130 inches. These conditions are satisfied by the high ranges of Kerala State. Tea is usually cultivated at altitudes ranging from 3,000 feet to 5,000 feet above mean sea level.

*Soil*:—The best soil suitable for the successful cultivation of tea is a light friable soil of good depth through which water percolates freely.

*Planting*:—After removing the forest growth and after providing for roads, drains and building sites the planting is done. The actual spacing of the plants will depend upon the layout of the land, used for cultivation. They are usually planted in square, rectangular or triangular patterns suitably spaced so that when mature they cover the ground almost completely without overcrowding, providing for a coverage of about 3,000 plants per acre. 'Hedge planting' i. e. planting in rows five feet apart with a spacing of 2 feet between the bushes in a row, is also done in new estates. Before planting is done pits of 9" square and eighteen inches deep are taken and the pits filled with the soil best suited for the cultivation of tea.

Planting will begin in June or July depending mainly upon the South-west Monsoon. Water is essentially needed for the young plants for the first two or three months after planting. Young plants taken from the nursery are preferred to the seeds. Usually these plants are removed from the nursery after 6 to 18 months with great care, so that the tap root of the plant is not damaged and planted in the places fixed for the purpose.

*Pruning*:—When the plants are about two years old and five to six feet high, they are pruned to stimulate lateral growth and to develop them into a bush.

*Plucking*:—Plucking is usually done by women and children. The young and freshly sprouted leaves with "two leaves and a bud" and plucked. Plucking is done throughout the year in several rounds. The period of one round varies according to the altitude of the land. In the high ranges the plucking rounds cover a period upto fourteen days, whereas in the plains the period is only seven or eight days.

*Manure*.—The important manures used are mixtures of nitrogen, phosphorous and potash. In some estates ammonium sulphate is also widely used.

*Yield*:—The average yield of a good estate is about thousand pounds of prepared tea per acre.

*Diseases:*—There are many kinds of diseases and attacks on the tea-bush. Tea mosquito, the red spider and thrips are some of the important pests attacking the crops.

*Life of the Plant:*—The average life of a tea plant varies from sixty to eighty years. But it will depend upon various factors such as soil erosion due to heavy rains, climatic conditions, etc.

*From the Garden to the Market:*—The leaves plucked from the tea garden has to undergo a series of processes before it appears in the market for sale.

In the tea factory, the leaves are spread on a wire mesh or hessian cloth racks for a period of eighteen hours for eliminating moisture so that it can be rolled easily. The next stage is called rolling. A rolling machine specially made for this purpose with pressure adjustments is used to twist the leaves for breaking the leaf cells so that the leaf juices ooze out. Then the rolled leaves are taken from the roll breakers and put in the fermentation room. Fermentation is a process of oxidation where the leaves undergo a chemical change. The green colour of tea leaves changes into reddish hue of copper. The next process is known as drying. Hot air (200° to 230°) from the drier furnace is forced into the chamber where the leaves are dried.

The last two processes are grading and packing. There are two important classification of grades. They are leaf grades and broken grades. The former group is mainly divided into Orange Pekoe and Pekoe Souchong. Broken Orange Pekoe, Broken Pekoe, Broken Souchong. Fannings and Dust are important broken grades. They are then packed category-wise and sent to the market for sale.

Besides the black tea, the manufacture of which has been described above, green tea is also manufactured in India in a small quantity. In this process the fresh leaf is subject to heat treatment by steaming or roasting. The green leaf after the heat treatment is rolled and dried, the process being repeated till the desired degree of driness is reached.

## 2. Coffee:

Coffee was first discovered in Africa although the earliest cultivation was begun in Southern Arabia. Coffee, an important plantation crop, was first introduced in India from Arabia. The production of coffee in India is only 1 per cent of the world production. There are two important species of coffee grown in India, namely, Arabia and Robusta flourishes at lower levels and has more powers of resistance against extremes of climate and pests and diseases. It is easily distinguishable from Arabia by the size of its leaves and appearance of the berries.

*Climate:*—Coffee is a tropical plant. It is successfully cultivated in places where the altitude ranges from 1500 to 6000 ft. above mean sea level. The most suitable altitude is between 2500 ft. to 4500 ft. It needs a well distributed rainfall of about 60 to 80 inches per annum and a distinct rainy and dry season with a minimum average temperature of 70°F. A good dry spell from about December to March with a few intermittent showers in

March and April and heavy rainfall in July and August constitute ideal condition for the growth of the coffee plant ('Report of the Plantation Enquiry Commission on Coffee, 1956 Government of India')

**Soil:**—Coffee requires sandy soils or clay loam soils with a good sub-soil drainage system.

**Planting:**—Coffee is grown from seed usually. It is also propagated from cuttings from mature trees or shoots. Propagation from seeds is usually done in January or February in well prepared nursery beds. It is essential that the nursery beds must have shades to protect the tender shoots. These plants are to be transplanted after four to six months in the nursery. When the plants are twenty inches in height they are finally ~~by~~ transplanted. The spacing between each plant is ordinarily eight to nine feet. The plants are manured well and watered frequently.

In the second method of propagation—lower branches of the trees are bent down under the earth for at least four months so as to enable new roots to sprout up from these branches.

Shade trees are provided in coffee plantation for protection of the trees from the full intensity of the sun and for soil conservation.

**Pruning:**—Usually the coffee plants are pruned at a height of fifteen feet to enable easy plucking of the berries.

**Plucking:**—Coffee plants begin to bear fruit within 5 to 7 years of planting. The colour of the berries is green at first. The colour slowly changes to golden and then to bright red. These red cherries are plucked up by hand. Several pluckings are necessary before a crop is completely harvested.

**Manure:**—The important manures used for the coffee plants are super-phosphate, ammonium sulphate, copper sulphate and urea.

**Yield:**—Under good climatic conditions a coffee plant yields  $\frac{1}{2}$  to 2 lbs. of green coffee in a season. Good yields may be obtained from a plant for a period of 20 to 30 years. Excessive rains or want of rains in the blossoming season will adversely affect the yield.

**Diseases:**—The following diseases are prevalent in the coffee estates. They are (1) coffee stem borer, (2) shot hole borer, (3) leaf disease, (4) Root-rot, (5) Die-Back. (6) Chlorosis and (7) Green bug.

**From Garden to the Market:**—There are two processes by which raw coffee is cured. They are known as 'dry' and 'wash' methods. By the first method the coffee cherries are washed and spread out on the cement floors in the open air for drying. When they are completely dried they are allowed to run through fanning and hulling machines.

The second process known as wash process is entirely different. The cherries are put in the pulping machine which breaks them. The pulp skin of the cherries are automatically removed. Then these cherries are put into big tanks for about twenty-four hours. A jelly like substance known as 'Honey' will be formed by these cherries due to fermentation. This honey is removed by thorough washing (canals). Then these cherries are spread out

to dry for two or three weeks. When these cherries are completely dried they are put through hulling and polishing machines. The coffee prepared by the wet method is called parchment. For preparing parchment coffee only ripe berries can be utilised.

Berries at different stages of maturity have to be converted into cherries.

They are then graded and packed. The important grades are arabica cherry, arabica parchment, robusta cherry and robusta parchment.

### 3. Rubber :

In India attempts were first made to plant rubber in Belgaum and Ratnagiri in the Bombay State. Now in the Kerala State 97 per cent of India's rubber is cultivated. India's place in the world acreage under rubber is comparatively very low: India's production comes to less than 2 per cent of the total world output of rubber. Upto 1938 the raw rubber was exported to foreign countries. In that year a tyre factory was established in India. Consumption of the rubber in India has been rising steadily and now the production has begun to lag behind the demand.

*Climate* :—Rubber usually grows in the tropical belt lying within 15°N and 10°S of the Equator and usually at an altitude of 1,000 feet above sea level. For the cultivation of rubber a warm and humid climate is necessary. The annual rainfall should be between 80-120 inches and should be well distributed.

*Soil* :—A stiff alluvial soil which is neither too steep nor too swampy is suited for cultivating rubber.

*Planting* :—Young plants or seeds are planted in pits of about 18" x 18". The planting season is from May to September. Usually 150 to 200 plants are planted in an acre.

*Tapping* :—Tapping of rubber will begin seven or eight years after planting. The period of tapping is from September to January.

*Diseases* :—There are two serious leaf diseases of rubber now prevailing in India. They are (*Odium hevea*) and '*Phytophthora meadii*' which cause secondary leaf fall. These diseases affect the growth of the tree and the yield of the tree.

Another disease known as 'Brown Bast' is prevalent in the trees which are used for frequent tapping. The symptom of the disease is the cessation of latex production by the trees in the affected portions of the bark.

*From the Estate to the Market* :—The latex brought by the tappers is first of all freed from sand, bark and other impurities by straining at the coagulating shed constructed specially for the purpose. In the case of crepe rubber, coagulation is done by using acetic acid. For changing latex into sheet rubber the latex after being bulked and diluted is put into shallow pans. For removing water and for getting a definite shape the coagulum is pressed by hand. Then the sheets are allowed to pass two or three times

between smooth rollers. The sheets are usually again passed through a machine for printing the trade mark of the estate. These sheets are washed. Then these sheets are placed in specially constructed houses, known as smoke houses and hot air with temperature of 115° to 120°F is allowed to circulate in the room. This is done for fifteen days. The colour of the sheet will change into black from white. There are three important types of rubber, smoked sheet, latex crepe and scrap rubber, of those the most important one is smoked sheet.

#### 4. Cardamom

The important cardamom producing countries are India, Ceylon and Indo-China. India is the largest producer of cardamom in the world. Cardamom is taken from the plant *Ellettaria Cardamom*. This is better than the plants growing in other parts of the world. Cardamom possess an aromatic odour and it is commonly used for flavouring and medicines.

*Climate* : The best climate suitable for the Cardamom cultivation is a warm and humid atmosphere with a temperature ranging between 50° to 95°F. It is cultivated in the shades of huge forest trees. Cardamom plants require a fairly well-distributed annual rainfall of sixty to eighty inches. The best altitude for cardamom planting is between 2500 to 5000 feet.

*Soil* : Cardamom is cultivated usually in high ranges which has a fairly deep rich loam soil and a place sheltered from strong winds and too much sunlight.

*Planting* : During February-March the Forest land chosen for planting the cardamom is cleared. But care is taken that big trees providing shades are not cut down. Small pits of two feet square and one foot deep are dug, the distance between one pit and the next varying from 8 to 10 feet, thus providing for about 700 pits in one acre of land. During the month of May or June when the south-west monsoon sets in the seeds are sown. Cardamom plants are usually prepared in specialised nurseries. The plants raised from seeds are usually free from any kind of diseases. When these plants attain one year of growth they are transplanted. Usually two plants are planted in one pit. In August-September the stagnant water is allowed to drain off.

*Plucking* : The crop begins to yield from the third year onwards and annually thereafter. The harvest will begin in the month of August of the third year of growth and lasts for nine months. The fruits are gathered at intervals of 30 to 40 days.

*Yield* : The first yield is low. The yield attains a normal stage by the fifth year.

*Life of the plant* : Nine years is the average life of the plant.

*Manure* : The important manures used are well-rotten cattle manure, sheep and fish manure, and leaves of *phyllanthes emblica*. A mixture of castorcake, bone-meal and potassium chlorate also considered to be a good manure.

**Diseases:** The main disease is mosaic or marble disease or katte disease. The symptom of the disease is the mottling or curling of the leaves and degeneration of the clumps. The remedy lies in the roguing of affected plants. Another menace is that caused by Thrips, an insect pest. Dusting the plant with gammaxene is the remedy.

**From the Estate to the Market:** The capsules of the cardamom are dried in the sun or in specially built dry houses by using artificial heat. Usually three to four days are taken for drying the cardamom in the sun-light but at the same time forty-eight hours is only needed for artificial drying. The sun dried produce retains the mucilaginous coating on the seeds and possesses a characteristic sweet aroma. The dried capsules are then cleaned. The final product of green cardamom is 20 to 28 per cent of the green harvested produce.

Sometimes bleaching is done by exposure to sulphur fumes. This change the colour of the skin of the capsule to white and it helps to preserve it for longer periods.

Then they are graded. There are three important grades (1) Green cardamom, (2) White or bleached cardamom and (3) Seeds. The quality of cardamom varies according to place and variety of the seed.

Indian cardamom is mainly exported to Sweden and to Saudi Arabia.

## 5. Pepper

Kerala is famous for her pepper from time immemorial and is the chief producer of pepper in India. Black pepper which is one of the important spices is produced mainly by India and Indonesia. During the Post-war period India stands as the largest producer of pepper in the world.

**Climate:** Pepper being a rain-bed crop, grows best in tropical regions where there is an average rainfall of 80 inches. The lower and upper limits of temperature in which the crop can flourish are 50°F and 140°F. It grows in places with altitude less than 3000 ft.

**Soil:** The suitable soils for pepper cultivation are clay loam, red loam or sandy loam soils, the first being the most suitable.

**Planting:** The crop is propagated vegetatively by means of cuttings. It is a wood climber and requires some support for the vines. Jack and Mango trees are commonly used as support for vines, and Murukku trees are also used. On a plantation basis they are planted at a distance of ten feet apart. The vine is rarely allowed to grow beyond a height of twenty feet lest the picking of the pepper berries becomes difficult.

**Picking:** The vines begin to bear after three years of planting. Flowering period is from June to July. The harvesting period is from December to March. When ripe the colour of the berries is orange. The berries are allowed to dry in the sun in mats for a week till the colour becomes black. Some-times the skin of the ripe berries is removed before drying. This kind pepper is known as white pepper and is produced only in limited quantities.

*Yield:* The yield mainly depends upon the fertility of the soil and the locality. The yield at the first harvest is generally poor. Full yield can be expected from the seventh year. Usually in an acre there will be 300 to 400 standards where pepper is cultivated on a plantation scale. The average yield per standard varies between ¼ lb. to 2 lb. of dried produce.

*Life of the Plant:* The life of the plant ranges between 25 to 30 years. But it is to be pointed out that some of the vines have been found to live up to sixty years.

*Manure:* The best manures to be used for the pepper gardens are powered bean-cake, fish guano and dried prawn.

*Diseases:* One of the major diseases that affects pepper is 'Pollu' by which the pepper berries are rendered hollow.

*From garden to the Market:* The dried black pepper is graded and packed. The pepper is generally packed in double gunny bags. Pepper is mainly exported to United States of America and United Kingdom.

### 6. Ginger (Dry)

The three important ginger growing regions are India, Jamaica and Sierra Leona. Of these ginger producing regions the best variety is seen in Jamaica and Sierra Leona. Indian Ginger contains more fibre content.

*Climate:* Ginger requires heavy rainfall. It needs a warm humid climate and considerable shade.

*Soil:* The soils suitable for ginger cultivation are welltrained sandy, clay loam, red loam or laterite soils.

*Planting:* Planting usually begins by the end of May or beginning of June before the commencement of the heavy rains. Ginger rhizomes (under-ground stem) are planted. Before planting, the ground is ploughed and manured. The seeds are planted in these beds in small pits at a distance of 6-10 inches. After planting the beds are covered with leaves with a view to protect the young shoots from the onslaught of the rain and to serve as manure also. The crop takes nine to ten months to attain maturity. In July—August weeding and manuring is done.

*Harvesting:* The harvesting is done by digging out of the rhizomes.

*Manure:* Usually cattle manures used.

*Yield:* The yield is generally eight to ten times of the seed rate. Here in Kerala the average yield of ginger is about 1,000 lbs. per acre.

*Pests and Diseases:* Ginger crop is usually affected by a disease known as 'Soft root'. The colour of the green plants are changed into pale yellow and the production goes down. Use of mercuric chloride (0.05%) for treating the rhizomes stored as seeds is advocated as a preventive measure. Another important disease is known as 'Vermicularia'. The leaves become covered with yellowish and brownish spots and gradually dry up. Spraying and Bordeaux mixture is suggested in such cases.

*From Garden to the Market:* Dry ginger, as a market produce is prepared as follows:—

First the outer skin of the green rhizomes are removed. Then they are soaked in water and kept over night. In the morning they are cleaned well. Then these rhizomes are allowed to dry for a week in the hot sun. They are again cleaned. The Ginger is known as the 'rough' or 'unbleached ginger' of commerce.

There is another variety of ginger known as 'lime ginger' or 'bleached ginger'. The process is a bit different from the above. The green ginger is put in shallow cisterns and they are cleaned by water repeatedly. When they are finally cleaned they are put in a solution containing milk of lime for some time after which they are dried in the sun. This process of dipping in lime and drying will be contained a number of times until the rhizomes get a uniform coating of lime.

Then they are graded. There are three important export grades—B, C, and D, B, quality ginger will have three fingers. The other two grades (C & D) have two fingers and one finger respectively.

The B and C grades ginger are exported to foreign market. The D grade being small pieces of ginger are mostly consumed internally in India.

Indian ginger is mainly exported to Aden, Arabia and United Kingdom.

## 7. Lemongrass Oil:

Lemongrass oil which is an important raw material for the perfumery soap and cosmetic industries is extracted by distilling the leaves of the grass 'cymbopogon flexrosus, stapf'. The important lemongrass growing areas are Ceylon, Java, West Indies, Malaya, Guatemala and India. The last two countries are holding almost a monopoly in the world market. In India Kerala is the most important producer of this crop. The Major lemongrass growing areas are Kuruppampadi, Odakkali, Thodupuzha, Muvattupuzha, Wynad, Thaliparamba, etc. At Odakkali, there is a lemongrass Oil research Station.

*Climate:* It grows on the fertile hill slopes. The grass grows when the monsoon begins.

*Soil:* It flourishes in hard laterite soils.

*Cultivation:* Fertile hill slopes with hard laterite soils are selected for the cultivation. During February-March the site selected is first cleared of all under-growth of vegetation by burning them. In April-May the land is ploughed and is prepared into long narrow beds for cultivation of lemongrass. Usually in one acre 15 to 20 lbs. of seeds are sown. The seeds are sown broadcast. The crop is also grown by transplanting of seedlings raised in separate ~~cultivation of this crop is very low. Much care is not needed during the nurseries. The cost of period of growth of the plant.~~ There are two varieties of lemongrass, red stem and white stem. The former variety gives better quality of oil containing greater quantity of citral.



**Harvesting:** Generally the harvesting will begin five months after sowing. The harvesting has to be done before the flowering season of the crop. Five cuttings are annually taken. After the first cutting, subsequent cuttings are done at intervals of 30 to 45 days. Usually the harvesting season ends by the month of December.

**Life of the Plant:** The life of the lemongrass plant is five to eight years.

**Yield:** The yield of the crop under different years are given below:—

1st year	1½ dozen bottles of 22 oz. each.
2nd year	2½ do.
3rd year	2 do.
4th year	2 do.
5th year	2 do.

**From the Garden to the Market:**—Now in Kerala we are using an old country method for distilling the lemongrass oil. The old apparatus consists of copper boiler, condenser (coil) receiver and wooden tub.

The raw grass and water put in the boiler specially made for this purpose. The shape of boiler is like a retort apparatus. Then the boiler is heated with fire-wood. After some time the mixture of water vapour and essential oil escapes through the copper spiral connected to the retort. This copper spiral is allowed to cool down by immersing it in a wooden bucket full of water. The wooden bucket has an opening near the bottom to let off the water as it becomes hot during the distillation time. The essential oil and water will be collected in the receiver tub. The specific gravity of the essential oil is lower than water. At 30°C specific gravity is 0.878. So naturally the lemongrass oil floats at the top of the receiver tub. Then it is separated from water.

Lemongrass oil is packed in steel drums which has a capacity of 40 to 45 gallons. Lemongrass oil is mainly exported to United States of America and United Kingdom.

#### 7. Classification of soils in Kerala is given below:

District (1)	Type of soil (2)	Details of distribution (3)
Trivandrum	1. Fairly rich brown loam of laterite origin	Middle part of the District
	2. Sandy loam	Western coastal region
	3. Richest dark brown loam of granite origin	Eastern hilly part of the District
Quilon	1. Sandy loam	Karunagappally and part of Quilon taluk
	2. Laterite soil	Kottarakkara, Kunnathoor and part of Quilon, Pathanapuram and Pathanamthitta taluks
	3. Hill and Forest soil	Part of Pathanapuram and Pathanamthitta taluks

(1)	(2)	(3)
Alleppey	1. Sandy loam	Karthigappally and Mavelik- kara taluks
	2. Sandy soil	Sherthalai and Ambalapuzha taluks
	3. Clay loam with much of ability	Kuttanad
	4. Laterite soil	Chengannur and part of Mavelikkara
Kottayam	1. Laterite soil	Peermade and part of Meena- chil, Changanacherry and Kottayam taluks
	2. Alluvial soil	Vaikom, parts of Changana- cherry and Kottayam, Devi- colam and Udumbanchola
Ernakulam	1. Laterite	Thodupuzha and Muvattu- puzha and part of Kunnathu- nad
	2. Sandy loam	Parur, Cochin and Kanayan- nur
	3. Alluvial	Part of Alwaye and Kunnathu- nad
Trichur	1. Sandy loam	Part of Mukundapuram, Trichur and Chowghat taluks
	2. Laterite	Eastern area of Trichur and West portion of Thalappilly
	3. Granite	Northern part of Thalappilly
	4. Clayey	Backwater area in Chowghat and part of Mukundapuram
	5. Alluvial soil	Portion of Chowghat and Kunnathunad taluks
Palghat	1. Laterite	Interior regions of the District Along coastal and river side areas
	2. Sandy	North Eastern portion of Chittur taluks
	3. Black soil	Major part of the District barring coastal area
Kozhikode	1. Laterite	Coastal strip
	2. Sandy	Major part barring coastal area
Cannanore	1. Laterite	Coastal area
	2. Sandy	

(1)	(2)	(3)
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### 8. Conversion ratio between the raw materials and the processed product

<i>Rice :</i>		
Rice (cleaned) Production		2/3 paddy production
<i>Cotton:</i>		
Cotton lint production		1/3 of kapas production
Cotton seed production		2/3 of kapas production
		2 times of cotton lint production
<i>Groundnut :</i>		
Kernel to nuts in shell		70 percent
Oils to nuts in shell		28 "
Oils to kernals crushed		40 "
Cake to kernals crushed		60 "
<i>Sesamum:</i>		
Oil to seeds crushed		40 "
Cake to seeds crushed		60 "
<i>Castor seed:</i>		
Oil seeds crushed		37 "
Cake to seeds crushed		63 "
<i>Cocoanuts:</i>		
Copra to nuts one ton copra		6775 nuts
Oil to copra crushed		62 percent
Cake to copra crushed		38 "
<i>Nem Seed:</i>		
Oil to kernals crushed		45 to 50 percent
Cake to Kernals crushed		50 to 55 "
<i>Sugar:</i>		
Gur from cane crushed		10 percent
Crystal sugar from gur refined		62.40 "
Crystal sugar from cane crushed		9.97 "
Khandassari sugar from gur refined		37.5 "
Molasses from cane crushed		3.5 "
<i>Cashewnuts:</i>		
Cashew kernels		25 percent of cashewnuts
Butter from mixed milk		6.3 percent
Ghee from mixed milk		5.3 "

SOURCE:—"FERTILISER STATISTICS"

## 9. Average analysis of important Fertilisers

Sl. No.	Name of Fertiliser	Percentage		
		Nitrogen (N)	Phosphoric (P2O5)	Potash
(1)	(2)	(3)	(4)	(5)
1.	Nitrate of Potash 70%	8-10	..	30-33
2.	Ammonium Phosphate	17-18	20-21	..
3.	Urea	46	..	..
4.	Nit rate of Soda	15-16	..	..
5.	Sulphate of Ammonia	20-6	..	..
6.	Ammonium Sulphate Nitrate	26	..	..
7.	Ammonium Nitrate	32-33	..	..
8.	Calcium Cynamide	18-20	..	..
9.	Nitroline	20-21	..	..
10.	Super phosphate (Single)	..	16-20	..
11.	Do. (Double)	..	45-50	..
12.	Hyper Phosphate	..	26	..
13.	Basic Slag	..	14-18	..
14.	Mineral Phosphate (various grades)	..	25-36	..
15.	Murite Potash	..	..	60
16.	Sulphate of Potash	..	..	48-52
ORGANIC MANURES				
17.	Castor cake	4.3	1.8	1.3
18.	Cotton seed cake (Undecorticated)	3.9	1.8	1.6
19.	Neem cake	5.2	1.0	1.4
20.	Sufflower cake (Undecorticated)	4.9	1.4	1.2
21.	Do. (Decorticated)	7.9	2.2	1.9
22.	Coconut cake	3.0	1.9	1.8
23.	Groundnut cake	7.3	1.5	1.3
24.	Jambo cake	4.9	1.6	1.9
25.	Linseed cake	5.5	1.4	1.3
26.	Rape seed cake	5.2	1.8	1.2
27.	Sesamum	6.2	2.0	1.2

(1)	(2)	(3)	(4)	(5)
<b>MANURES OF ANIMAL ORIGIN.</b>				
28. Dried Blood		10·0	1·5	1·0
29. Fish manures		4·0-10·0	3·0-3·0	0·3-1·5
30. Bone meal (Raw)		3·0-4·0	20·0-25·0	
31. Do. (steamed)		1·0-2·0	25·0-30·0	::
<b>BULKY ORGANIC MANURES</b>				
32. Farm-yard manure		0·5-1·5	0·4-0·8	0·5-1·9
33. Compost (Urban)		1·0-2·0	1·0	1·5
34. Do. (Rural)		0·4-0·8	0·3-0·6	0·7-1·0
35. Green manure ; (various averages)		0·5-0·7	0·1-0·2	0·8-1·6

Source:—Indian Council of Agricultural Research Bulletin.

10. Insect pest affecting Paddy Crops, their distribution and some practical methods of Control.

Crop (1)	Pest (Scientific name) (2)	Distribution (3)	Control (4)
Paddy	Paddy may work or the swarming caterpillar (Spond-opteramanaritia boisd).	This is a sporadic pest. Attacks mostly Viruppu (Autumn) crop of paddy throughout the State	<p>i. Apply 10 per cent B. H. C. dust at 15 to 20 lb. per acre.</p> <p>ii. Spray D. D. T. suspension prepared at the rate of 1 lb. of 50 per cent wettable powder in 25 gallons of water 3 to 35 gallons required for an acre).</p>
			<p>iii. Apply D. D. T. 50 per cent dust at 15 lb. per acre. In hardly affected fields give a top dressing of Ammonium sulphate at 28 lb. per acre to promote rapid recuperation.</p>
	Paddy stem borer (Scheenibius incortellus W)	This pest is usually found in Mundakan (Winter) Crop and often causes heavy damage. This also is commonly seen in all the districts of the State	<p>i. Spray Folidol E 605 thrice as follows:— First spraying in the nursery when the plants are about 15 days old, second spraying about three weeks after transplanting and third spraying at the short blade stage. The rate is 2 CC per gallon of water (1 oz. in 14 gallons of water) 30 to 35 gallons are required per acre. The spraying are to be done when a good number of moths or eggs are found in the field.</p>

## Paddy—(contd.)

- ii. Spray D. D. T. at the rate of 1 lb. of 50 per cent wettable powder in 25 gallons of water as follows.—  
 One spraying in the nursery, dip the seedlings in the suspension of the same strength, one spraying 2 to 3 weeks after transblade stage (in the short blade stage 40 to 45 gallons of the spray liquid are required per acre in both cases).
- iii. At the time of transplanting eliminate and destroy the dead heards if any.
- iv. In hardly affected fields give a top dressing of ammonium Sulphate.
- v. After harvest destroy the stems by burning.
- i. In the early stage of attack collect the bugs by a hand net.
- ii. Apply B. H. C. 10 per cent dust at rate of 20 to 25 lb. per acre.
- i. Apply 10 per cent B. H. C. dust at 15 to 20 lb. per acre.
- ii. Spray D. D. T. at the rate of 1 lb. of 50 per cent Wettable powder in 25 gallons of water (30 to 35 gallons of spray liquid required per acre).
- Rice bug (Lip to corisa actu. T.) This is found throughout the State
- Rice (Hispa.Arinigera 01) Nilaparvata Sp.) Very common in Karunagappally, Harippad, Mavelikkara, Kottarakara and Karthigappally, of Quilon District and all parts of Alleppey and Trichur Districts

- i. During seedlings stage of the crops, if adultam are found in the fields set up light traps.
- ii. Spray the seedlings with D. D. T. at the rate of 1 lb. of 50 per cent wettable powder in 25 gallons of water when adults are observed in the field (30 to 35 gallons of spray liquid required for an acre).
- iii. Give a top dressing of ammonium sulphate in the affected fields.

Commonly found in Virippu crops in the District of Quilon and Trichur

Paddy— Paddy gall fly (Pachy-diplosis oryal W)

(Contd.)

Apply 10 per cent B. H. C. dust on field bunds soon after the nymphs appear and before they actually invade the crops. If the crop is already attacked apply B. H. C. 10 per cent dust at 20 to 25 lb. per acre or drive the hopper to a convenient field corner and give a heavy dusting with B. H. C. 10 per cent.

Commonly found in the various parts of Palghat and Tellicherry Districts though the damage done is a minor form

Rice grass hopper (Hero-glyphids)

Spray D. D. T. suspension at the rate of 1 lb. of 50 per cent wettable powder in 25 gallons of water (30 to 35 gallons required per acre).

Commonly found in the Virippu crop in the Districts of Quilon and Trichur

Leaf roller (Craphalocrocis medainalis G)



(1)

(2)

(3)

(4)

Paddy cockchaferbottle  
(*Phyllognathus drony-*  
*sins* F)

Found in  
District

Kottayam

Prior to sowing plough into the soil 28 lb. of 5 per cent Aldrin dust or 55 lb. of 10 per cent B. H. C. dust per acre.

The paddy jassid. (The  
green jassid *Nepho-*  
*tetix*. SP. and the  
white jassid) *Tetti-*  
*goniella spectra* Dt.) T.

do.

- i. Collect the bugs by a hand net on the early stages of attack.
- ii. Spray D. D. T. at the rate of 1 lb. of 50 per cent wettable powder in 25 gallons of water. 30 to 35 gallons of suspension required per acre.
- iii. Dust D. D. T. 5 per cent at the rate of 15 to 20 lb. per acre.

Paddy blue bottle (Lept-  
isan *Phgamae*)

Commonly noticed in  
Ottappalam and near-  
by places of the Palghat  
District, resulting in  
heavy damage to paddy  
crops

Apply 10 per cent B. H. C. dust at 15 to 20 lb. per acre of spray D. D. T. at the rate of 1 lb. 50 per cent wettable powder. 30 to 35 gallons of the suspension required per acre.

### 11. List of centres selected for recording meteorological information in Kerala during 1964-65.

#### TRIVANDRUM DISTRICT

- 1 Ponnudi
- 2 Varkala
- 3 Attingal
- 4 Nedumangad
- 5 Trivandrum-b
- 6 Neyyattinkara
- 7 Parassala
- 8 Trivandrum (Aerodrome-b)

#### QUILON DISTRICT

- 1 Pathanamthitta
- 2 Konni
- 3 Adoor
- 4 Karunagappally
- 5 Punalur
- 6 Kottarakkara
- 7 Aryankavu
- 8 Quilon
- 9 Nilamel
- 10 Paravur

#### ALLEPPEY DISTRICT

- 1 Arukutty
- 2 Sherthalai
- 3 Alleppey-b
- 4 Ambalapuzha
- 5 Thiruvalla
- 6 Chengannur
- 7 Haripad
- 8 Mavelikara
- 9 Kayamkulam

#### KOTTAYAM DISTRICT

- 1 Chinnar
- 2 Marayur
- 3 Munnar
- 4 Devikulam
- 5 Vandanmedu
- 6 Vaikom
- 7 Palai
- 8 Ettumanna
- 9 Kumili
- 10 Kottayam
- 11 Peermade (Taluk)
- 12 Peermade (Residency)
- 13 Kanjirappally
- 14 Changanacherry
- 15 Velloor

#### ERNAKULAM DISTRICT

- 1 Malayattur
- 2 Parur
- 3 Perumbavoor
- 4 Alwaye
- 5 Neriamangalam
- 6 Muvattupuzha
- 7 Karikode
- 8 Ernakulam
- 9 Cochin-b
- 10 Port of Cochin-b

#### TRICHUR DISTRICT

- 1 Crangannore
- 2 Mukundapuram
- 3 Trichur
- 4 Thalappally

#### PALGHAT DISTRICT

- 1 Alathur
- 2 Palghat-b
- 3 Parali
- 4 Ottapalam
- 5 Cherplasserry
- 6 Mannarghat
- 7 Perinthalmanna
- 8 Ponnani
- 9 Chittoor

#### KOZHIKODE DISTRICT

- 1 Manjeri
- 2 Thirurangadi
- 3 Kozhikode-b
- 4 Nilambur
- 5 Vythiri
- 6 Quilandy
- 7 Badagara
- 8 Kuttiadi

#### CANNANORE DISTRICT

- 1 Kasargode
- 2 Thaliparamba
- 3 Cannanore
- 4 Hosdurg
- 5 Tellicherry
- 6 Irrikur
- 7 Payyannur
- 8 Mananthodi
- 9 Mahe

12. Glossary of English, Botanical and Malayalam names of crops.

Sl. No.	English	Botanical	Malayalam
(1)	(2)	(3)	(4)
1	Alexandrian lamel	Clophyllum inophyllum	Punna
2	Amaranthus	"	Ketra or Chetra
3	Arrow root	Curcuma angustifolia	Kuva
4	Ash gourd	Biancasea certifera	Kumbalanga
5	Bajra	Pannretam typhodeum	Kambu
6	Bamblaimas	Citrus madima	Bamblimas
7	Barley	Hordeum Volgana	Barley
8	Bengalgram	Oicer arietenum	Kadala
9	Betel leaves	Piper betel	Vettila
10	Betel nut	Areca catecha	Adakka or Pakku
11	Bitter gourd	Mamordica charntia	Pavakka or Kaipakka
12	Blackgram	Pahasedur radiatus	Uzhunnu
13	Breed fruit	Artocarpus commuris	Simachakka or Kadachakka
14	Brinjal	Solanum malorgena	Vazhuthananga
15	Bottle gourd	Lagenaria Vulgaris	Churakbai
16	Cabage	Erasica olavacca	Mottakkose
17	Cardamom	Electaria cardamom	Elakka
18	Carrot	Doncees carota	Mullanki
19	Cashewnut	Anacardium occidentale	Kasuandi or Parangiandi

(1) (2) (3) (4)

20	Castor	<i>Ricinus communis</i>	Avanaku
21	Chillies (dry)	<i>Capaicum annum</i>	Vattamulaku or Kappalmulaku
22	Do. (green)	do.	Pachamulaku
23	Cinnamon	<i>Cinnamomum zeylanicum</i>	Karava or Cashana
24	Cloves	<i>Enguinia coryphylate</i>	Grampu
25	Cluster beans	<i>Cyanopsis psoralicides</i>	Kothavara
26	Cocconut	<i>Cocos nucifera</i>	Naliker or Thenga
27	Colocoesia	<i>Colocasia Autiqueram</i>	Chempu
28	Corriander	<i>Corriandrum Sativum</i>	Kothamally
29	Cotton	<i>Cossypium barbaecum</i>	Paruthi
30	Cowgoram	<i>Vigna catiang</i>	Karamani or Kostapayaru
31	Cucumbur	<i>Cucumis sativan</i>	Vellarikka
32	Cumur	<i>Cuminum Yiminum</i>	Jeerakom
33	Dramstic	<i>Moringa Clerifara</i>	Muringakka
34	Elephant Foot yam	<i>Amorphaphallus</i>	Chena
35	Field beans	<i>Dolichos Hablal</i>	Mochakkota
36	Garlic	<i>Allium Sativum</i>	Veluthulli
37	Ginger	<i>Zingiber Officialis</i>	Inchi or Chukku
38	Grape	<i>Vitis vinifara</i>	Munthiringa
49	Green gram	<i>Phaseolus mango</i>	Cherupayaru
40	Guava	<i>Psidum guajava</i>	Perakka
41	Groundnut	<i>Arcachis hypogea</i>	Nalakadala
42	Horsegram	<i>Dolichers Biflorous</i>	Muthira or Kanam
43	Italian millet	<i>Setaria italica</i>	Thina
44	Jack fruit	<i>Artorarpus intigrifoli</i>	Chakka
45	Jowar	<i>Sorghum Volgara</i>	Cholam
46	Jute	<i>Corchorous Capsularis</i>	Chanam
47	Kari leaf	<i>Murraya Zocnigari</i>	Karivappila
48	Ladies finger	<i>Habiscus esculentus</i>	Vendakka

49	Lemongrass	Cymbopogon spices	Ezhumpull or Thailappullu
50	Lime fruits	Citrus aurantifolia	Cherumaranga
51	Do.	Citrus Senensis	Madhuramaranga
52	Do.	Citrus senensis	do.
53	Long pepper	Piper longum	Tippali
54	Maize	Fea Mayas	Mokka Cholam
55	Mango	Magnifera indica	Mambazham
56	Nem	Azhibirachta Indica	Veppu
57	Nut-mug	Myristica foregrus	Jathikka
58	Onion	Allium Cepa	Chevannulli
59	Opium	Patayar Somniferum	Karuppu
60	Paddy	Dryza Sativa	Nelru
61	Palmyrah	Borassus flabellifar	Karimpana
62	Pappaya	Cariota pappaya	Omakka or Koppanga
63	Pepper (Black)	Piper nigrum	Kurumulaku or Nallamulaku
64	Pineapple	Ananes comesus	Kaithachakka or Prithichakka
65	Plantain	Musasepientun	Vazha
66	Pomegranate	Punicagranalum	Mathalam
67	Pumpkin	Cucurbitamaxima	Mathanga
68	Ragi	Eleusive Coracana	Panjappullu or Koovaraku
69	Redgram	Gajanus indicus	Thuvara
70	Roscapple	Engenia Jamos	Jampa
71	Samai	Panicum miliara	Chama
72	Sesamum	Sesamum indicum	Ellu
73	Snake gourd	Trichosan thesagum	Padavalanga
74	Sugarrauc	S-eachthuram officinarum	Karimbu
75	Sweet Potato	Ipmoca batatas	Sarkaravalli or Madhurakizhangu
76	Sword beams	Canavalia ensiforms	Valaringa
77	Tamarind	Tamarindur indica	Valampuli
78	Tapioca	Manikot utilissima	Marachini or Kappa

(4)

(3)

(1) (2)

79	Tobacco	Nicotiana tobacum	Pukayila
80	Tomato	Hycopersicum	Thakkali
81	Turneric	Curcuma longa	Manjal
82	Water melon	Citrullus vulgaris	Thannimathan
83	Wheat	Triticum vulgare	Gothampu
84	Winged beans,	Psophocarpustebragonolohus	Chathurapayaru
85	Yam	Diowrea bulbiforia	Kachil
86	Do.	Engemia cumim	Njarapazham
87	Do.	Dioswrea acullota	Cheruvallikizhangu
88	Do.	Coleus parriflorus	Koorka or Cheevakizhangu
89	Do.	Luffa acutangula	Pichanka
90	Do.	Garcinia cambogia	Kodampuli or Penaru.

# KERALA STATE ADMINISTRATIVE DIVISIONS

Cannanore

CANNANORE

Kozhikode

KOZHIKODE

PALGMAT

Palghat

Trichur

TRICHUR

Ernakulam

ERNAKULAM

Kottayam

KOTTAYAM

Alleppey

ALLEPPEY

QUILON

Quilon

TRIVANANDRUM

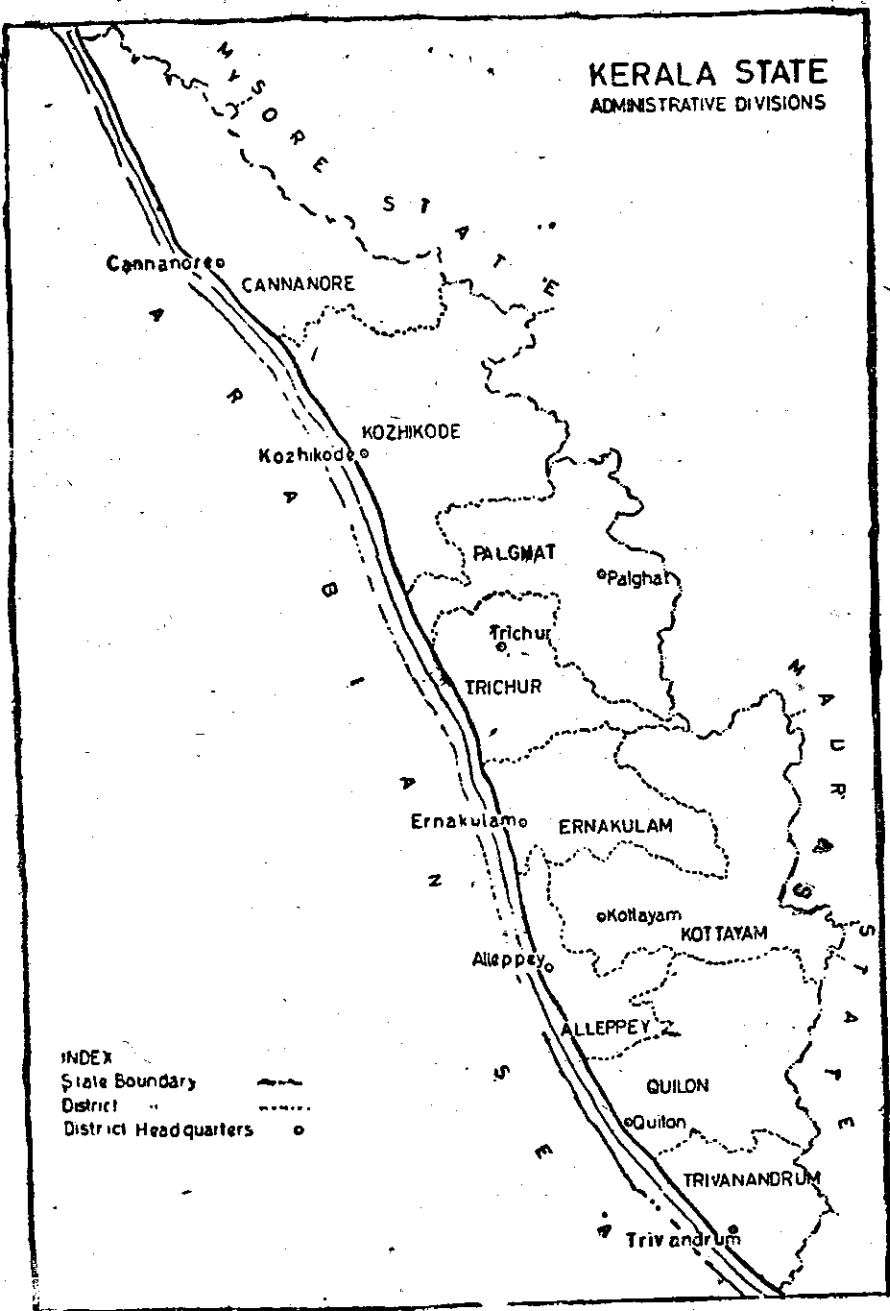
Triv andrum

## INDEX

State Boundary








District

District Headquarters

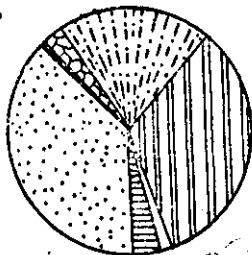


# AREA UNDER CROPS 1964-65

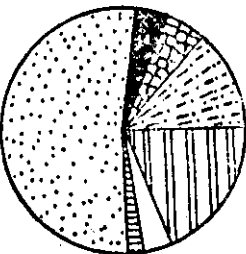
INDEX:

-  CEREALS AND MILLETS.
-  PULSES.
-  CONDIMENTS AND SPICES.
-  FRUITS AND VEGETABLES.
-  OIL SEEDS.
-  PLANTATION.
-  OTHERS.

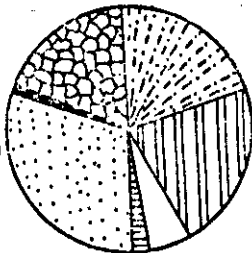
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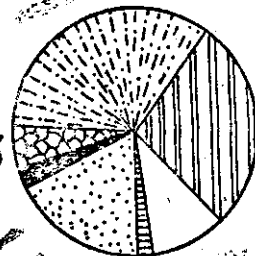
TRICHUR.



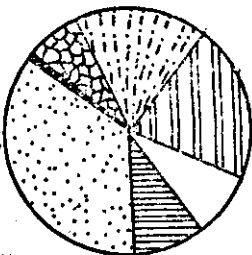
CANNANORE.



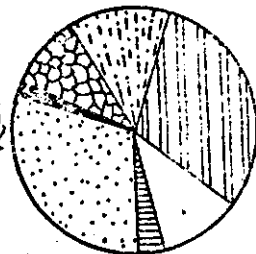
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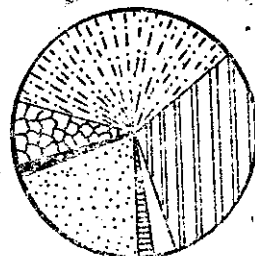
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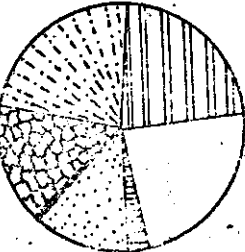
KOZHIKODE.



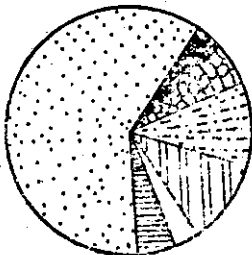
TRIVANDRUM.



KOTTAYAM.



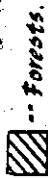
PALGHAT.





# CLASSIFICATION OF AREA 1964:65

## INDEX



-- Forests.



{ Land put to non-agricultural uses.



{ Barren and uncultivated lands.



{ Permanent pastures and other grazing lands.



{ Land under Miscellaneous tree-crops and groves not included in net area sown.



-- Cultivable waste.



-- Other fallow lands.

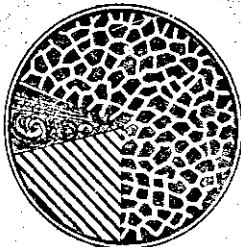


-- Current fallow.

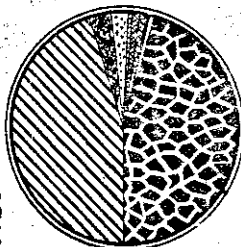


-- Net area sown.

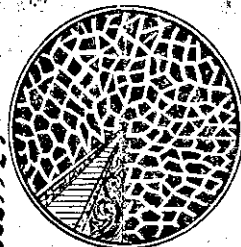
TRIVANDRUM



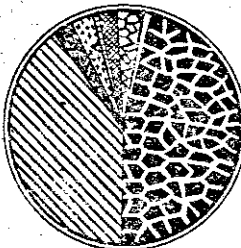
QUILON



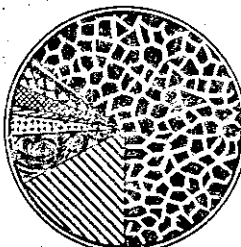
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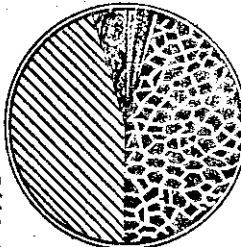
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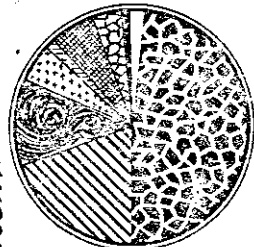
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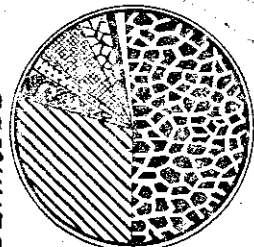
TRICHUR



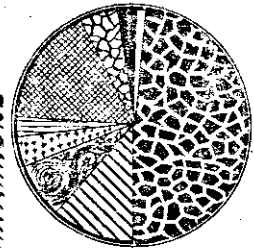
PALGHAT



KOZHIKODE



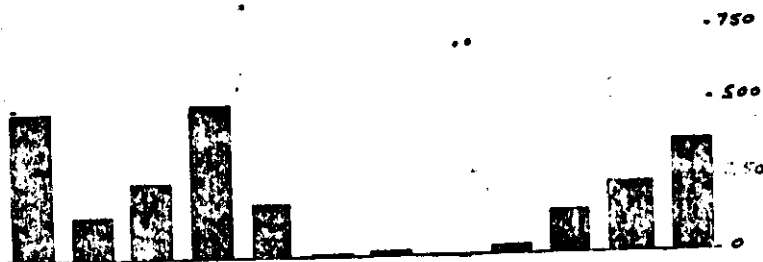
CANNANORE



# AVERAGE MONTHLY RAINFALL

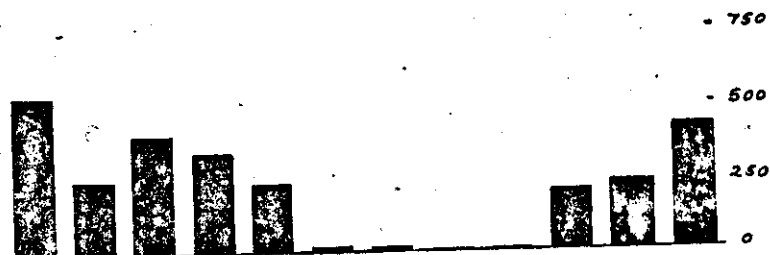
TRIVANDRUM.

IN MILLIMETRES  
- 1000



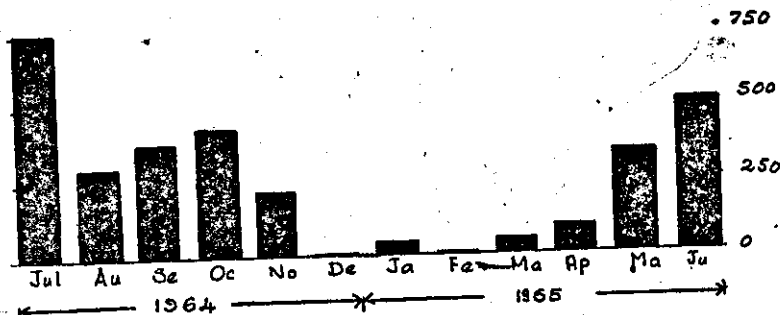
QUILON.

- 1000



ALLEPPEY.

- 1000



# AVERAGE MONTHLY RAINFALL

KOTTAYAM.

In MILLIMETRES

- 1000

- 750

- 500

- 250

0



ERNAKULAM.

- 1000

- 750

- 500

- 250

0



TRICHUR.

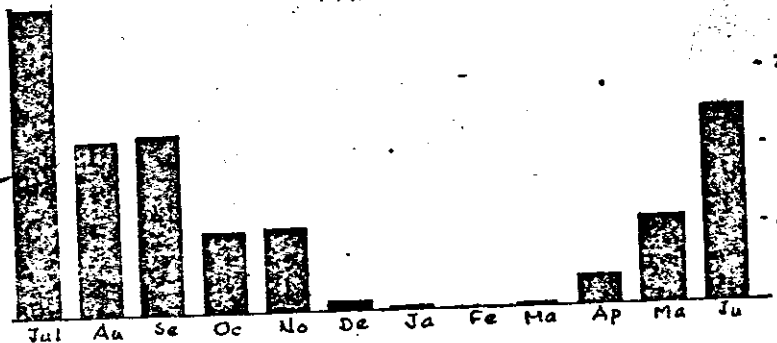
- 1000

- 750

- 500

- 250

0



1964

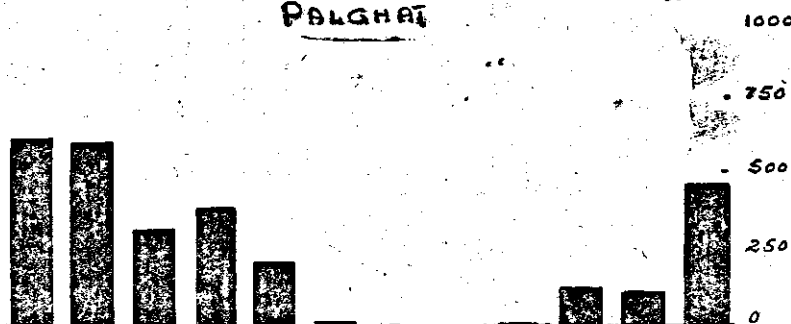
1965

©

# AVERAGE MONTHLY RAINFALL

PALGHAT

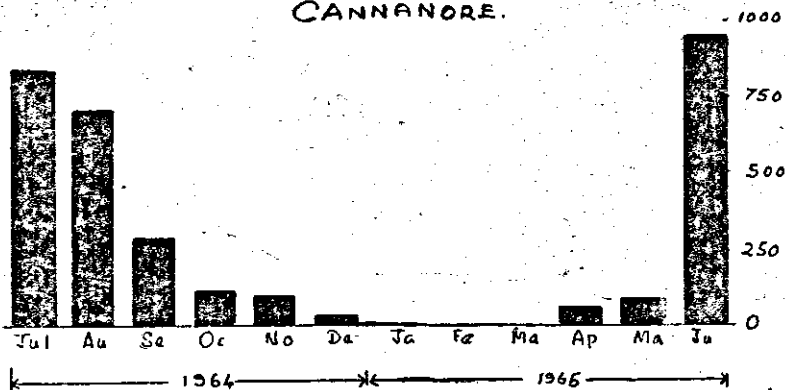
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KOZHIKODE

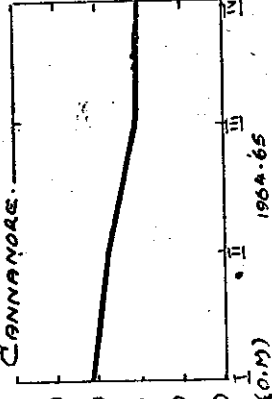
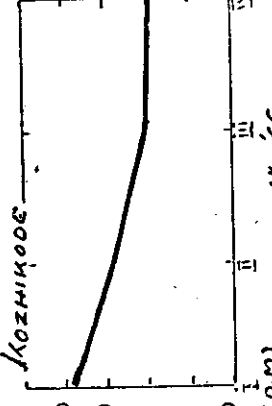
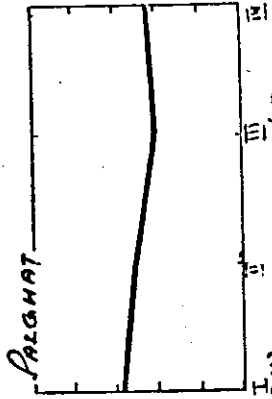
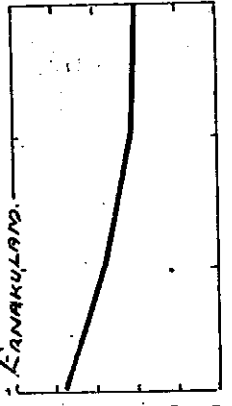
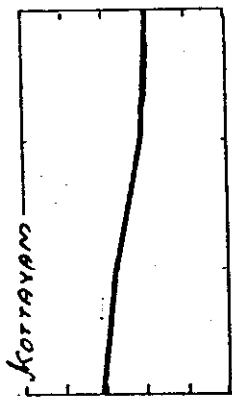
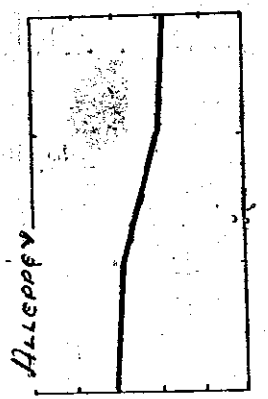
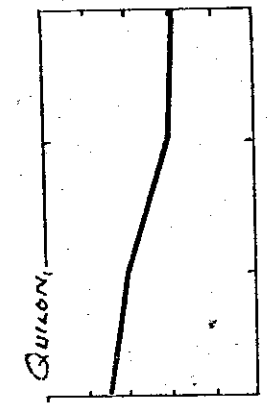
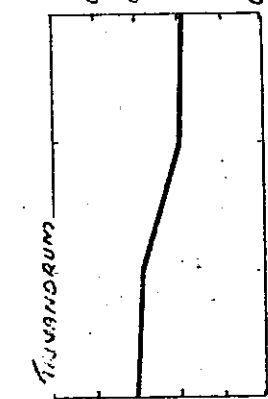


CANNANORE.



1964 1965

# QUARTERLY RETAIL PRICES OF RICE (CONTROL\_Kg) 1964-'65



(O.M) OPEN MARKET 1964-65

(O.M)

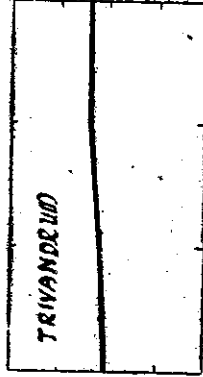
1964-65

(O.M)

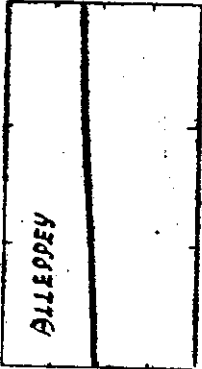
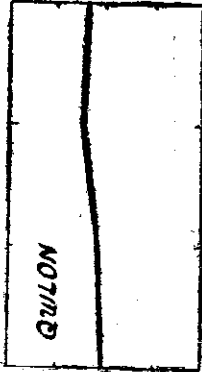
1964-65

# QUARTERLY RETAIL PRICES OF SUGAR 1964-65

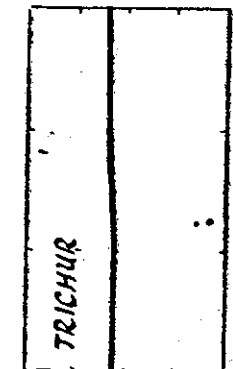
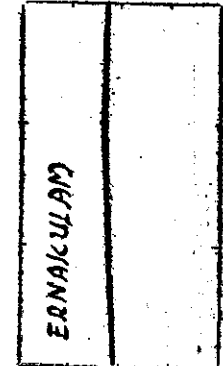
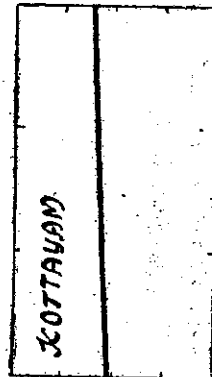
Rs Per Kg.  
175



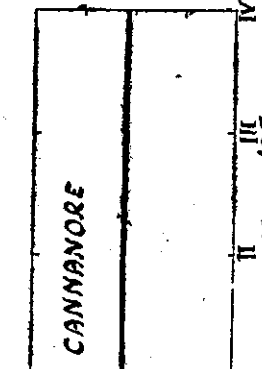
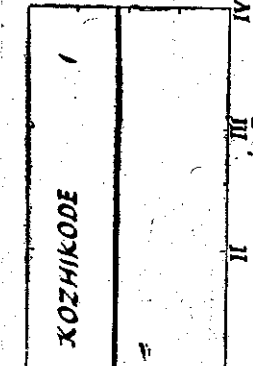
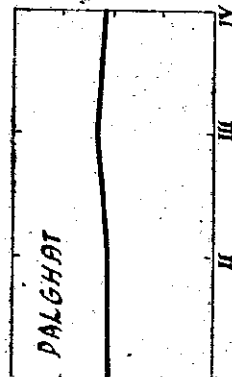
Rs. Per Kg.  
175



175



175

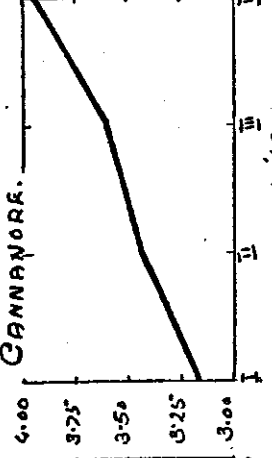
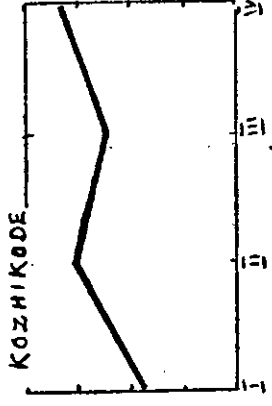
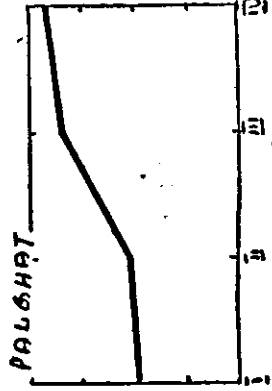
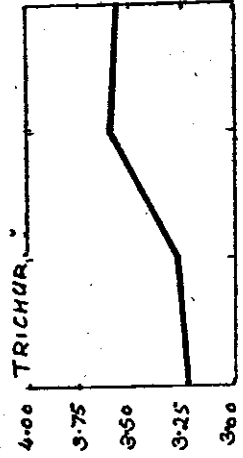
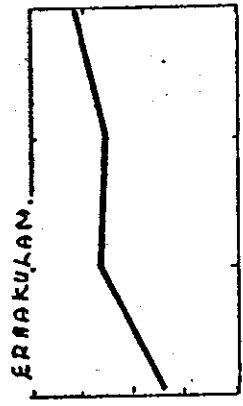
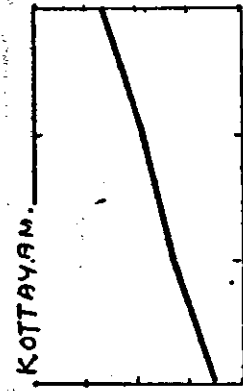
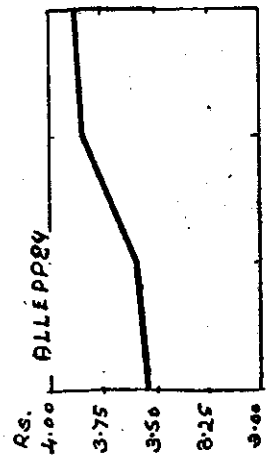
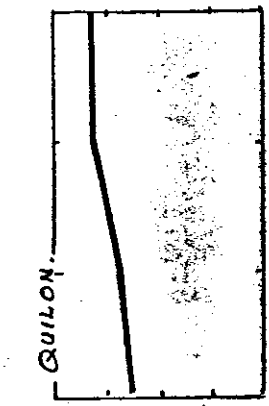
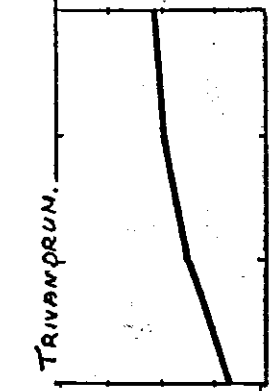


II III IV  
1964-65

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1964-65

# QUARTERLY RETAIL PRICES OF GINGELYOIL(LITRE)1964-'65



1964-'65

1964-'65

1964-'65

# QUARTERLY RETAIL PRICES OF CHILLIES, 1964 - '65

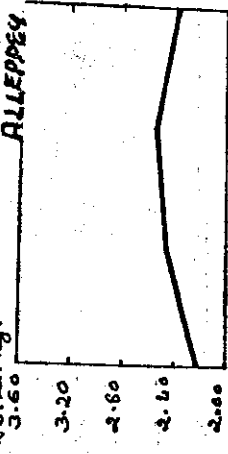
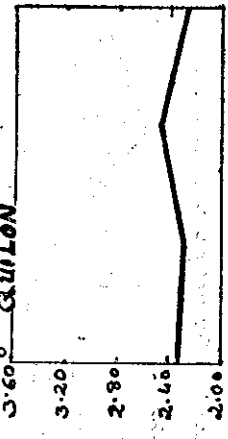
TRIVANDRUM.

Rs. Per Kg.

GUILTON

Rs. Per Kg.

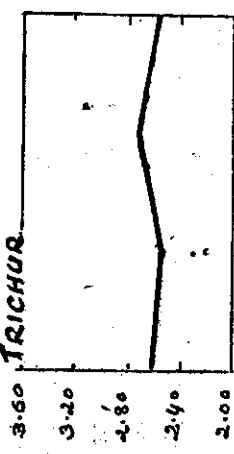
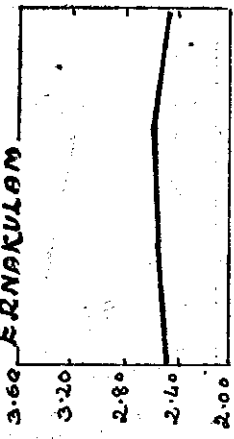
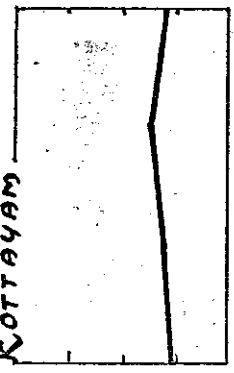
ALLEPPEY



KOTTAYAM

ERNAKULAM

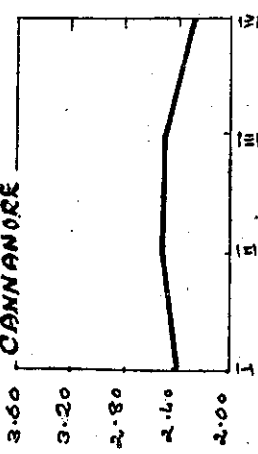
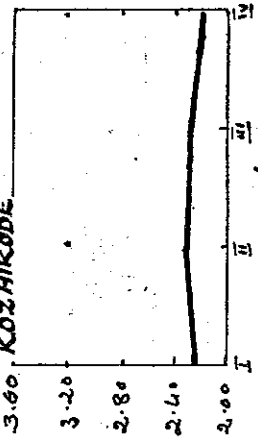
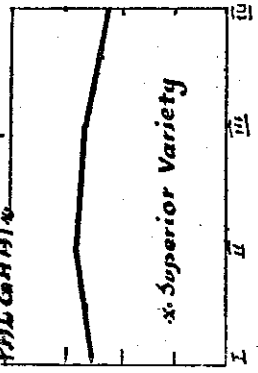
TRICHUR



PALGHAT

KOZHIKODE

CANNANORE



1964. '65

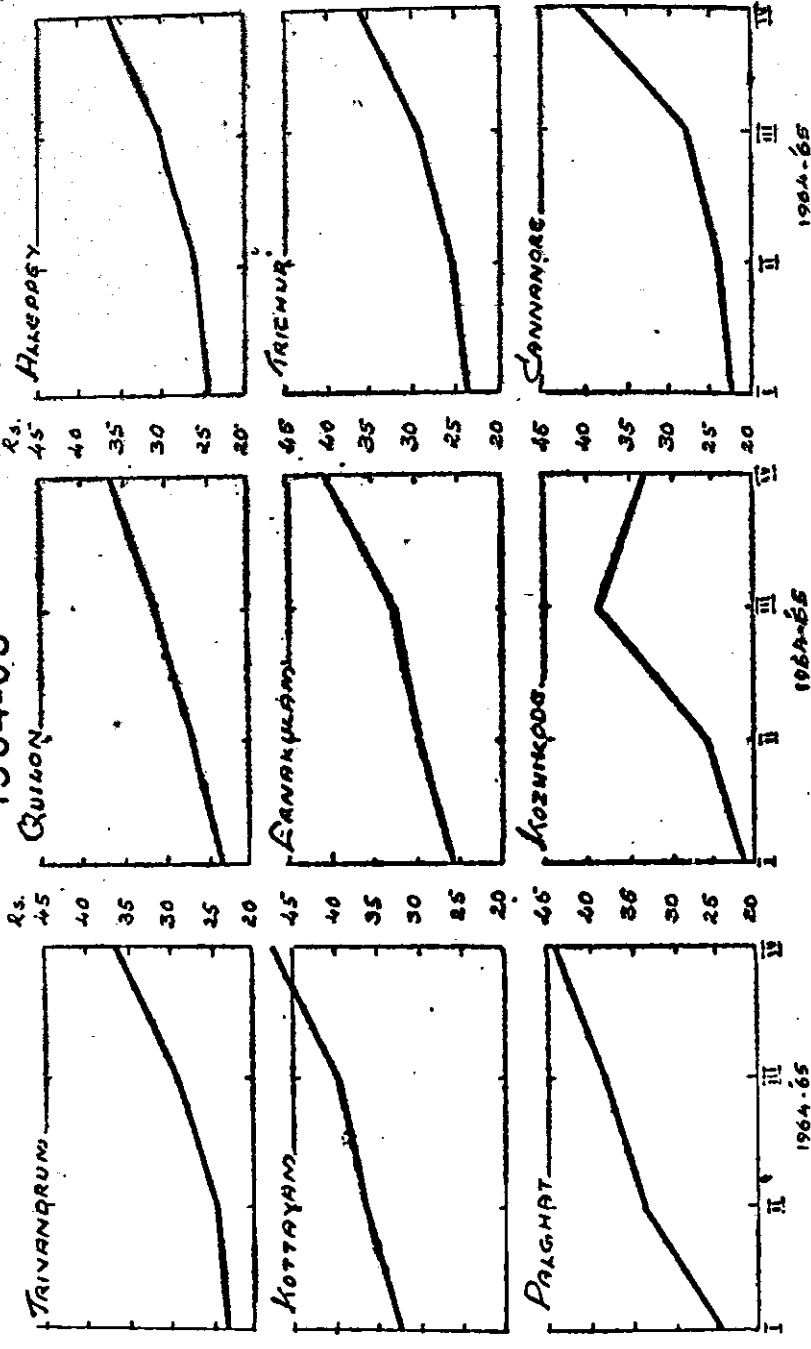
1964. '65

1964. '65



# QUARTERLY RETAIL PRICES OF COCONUT (With out husk -100 no)

## 1964-65

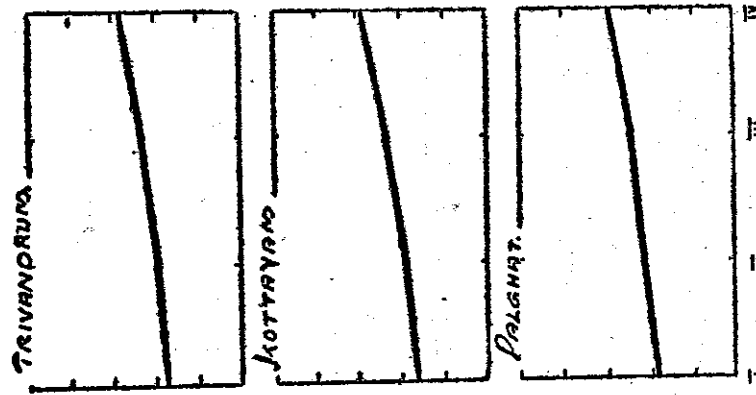
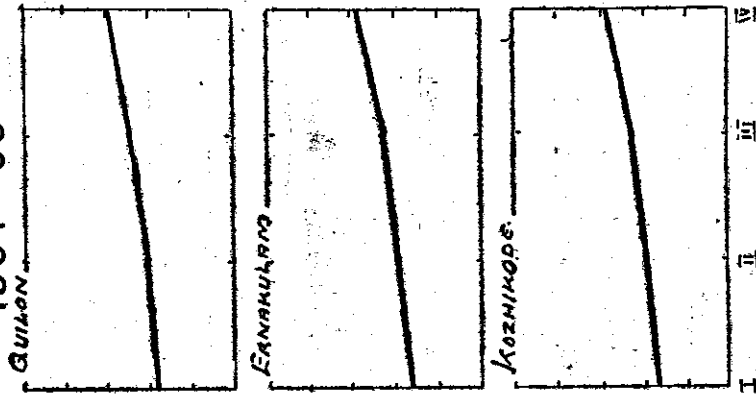
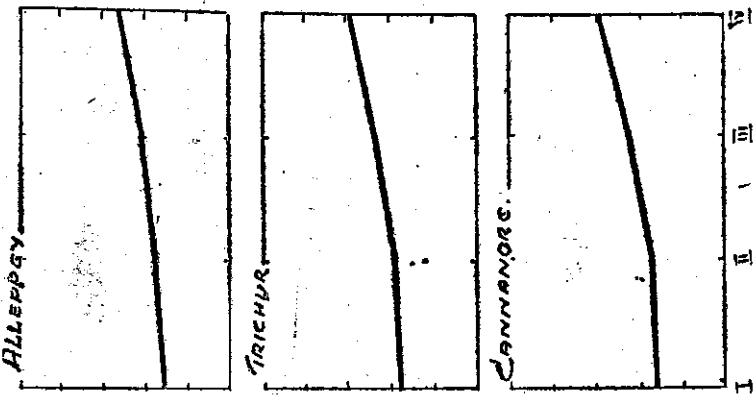


# QUARTERLY RETAIL PRICES OF COCONUT OIL - (LITRE)

1964-'65

Rs.

Rs.

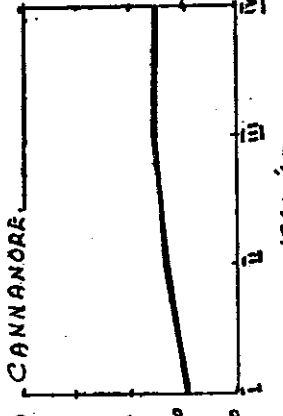
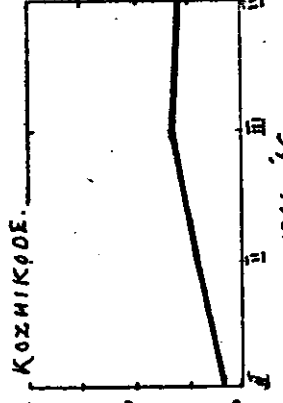
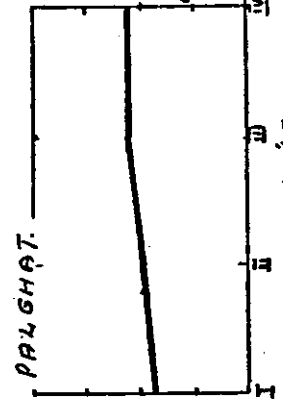
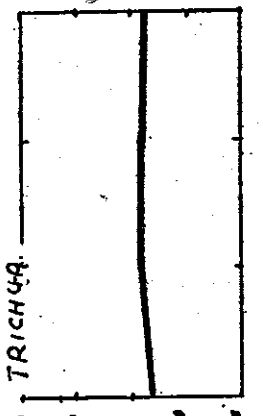
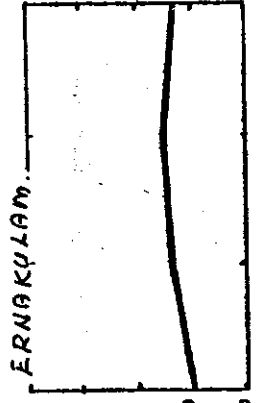
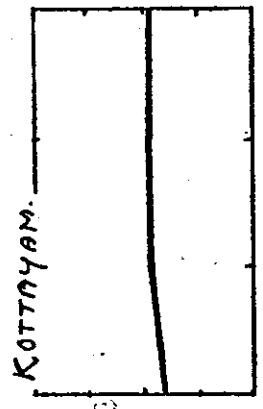
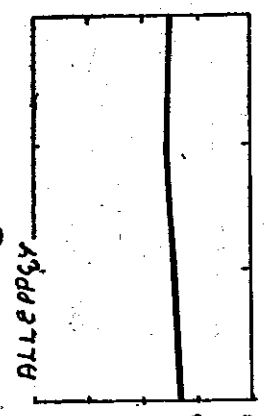
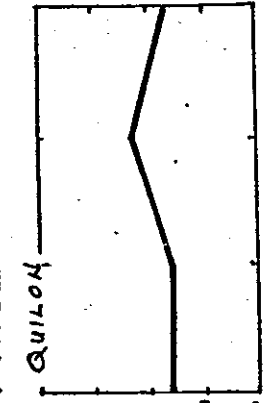
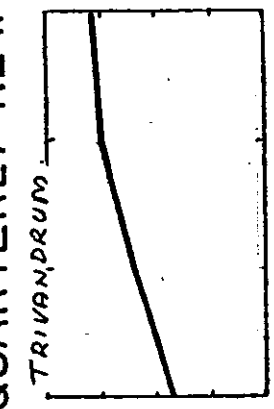


1964-'65

1964-'65

1964-'65

# QUARTERLY RETAIL PRICES OF BLACK GRAM (Kg) - 1964-65

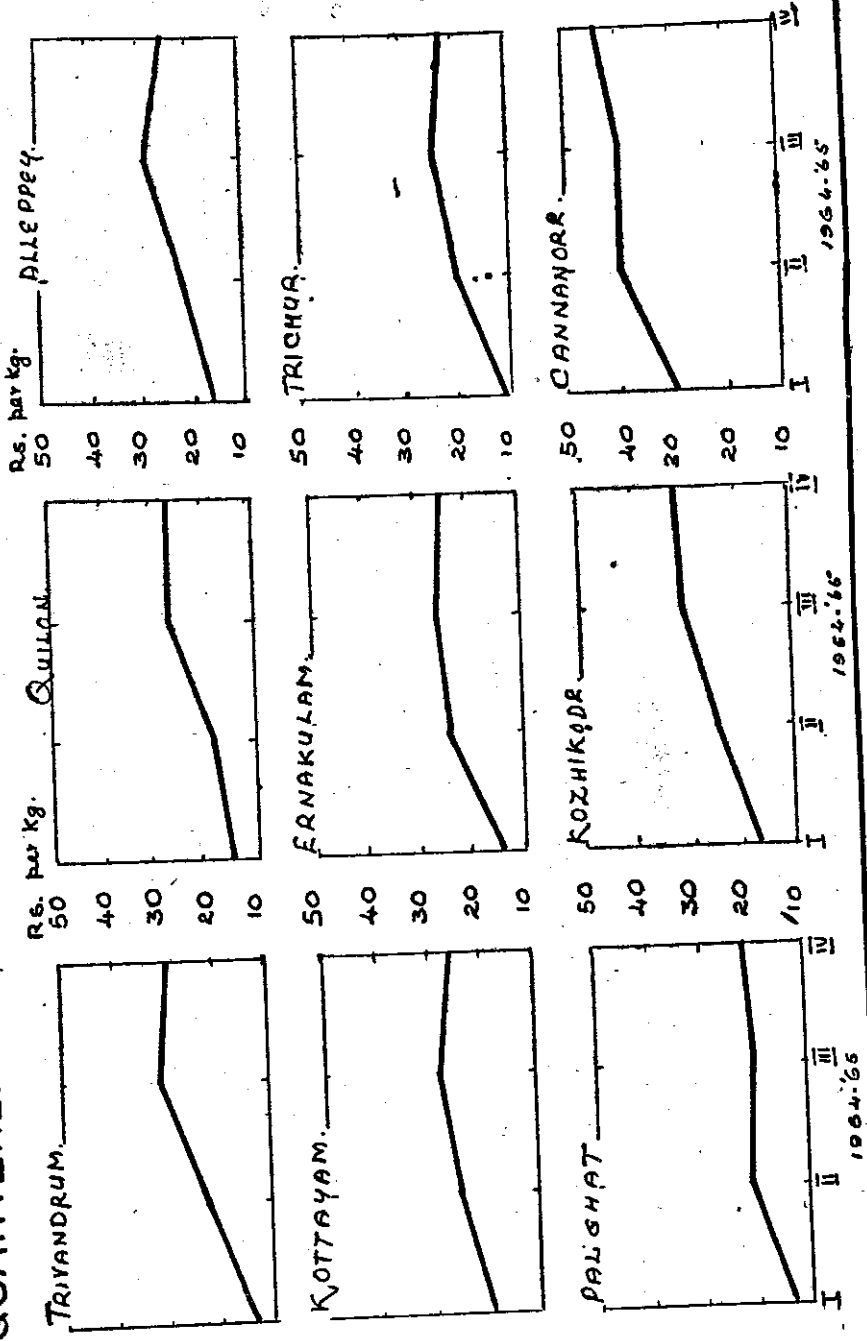


1964-65

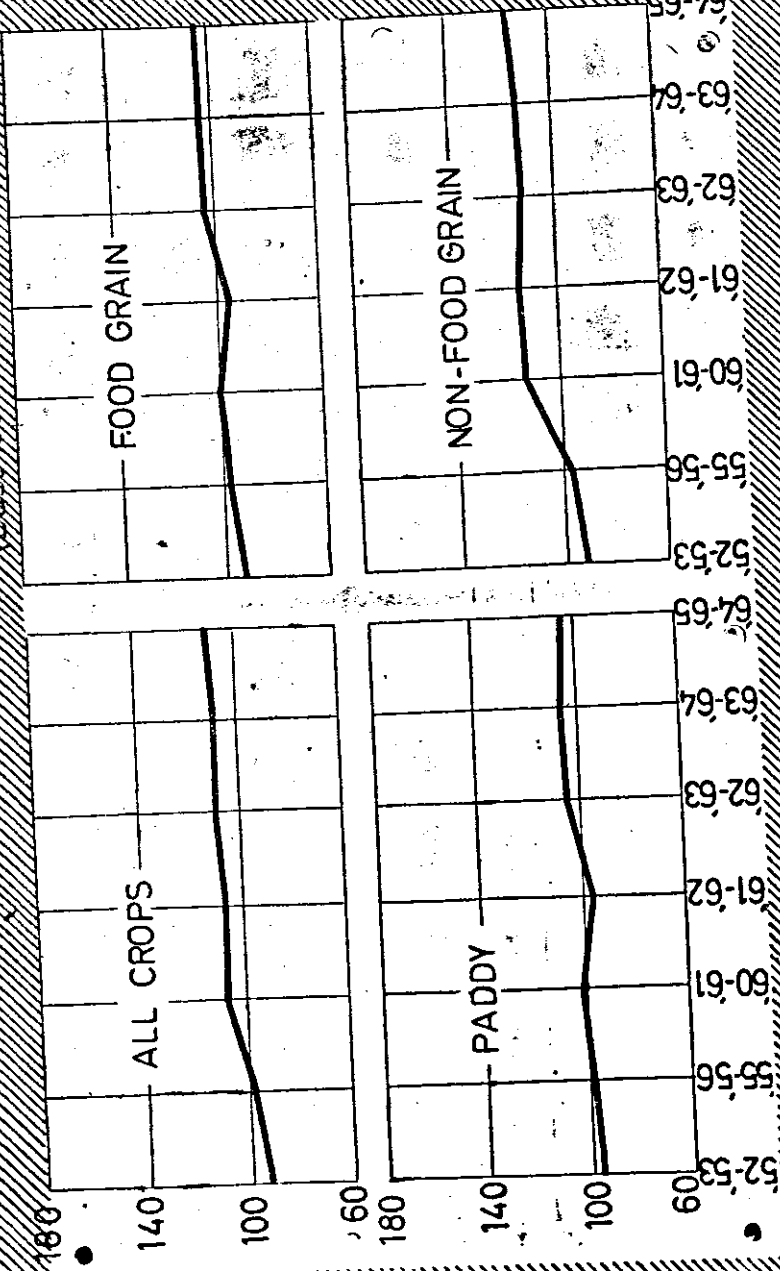
1964-65

1964-65

# QUARTERLY RETAIL PRICES OF TAPIOCA(RAW) - 1964-'65

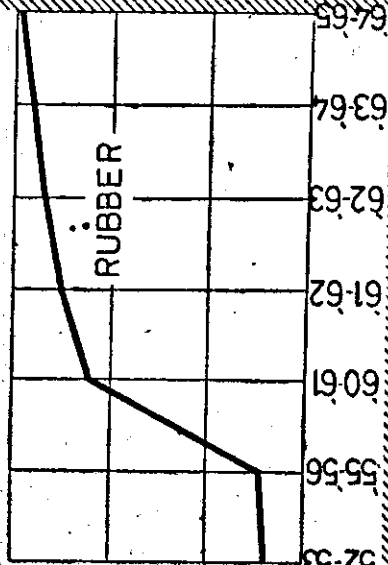
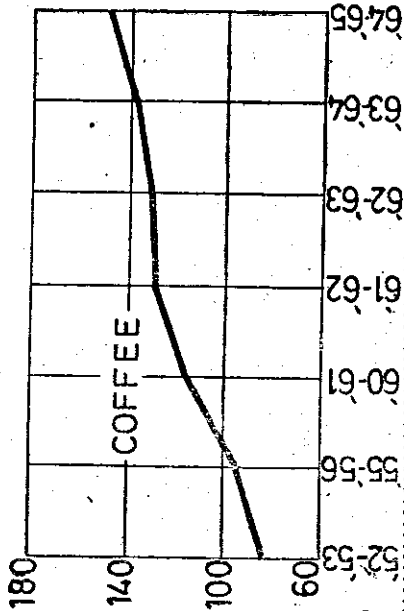
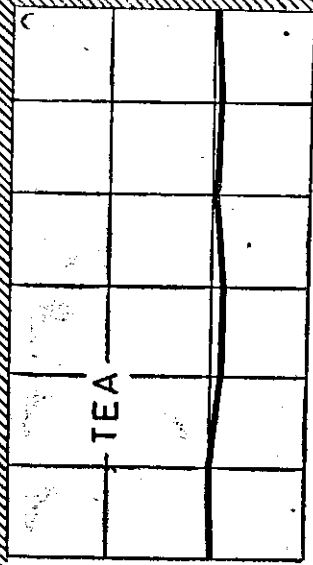
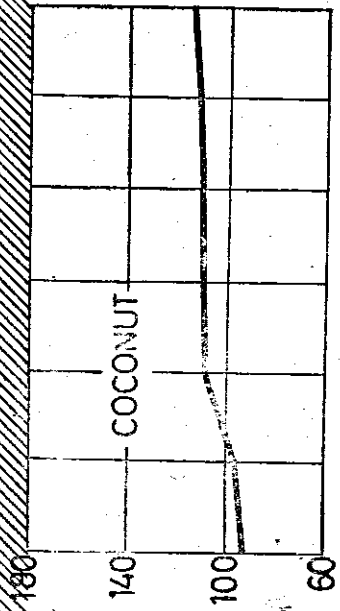


# INDEX NUMBERS OF AREA UNDER CROPS (Base 1956-57=100)

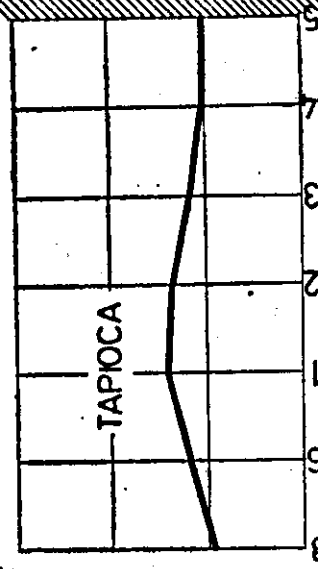
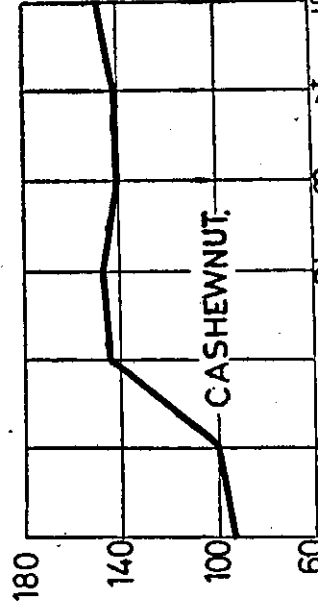
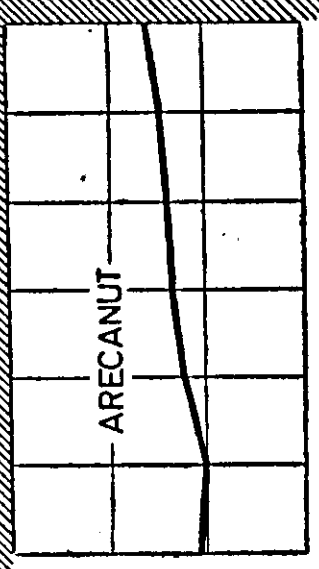
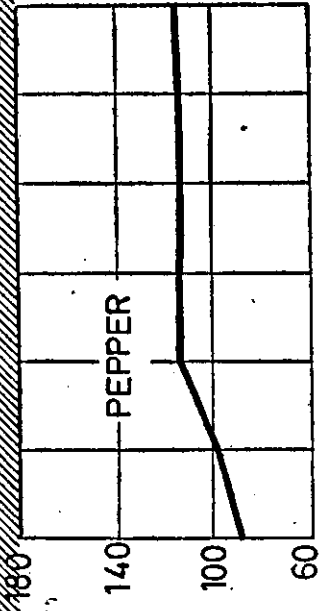


# INDEX NUMBERS OF AREA UNDER CROPS

(Base 1956-57=100)



INDEX NUMBERS OF AREA UNDER CROPS  
 (Base 1956-57=100)



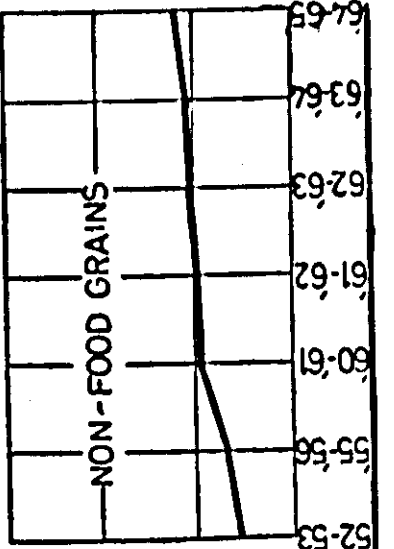
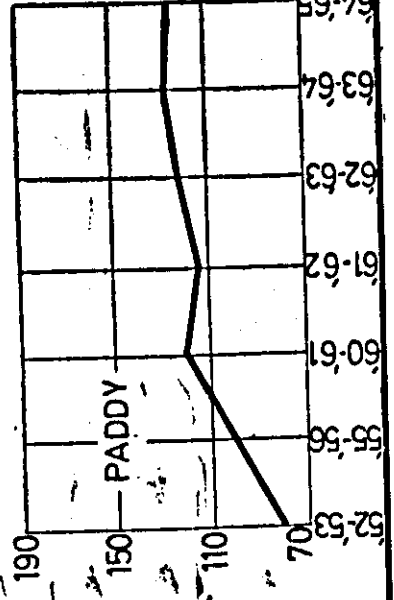
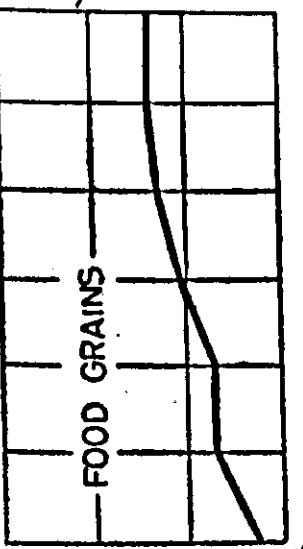
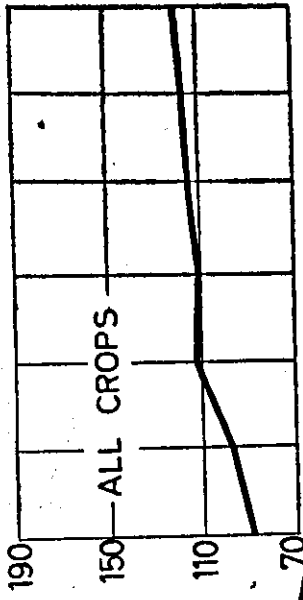
180  
140  
100  
60

180  
140  
100  
60

1952-53  
1955-56  
1960-61  
1961-62  
1962-63  
1963-64  
1964-65

# INDEX NUMBERS OF AGRICULTURAL PRODUCTION

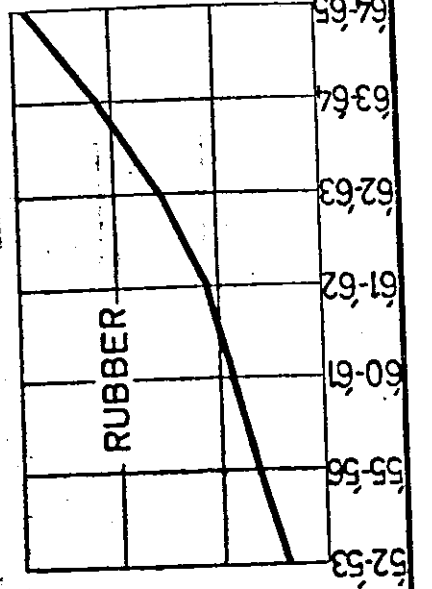
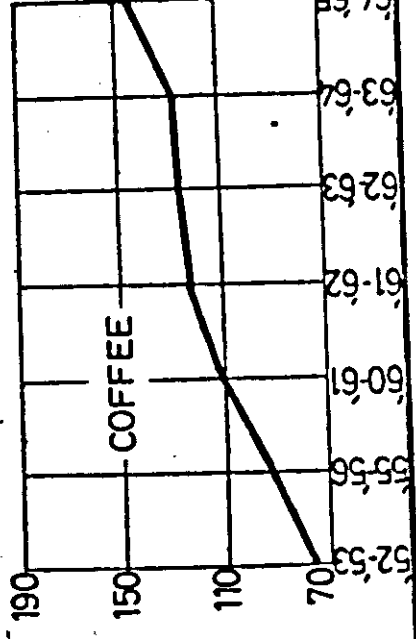
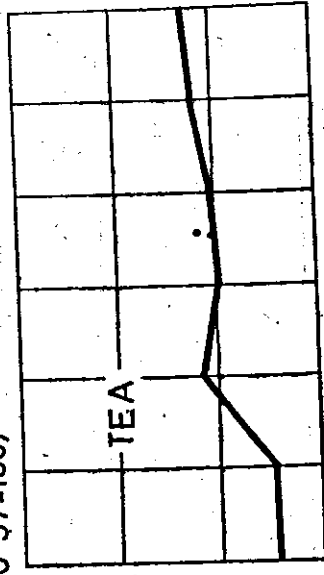
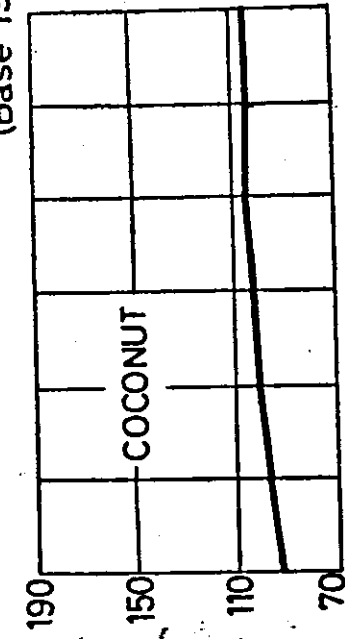
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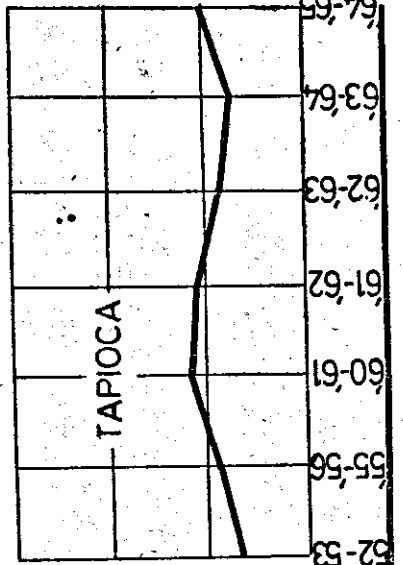
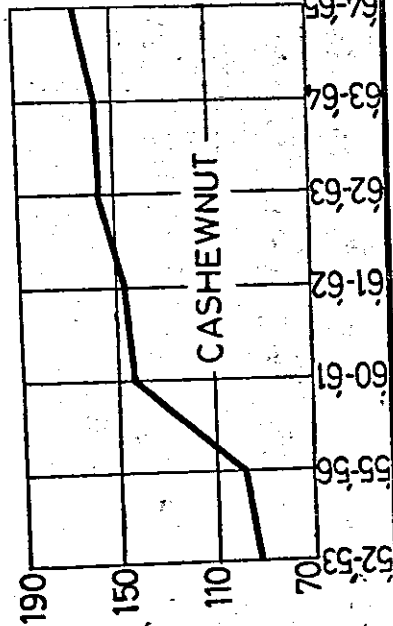
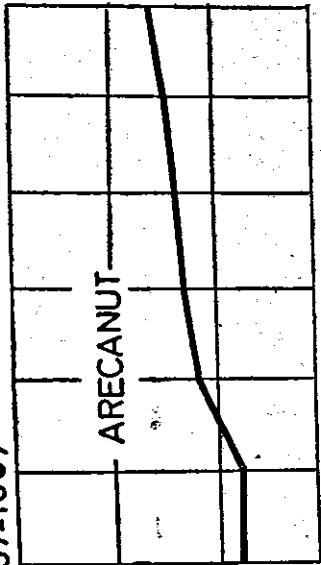
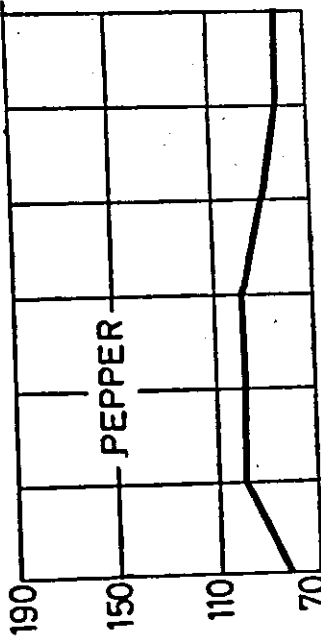
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(Base 1956-57=100)



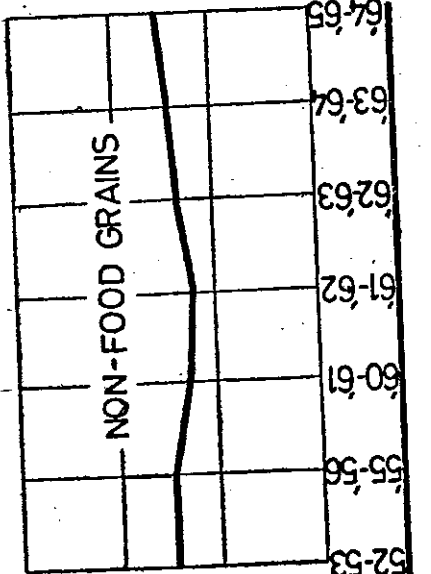
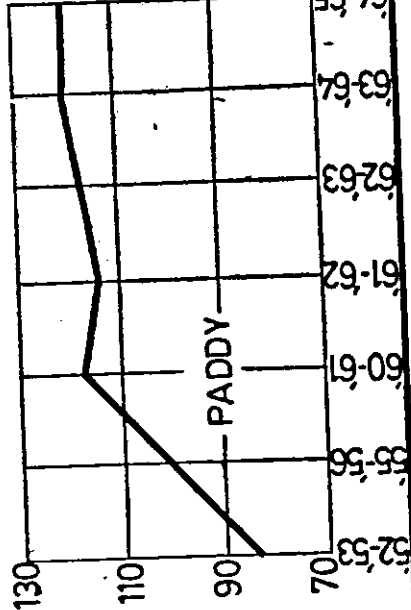
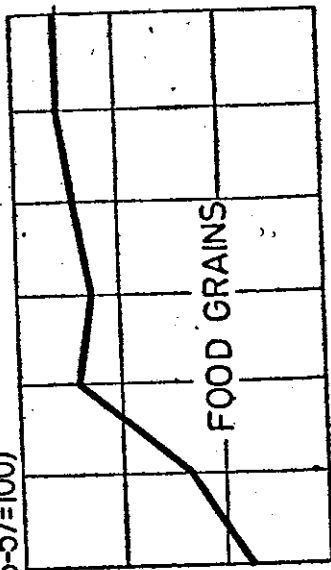
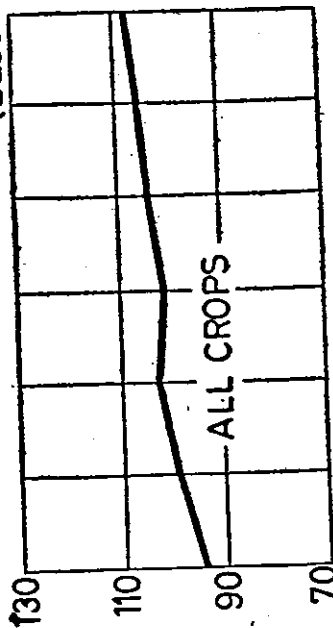
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(Base 1956-57=100)



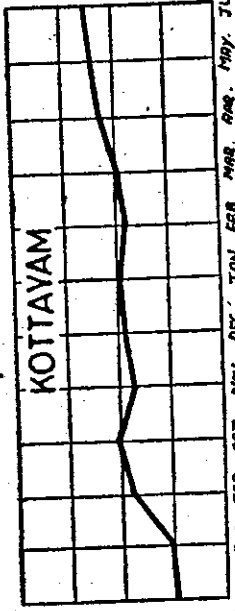
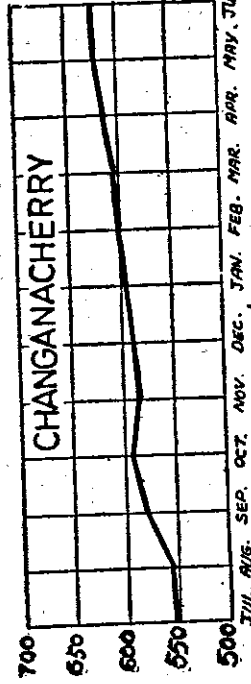
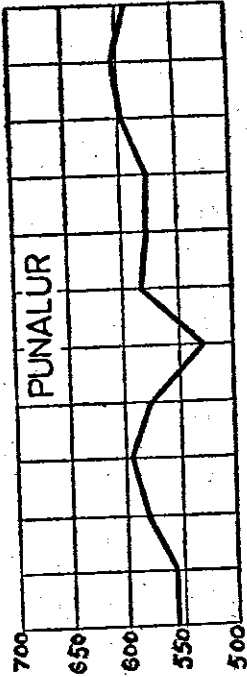
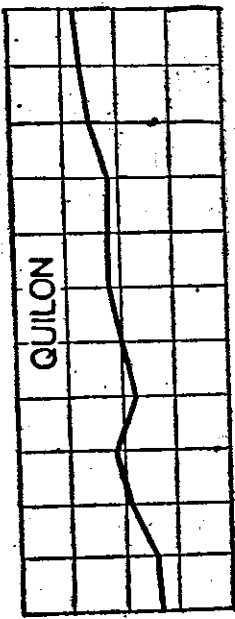
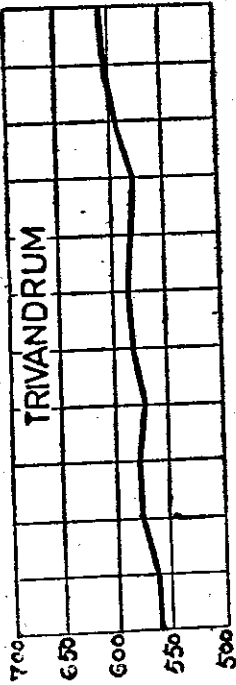
# INDEX NUMBERS OF AGRICULTURAL PRODUCTIVITY

(Base 1956-57=100)



# COST OF LIVING INDEX NUMBERS

(Base - 1939=100)



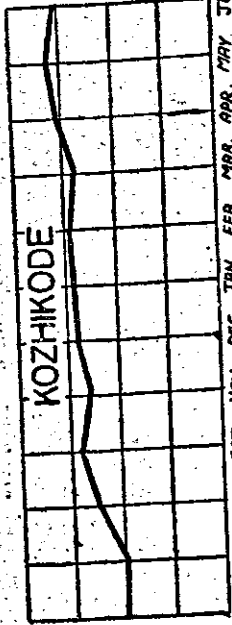
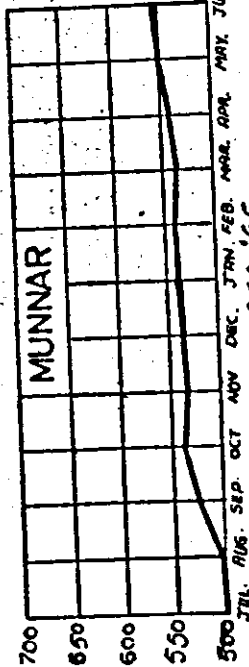
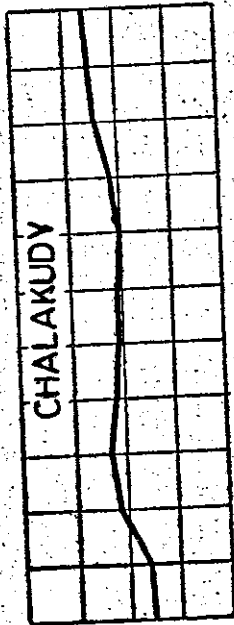
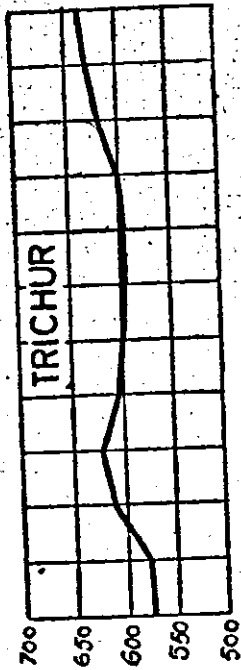
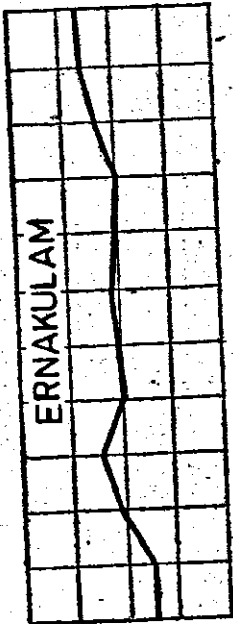
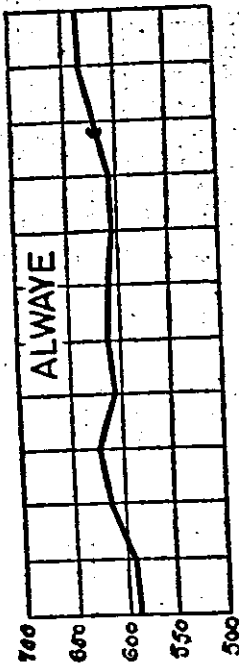
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1964-'65

S.V

# COST OF LIVING INDEX NUMBERS

(Base - 1939=100)



JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN

1964-'65

1964-'65