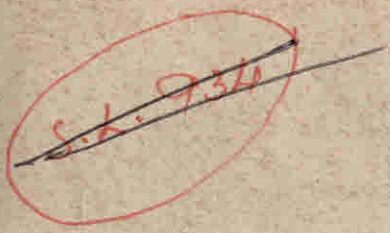

DEPARTMENT OF STATISTICS

SEASON AND CROP REPORT

FOR

KERALA STATE

1959-60 and 1960-61

FOREWORD

This, the third issue of the *Season and Crop Report for Kerala State*, relates to the two agricultural years 1959-60 and 1960-61. It gives a review of the over-all agricultural situation of the State during the period.

The report consists of four parts. Part I contains General information on the area, population, rainfall, soil and other important topics. The State tables are given in Part II (summary tables) while the district-wise tables are given in Part III (detailed tables). Part IV contains some important indices, notes on certain crops, graphs and charts etc. For the sake of comparison, figures from 1954-55 are given wherever possible.

The data on irrigation for 1959-60 and 1960-61 could not be included in this report due to the lack of reliable data in this regard. Efforts are being made to collect the same and it will be included in the next issue.

N. GOPALAKRISHNAN NAIR,
Deputy Director in charge.

Trivandrum,
28th September 1962.

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Season and Crop Report for the Years 1959-60 and 1960-61.

Part I—REPORT

1. Introduction.

Kerala, the smallest State in the Indian Union, has an area of 15002 Sq. miles according to professional survey. It lies between north latitudes 8° 18′ and 12° 48′ and east longitudes 74° 52′ and 77° 22′. On the western side of the State lies the Arabian Sea and on the eastern side, the Western Ghats. The length of the State is 360 miles and its breadth varies from 20 miles in the extreme north and south to 80 miles in the middle.

The State is divided topographically into three natural regions viz., the Lowland, the Midland and the Highland. The Lowland is a narrow strip along the sea coast. The Highland lies on the eastern boundry of the State and comprises the high ranges of the Western Ghats. The landlying between these two regions forms the Midland.

The Highland, which contains most of the reserve forests in the State, having a rainfall which varies from about 2500 millimeters in the South to about 5000 milli meters in the north. The climate is cool and bracing, the means of communications are poor and the cultivation is mainly confined to plantation crops like Tea, Rubber, Coffee and Cardamon. The important forests produces are Teakwood, Rosewood, other kinds of hardwood and different varieties of soft wood. These contributes a sizable amount to the regional income of the State. The average elevation of the Western Ghats is about 5000 ft, the height going up-to 8000 ft. at certain places. Mukunni (8380 ft.) Anamudi (8387 ft.), Nilagiri (8118 ft.) and Pullangudi (6392 ft.) are some of the important peaks of the Western Ghats.

In the Midland area, rainfall ranges from about 1400 milli meters to 4000 milli meters. It consists of lands with varying elevation through which rivers have carved out long narrow valleys. The important crops grown in this region are paddy, tapioca, coconut, pepper, sugar cane and ginger. Rubber also is cultivated on the hill slops.

The Lowland region consists of a narrow strip of land along the Arabian Sea coast in the West. The rainfall varies from about 900 millimeters in the extreme south to 3500 milli meters in the north. It has an almost embroken line of lagoos and back waters receiving the drainage of several rivers. Rice and coconut are the main crops of this region.

For administrative purposes the State is divided into nine districts. They are from south to north Trivandrum, Quilon, Alleppey, Kottayam, Ernakulam, Trichur, Palghat, Kozhikode and Cannanore.

There are 44 rivers in the State. Almost all of them originate from the Western Ghats and flowing through the Midland and the Lowlands, into the Sea. Thus the rainwater and the subsoil water in their course are collected and carried to all regions of the State. The rivers are full during both the monsoon periods and even during the dry months they do not dry up completely so that water is available for irrigation purposes all the year round. As the State receives the benefit from both the monsoons, complete failure of crops is not known in any year. The important rivers of the State are (1) Bharathapuzha, (2) Periyar, (3) Manimala, (4) Pampa and (5) Achencoil.

The soils of the State can be mainly classified into 7 types, namely, (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 seen all along the Midland portion, (4) black soil which occur as a patch on the eastern border of the Palghat district, (5) Peat or Kari soil in Alleppey district, (6) the alluvial soil which occurs along the eastern and southern parts of Vembanad lake in Ernakulam, Kottayam and Alleppey districts and (7) the red soil found in the extreme tip of Trivandrum Taluk. The main peculiarity of agriculture in the State is diversity in crops and hectrogenity in cultivation. The Highland is mainly under the cultivation of plantation crops and the Lowland is monopolised by paddy and coconut while the Midland is under a combination of both major and minor crops, often cultivated intermixed with one another. The more important crops grown in this region are Pepper, Coconut, Arecanut, Ginger etc.

Population

One of the main problems facing the State is the rapid growth of population. The population of the State according to the 1961 Census is 1,68,75,199 out of which 83,45,897 are males and 85,29,302 females, with a density of 1125 persons per square mile. The population of the State has then increased by about 24.55 percent during the previous decade. This rate of growth is one of the highest in the world. The following table gives the variation in population over the last six decads.

Year	*Area in Sq. miles*	*Population in lakhs*			*No. of women per 1000 males*	*Density in sq. miles*	*Per capital land in acres.*
		Total	*Male*	*Female*			
1	2	3	4	5	6	7	8
1901	15002	63.38	31.66	31.72	1002	422	1.51

Year	Area in Sq. miles	Population in lakhs			No of Women per 1000.	Density per Sq. mile	Per capital land in acres
		Total	Male	Female			
1	2	3	4	5	6	7	8
1911	15002	70.15	34.99	35.16	1005	468	1.37
1921	15002	78.13	38.91	39.22	1008	521	1.23
1931	15002	95.02	47.06	47.96	1009	633	1.01
1941	15002	110.37	54.53	55.84	1024	736	0.87
1951	15002	135.52	66.83	68.69	1028	903	0.71
1961	15002	x168.75	83.46	85.29	1022	1125	0.57

x Provisional population.

The State the smallest in India is the most thickly populated with more than 1100 persons per square mile on an average. The district wise density of population according to the 1961 census is given in the table below:

	District	Area in Sq. mile	Population (in 1000)			Density er Sq mile
			Male	Female	Total	
1.	Trivandrum	844	867	871	1738	2059
2.	Quilon	1827	965	965	1930	1056
3.	Alleppey	708	893	917	1810	2556
4.	Kottayam	2456	881	849	1730	705
5.	Ernakulam	1289	931	927	1858	1441
6.	Trichur	1137	783	852	1635	1437
7.	Palghat	1980	851	924	1755	897
8.	Kozhikode	2570	1300	1319	2619	1019
9.	Cannanore	2191	845	905	1780	812
10.	State	15002	8346	8529	16875	1125

The rural population of Kerala according to the 1961 census is 14.34 millions which forms 84.98 percent of the total population. The remaining 15.02 percent ie. 2.53 millions live in urban areas. The corresponding figures for 1951 are 86.5 and 13.5 respectively showing that urbanisation of population is on the increase.

In the case of literacy Kerala is leading other States in India. As per the 1961 census 46.22 percent are literate as against 40.5% in 1951. 54.18% among males and 38.44% among females. Thus the percantage of literates has increased by more than 5% during the last decade.

The per capita land including forests and other uncultivated land in Kerala is only 0.57 acre. This is the lowest in India. The net area available for cultivation during the agricultural year 1960-61 was only 4753616 acres which works out to 0.28 acre per person.

3. Rainfall.

As stated earlier Kerala receives the benefit of both the South-west and North-east monsoons. The rainfall is heaviest during the south-west monsoon period from May to September. The heavy flo ds which occur during this period cause substantial damages to crops and the agriculturists are put to much hardships.

Table 1.2 (in the detailed tables) gives the average monthly rainfall in each district in Kerala during 1959-60 and 1960-61.

4. Soil.

The soils are the permanent wealth of a Country. In the hills of Kerala, the soil is mainly laterite and combined with humus which is good for tea and cardamom plantations. The soil in the Midland area is loamy and gravelly and is fertile and suited for cultivation of pepper, ginger and tapioca. The coastal tract is mainly sandy loam and is suited for cocoanut and paddy cultivation. Clayey soil is found in Kozhikode, Chalakudy, Alwaye and Kundara which is good for potteries, title manufacturing and china ware.

The classification of soils in each district in Kerala is given in Appendix I.

5. Communication Facilities.

The State is more advanced than other Indian States in this regard. The important modes of communications are the roadways the waterways and the railways.

The State is linked to other States by airways also. There are daily air services from Trivandrum and Ernakulam (the two aerodrome in the States) to Madras, Bombay etc.

There is a rail link from Trivandrum in the South and Kasargod and Hosdurg in the north. This railway link connects the important centres in the State as well as the State with the neighbouring Madras and Mysore States. The Southern Railway has its southern terminus at Trivandrum. The railway link passes through all the district Headquarters in the State except Alleppey.

A good system of roads which connects the State with the neighbouring States and interlinks the districts is the more important mode of communication. The main southern road from Trivandrum connects the southernn ost district with the neighbouring Kanyakumari district of Madras State. The Main central Road which passes through the Midland region of the State and the National Highway which passes through the Lowland region of the State connects the Capital of the State with other districts. The Kottayam-Kumily road connects the Midland portion of Kottayam district to the Highranges. A net work of subsidiary and feeder roads connects the remain parts of the State with each other.

The back waters along the coastal region affords cheaper transportation facilities from Trivandrum in the south to Tirur in the North. The system of water transportation is more common in Alleppey and Ernakulam districts of the State.

6. Classification of area.

The classification of area of the State for the years 1954-55 to 1960-61 is given in Table A of the summary tables and the district-wise figures for the two years under report are given in table 2.1 (detailed tables.)

1. *Total area*—The total area of the State according to professional survey is 15002 Sq. miles (9601299 acres). The area according to the village papers is 9534,611 acres which thus accounts for 99.3 percent of the area according to professional survey.

The district wise area according to village papers and the percentage of the same to the total area of the State are given below :

District	*Area according to village papers*	
	Area (acres)	*Percentage*
Trivandrum	533983	5.6
Quilon	1159049	12.2
Alleppey	461568	4.8
Kottayam	1547434	16.2
Ernakulam	784381	8.2
Trichur	737137	7.6
Palghat	1261285	13.2
Kozhikode	1634814	17.2
Cannanore	1424960	15.0
State	9534611	100.0

Kozhikode is the largest district in the State covering about 17.1% of the area of the State and Alleppey the smallest covering only 4.8 percent of the total area.

2. *Forests.*—The area under forests in the State was 2609654 acres during 1959-60 and 2609784 acres during 1960-61. This is about 27.37 percent of the total area of the State. It is seen that the area under forests is on the increase compared to the previous years.

The distribution of the area under forests during the latter year among the various districts is given below :

District	Area under forest (1960-61)	
	Area (acres)	Percentage
Trivandrum	110241	4.2
Quilon	526629	20.2
Alleppey	1268	0.1
Kottayam	614690	23.5
Ernakulam	136551	5.2
Trichur	328483	12.6
Palghat	246275	9.4
Kozhikode	479514	18.4
Cannanore	166133	6.4
State	2609784	100.0

Kottayam which contains about 23.5 percent of the area under forest is the leading district in this respect. It is followed by Quilon and Kozhikode. Alleppey district contains only a negligible area under forests. Private forests exist only in the Malabar region. Its area is estimated as about 3 lakhs of acres.

3. *Land put to non-agricultural uses.*—The area under land put to non-agricultural uses was 500884 acres during 1959-60 which forms only 5.25 percent of the area of the State. During 1960-61 the same increased to 505688 acres. The distribution of this area among the districts together with the percentages to that of the State for the two years is given below:

District	1959-60		1960-61	
	Area	Percentage	Area	Percentage
Trivandrum	27335	5.5	27919	5.5
Quilon	28873	5.8	29601	5.9
Alleppey	25276	5.0	25276	5.0
Kottayam	32045	6.4	32996	6.5
Ernakulam	40744	8.1	41779	8.3
Trichur	30668	6.1	31554	6.2
Palghat	151460	30.2	151460	30.0
Kozhikode	64883	13.0	64914	12.8
Cannanore	99600	19.9	100189	19.8
State	500884	100.0	505688	100.0

The area under non-agricultural uses was largest in Palghat District (30 percent) followed by Cannanore (19.8 percent) and Kozhikode (12.8 percent) Districts. Comparatively the districts in the Travancore-Cochin region have lesser areas under this category. It can be seen that the districts in Travancore-Cochin area occupies only about one third of the total area while the remaining two third portion is in the Malabar region.

4. *Barren and uncultivable land.*—The area under this type of land was 386056 acres and 373978 acres during 1959-60 and 1960-61 respectively which accounted for 4.05 percent and 3.92 percent respectively of the total area of the State. The district-wise area of barren and uncultivable land for 1960-61 is given below.

District	*Barren and uncultivable land*	
	Area (acres)	*(Percentage)*
Trivandrum	5460	1.5
Quilon	41094	11.0
Alleppey	6866	1.8
Kottayam	68319	18.3
Ernakulam	27740	7.4
Trichur	12495	3.3
Palghat	70408	18.9
Kozhikode	47564	12.7
Cannannore	94032	25.1
State	373978	100.0

In this case also the area is seen to decrease in succeeding years.

5. *Permanent pastures and grazing land.*—During 1959-60 an area of 112961 acres was under permanent pastures and grazing lands. The area has decreased to 111770 acres during 1960-61. This is about one percent of the toral area of the state.

The table below giving the percentage to total area under pastures shows that nearly half of the area under this category was in Cannanore District.

District	1959-60		1960-61	
	Area.	*Percentage.*	*Area.*	*Percentage.*
Trivandrum	2462	2.2	2462	2.2
Quilon	4162	3.7	4162	3.7
Alleppey	1180	1.0	1180	1.0
Kottayam	12676	11.1	12676	11.3
Ernakulam	11082	9.7	10082	9.0
Trichur	3463	3.1	3463	3.1
Palghat	15843	14.0	15483	13.9
Kozhikode	8372	7.4	8358	7.4
Cannanore	54081	47.8	53904	48.4
State	112961	100.0	111770	100.0

6. *Land under miscellaneous tree crops.*—The area under miscellaneous tree crops was 505128 acres during 1959-60 and 504991 acres during 1960-61 which forms 5.29 percent and 5.30 percent respectively of the total area of the State. The table given below gives the district-wise distribution of the area for 1960-61. It shows that the area under this group is larger in the Malabar region occupying about 6.9 percent of the total for the State. In Travancore-Cochin area Kottayam District stands first in this respect.

District	*Area under miscellaneous tree crops 1960-61*	
	Area (acres)	*percentage*
Trivandrum	1880	0.3
Quilon	14526	2.8
Alleppey	12315	2.4
Kottayam	43537	8.6
Ernakulam	23966	4.7
Trichur	3920	0.8
Palghat	74539	14.8
Kozhikode	104517	20.8
Cannanore	225791	44.8
State	504991	100.0

7. *Cultivable Waste.*—The extent of cultivable waste land in the State during 1959-60 was 369,212 acres (3.87 per cent) which decreased to 354,371 acres (3.72 percent) during 1960-61. The area under cultivable waste land in the different districts in Kerala for the two years under review is given below.

District	Cultivable Waste			
	1959-60		1960-61	
	Area.	Percentage.	Area.	Percentage.
Trivandrum	6556	1.8	6556	1.8
Quilon	16263	4.4	14562	4.1
Alleppey	7746	2.1	7041	1.9
Kottayam	63497	17.2	58721	16.6
Ernakulam	24012	6.5	22012	6.3
Trichur	22678	6.1	22080	6.3
Palghat	59222	16.0	56184	15.9
Kozhikode	75546	20.4	74403	20.9
Cannanore	93692	25.5	92812	26.2
State	369212	100.0	354371	100.60

Cannanore District contains more than one-fourth of the area under cultivable waste lands in the State followed by Kozhikode District (21 per cent) and Kottayam (17 per cent).

8. *Fallow lands other than current fallows.*—Other fallow lands accounted for 172,947 acres during 1959-60. This is 1.81 per cent of the total area of the State. During the succeeding year the same

decreased to 154,545 acres. The district-wise distribution of land under this category is given below.

District	Other fallows			
	1959-60		1960-61	
	Area (acres)	Percentage.	Area (acres)	Percentage.
Trivandrum	8610	4.9	8119	5.3
Quilon	5721	3.3	5721	3.7
Alleppey	2716	1.5	2375	1.5
Kottayam	5273	3.0	4706	3.0
Ernakulam	5825	3.3	4609	3.0
Trichur	1747	1.0	2386	1.5
Palghat	29620	16.9	26391	17.1
Kozhikode	27605	15.9	25841	16.7
Cannanore	85830	49.2	74397	48.2
State	172947	100.0	154545	100.0

The districts in the Malabar region accounted for more than 80 per cent of the fallow lands in the State. Among these Cannanore (4.8 per cent) stands first. It is followed by Palghat (1.7 per cent) and Kozhikode (1.6 per cent). There is also a sizeable decrease in the area in all the district over the previous years.

9. *Current fallows.*—The following table gives the district-wise distribution of the area under current fallows during the two years under review:

District	Current fallows			
	1959-60		1960-61	
	Area (acres)	percentage	Area (acres)	percentage
Trivandrum	6704	3.9	6704	4.0
Quilon	9167	5.3	9167	5.5
Alleppey	14666	8.5	14666	8.8
Kottayam	17400	10.1	17400	10.5
Ernakulam	21765	12.6	17075	10.3
Trichur	13135	7.6	11426	6.9
Palghat	21773	12.6	22976	13.8
Kozhikode	38114	22.2	38116	23.0
Cannanore	29669	17.2	28338	17.2
State	172393	100.0	165868	100.0

The area under current fallow which was 172393 acres in 1959-60 decreased to 165868 acres during 1960-61. This is about 1.81 per cent and 1.74 per cent respectively of the total area. Kozhikode District contains the largest area under this category, accounting for about 23 per cent of the total in 1960-'61 followed by Cannanore and Palghat Districts.

10. *Net area sown.*—The net area sown in the State was 4706376 acres (49.4 per cent of the total area) during 1959-60 and it increased by 47240 acres to 4753616 acres (49.9 per cent of the total area) during 1960-61. Thus the percentage increase of the sown area between two years which was one percent. The district-wise distribution of the net area sown for the two years and the percentages of the same to the total of the State are given below.

District	*Net area sown* 1959-60		1960-61	
	Area (acres)	*percentage*	*Area (acres)*	*percentage*
Trivandrum	364581	7.7	364642	7.7
Quilon	512084	10.9	513587	10.8
Alleppey	390144	8.3	390581	8.2
Kottayam	688210	14.7	694389	14.6
Ernakulam	491695	10.4	500567	10.5
Trichur	308782	6.5	311330	6.5
Palghat	595992	12.7	597569	12.6
Kozhikode	788576	16.8	791587	16.7
Cannanore	566312	12.0	589364	12.4
State	4706376	100.0	4753616	100.0

Kozhikode, the largest district in the State leads the other districts in the area sown also with about 17 per cent of the net area sown in the State. It is followed by Kottayam (15 per cent) Trivandrum comes last in this regard.

There is a slow but steady increase in the net area sown over the years for the State.

11. *Area sown more than once.*—The area sown more than once during 1959-60 was 991830 acres and during 1960-61 it was 1050527 acres. Thus this area increased by 58697 acres. The percentage increase

during 1960-61 over that for 1959-60 was thus about 6. The percentage of area sown more than once to the net area sown in each district is given below :—

Year	Trivandrum	Quilon	Alleppey	Kottayam	Ernakulam	Trichur	Palghat	Kozhikode	Cannanore	State
1959-60	32	22	40	11	9	53	29	11	12	21
1960-61	33	24	40	11	10	56	32	12	12	22

This shows that on an average more than 20 percent of the net area sown was cultivated more than once during the two years. The ratio of double cropped area to sown area was largest in Trichur District followed by Alleppey, Trivandrum and Palghat, in that order was least in Kottayam and Ernakulam Districts.

The table below gives the percentages of double cropped land in each district in the total for the State for the two years.

Year	Trivandrum	Quilon	Alleppey	Kottayam	Ernakulam	Trichur	Palghat	Kozhikode	Cannanore	State
1959-60	11.8	11.5	15.8	7.4	4.4	16.6	17.2	8.5	6.8	100.0
1960-61	11.5	11.6	15.0	7.0	4.6	16.8	18.0	8.7	6.8	100.0

While Trichur leads other districts in respect of the proportion of double cropped area to sown area, Palghat comes first in respect of the actual extent of such land as seen from the above table.

12. *Total cropped area.*—The total cropped area of the State during 1959-60 was 5698206 acres. It increased to 5804143 acres during 1960-61 which is an increase of two percent. A statement giving the District-wise details of cropped area, its percentage to the total area is given on the next page.

(Area in acres)

District	1959-60				1960-61			
	Total cropped area	*Percentage to the total area*	*Percentage to the area according to village papers*	*Per capita cropped area*	*Total cropped area*	*Percentage to the total area*	*Percentage to the area according to village papers*	*Per capita cropped area*
Trivandrum	481071	8.4	90.1	0.28	485822	8.4	91.0	0.28
Quilon	626281	10.9	54.0	0.32	635329	10.9	54.8	0.33
Alleppey	546324	9.6	118.4	0.30	548324	9.4	118.8	0.30
Kottayam	761491	13.5	49.2	0.44	767711	13.2	49.6	0.44
Ernakulam	545588	9.4	68.3	0.29	549028	9.5	70.0	0.30
Trichur	473676	8.3	65.1	0.29	486398	8.4	66.9	0.30
Palghat	766123	13.4	60.7	0.43	787128	13.6	62.4	0.44
Kozhikode	873443	15.4	53.4	0.33	883377	15.2	54.0	0.34
Cannanore	634206	11.1	44.5	0.36	661026	11.4	46.4	0.37
State	5698206	100.0	59.8	0.34	5804143	100.0	60.9	0.34

Kozhikode District contains the largest percentage (about 15%) of the cropped area of the State. Palghat and Kottayam come next with nearly 13 per cent of the total of the State. Each of Cannanore and Quilon Districts accounts for 11 per cent of the total cropped area of the State while each of the remaining four districts hove nearly 9 per cent of the total cropped area.

Area under crops.

The details of area under each crop in the State from 1954-55 to 1960-61 are given in the summary tables (Table C). The district-wise details for the two years under review are given in the detailed tables. (Table 3.1).

A. Food Crops—The area under food crops in the State during 1959-60 was 3811285 acres. This is about 67 per cent of the total cropped area. During 1960-61 it increased by about 1.4 per cent boosting up the total area to 3867337 acres. The district-wise distribution of the area under food crops and its percentage to the total cropped are area given on the next Page.

District.	1959-60			1960-61		
	Area under food crops (acres.)	*Percentage to that of the state.*	*Percentage to total cropped area.*	*Area under food crops (acres).*	*Percentage to that of the state.*	*Percentage to total cropped area.*
Trivandrum	325674	8·5	67·70	330140	8·5	67·97
Quilon	398100	10·4	63·57	398216	10·3	62·68
Alleppey	337162	8·8	61·72	342296	8·8	62·42
Kottayam	409661	10·8	53·80	410763	10.6	53·52
Ernakulam	340901	8·9	63·66	345478	8·9	62·93
Trichur	359270	9·4	75·84	368882	9·5	75·84
Palghat	633729	16·7	82·73	647457	16·8	82·27
Kozhikode	529623	13·9	60·64	534457	13·8	60·53
Cannanore	477165	12·6	75·24	489648	12·8	74·07
State	3811285	100·0	66·89	3867337	100·0	66·63

The Malabar region alone contained nearly 43 percent of the total area under food crops in the State. More than 80% of the cropped area was devoted to food crops in Palaghat District, Trichur and Cannanore followed with about $\frac{3}{4}$ of the cropped area under food crops. The percentage of area under food crops to the total cropped area was 66·82 during 1959-60 and 66·63 during 1960-61.

1. *Paddy.*—As far as the total area is concerned, Paddy is the most important crop in the State accounting for about 1/3 of the cropped area. It was 1900142 acres during 1959-60 and 1924727 acres during the succeeding year recording an increase of nearly 1·3%

Paddy is cultivated in three seasons viz., autumn, winter and summer. The sowing season of autumn paddy is from April-June and the harvesting season is from August to October. For the second crop viz., winter paddy the sowing starts in August and lasts upto October. It is harvested during the months of December to February. A major part of the summer crop is sown during November and December and is harvested in February and March. However, in certain parts of the state, the sowing of summer paddy is done during January to March and the harvesting during April to May

Among these three crops, autumn paddy accounts for more than half of the total cropped area under the crop. Autumn and winter crops of paddy are cultivated in almost all taluks of the state while the summer crop is cultivated only in about 30 taluks in the State.

The distribution of the cropped area under paddy in each district together with the percentage to that of the State and the percentage to the total cropped area for the two years is given on the next Page.

District.	1959-60			1960-61		
	Area (in acres).	*Percentage to total.*	*Percentage to total cropped area in the District.*	*Area (in acres).*	*Percentage to total.*	*Percentage to total cropped area in the District.*
Trivandrum	90259	4·8	18·8	92457	4·8	19·0
Quilon	112656	5·9	18·0	114020	5·9	18·0
Alleppey	192905	10·1	35·3	196171	10·2	35·8
Kottayam	96871	5·1	12·7	98753	5·1	12·9
Ernakulam	188216	9·9	35·2	192476	10·0	35·1
Trichur	247107	13·0	52·2	252529	13·1	52·0
Palghat	462105	24·4	60·3	474699	24·7	60·3
Kozhikode	276086	14·5	31·6	267152	13·9	30·3
Cannanore	233937	12·3	36·9	236470	12·3	35·8
State	1900142	100·0	33·3	1924727	100·0	33·2

It may be seen that Palaghat District accounts for nearly onefourth of the total area under paddy in the State. It is followed by Kozhikode, Trichur and Cannanore in that order. With respect to the proportion of the area under paddy to cropped area also Palghat leads the other districts. It is in this respect closely followed by Trichur, Kottayam and Trivandrum comes last both with regard to the extent of area under paddy as well as with regard to the ratio of the area under paddy to the cropped area.

2. *Other cereals and millets.*—This includes cereals other than paddy viz. Jowar, Ragi, Kora, Varagu Thina, Chama etc. The total area under this was 31426 acres during 1959-60 and 31855 acres during 1960-61. Palghat District accounted for a major part of the area under these crops. It is followed by Kozhikode District.

3. *Pulses.*—Pulse crops like tur, blackgram, green gram, horsegram, peas and beans, etc., are included under this category. The area under pulse crops was 108911 acres during 1959-60 and 1090 3 acres during 1960-61. This accounts for nearly two percent of the total cropped area. Palghat District contains nearly 30 per cent and Trichur District nearly 20 percent of the area under pulses.

4. *Sugar Crops*:—This includes two crops viz. sugarcane and palmyrah. Alleppey is the most important district for sugarcane accounting for more than half of the total area of the crop in the State, while for palmyrah, Palghat District is the most important accounting for more than 60 percent of the crop. The total area under sugar crops during the years 1959-60 and 1960-61 were 34359 acres and 35079 acres respectively.

5. *Condiments and Spices*:—The most important spices crops grown in the State are black-pepper, Ginger, turmeric, cardamom and betel nuts. The State is famous for its spices which earns much valuable foreign exchange for the country.

5,19,180 acres were under the cultivation of spices crops during 1959-60. During 1960-61 it increased to 5,46,684 acres. The leading districts for spices cultivation in the State are Cannanore, Kottayam and Palghat and they together contained more than 65 percent of the total area under the crop in the State during the years under review.

(a) *Black Pepper*:—Kerala is famous for its black pepper which attracted foreigners to this country even from very olden times. More than 97 percent of the total production of black pepper in India is produced by Kerala. The area under pepper in Kerala during 1959-60 was 2,26,080 acres and during 1960-61 it increased to 2,46,500 acres. Pepper is grown in all districts in Kerala, the more important districts

being Cannanore, Kozhikode and Kottayam. The district-wise distribution of the area under pepper in Kera a and the percentage to the total for the State are given below:—

District	1959-60		1960-61	
	Area (acres)	Percentage	Area (acres)	Percentage
(1)	(2)	(3)	(4)	(5)
Trivandrum	19930	8.8	20845	8.4
Quilon	12930	5.7	13045	5.3
Alleppey	4230	1.9	4330	1.7
Kottayam	32270	14.3	34790	14.1
Ernakulam	16390	7.3	16875	6.8
Trichur	1350	0.6	1710	0.7
Palghat	8450	3.7	8455	3.4
Rozhikode	32370	14.3	39695	16.2
Cannanore	98160	43.4	106755	43.4
State	226080	100.0	246500	100.0

Trichur and Alleppey Districts are not important for pepper cultivation.

(b) *Ginger*:—Ginger is another important spices crop grown in the State even though the extent under cultivation is small. Its cultivation is mainly confined to the four districts Kottayam, Ernakulam, Palghat and Kozhikode. The area under the crop was 27,326 acres during 1959-60 and 29662 acres during 1960-61.

(c) *Turmeric*:—Turmeric is another important crop under the spices group. The extent of its cultivation was 11450 acres during 1959-60 and 11529 acres during the succeeding year. The cultivation of turmeric is mainly confined to Kottayam, Palghat and Kozhikode Districts.

(d) *Cordamom*:—Cardamom, still another important crop in this group is cultivated mainly in the high ranges of Kottayam District. 86 percent of the total area under the crop in the State in this District. The areas under cardamom for the two years under review were 70,542 acres and 70,689 acres respectively.

(e) *Betelnut or Arecanut*:—Arecanut is another important crop included under this group. The area under the crop during 1959-60 and 1960-61 were 1,31,361 acres and 1,34,069 acres respectively. Though it is cultivated in almost all districts, those in the Malabar region are comparatively more important accounting for more than

half of the total area under the crop of the State. The District-wise area under this crop for the two years is given in the subjoined table.

District	1959-60		1960-61	
	Area (acres)	Percentage to total	Area (acres)	Percentage to total
(1)	(2)	(3)	(4)	(5)
Trivandrum	8377	6.4	8371	6.6
Quilon	8823	6.7	9486	7.1
Alleppey	5923	4.5	5665	4.2
Kottayam	11450	8.7	11190	8.3
Ernakulam	10461	7.9	10064	7.5
Trichur	9536	7.3	10233	7.6
Palghat	12029	9.2	13015	9.7
Kozhikode	43970	33.5	44553	33.3
Cannanore	20792	15.8	20992	15.7
State	131361	100.0	134069	100.0

(f) *Chillies*:—Chillies is grown only in the Malabar region which covered an area of 8321 acres during 1959-60. The area decreased to 8200 acres during 1960-61.

6. *Fruits*:—Fruit crops occupied nearly nine percent of the total cropped area of the State. The fruit crops cultivated in the State can mainly be classified into two groups viz. fresh fruits and dry fruits.

(a) *Fresh fruits*:—The important fresh fruits grown are Mangoes, Bananas, Plantains, etc. Fresh fruits covered an area of 409313 acres during 1959-60. It decreased to 405540 acres during 1960-61.

(b) *Dried fruits*:—Cashewnut, the most important crop in this group, is grown in all districts, but it is grown more abundantly in Kozhikode, Trichur, Quilon, Ernakulam and Cannanore Districts. The area under cashewnut during 1959-60 was 129525 acres. It increased to 134222 acres during 1960-61.

7. *Vegetables*.—The crops included under this group are tapioca, sweet potatoes, onions and other tuber crops. Among these tapioca is by far the most important crop.

Tapioca, a tuber crop with a high content of starch, is second only to rice in importance among the food crops of the State. It is taken as a subsidiary food by a vast majority of the population. It is raised in almost all types of land in the State. Its duration varies from 6 to 12 months. It was cultivated in 594922 acres during 1959-60 which increased by 4568 acres to 598490 acres during 1960-61. The following table gives the district-wise area with some other relevant details.

District	1959-60			1960-61		
	Area (acres)	Percentage to total area	Percentage of area to total cropped area	Area (acres)	Percentage to total area	Percentage of area to total cropped area
Trivandrum ..	138451	23.3	30.0	140645	23.6	30.2
Quilon ..	149295	25.1	25.3	143441	24.0	24.0
Alleppey ..	67122	11.3	13.5	69724	11.6	13.8
Kottayam ..	110058	18.4	16.0	109295	18.3	15.8
Ernakulam ..	41600	7.0	9.0	43816	7.3	9.4
Trichur ..	18590	3.1	4.8	18860	3.1	4.7
Palghat ..	8083	1.4	3.1	8280	1.4	2.8
Kozhikode ...	45333	7.6	6.3	46933	7.8	6.3
Cannanore ..	16390	2.8	4.9	17496	2.9	4.9
State ..	594922	100.0	11.9	598490	100.0	11.7

Nearly 12% of all cropped areas was under this crop.

The intensity of cultivation was highest in Trivandrum and Quilon Districts and the lowest in Palghat District. The intensity is seen to decrease from south to north.

Sweet potatoes was grown in 20837 acres during 1959-60. It decreased to 19846 acres during 1960-61.

8. *Oil seeds.*—The important oil seeds of the State are Cocoanut Sesamum and Groundnut. Among them cocoanut occupies by far the most important place.

Cocoanut is grown in all parts of the State; so much so the State itself is called Kerala which means the land of cocoanut palm.

During 1959-60 cocoanut was grown in 1217091 acres. It increased to 1237398 acres during 1960-61. The crop occupies more than 20 percent of the total cropped area of the State. The district-wise details of the area under cocoanut for the two years are given on the next page.

District	1959-60			1960-61		
	Area (acres)	Percentage to total of State	Percentage to total cropped area	Area (acres)	Percentage to total of State	Percentage to total cropped area
Trivandrum ..	139245	11.4	28.9	136001	11.0	28.0
Quilon ..	149153	12.3	23.9	159907	12.9	25.1
Alleppey ..	183429	15.2	33.6	187373	15.2	34.2
Kottayam ..	145829	11.9	19.2	145282	11.7	18.9
Ernakulam ..	106289	8.7	19.9	109150	8.3	19.9
Trichur ..	86385	7.1	18.3	88898	7.2	18.3
Palghat ..	45003	3.7	5.9	45684	3.7	5.8
Kozhikode ..	242273	19.9	27.7	245472	19.8	27.9
Cannanore ..	119485	9.8	18.8	119631	9.7	18.1
State ..	1217091	100.0	21.4	1237398	100.0	21.3

The intensity of cultivation of cocoanuts was highest in Alleppey District where more than 34 percent of the total cropped area was under the crop. It was followed by Trivandrum, Kozhikode and Quilon Districts. On the other districts excepting Palghat, the area under the crop was about 18 percent of the total cropped area. In Palghat District cocoanut is grown only in about 6 percent of the total cropped area. The most important cocoanut growing district in the State during the years under review was Kozhikode which accounted for nearly 20 percent of the total area under the crop in the State, followed by Alleppey which contained about 15 percent of the area under the crop. Palghat came last with only about 3.7 percent of the cropped area.

Another important oil seed of the State is sesamum (or gingelly). The acreage under sesamum during 1959-60 was 43514 acres. During 1960-61 it was only 29867 acres. Quilon and Alleppey Districts accounted for about three forth of the total area under the crop in the State. The decrease in the area under sesamum during 1960-61 was due to unfavourable weather conditions.

Groundnut is still another important oil seed grown in the State. Its cultivation is mainly confined to Palghat District. The area under groundnut during 1959-60 and 1960-61 was 31950 acres and 39610 acres respectively.

Cotton.—The chief cotton growing district in the State is Palghat. During 1959-60 cotton was cultivated in 20710 acres and during 1960-61 it was raised in 24270 acres. During the two years under review there was an intensive compaign for the cultivation of sea island cotton in all districts carried out by the Development blocks.

Plantation crops.—The important plantation crops cultivated in the State are Rubber, Tea and Coffee.

(1) *Rubber.*—Kerala holds a monopoly for Rubber cultivation in India. The cultivation of the crop is done on a very large scale in almost all parts of the State. It was cultivated in an area of 270626 acres during 1959-60. It increased to 303605 acres during 1960-61 which shows an increase of about 12 percent. Rubber accounted for nearly 5 percent of the total cropped area of the State. The following table gives the district-wise area under the crop during the latter year.

District	*Area under the crop*	*Percentage to the total of the State*
Trivandrum	9179	3.0
Quilon	53211	17.5
Alleppey	4844	1.6
Kottayam	106588	35.1
Ernakulam	39262	12.9
Trichur	15469	5.1
Palghat	12514	4.1
Kozhikode	36885	12.1
Cannanore	25653	8.6
State	303605	100.0

The important rubber cultivating district in the State is Kottayam which contains more than 35 percent of the total area under the crop in the State. It is followed by Quilon, Ernakulam and Kozhikode Districts in that order. Alleppey District with only 1.6% of the area under rubber comes last in this regard.

(2) *Tea.*—Tea is another important plantation crop grown in the High Ranges of the State. The area under cultivation of tea during the years was 92988 acres. Kottayam District, which contains an area of 66456 acres under Tea, forming 67 per cent of the total area under the crop in the state, led others in the extent of cultivation of the crop.

(3) *Coffee.*—Coffee was grown in an area of 41509 acres during the years under review. Among the District, Kozhikode occupies the formost place in the extent of cultivation of Coffee, with an area of 28449 acres. This is nearly 60 per cent of the total of the State.

8. Weather and Crop Conditions—1959-60

Rainfall Conditions

Trivandrum.—The rainfall was more than sufficient during the Kharif and Rabi seasons. During July and August 1959, heavy rainfall occurred resulting in floods. By the middle of August the monsoon subsided and dry weather prevailed facilitating the harvest of Kharif paddy.

Quilon.—Rainfall was excessive in many parts of the district. There were heavy showers during July 1959 resulting in flood causing great damages to Kharif paddy and tapioca cultivated in low land regions.

The rainfall conditions during the Rabi season was satisfactory though untimely rain occurred during May 1960 affecting standing crop like paddy and tapioca in some parts of Pathanamthitta Taluk in the District.

Alleppey.—The year started with heavy rainfall and floods causing heavy damages to Kharif crops in almost all parts of the district. The damage was heaviest in Thiruvalla, Chengannur and Mavelikara Taluks.

During Rabi season rains were rare and dry weather prevailed during December 1959 and January 1960. The crops in many areas had to face draught during this period. The rains, showered during February, 1960 was beneficial to banana, sugarcane etc.

Kottayam.—Heavy rains were experienced in Kottayam, Vaikom and Changanacherry Taluks during the Kharif season. Due to these excessive rains the sugarcane crop could not be raised in some parts of these Taluks. Rainfall was sufficient during the Rabi season.

Ernakulam.—Excepting in Thodupuzha and Muvattupuzha Taluks the rainfall condition during the Kharif season was satisfactory. In these two taluks, heavey rains were experienced causing damages to Kharif paddy.

Rainfall during the Rabi season was quite sufficient in all taluks except Parur where the rainfall was a bit inadequate.

Trichur.—During July 1959 heavy rains were experienced in Trichur and Chowghat Taluks. The rainfall was moderate in all other taluks during the Kharif and Rabi seasons.

Palghat.—The Kharif and Rabi crops received moderate rains in all taluks except Chittur where rains were inadequate during the Rabi season.

Kozhikode.—Rains were normal and sufficient during the Kharif and Rabi seasons.

Cannanore:—Rainfall condition was satisfactory for both the seasons except during July 1959 when heavy rains were experienced resulting in slight damages to crops.

The table appended gives the average monthly rainfall in each district in Kerala during the year 1959-60.

II Condition of crops

Trivandrum:—The condition of crop was generally good during both the seasons. Damage due to flood was not considerable in any taluks of the district. In some parts of the district the crops were affected by pest attacks. The average yield of Kharif paddy was slightly greater than that of the previous year. For other crops the yield was normal.

Quilon.—Due to the heavy rains and flood, occurred during the beginning of the year, considerable damages occurred to crops like paddy and tapioca during the Kharif season, in Pathananmthitta and Kunnathur Taluks of the district. The untimely rains affected crops like tapioca, pepper and cocoanuts in Quilon and Karunagappally Taluks.

The condition of crops during the Rabi season was normal in all taluks except Pathanamthitta where the untimely rains, occurred during May, 1960 affected the standing crops like paddy and tapioca.

Alleppey:—The condition, of paddy, tapioca and sugarcane crops during Kharif season was not satisfactory as the crops were considerably affected by the heavy rain and flood. These rains also affected the yield of perenial crops like cocoanut and arecanut.

The climatic conditions were satisfactory to the Rabi crops though the sesamum crop in Karthigappally Taluk was affected by the untimely rains; the condition of other crops was normal during both the seasons.

Kottayam:—In general, condition of the crops was satisfactory during both the seasons. But the excessive rains and flood caused slight damages to the paddy crop in Vaikom Taluk and the unexpected rains caused damages to sugarcane in Meenachil and Kottayam Taluks.

In Devicolam and Udumbanchola Taluks the cardamom crop was slightly attacked by stem bour. The condition of other crops was normal.

Ernakulam:—The condition of Kharif crops was satisfactory in all taluks excepting Thodupuzha, Alwaye and Muvattupuzha. In these three taluks Kharif paddy was affected by the heavy rain and consequent floods.

The average yield of puncha crop of paddy was slightly lower due to adverse weather conditions.

Trichur:—The condition of Kharif and Rabi crops was satisfactory and the yield normal in all taluks in the district.

Palghat:—The Kharif and Rabi crops were experienced good weather and the condition of the crops was satisfactory in all taluks except Chittur. In Chittur Taluk there was a slight reduction in the yield of groundnut due to the scarcity of rainfall during the Rabi season.

Kozhikode:—The Kharif crops generally good throughout the district, though the paddy crop was affected by the excessive rains at the early stage. Besides, the yield of arecanut was also affected throughout the district by excessive rains.

Cannanore:—The Kharif paddy was affected by the excessive rains during July 1959 resulting in a slight reduction in the yield. Other crops grown in the district did not experience any adverse conditions.

1960-61.

A. Rainfall Conditions.

Trivandrum:—The south-west monsoon started towards the middle of May in all taluks in the district. There were occasional showers during April 1960 also. Rainfall was considerably heavier in Nedumangad and Chirayinkil Taluks of the district.

Quilon:—Due to heavy rain and flood during the beginning of the year under report, paddy and other crops cultivated in the low areas of the district were adversely affected. The low lying regions of the district were under water for a long time.

The rainfall condition duriug the Rabi season was satisfactory crops like ginger, pepper, and banana were affected by drought experienced during October to March of the year under report.

Alleppey:—Rains were excessive during the Kharif season in all taluks of the district. During the Rabi season the rains were timely and adequate. The rains showered in April 1961 were highly beneficial to crops like tapioca and yam.

Kottayam:—The rainfall condition during Kharif and Rabi seasons was satisfactory in almost all taluks, though reports show that there were slight damages to paddy crop in Devicolam, Vaikom, Kottayam and Changanacherry Taluks.

Ernakulam:—The rainfall was quite sufficient and timely during both the seasons.

Trichur:—The rainfall condition was satisfactory during the period from August 1960 to May 1961 in all taluks in the district. Heavy rains occurred during July 1960 and June 1961 which caused slight damages to the crops.

Palghat:—The rain fall was satisfactory during the first eleven months of the year while the untimely heavy rains occurred in June 1961 were detrimental to the standing crops. But no serious losses were reported.

Kozhikode.—Both the Kharif and Rabi crops received sufficient rains in all taluks except Quilandy where the rains were excessive during the Rabi season.

Cannanore:—Rains were timely and adequate during the year except in July 1960 when there was heavy rains in some parts of the district. Due to this some slight damages were reported to the paddy crop in the low lying areas of the district.

B. Condition of Crops.

Trivandrum:—The Kharif crops were slightly affected by the excessive rains in all taluks. The yield of paddy was however, better when compared to that of the previous year the condition of other crops were satisfactory during the year.

Quilon:—Due to the excessive rains during the Kharif season, the crops were affected adversely. The harvesting operations were also delayed and it resulted in loss to cultivators. The drought experienced during October 1960 to March 1961 affected the cash crops like ginger, pepper and banana.

Alleppey:—The conditions of Kharif and Rabi crops were satisfactory during the year under review. Though rains were excessive in almost all parts of the district no loss was reported to crops.

Kottayam:—Slight damages were reported to Kharif paddy during the year. No other crop was reported to have been affected during the Kharif and Rabi seasons.

Ernakulam:—The condition of Kharif and Rabi crops was satisfactory. No loss to any of the crops has been reported.

Trichur:—The Kharif crops were fair though there were excessive rains during the beginning of the year. The condition of Rabi crops was satisfactory.

Palghat:—The Kharif and Rabi crops were satisfactory during the year and no loss to crops is reported.

Kozhikode:—Some slight damages were reported to the Kharif crops in Quilandy and Badagara Taluks of the District. The condition of Kharif crops in all other taluks as well as that of Rabi crops was satisfactory.

Cannanore:—The Kharif and Rabi crops experienced fair weather during the year. Slight damages were reported for Kharif paddy in some parts of the District.

9. Production of important crops.

The production of all important crops in the State from 1954-55 to 1960-61 is given in table D of the summary tables. The district-wise production during the two years under report is given in table 4.1 (detailed tables).

Rice:—The total production of rice during 1959-60 was about 1022000 tons. It increased to about 1051000 tons during 1960-61. The average yield of dry paddy per acre in each district during the two years is given below.

District	Average yield 1959-60.	lbs./acre 1960-61.	Percentage variation.
Trivandrum ..	2093	2078	— 1.0
Quilon ..	1993	2036	+ 1.9
Alleppey ..	1785	2059	+15.3
Kottayam ..	2029	2176	+ 7.2
Ernakulam ..	1831	1863	+ 1.7
Trichur ..	1625	1676	+ 3.1
Palghat ..	2167	2163	— 0.2
Kozhikode ..	1543	1466	— 5.0
Cannanore ..	1505	1435	— 4.7
State ..	1832	1861	+ 1.6

The average yield of paddy is estimated from crop-cutting surveys. The quantity of rice produced from 1000 lbs. of paddy is found to be nearly 657 lbs.

The estimate of production of other forecast crops namely Jowar, Ragi, Pulses, Sugarcane, Pepper, Ginger, Chillies, Groundnut, Sesamum, Cotton and Tobacco have been compiled from forecast reports. In the case of the remaining crops conventional estimates have been used to arrive at production.

The yield data on coconut and arecanut are available in the Department from the Crop-cutting Surveys also conducted on the same as part of the scheme for the survey on coconuts and arecanuts in the State. Yield data on a few other crops like Banana, Cashewnut, etc. are also being now collected based on objective methods and the results will be used to work out production which will be incorporated in subsequent issues.

10. Farm Prices.

The farm prices of certain agricultural commodities are given in Table F (summary tables) and table 5.1 (of the detailed tables). The farm price of Paddy, Cashewnut, Cocoanut, Arecanut and Plantain showed an upward trend during 1960-61 when compared to that of the

previous year, while the price of Tapioca, Ginger and Pepper decreased during 1960-61. The price of Banana did not vary appreciably during the two years.

The value of production of the crops is also given in Table F of the summary tables.

11. Agricultural Wages.

Table 6.1 (detailed tables) gives the agricultural wages in each district during the two years under review.

12. Live Stock

In the economy of a State which is predominently agricultural, livestock plays an important part. Statistics of livestock are collected by conducting quinquinnial livestock censuses. The last census was conducted in 1961. The figures of the 1961 census together with those of the previous census conducted in 1956, for the State are given in the summary tables (Table G). The district-wise figures of the 1961 census are given in the detailed tables (table 7.1).

Under livestock the following were enumerated:—

1. Cattle
2. Buffaloes
3. Sheep
4. Goats
5. Horses and Ponnies
6. Donkeys
7. Pigs

PART II

SUMMARY TABLES

Table No.	*Details of the Table.*
A.	Classification of Area.
B1.	Source of Irrigation.
B2.	Area under crops irrigated.
C.	Area under crops
D.	Production of important crops.
E.	Average yeild per acre of certain crops.
F.	Average price and value of production.
G.	Livestock, poultry and agricultural implements.
H.	Sowing, harvesting and Peak Marketing of important crops.

TABLE A.

CLASSIFICATION OF AREA

(Area in acres)

Head of Classification.	1954-55		1955-56		1956-57	
	Area	*Percentage of total area*	*Area*	*Percentage*	*Area*	*Percentage*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Total area by village papers	9411892	100.00	9411892	100.00	9411892	100.00
Forests	2397052	25.47	2489891	26.46	2515670	26.73
Land put to non-Agricultural uses.	508300	5.40	506494	5.38	503064	5.35
Barren and Uncultivable land	507904	5.40	504903	5.36	497306	5.28
Permanent pastures and Grazing land	118711	1.26	116337	1.24	120589	1.28
Land under Miscellaneous tree crops	473622	5.03	486824	5.17	508372	5.40
Cultivable waste	430639	4.57	374617	3.98	437198	4.65
Current fallow	99734	1.06	139744	1.48	154734	1.64
Other fallows	635080	3.88	268168	2.85	207144	2.20
Net area sown	4510850	47.93	4524914	48.08	4467815	47.47
Total cropped area	5362697	56.98	5382717	57.19	5382408	57.19
Area sown more than once	851847	9.05	857803	9.11	914593	9.72

TABLE A—(*contd.*)

(Area in acres)

Head of Classification	1957-58		1958-59		1959-60		1960–61	
	Area	*%age*	*Area*	*%age*	*Area*	*%age*	*Area*	*%age*
(1)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Total area by village papers	9534611	100.00	9534611	100.00	9534611	100.00	9534611	100.00
Forests	2515388	26.38	2589105	27.15	2609654	27.37	2609784	27.37
Land put to non-Agricultural uses	496914	5.21	492328	5.16	500884	5.25	505688	5.30
Barren and Uncultivable land	941621	5.16	415180	4.35	386056	4.05	373978	3.92
Permanent pastures and Grazing land	119150	1.25	110762	1.16	112961	1.18	111770	1.17
Land under Miscellaneous tree crops	540847	5.67	493595	5.18	504128	5.29	504991	5.30
Cultivable waste	471233	4.94	467968	4.91	369212	3.87	354371	3.72
Current fallow	148630	1.56	178142	1.87	172393	1.81	165868	1.74
Other fallows	205769	2.16	200617	2.10	172947	1.81	154545	1.62
Net area sown	4545050	47.67	4586914	48.11	4706376	49.37	4753616	49.86
Total cropped area	5463188	57.30	5536713	58.07	5698206	59.76	5804143	60.87
Area sown more than once	918129	9.63	949799	9.96	991830	10.40	1050527	11.02

TABLE B.1

SOURCES OF WATER SUPPLY AND NET AREA IRRIGATED THEREFROM 1954-55 to 1958-59

(Area in acres))

Sources (1)		1954-55 (2)	1955-56 (3)	1956-57 (4)	1957-58 (5)	1958-59 (6)
Net area irrigated by	Government Canals	322361	327671	342955	358885	376848
	Private Canals	68113	68113	70849	71823	73043
	Tanks	75968	77400	77477	78751	79032
	Wells	26341	28499	28696	29571	34882
	Other Sources	312959	309380	309481	311578	315023
	Total	805742	811063	829458	850608	878828
Percentage of net area irrigated to net area sown.		17.9	17.9	18.6	18.7	19.2
Area irrigated more than once in an year		286370	319967	321269	368917	389656
Total irrigated area		1092112	1131030	1150727	1219525	1268484
Percentage of total irrigated area to total cropped area		20.4	21.0	21.4	22.3	22.9

TABLE B-2

AREA UNDER CROPS IRRIGATED (AREA IN ACRES)

Name of crop	1954-55		1955-56		1956-57		1957-58		1958-59	
	Area	*% age*	*Area*	*% age*	*Area*	*% age*	*Area*	*% age*	*Area*	*% age*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Rice	720380	66.0	766092	67.7	781398	67.9	828558	67.9	873871	68.9
Jowar	534	..	534	..	534	..	3302	0.3	3302	0.3
Ragi	46	..	46	..	100	..	2024	0.2	2024	0.1
Other cereals and millets	165	..	35	..	702	0.1	7146	0.6	7146	0.6
Pulses	21496	2.0	21466	1.9	21558	1.9	35459	2.9	39105	3.1
Sugar cane	10464	0.9	9423	0.8	10302	0.9	11703	1.0	11703	0.9
Other food crops	211543	19.4	205950	18.2	203625	17.7	202841	16.6	202841	16.0
Total food crops	964628	88.3	1003546	88.7	1018219	88.5	1091033	89.5	1139992	89.9
Total non-food crops	127484	11.7	127484	11.3	132508	11.5	128492	10.5	128492	10.1
All crops	1092112	100.00	1131030	100.0	1150727	100.0	1219525	100.0	1268484	100.0

C. AREA UNDER CROPS IN KERALA

(Area in acres)

Name of crop	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Paddy	1885920	1876400	1883000	1894701	1898804	1900142	1924727
Jowar	3590	4601	4847	4019	3783	3640	3640
Ragi	11392	11618	12300	12418	12539	13265	13770
Other Cereals and millets	14614	13400	14107	14600	14262	14521	14445
Total Cereals and millets	1915516	1906019	1914254	1925738	1929388	1931568	1956582
Tur	31116	30790	28058	21620	21793	21657	22072
Other Pulses	79207	79793	90691	89824	87883	87254	86951
Total Pulses	110323	110583	118749	111444	109676	108911	109023
Sugarcane	17867	18022	19150	21570	21759	22010	22600
Palmyrash	13127	13483	10789	12406	12380	12349	12479
Total Sugar crops	30994	31505	29939	33976	34139	34359	35079
Pepper	205750	213715	214900	224658	223916	226080	246500
Chillies (dry)	11165	9999	7412	8340	8202	8321	8200
Ginger	24700	25838	25038	22907	22034	27326	29662
Turmeric	11296	11247	11560	15093	10597	11450	11529
Cardamom	69361	69361	69572	69658	73756	70542	70689
Arecanut	144517	143563	121409	122827	123833	131361	134069
Other condiments & spices	39539	39539	45002	43033	42521	44100	46035
Total condiments and spices	506328	513262	494893	506516	504859	519180	546684

AREA UNDER CROPS IN KERALA

(Area in acres)

Name of crop (1)	1954-55 (2)	1955-56 (3)	1956-57 (4)	1957-58 (5)	1958-59 (6)	1959-60 (7)	1960-61 (8)
Mangoes	128462	141113	138973	140645	145357	146857	147224
Citrus fruits	5713	5713	5713	1593	4603	4603	4841
Banana	106501	116305	24212	25641	24641	24883	24746
Other Plantains	..	..	75257	74604	73695	85547	85028
Other fresh fruits	111428	125876	125871	138077	136690	147423	143701
Cashewnut	81035	92576	92395	108815	114189	129525	134222
Other dried fruits	26951	14951	6991	965	60	60	60
Total fruits	460087	496534	469412	490340	499235	538898	539822
Tapioca	557673	548900	515233	528708	553207	594922	598490
Sweet Potatoes	31908	20760	18576	20905	22100	20837	19846
Other vegetables	98311	98311	98897	57064	56453	62610	61811
Total vegetables	687892	667971	632706	606677	631760	678369	680147
Total food crops	3711140	3725874	3659953	3674691	3709057	3811285	3867337
Groundnut	34041	32610	33000	33800	35468	31950	39610
Castor	1744	1738	1511	223	384	557	528
Sesamum	52406	49729	48910	50300	48560	43514	29867
Cocoanut	1098440	1106895	1136284	1144766	1175425	1217091	1237398
Other oil seeds	27690	27690	29101	21825	21813	24130	24071
Total Oil seeds	1214321	1218662	1248806	1250914	1281653	1317242	1331374

AREA UNDER CROPS IN KERALA

(area in Acres)

Name of crop (1)	1954-55 (2)	1955-56 (3)	1956-57 (4)	1957-58 (5)	1958-59 (6)	1959-60 (7)	1960-61 (8)
Cotton	21935	21663	22450	21490	19650	20710	24270
Other fibres	..	167	344	159	90	90	90
Total fibres	21935	21830	22794	21649	19740	20800	24360
Tobacco	1383	1412	1230	1293	1320	1540	1835
Tea	97624	98553	98556	98640	92988	92988	92988
Coffee	36388	35324	36902	41123	40060	41509	41509
Rubber	160146	159896	203282	246793	270626	270626	303605
Other drugs, Plantation crops	5041	248	4071	3899	3475	3475	3475
Total drugs, Plantation crops etc.	300582	295433	344041	391748	408469	410138	443412
Fodder	1495	1495	504	1702	1128	1122	1151
Green manure crops	3578	3578	1265	2589	2425	3525	3530
Lemongrass	N.A.	34805	41000	52520	53130	64103	63535
Other non-food crops	109646	81040	64046	67375	61111	69991	69444
Total Non-food crops	1651557	1656843	1722455	1788497	1827656	1886921	1936806
Total area under all crops	5362697	5382717	5382408	5463188	5536713	5698206	5804143
Area sown more than once	851847	857803	914593	918129	949799	991830	1050527
Net area sown	4510850	4524914	4467815	4545059	4586914	4706376	4753616

D. PRODUCTION OF IMPORTANT CROPS IN KERALA

Name of crop	*Unit*	*Production*						
		1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Paddy	000 Tons	1226	1324	1329	1386	1430	1555	1599
Jowar	Tons	595	820	866	730	654	630	630
Ragi	"	6043	6115	6700	7107	7225	7710	7880
Pulses	"	17238	17279	18362	17509	17383	17235	17270
Sugarcane (Gur)	"	36000	33447	35250	34840	35021	35780	37490
Pepper (Black)	"	25955	27236	26800	26020	25030	24880	26600
Ginger (Dry)	"	10409	10936	10700	9198	7662	9820	11086
Turmeric (Dry)	"	5043	5021	4129	5391	3785	4087	4115
Cardamom	"	1208	1239	1242	1242	1316	1260	1263
Arecanut	Million Nuts	5781	6460	6617	6754	6795	7208	7737
Chillies (Dry)	Tons	N.A.	N.A.	1986	2235	2198	2226	2190
Banana	"	285508	311790	62692	66392	63803	64427	64072
Other Plantain	"	...	...	228460	226476	224161	260194	258615
Cashew nut	"	50509	57860	57747	68010	71368	80388	83297
Tapioca (Raw)	'00 Tons	15685	15690	14260	14871	15273	16466	16565
Groundnut	"	18576	14240	15650	10980	15648	12700	13580
Sesamum	"	6779	6358	6348	6419	5720	4291	2545
Coconut	Million Nuts	3076	9099	3182	3199	3248	3365	3220
Tea	Tons	29635	29917	34175	34175	39737	39737	39737
Coffee	"	5884	6155	6610	7101	6961	7292	7292
Rubber	"	20874	20841	21319	21496	22158	22158	22682
Cotton	Bales	9726	9560	10000	9630	7860	8250	10610
Tobacco	Tons	N.A.	689	689	689	700	850	990
Lemongrass oil	"	N.A.	1000	1000	1050	1321	1655	16766

TABLE—E

AVERAGE YIELD PER ACRE OF CERTAIN CROPS

Name of crop (1)	*Unit* (2)	1956-57 (3)	1957-58 (4)	1958-59 (5)	1959-60 (6)	1960-61 (7)
Paddy	lb.	1581	1639	1687	1832	1861
Rice	,,	1039	1077	1108	1204	1223
Jowar	,,	400	407	387	387	387
Ragi	,,	1220	1282	1290	1302	1282
Sugarcane (Gur)	,,	4123	3618	3605	3641	3716
Pepper (Black)	,,	280	260	250	246	242
Ginger (Dry)	,,	957	899	779	805	837
Turmeric (Dry)	,,	800	800	800	800	800
Cardamom	,,	40	40	40	40	40
Arecanut	Nuts	54500	54988	54872	54872	57710
Banana	lb.	5800	5800	5800	5800	5800
Other Plantains	,,	6800	6800	6813	6813	6813
Cashewnuts	,,	1400	1400	1400	1400	1390
Tapioca	,,	6200	6300	6200	6200	6200
Groundnut	,,	1062	728	988	890	770
Sesamum	,,	291	286	264	221	191
Cocoanuts	Nuts	2800	2800	2765	2765	2602
Cotton	lb.	175	176	157	156	171
Tea	,,	777	776	957	957	957
Coffee	,,	387	387	389	394	394
Rubber	,,	195	195	183	183	167

TABLE—F

AVERAGE PRICE AND TOTAL VALUE OF PRODUCTION

Name of Crop	*Unit*	*Average Price (Rs.)*		*Value of Production (Rs. in lakhs)*	
		1959-60	1960-61	1959-60	1960-61
Paddy	Ton	406.13	411.58	6315	6581
Pepper (Black)	"	4602.49	4110.89	1145	1093
Ginger (Dry)	"	1444.34	1193.90	142	132
Cocoanut (with husk)	Thousand nuts	192.61	215.05	6481	6925
Arecanut	"	24.23	27.34	1746	2115
Tapioca	Ton	87.11	78.67	1434	1303
Banana	100	6.72	6.73	242	241
Other plantains	"	1.17	1.26	682	730
Cashewnut	Ton	623.36	785.59	501	654

TABLE —G.

NUMBER OF LIVESTOCK POULTRY AND AGRICULTURAL MACHINERY

Sl. No. (1)	(2)	(3)	1956 *Census* (4)	1961 *Census* (5)
1	Cattle	Males over 3 years—		
		(a) Breeding	11026	29319
		(b) Working	553155	515241
		(c) Others	37718	21471
		Total	601899	566031
		Female over 3 years—		
		(a) Breeding:		
		(1) In Milk	396375	428194
		(2) Dry	454283	502935
		(3) Not calved	120996	207277
		(b) Working	7083	11274
		(c) Others	19223	12306
		Total	997950	1161986
		Young stock	910527	1025148
		Total cattle	2510376	2753165
2	Baffaloes	Males over 3 years—		
		(a) Breeding	4046	10627
		(b) Working	247313	267871
		(c) Others	5895	6614
		Total	257254	285112
		Female over 3 years—		
		(a) Breeding:		
		(1) In Milk	61336	59542
		(2) Dry	52128	49341
		(3) Not calved	11624	16846
		(b) Working	10109	7266
		(c) Others	3288	2118
		Total	138485	135113
		Young stock	91914	64864
		Total Baffaloes	487653	485089

TABLE—G—(*Contd.*)

Sl. No.			1956 *Census*	1961 *Census*
(1)	(2)	(3)	(4)	(5)
3	Sheep	(a) One year and above	39143	18949
		(b) Below one year	58677	5292
		Total	97820	24241
4	Goats	(a) One year and above	363135	869414
		(b) Below one year	592435	442848
		Total	955570	1312262
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
12	Carts		27283	21037
13	Sugarcane crushers		230	175
		(a) Power	1155	1071
		(b) Bullocks	2504	3372
14	Oil engines		723	2565
15	Electric pumps		187	276
16	Tractors		1858	2058
17	Ghains	(a) More than five seers	2366	2164
		(b) Less than five seers		

TABLE H

SOWING, HARVESTING AND PEAK MARKETING SEASONS OF PRINCIPAL CROPS IN THE KERALA STATE.

Crop		*Sowing*	*Harvesting*	*Peak marketing*
(1)	(2)	(3)	(4)	(5)
1. Rice	Autumn	April—June	August—October	September—October
	Winter	August—October	December—February	January—February
	Summer	November—December	February—March	March—April
		January—March	April—May	May—June
2. Ragi	1st crop	April—July	August—October	September—October
	2nd crop	September—October	December—January	December—January
3. Small Millets (Samai)	Kharif	May	August	August
	Rabi	September	December	December
4. Red gram	1st crop	May—June	August—September	September—October
	2nd crop	August—October	November—January	January
	3rd crop	February	April	April
5. Horse gram	1st crop	August—October	November—January	January—February
	2nd crop	February—March	April—May	May—June
6. Green gram		May—June	August—September	September—October
7. Black gram	1st crop	May—June	August—October	October
	2nd crop	October—November	January—February	February
8. Other pulses	..	May—June	August—September	August—September
		October	December—January	January
9. Sugarcane	1st crop	November—February	October—December	November—December
	2nd crop	January—March	December—February	February
10. Ginger (raw)	..	April—May	November—January	December—January
11. Pepper	..	..	November—January	December—January
12. Sesamum	1st crop	February—March	June—July	July—August
	2nd crop	August—October	December—January	December—January
	3rd crop	December—January	March—April	April—May
13. Cotton	..	August—September	February—March	February—March
14. Sweet Potatoes	1st crop	June—July	September—October	September—October
	2nd crop	September—October	December—January	December—January
	3rd crop	November—December	February—March	February—March
15. Turmeric	..	April—May	December—January	January—February
16. Lemon grass	..	..	June—September	September
17. Tapioca	1st crop	October—November	August—September	August—Septemper
	2nd crop	March—May	November—January	December—January
	3rd crop	July—September	May—July	June—July

PART III

DETAILED TABLES

TABLE—1.1

NORMAL RAINFALL (MILE METRES)

	District	July	August	September	October	November	December	January	February	March	April	May	June
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Trivandrum	217.1	129.4	123.9	286.0	205.1	59.3	21.9	20.7	40.9	120.8	200.7	347.7
2	Quilon	450.4	301.3	224.0	333.7	238.1	58.2	24.9	36.6	79.3	168.5	260.7	538.7
3	Alleppey	536.4	334.5	243.2	337.2	211.0	58.1	29.6	27.1	54.3	130.5	284.4	648.4
4	Kottayam	654.8	426.3	260.1	334.0	210.8	65.8	29.4	26.1	60.3	137.8	233.0	604.6
5	Ernakulam	789.0	513.7	286.9	380.7	210.0	45.0	13.5	22.1	52.3	146.2	298.9	760.5
6	Trichur	759.2	463.6	247.9	325.5	158.5	23.5	7.4	9.0	27.3	82.8	266.8	789.4
7	Palghat*	..	..	..	..	..	..	..	..	..	..	..	..
8	Kozhikode	980.1	519.1	225.5	281.3	143.7	27.7	7.4	6.4	7.3	87.3	220.1	878.5
9	Cannanore*	..	..	..	..	..	..	..	..	..	..	..	..

* Normals are not available for these districts.

TABLE 1.2

AVERAGE MONTHLY RAINFALL (IN MILLIMETRES) IN KERALA DURING THE YEARS 1959-60 AND 1960-61

Years	*District*	*July*	*August*	*September*	*October*	*November*	*December*	*Janvary*	*February*	*March*	*Apoil*	*May*	*June*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1959-60	Trivandrum	570.6	141.4	206.7	239.4	172.3	67.1	29.7	17.6	48.2	188.1	600.1	251.0
	Quilon	640.7	194.3	275.7	191.1	148.5	24.3	18.7	25.1	61.2	234.6	661.0	273.0
	Alleppey	768.5	351.7	305.8	197.9	97.1	65.4	7.7	21.6	61.6	244.7	745.9	381.0
	Kottayam	796.6	335.5	430.2	261.7	195.5	38.3	16.5	20.6	66.2	273.2	520.5	340.2
	Ernakulam	1019.4	411.1	459.9	250.8	146.6	30.4	11.9	3.8	89.7	240.5	737.7	552.0
	Trichur	1127.6	526.4	443.8	263.0	156.5	6.4	0.2	..	11.7	152.8	705.1	636.6
	Palghat	1097.3	331.9	329.5	198.3	170.7	38.9	..	..	34.7	191.4	362.8	404.3
	Kozhikode	1710.8	477.5	450.8	137.8	125.8	30.8	4.3	..	47.7	176.9	464.7	661.1
	Cannanore	1723.1	614.5	456.5	94.1	91.1	18.7	0.6	..	9.3	134.9	508.1	723.8
	STATE	875.0	359.3	371.7	205.9	148.1	37.0	11.1	11.4	52.2	213.9	580.2	443.6
1960-61	Trivandrum	389.1	201.5	362.3	207.8	480.2	38.8	67.7	48.7	9.4	75.0	446.4	912.1
	Quilon	495.8	283.4	411.1	251.4	571.4	35.1	48.5	58.9	15.6	143.2	368.7	864.2
	Alleppey	676.7	373.8	474.2	198.4	422.0	27.7	28.2	110.2	13.6	126.7	456.5	1089.4
	Kottayam	694.0	401.7	403.6	268.3	361.9	37.5	15.0	57.6	15.6	132.7	418.1	855.2
	Ernakulam	760.4	377.5	535.9	311.9	311.5	31.2	2.6	21.1	5.5	134.7	656.9	829.9
	Trichur	865.6	287.9	415.9	296.1	218.9	2.7	..	28.0	24.8	95.3	644.0	1007.2
	Palghat	643.8	230.9	252.8	332.5	323.5	22.8	1.6	8.8	12.2	65.6	421.1	856.4
	Kozhikode	919.7	300.2	321.6	197.3	342.4	5.8	..	..	..	50.9	1041.4	1479.5
	Cannanore	947.9	439.3	303.0	124.1	283.6	1.8	0.4	2.0	3.4	58.2	558.3	1091.3
	STATE	693.4	329.0	389.1	244.2	377.6	25.3	19.1	35.7	10.3	106.8	533.5	969.0

TABLE 2.1

CLASSIFICATION OF AREA IN EACH DISTRICT IN KERALA (AREA IN ACRES)

Year	District	Total area according to		Classifications									Area sown more than once	Total cropped area
		Professional survey	Village papers	Forests	Land put to non-agricultural uses	Barren & other cultivable land	permenent pastures & other grazing lands	Land under Mis-tree crops included in net area sown	Cultivable waste	Other fallow land	Current fallows	Net area sown		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1959-60	Trivandrum	533983	110242	27335	5614	2462	1880	6556	8610	6704	364581	116490	481071	
	Quilon	1159049	526629	28873	42247	4162	13903	16263	5721	9167	512084	114197	626281	
	Alleppey	461568	1268	25276	7059	1180	11513	7746	2716	14666	390144	156180	546324	
	Kottayam	1547434	614543	32045	70236	12676	43554	63497	5273	17400	688210	73284	761494	
	Ernakulam	784381	136551	40744	28519	11082	24188	24012	5825	21765	491695	43893	545588	
	Trichur	727137	328483	30668	14476	3463	3705	22678	1747	13135	308782	164894	473676	
	Palghat	1261285	246275	151460	71383	15483	70077	59222	29620	21773	595992	170131	766123	
	Kozhikode	1634814	479614	64883	47687	8372	104517	75546	27605	38114	788576	84867	873443	
	Cannanore	1424960	166150	99600	98835	54081	230791	93692	85830	29669	566312	67894	634206	
	STATE	9534611	2609654	500884	386056	112961	504128	369212	172947	172393	4706376	991830	5698206	
1960-61	Trivandrum	533983	110241	27919	5460	2462	1880	6556	8119	6704	364642	121180	485822	
	Quilon	1159049	526629	29601	41094	4162	14526	14562	5721	9167	513587	121742	635329	
	Alleppey	461568	1268	25276	6866	1180	12315	7041	2375	14666	390581	157743	548324	
	Kottayam	1547434	614690	32996	68319	12676	43537	58721	4706	17400	694389	73322	767711	
	Ernakulam	784381	136551	41779	27740	10082	23966	22012	4609	17075	500567	48461	549028	
	Trichur	727137	328483	31554	12495	3463	3920	22080	2386	11426	311330	175068	486398	
	Palghat	1261285	246275	181460	70488	15483	74539	56184	26391	22976	597569	189559	787128	
	Kozhikode	1634814	479514	64914	47564	8358	104517	74403	25841	38116	791587	91790	883377	
	Cannanore	1424960	160133	100189	94032	53904	225791	92812	74397	28338	589364	71662	661026	
	STATE	9534661	2609784	505688	373978	111770	504991	354371	154545	165868	4753616	1050527	5804143	

TABLE 2.2

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

Year	District	Area according to village Papers	Classifications					
			Forests	Land put to non-agricultural uses.	Barren and uncultivable lands	Permanent pastures and other grazing lands	Land under Miscellaneous tree crops and groves	Cultivable waste
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1959-60	Trivandrum	100.00	20.65	5.12	1.05	0.46	0.35	1.23
	Quilon	100.00	45.44	2.49	3.64	0.36	1.20	1.40
	Alleppey	100.00	0.27	5.48	1.53	0.26	2.49	1.68
	Kottayam	100.00	39.72	2.07	4.54	0.82	2.81	4.10
	Ernakulam	100.00	17.41	5.20	3.64	1.41	3.08	3.06
	Trichur	100.00	45.16	4.22	1.99	0.48	0.51	3.12
	Palghat	100.00	19.53	12.01	5.70	1.23	5.56	4.70
	Kozhikode	100.00	29.33	3.97	2.92	0.51	6.39	4.62
	Cannanore	100.00	11.66	6.99	6.94	3.80	16.20	6.58
	STATE	100.00	27.37	5.25	4.05	1.18	5.29	3.87
1960-61	Trivandrum	100.00	20.65	5.23	1.02	0.46	0.35	1.23
	Quilon	100.00	45.44	2.55	3.55	0.36	1.25	1.26
	Alleppey	100.00	0.27	5.48	1.49	0.26	2.67	1.53
	Kottayam	100.00	39.72	2.13	4.41	0.82	2.81	3.79
	Ernakulam	100.00	17.41	5.33	3.54	1.29	3.06	2.81
	Trichur	100.00	45.16	4.34	1.72	0.48	0.54	3.04
	Palghat	100.00	19.53	12.01	5.58	1.23	5.91	4.45
	Kozhikode	100.00	29.33	3.97	2.91	0.51	6.39	4.55
	Cannanore	100.00	11.66	7.03	6.60	3.78	15.85	6.51
	STATE	100.00	27.37	5.30	3.92	1.17	5.30	3.72

TABLE 2.2—(*contd.*)

Year	District	Classification		Total cropped area				Area sown more than once
		Other fallow lands	Current fallow	Net area sown	Food crops	non-food crops	Total	
		(10)	(11)	(12)	(13)	(14)	(15)	(16)
1959-60	Trivandrum	1.61	1.26	68.27	60.99	29.10	90.09	21.82
	Quilon	0.49	0.79	44.19	34.35	19.68	54.03	9.84
	Alleppey	0.59	3.18	84.52	73.05	45.31	118.36	33.82
	Kottayam	0.34	1.12	44.48	26.47	22.74	49.21	4.73
	Ernakulam	0.74	2.77	62.69	43.46	24.82	68.28	5.59
	Trichur	0.24	1.81	42.47	49.41	15.73	65.14	22.67
	Palghat	2.35	1.73	47.25	50.29	10.50	60.74	13.49
	Kozhikode	1.69	2.33	48.24	32.39	21.04	53.43	5.19
	Cannanore	6.02	2.08	39.74	33.49	11.02	44.51	4.76
	STATE	1.81	1.81	49.37	39.97	19.79	59.76	10.40
1960-61	Trivandrum	1.52	1.26	68.28	61.83	29.15	90.98	22.69
	Quilon	0.49	0.79	44.31	34.36	20.46	54.82	10.50
	Alleppey	0.51	3.18	84.61	74.16	44.64	118.80	34.18
	Kottayam	0.30	1.12	44.90	26.54	23.07	49.61	4.74
	Ernakulam	0.30	1.46	63.82	44.04	25.96	70.00	6.18
	Trichur	0.33	1.57	42.82	50.73	16.16	66.87	24.08
	Palghat	2.09	1.82	47.38	51.33	11.08	62.41	15.03
	Kozhikode	1.58	2.33	48.43	32.69	21.34	54.03	5.60
	Cannanore	5.22	1.99	41.36	34.36	12.03	46.39	5.03
	STATE	1.62	1.74	49.86	40.56	20.31	60.87	11.02

TABLE 3.1.

AREA UNDER CROPS IN EACH DISTRICT OF KERALA (AREA IN ACRES)

Year	District	Cereals						Foodcrops	
		Rice				Jowar			
		Autumn	Winter	Summar	Total	Kharif	Rabi	Total	Ragi
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1959-60	Trivandrum	44475	45784	..	90259	..	..	..	3
	Quilon	47066	65590	..	112656	..	..	..	894
	Alleppey	56348	37619	98938	192905	..	..	..	95
	Kottayam	13189	42968	40714	96871	..	..	..	51
	Ernakulam	91042	88845	13329	188216	..	..	..	957
	Trichur	84135	142566	20406	247107	..	..	..	3056
	Palghat	286766	168339	7000	462105	..	..	3440	2123
	Kozhikode	176320	96766	3000	276086	..	..	110	3804
	Cannanore	165306	65917	2714	233937	..	..	90	2282
	STATE	964647	749394	186101	1900142	..	..	3640	13265
1960-61	Trivandrum	46673	45784	..	92457	..	..	..	55
	Quilon	49159	64370	491	114020	..	..	..	977
	Alleppey	59562	37526	99083	196171	..	..	..	103
	Kottayam	13645	44251	40857	98753	..	..	..	115
	Ernakulam	92918	86209	13349	192476	..	..	..	997
	Trichur	87367	144509	20653	252529	..	..	..	3056
	Palghat	297461	170238	7000	474699	..	..	3440	2283
	Kozhikode	164278	99874	3000	267152	..	..	110	3880
	Cannanore	167797	65917	2756	236470	..	..	90	2304
	STATE	978860	758678	187189	1924727	..	..	3640	13770

TABLE 3 . 1—(*contd.*)

		Cereals		Pulses					
		Other cereals	*Total cereals & millets*	*Tur*	*Other Pulses Kharif*	*Rabi*	*Total*	*Total food Total pulses*	*grains*
		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1959-60	Trivandrum	..	90262	40	3038	3500	6538	6578	96840
	Quilon	..	113550	501	10309	6059	16368	16869	130419
	Alleppey	..	193000	29	1274	1421	2695	2724	195724
	Kottayam	..	96922	766	568	464	1032	1798	98720
	Ernakulam	976	190149	190	1861	3047	4908	5098	195247
	Trichur	254	250417	2364	6168	13617	19785	22149	272566
	Palghat	10113	477781	12130	8478	11873	20351	32481	510262
	Kozhikode	3051	283051	5216	645	7778	8423	13639	296690
	Cannanore	127	236436	421	4060	3094	7154	7575	244011
	STATE	14521	1931568	21657	36401	50853	87254	108911	2040479
1960-61	Trivandrum	..	92512	40	3038	3500	6538	6578	99090
	Quilon	..	114997	501	10246	6077	16323	16824	131821
	Alleppey	..	196274	29	1268	1413	2681	2710	198984
	Kottayam	..	98868	766	565	456	1021	1787	100655
	Ernakulam	895	194368	190	1822	3018	4840	5030	199398
	Trichur	254	255839	2364	6168	13617	19785	22149	277988
	Palghat	10090	490512	12118	8474	11873	20347	32465	522977
	Kozhikode	3079	274221	5643	638	7612	8250	13893	288114
	Cannanore	127	238991	421	4060	3106	7166	7587	246578
	STATE	14445	1956582	22072	36279	50672	86951	109023	2065605

TABLE 3.1—(*Contd.*)

District	Food Crops—(Contd.)										
	Sugar			Condiments and Spices							
	Sugarcane (18)	Others (19)	Total (20)	Pepper (21)	Chillies (22)	Ginger (23)	Turmeric (24)	Cardamom (25)	Betelnuts (26)	Others (27)	Total (28)
					1959-60						
Trivandrum	..	1052	1052	19930	..	213	77	..	8377	6956	35553
Quilon	2040	27	2067	12930	..	338	67	..	8823	8235	30393
Alleppey	12920	45	12965	4230	..	132	10	..	5923	2799	13094
Kottayam	3600	670	4270	32270	..	9320	2990	60104	11450	4962	21096
Ernakulam	1130	391	1521	16390	..	2905	916	2574	10461	4346	37592
Trichur	..	530	530	1350	..	170	20	..	9536	5922	26998
Palghat	1390	7648	9038	8450	1969	4908	3797	4284	12029	8241	43678
Kozhikode	70	1963	2033	32370	1971	8380	2973	2600	43970	2415	94679
Cannanore	860	23	883	98160	4381	960	600	980	20792	224	126097
STATE	22010	12349	34359	226080	8321	27326	11450	70542	131361	44100	519180
					1960-61						
Trivandrum	..	979	979	20845	..	250	132	..	8871	6733	36831
Quilon	2100	47	2147	13045	..	379	40	..	9486	8748	31698
Alleppey	13500	36	13536	4330	..	150	41	..	5665	2862	13048
Kottayam	3570	539	4109	34790	..	8997	3250	60104	11190	5086	123417
Ernakulam	1110	367	1477	16875	..	2883	595	2574	10064	4741	37732
Trichur	..	497	497	1710	..	199	102	..	10233	6524	18768
Palghat	1390	8068	9458	8455	2360	4773	3810	4422	13015	8289	45124
Kozhikode	70	1925	1995	39695	1670	10875	3015	2633	44553	2515	104956
Cannanore	860	21	881	106755	4170	1156	544	956	20992	537	135110
STATE	22600	12479	35079	246500	8200	29662	11529	70689	134069	46035	546684

TABLE 3.1—(*Contd.*)

District	Food Crops (contd)						
	Fruits						
	Mangoes	*Citrus fruits*	*Bananas*	*Others*	*Total*	*Cashewnuts (dried)*	*Others (dried)*
	(29)	(30)	(31)	(32)	(33)	(34)	(35)
			1959-60				
Trivandrum	14372	..	5420	16072	35864	12092	..
Quilon	27732	..	7972	22255	57964	18892	..
Alleppey	12370	..	7833	14247	34450	7220	..
Kottayam	21261	..	7219	30274	58754	5291	..
Ernakulam	17493	..	5580	18653	41726	16885	..
Trichur	11638	..	7315	6829	25782	20791	..
Palghat	10405	..	20940	7272	38617	8077	..
Kozhikode	18566	..	22560	16134	57260	24032	30
Cannanore	13015	4603	25591	15687	58896	16245	30
STATE	146857	4603	110430	147423	409313	129525	60
			1960-61				
Trivandrum	14368	..	5338	15540	35246	11333	..
Quilon	27887	..	7972	22369	58228	22024	..
Alleppey	12525	..	7611	13577	33713	7294	..
Kottayam	20568	..	7219	28273	36060	5563	..
Ernakulam	16628	..	5580	17129	39337	16081	..
Trichur	12135	..	6944	7727	26806	21949	..
Palghat	11187	..	21167	7154	39508	8031	..
Kozhikode	18918	238	22301	16443	37900	25702	30
Cannanore	13008	4603	25642	15489	58742	16245	30
STATE	147224	4841	109774	143701	405540	134222	60

TABLE—3.1—(*Contd.*)

District	Food Crops (contd.)						
	Vegetables						
	Total (dried)	Total fruits (dried)	Tapioca	Sweet Potatoes	Onions	Others	Total Vegetables
	(36)	(37)	(38)	(39)	(40)	(41)	(42)
			1959-60				
Trivandrum	12092	47956	138451	738	70	5024	144273
Quilon	18892	76856	149295	57	839	8174	158365
Alleppey	7220	41670	67122	151	29	6407	73709
Kottayam	5291	64045	110058	176	11	11285	121530
Ernakulam	16885	58611	41600	1819	244	4267	47930
Trichur	20791	46573	18590	143	..	3870	22603
Palghat	8077	46694	8083	2950	98	12926	24057
Kozhikode	24062	81322	45333	3927	4	5635	54899
Cannanore	16275	75171	16390	10886	..	3727	31003
STATE	129585	538898	594922	20837	1295	61315	678369
			1960-61				
Trivandrum	11333	46579	140645	866	70	5080	146661
Quilon	22024	80252	143441	112	839	7906	152298
Alleppey	7294	41007	69724	43	..	5954	75721
Kottayam	5563	61623	109295	302	77	11285	120959
Ernakulam	16081	55418	43816	1819	244	5574	51453
Trichur	21949	48755	18860	210	..	3804	22874
Palghat	8031	47539	8280	2237	98	11744	22359
Kozhikode	25732	83632	46933	3321	..	5506	55760
Cannanore	16275	75017	17496	10936	..	3630	32062
STATE	134282	539822	598490	19846	1328	60483	680147

TABLE—3.1—(*Contd.*)

Dittrict	*Total fruits and Vegetables* (43)	*Total Food crops* (44)	*Oilseeds*				
			Groundnut (45)	*Castor* (46)	*Sesamum* (47)	*Rape & Mustard* (48)	*Linseed* (49)
		1959-60					
Trivandrum	192229	325674	..	14	13	..	..
Quilon	235221	398100	..	11	13298	..	..
Alleppey	115379	337162	..	23	18494	..	..
Kottayam	185575	409661	..	164	27	..	..
Ernakulam	106541	340901	..	3	2134	..	..
Trichur	69176	359270	..	14	2874	..	..
Palghat	70751	633729	31950	272	3948	51	..
Kozhikode	136221	529623	..	—	1659	..	..
Cannanore	106174	477165	..	56	1067	20	86
STATE	1217267	3811285	31950	557	43514	71	86
		1960-61					
Trivandrum	193240	330140	1580	28	99	..	..
Quilon	232550	398216	..	22	7433	..	..
Alleppey	116728	342296	..	23	10120	..	..
Kottayam	182582	410763	..	164	350	..	..
Ernakulam	106871	345478	..	3	2448	..	..
Trichur	71629	368882	..	14	2874	..	..
Palghat	69898	647457	38030	208	3948	..	..
Kozhikode	139392	534457	..	..	1533	..	..
Cannanore	107079	489648	..	66	1062	20	36
STATE	1219969	3867337	39610	528	29867	20	36

TABLE—3.1—(*Contd.*)

Year	District	Fibres							
		Cocoanut (50)	*Others* (51)	*Total* (52)	*Cotton* (53)	*Jute* (54)	*Sunon hemp* (55)	*Others* (56)	*Total* (57)
1959-60	Trivandrum	139245	1438	140710	..	..	..	..	..
	Quilon	149153	420	162882	..	..	..	..	..
	Alleppey	183429	527	202473	..	..	..	..	..
	Kottayam	145829	13578	159598	100	..	..	..	100
	Ernakulam	106289	4779	113205	..	..	..	..	..
	Trichur	86385	2178	91451	..	..	..	..	..
	Palghat	45003	881	82105	20250	..	..	..	20250
	Kozhikode	242273	..	243932	360	..	..	..	360
	Cannanore	119485	172	120886	..	..	..	90	90
	STATE	1217091	23973	1317242	20710	..	..	90	20800
1960-61	Trivandrum	136001	1398	139106	280	..	..	..	280
	Quilon	159907	450	167812	740	..	..	..	740
	Alleppey	187373	530	198046	290	..	..	..	290
	Kottayam	145282	12836	158632	1120	..	..	..	1120
	Ernakulam	109150	5364	116965	770	..	..	..	770
	Trichur	88898	2255	94041	1150	..	..	..	1150
	Palghat	45684	914	88784	18980	..	..	..	18980
	Kozhikode	245472	..	247005	600	..	..	..	600
	Cannanore	119631	164	120983	410	..	..	90	500
	STATE	1237398	23915	1331374	24270	..	..	90	24360

TABLE 3.1 (*Contd.*)

Year	District	Drugs, narcotics and Plantation crops					
		Tobacco	*Tea*	*Coffee*	*Rubber*	*Others*	*Total*
		(58)	(59)	(60)	(61)	(62)	(63)
1959-60	Trivandrum	..	2791	..	7466	..	10257
	Quilon	..	7472	586	49087	..	57145
	Alleppey	..	..	..	3738	..	3738
	Kottayam	..	66456	4228	100469	..	171153
	Ernakulam	..	333	170	34367	..	34870
	Trichur	..	991	..	15576	..	16567
	Palghat	..	1459	4814	10104	919	17296
	Kozhikode	90	9801	28449	35600	2556	76496
	Cannanore	1450	3685	3262	14219	..	22616
	STATE	1540	92988	41509	270626	3475	410138
1960-61	Trivandrum	..	2791	..	9179	..	11970
	Quilon	..	7472	586	53211	..	61269
	Alleppey	..	..	..	4844	..	4844
	Kottayam	..	66456	4228	106588	..	177272
	Ernakulam	..	333	170	39262	..	39765
	Trichur	..	991	..	15469	..	16460
	Palghat	..	1459	4814	12514	919	19706
	Kozhikode	..	9801	28449	36885	2556	77691
	Cannanore	1835	3685	3262	25653	..	34435
	STATE	1835	92988	41509	303605	3475	443412

TABLE 3.1—(contd.)

Year	District	(1)	(2)	Fodder crops	Green manure crops	Other non-food crops	Total non-food crops	Total area sown under all crops	Area sown more than once	Net area sown
				(64)	(65)	(66)	(67)	(68)	(69)	(70)
1959-60	Trivandrum			37	..	4393	155397	481071	116490	364581
	Quilon	100·00	99·09	146	..	8008	228181	626281	114197	512084
	Alleppey			70	..	2881	209162	596324	156180	390144
	Kottayam	100·00	92·54	288	..	20694	351833	761494	73284	688210
	Ernakulam	100·00	89·91	543	..	46069	194687	535588	43893	491695
	Trichur	100·00	95·52	14	..	6374	114406	473676	164894	308782
	Palghat	100·00	92·75	5	..	12738	132394	766123	170131	595992
	Kozhikode	100·00	93·60	19	1093	21920	343820	873443	84867	788576
	Cannanore	100·00	91·25	..	2432	11017	157041	634206	67894	566312
	STATE	100·00	94·23	122	3525	134094	1886921	5698206	991830	4706376
1960-61	Trivandrum			39	..	4287	155682	485822	121180	364642
	Quilon			146	..	7146	237113	635329	121742	513587
	Alleppey			70	..	2778	206028	548324	157743	390581
	Kottayam			301	1623	19623	356948	767711	73322	694389
	Ernakulam			543	..	45577	203550	549028	48461	500567
	Trichur			14	..	5851	117516	486398	175068	311330
	Palghat			5	..	12196	139671	787128	189559	597569
	Kozhikode			19	1093	22512	348920	883377	91790	791587
	Cannanore			14	2437	13009	171378	661026	71662	589364
	STATE			1151	3530	132979	1936806	5804143	1050527	4753616

TABLE 3.2

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

Year	District	Total Cropped area	Total food crops	Total non-food crops	Net area sown	Area sown more than once	Food Crops				
							Cereals and Millets			Total pulses	Total food grains
							Rice	Others	Total		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1959-60	Trivandrum	100.00	67.70	32.30	75.80	24.22	18.76	..	18.76	1.37	20.13
	Quilon	100.00	63.57	36.43	81.77	18.23	17.99	0.14	18.13	2.70	20.83
	Alleppey	100.00	61.72	38.28	71.43	28.57	35.32	0.02	35.34	0.50	35.84
	Kottayam	100.00	53.80	46.20	90.40	9.60	12.72	0.02	12.74	0.23	12.97
	Ernakulam	100.00	63.66	36.34	91.82	8.18	35.15	0.36	35.52	0.95	36.47
	Trichur	100.00	75.84	24.16	65.19	34.81	52.18	0.70	52.88	4.67	57.55
	Palghat	100.00	82.73	17.27	77.81	22.19	60.35	2.04	62.38	4.24	66.62
	Kozhikode	100.00	60.64	39.36	90.28	9.72	31.61	0.80	32.42	1.56	33.98
	Cannanore	100.00	75.24	24.76	89.30	10.70	36.89	0.39	37.28	1.20	38.48
	STATE	100.00	66.89	33.11	82.60	17.40	33.35	0.55	33.90	1.92	35.82
1960-61	Trivandrum	100.00	67.97	32.03	75.06	24.94	19.03	0.01	19.05	1.35	20.40
	Quilon	100.00	62.68	37.32	80.04	19.16	17.95	0.15	18.10	2.64	20.74
	Alleppey	100.00	62.42	37.58	71.24	28.76	35.78	0.02	35.80	0.49	36.29
	Kottayam	100.00	53.52	46.48	90.46	9.54	12.86	0.02	12.88	0.23	13.11
	Ernakulam	100.00	62.93	37.07	91.19	8.81	35.07	0.34	35.41	0.92	36.33
	Trichur	100.00	75.84	24.16	64.01	35.99	51.92	0.68	52.60	4.55	57.15
	Palghat	100.00	82.27	17.73	75.93	24.07	60.33	2.01	62.34	4.13	66.47
	Kozhikode	100.00	60.53	39.47	89.62	10.38	30.27	0.80	31.07	1.57	32.64
	Cannanore	100.00	74.07	25.93	89.16	10.84	35.78	0.38	36.16	1.15	37.31
	STATE	100.00	66.63	33.37	81.90	18.10	33.16	0.55	33.71	1.88	35.59

TABLE 3.2—(*contd.*)

Year	District	Food Crops											
		Condiments and Spices						Fresh fruits				Dry fruit (cashew nuts)	Total fruits.
		Sugar	Pepper	Cardamom	Betel-nuts	Others	Total	Mangoes	Bananas	Others	Total		
		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
1959-60	Trivandrum	0.22	4.14	..	1.75	1.50	7.39	2.99	1.12	3.34	7.45	2.52	9.97
	Quilon	0.33	2.06	..	1.41	1.38	4.85	4.43	1.27	3.55	9.25	3.02	12.27
	Alleppey	2.37	0.77	..	1.08	0.55	2.40	2.26	1.43	2.61	6.30	1.32	7.62
	Kottayam	0.56	4.24	7.89	1.50	2.28	15.91	2.79	0.95	3.98	7.72	0.68	8.40
	Ernakulam	0.28	3.06	0.48	1.91	1.57	7.02	3.27	1.04	3.48	7.79	3.15	10.94
	Trichur	0.11	0.28	..	2.01	1.29	3.58	2.45	1.54	1.47	5.46	4.38	9.84
	Palghat	1.18	1.10	0.55	1.57	2.48	5.70	1.35	2.73	0.96	5.04	1.05	6.09
	Kozhikode	0.23	3.71	0.29	5.03	1.81	10.84	2.12	2.58	1.85	6.55	2.75	9.30
	Cannanore	0.14	15.47	0.15	3.27	0.99	19.88	2.05	4.03	3.20	9.28	2.57	11.85
	STATE	0.60	3.96	1.24	2.30	1.61	9.11	2.58	1.94	2.66	7.18	2.27	9.45
1960-61	Trivandrum	0.20	4.29	..	1.82	1.47	7.58	2.96	1.10	3.19	7.25	2.33	9.58
	Quilon	0.34	2.05	..	1.49	1.35	4.99	4.39	1.25	3.53	9.17	3.47	12.64
	Alleppey	2.46	0.79	..	1.03	0.56	2.38	2.28	1.39	2.47	6.14	1.33	7.47
	Kottayam	0.54	4.53	7.83	1.46	2.26	16.08	2.68	0.94	3.68	7.30	0.72	8.02
	Ernakulam	0.27	3.07	0.47	1.83	1.50	6.87	3.03	1.07	3.07	7.17	2.93	10.10
	Trichur	0.10	0.35	..	2.58	0.83	3.86	2.49	1.43	1.59	5.51	4.51	10.02
	Palghat	1.20	1.07	0.56	1.65	2.45	5.73	1.42	2.69	0.91	5.02	1.02	6.04
	Kozhikode	0.23	4.50	0.30	5.05	2.03	11.88	2.14	2.53	1.89	6.56	2.91	9.47
	Cannanore	0.13	16.15	0.14	3.18	0.96	20.43	1.97	3.88	3.04	8.89	2.46	11.35
	STATE	0.60	4.25	1.21	2.31	1.65	9.42	2.54	1.89	2.56	6.99	2.31	9.30

TABLE 3.2—(contd.)

Year	District	Food Crops					Non-food Crops				
			Vegetables				Oil Seeds				
		Tapioca	Others	Total	Total fruits & vegetables	Total food crops	sesamum	Cocoanut	Groundnut	Others	Total
		(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
1959-60	Trivandrum	28.78	1.21	29.99	39.96	67.70	..	28.94	..	0.30	29.24
	Quilon	23.84	1.45	25.29	37.56	63.57	2.12	23.82	..	0.07	26.01
	Alleppey	12.29	1.20	13.49	21.11	61.72	3.38	33.58	..	0.10	37.06
	Kottayam	14.45	1.51	15.96	24.36	53.80	..	19.16	..	1.81	20.97
	Ernakulam	7.77	1.18	8.95	19.89	63.66	0.39	19.85	..	0.90	21.14
	Trichur	3.91	0.85	4.76	14.60	75.84	0.60	18.25	..	0.47	19.32
	Palghat	1.05	2.09	3.14	9.23	82.73	0.51	5.87	4.17	0.17	10.72
	Kozhikode	5.19	1.10	6.29	15.58	60.64	0.19	27.74	..	..	27.93
	Cannanore	2.58	2.31	4.89	16.74	75.24	0.17	18.84	..	0.05	19.06
	STATE	10.45	1.46	11.91	21.36	66.89	0.76	21.36	0.56	0.43	23.11
1960-61	Trivandrum	28.96	1.25	30.21	39.79	67.97	0.02	28.00	0.38	0.24	28.64
	Quilon	22.58	1.39	23.97	36.60	62.68	1.16	25.16	..	0.09	26.41
	Alleppey	12.72	1.09	13.81	21.29	62.42	1.84	34.18	..	0.11	36.13
	Kottayam	14.24	1.53	15.77	23.79	53.52	0.05	18.91	..	1.69	20.65
	Ernakulam	7.98	1.38	9.36	19.46	62.93	0.45	19.86	..	0.98	21.29
	Trichur	3.89	0.82	4.71	14.73	75.84	0.59	18.28	..	0.46	19.33
	Palghat	1.05	1.78	2.83	8.87	82.27	0.50	5.80	4.83	0.14	11.27
	Kozhikode	5.30	1.01	6.31	15.78	60.53	0.17	27.85	..	..	27.92
	Cannanore	2.65	2.20	4.85	16.20	74.07	0.16	18.10	..	0.04	18.30
	STATE	10.31	1.41	11.72	21.02	66.63	0.51	21.32	0.68	0.44	22.95

TABLE 3.2 (*Contd.*)

Year	District	Non Food Crops								Other non-food crops	Total non-food crops
		Fibres			Drugs	Narcotics	and Plantation Crops				
		Cotton	Others	Total	Tea	Coffee	Rubber	Others	Total		
		(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1959-60	Trivandrum	..	..	..	0.58	..	1.55	..	2.13	0.93	32.30
	Quilon	..	..	..	1.19	0.09	7.84	..	9.12	1.30	36.43
	Alleppey	..	..	..	..	..	0.68	..	0.68	0.54	38.28
	Kottayam	..	..	..	8.73	0.55	13.20	..	22.48	2.75	46.20
	Ernakulam	..	..	..	0.06	0.03	6.41	..	6.50	8.70	36.34
	Trichur	..	..	..	0.21	..	3.29	..	3.50	1.34	24.16
	Palghat	2.64	..	2.64	0.19	0.62	1.32	0.12	2.25	1.66	17.27
	Kozhikode	0.04	..	0.04	1.12	3.25	4.07	0.31	8.75	2.64	39.36
	Cannanore	..	0.01	0.01	0.58	0.51	2.24	0.24	3.57	2-12	24.76
	STATE	0.37	..	0.37	1.63	0.72	4.75	0.10	7.20	2.43	33.11
1960-61	Trivandrum	0.06	..	0.06	0.57	..	1.88	..	2.45	0.88	32.03
	Quilon	0.11	..	0.11	1.18	0.09	8.33	..	9.65	1.15	37.32
	Alleppey	0.05	..	0.05	..	..	0.88	..	0.88	0.52	37.58
	Kottayam	0.15	..	0.15	3.65	0.55	13.83	..	23.08	2.60	46.48
	Ernakulam	0.14	..	0.14	0.06	0.03	7.18	..	7.27	8.37	37.07
	Trichur	0.24	..	0.24	0.20	..	3.18	..	3.38	1.21	24.16
	Palghat	2.41	..	2.41	0.18	0.61	1.59	0.12	2.50	1.55	17.73
	Kozhikode	0.07	..	0.07	1.11	3.22	4.18	0.29	8.80	2.68	39.47
	Cannanore	0.06	0.01	0.07	0.58	0.49	3.89	0.26	5.22	2.34	25.93
	STATE	0.41	..	0.41	1.60	0.72	5.23	0.09	7.64	2.37	33.37

TABLE 4.1

TOTAL OUT-TURN OF IMPORTANT COMMODITIES IN EACH DISTRICT.

Year	District	Rice (tons)	Jowar (tons)	Ragi (tons)	Other cereals and Millets (tons)	Pulses (tons)	Sugarcane (tons)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1959-60	Trivandrum	55575	..	1	..	1004	..
	Quilon	66086	..	351	..	2580	3370
	Alleppey	101090	..	38	..	396	21330
	Kottayam	57681	..	20	..	278	5300
	Ernakulam	101116	..	380	195	782	1740
	Trichur	117818	..	1390	50	3374	..
	Palghat	293959	590	1330	2003	5326	2330
	Kozhikode	125067	20	2620	613	2400	130
	Cannanore	103301	20	1580	24	1170	1580
	STATE	1021593	630	7710	2885	17235	35780
1960-61	Trivandrum	56357	..	20	..	1057	..
	Quilon	68119	..	364	..	2541	3430
	Alleppey	118445	..	38	..	393	22910
	Kottayam	63032	..	43	..	278	5420
	Ernakulam	105146	..	371	175	770	1690
	Trichur	124123	..	1388	50	3374	..
	Palghat	301094	590	1421	1994	5313	2330
	Kozhikode	114861	20	2645	618	2448	130
	Cannanore	99544	20	1590	23	1096	1580
	STATE	1050721	630	7880	2860	17270	37490

TABLE 4.1 *(Contd.)*

Year	*District*	*Pepper (tons)* (9)	*Ginger (dry) (tons)* (10)	*Turmeric (dry) (tons)* (11)	*Cardamom (tons)* (12)	*Arecanuts (Million nuts)* (13)	*Banana (tons)* (14)
1959-60	Trivandrum	3400	75	27	..	460	3708
	Quilon	2240	202	23	..	484	9972
	Alleppey	700	72	4	..	325	5531
	Kottayam	5270	3090	1068	1071	628	4999
	Ernakulam	2730	1220	327	47	574	5520
	Trichur	230	44	7	..	523	6431
	Palghat	680	1720	1356	77	660	9699
	Kozhikode	2520	3060	1061	47	2413	7362
	Cannanore	7110	337	214	18	1141	11205
	STATE	24880	9820	4087	1260	7208	64427
1961-62	Trivandrum	3560	88	47	..	512	3498
	Quilon	2180	223	14	..	547	9972
	Alleppey	720	82	15	..	327	4955
	Kottayam	5420	3122	1161	1071	646	4999
	Ernakulam	2760	1216	212	47	581	5520
	Trichur	290	143	36	..	591	6431
	Palghat	680	1663	1361	78	751	9699
	Kozhikode	3190	4150	1075	47	2571	7664
	Cannanore	7780	399	194	17	1211	11334
	STATE	26600	11086	4115	1263	7737	64072

TABLE 4.1 (*Contd.*)

Year	District	Other Plantations (Tons) (15)	Cashew nuts (Tons) (16)	Ground nut (Tons) (17)	Sesamum (Tons) (1)	Coconut (Million nuts) (19)	Cotton (Bales of 392 lbs. each.) (20)
1959-60	Trivandrum	12130	7508	..	2	385	..
	Quilon	12534	11722	..	1566	412	..
	Alleppey	17327	4480	..	1428	508	..
	Kottayam	16083	3283	..	3	403	10
	Ernakulam	10487	10477	..	242	294	..
	Trichur	14693	12901	..	326	239	..
	Palghat	52296	5012	12700	429	124	8150
	Kozhikode	59969	14930	..	180	670	90
	Cannanore	64675	10080	..	115	330	..
	STATE	260194	80388	12700	4291	3365	8250
1960-61	Trivandrum	12130	7093	680	13	354	150
	Quilon	12534	13668	..	829	416	400
	Alleppey	17327	4527	..	350	488	160
	Kottayam	16083	3452	..	44	378	590
	Ernakulam	10487	9980	..	277	284	410
	Trichur	13565	13622	..	322	231	640
	Palghat	52986	4984	12900	429	119	7530
	Kozhikode	58826	15951	..	168	639	510
	Cannanore	64677	10080	..	113	311	220
	STATE	258615	83297	13580	2545	3220	10610

TABLE 4.1—*(concld.)*

Year	District	Tobacco (tons)	Tea (tons)	Coffee (tons)	Rubber (tons)	Lemongrass oil (Bottles of 22 oz.)	Dry chillies (tons)	Tapioca (tons)
		(21)	(22)	(23)	(24)	(25)	(26)	(27)
1959-1960	Trivandrum	..	1005	..	723	1131	..	383205
	Quilon	..	2207	6	5059	4785	..	413219
	Alleppey	..	..	..	385	..	..	185780
	Kottayam	..	29106	457	7344	138504	..	304618
	Ernakulam	..	69	32	2764	1056992	..	115140
	Trichur	..	673	..	1838	24725	..	51453
	Palghat	..	698	1624	682	30176	..	22373
	Kozhikode	50	4842	4540	2403	702039	..	125473
	Cannanore	800	1137	633	960	750858	..	45364
	STATE	850	39737	7292	22158	2709210	..	1646625
1960-1961	Trivandrum	..	1005	..	564	2146	..	389227
	Quilon	..	2207	6	5392	5423	..	397016
	Alleppey	..	..	..	178	..	..	192982
	Kottayam	..	29106	457	7296	116986	..	302507
	Ernakulam	..	69	32	2548	1021264	..	121274
	Trichur	..	673	..	2358	24725	..	52201
	Palghat	..	698	1624	798	30176	..	22917
	Kozhikode	..	4842	4540	2499	702039	..	129901
	Cannanore	990	1137	633	1049	839799	..	48425
	STATE	990	39737	7292	22682	2742588	..	1656500

TABLE 5.1

AVERAGE FARM (HARVEST) PRICES OF CERTAIN COMMODITIES FOR THE YEAR 1959-60

(Price in Rupees)

Sl. No.	Name of Crop	Unit	1959-60									
			Trivandrum	*Quilon*	*Alleppey*	*Kottayam*	*Ernakulam*	*Trichur*	*Palghat*	*Kozhikode*	*Cannanore*	*State*
1.	Paddy	Maund	15.65	16.26	14.89	14.89	16.00	13.98	13.92	15.80	15.70	14.92
2.	Tapioca	do.	2.99	3.28	3.38	3.14	3.35	3.69	2.54	3.26	3.50	3.20
3	Ginger	do.	..	..	..	53.06	..	..	..	..	..	53.06
4.	Turmeric	do.				N.A.						
5	Sugarcane (cane)	do.				N.A.						
6	Cashewnut	do.	22.56	23.03	19.50	24.12	21.60	23.24	22.00	23.03	25.08	22.90
7.	Pepper	do.	..	131.24	..	184.29	201.25	..	..	185.33	152.01	169.08
8.	Coconut (with husk)	1000	179.68	202.03	208.04	207.45	207.10	199.72	189.24	170.23	185.37	192.61
9.	Arecanut	1000	28.18	32.51	26.25	29.50	22.90	30.41	16.99	20.32	26.59	24.23
10.	Banana	100	6.71	7.36	6.76	7.75	6.29	6.57	6.59	6.56	6.30	6.72
11.	Other Plantains	100	1.24	1.28	1.36	1.38	1.11	1.00	1.34	1.04	1.09	1.17
12.	Tamarind					N.A.						

TABLE 5.1—(*contd.*)

AVERAGE FARM PRICES OF CERTAIN COMMODITIES FOR THE YEAR 1960-61

(Price in Rupees)

Sl. No.	Name of Crop	Unit	1960-61									
			Trivandrum	*Quilon*	*Alleppey*	*Kottayam*	*Ernakulam*	*Trichur*	*Palghat*	*Kozhikode*	*Cannanore*	*State*
1.	Paddy	Maund	17.02	15.53	14.04	15.22	15.07	14.55	14.35	16.41	16.35	15.12
2.	Tapioca	do.	2.24	3.12	2.30	3.49	..	4.35	3.01	3.96	3.01	2.89
3.	Ginger	do.	..	..	..	..	46.30	..	..	42.62	39.40	43.86
4	Turmeric	do.	..				N.A.					
5	Sugarcane (cane)	do.	..	..	..	..	N.A.					
6.	Cashewnut	do.	25.00	25.00	..	..	28.56	..	..	29.75	31.53	28.86
7.	Pepper	do.	126.87	144.50	..	168.95	140.20	..	..	140.72	160.46	151.02
8.	Coconut (with husk)	1000	212.50	225.77	225.95	237.65	240.10	236.96	211.66	182.33	194.11	215.05
9	Arecanut	1000	27.04	28.24	37.87	26.14	29.36	34.61	23.72	24.58	27.52	27.34
10.	Banana	100	9.20	7.05	6.83	6.97	6.32	6.11	6.33	6.63	6.65	6.73
11.	Other Plantains	100	1.49	1.20	1.46	1.44	0.98	1.02	..	..	..	1.26
12.	Tamarind	Maund					N.A.					

TABLE 6.1

THE AVERAGE DAILY WAGES FOR DIFFERENT DISTRICT OF KERALA (WAGES IN RS.)

Districts	*July* 1959	*August* 1959	*Sept.* 1959	*Oct.* 1959	*Nove.* 1959	*Dece.* 1959	*Jan.* 1960	*Feb.* 1960	*March* 1960	*April* 1960	*May.* 1960	*June* 1960	*Average* 1959-60
Carpenter.													
Trivandrum	2.45	2.45	2.45	2.45	2.45	2.45	2.44	2.44	2.44	2.48	2.24	2.24	2.42
Quilon	2.86	2.86	2.99	2.95	2.95	2.95	3.00	3.00	3.00	2.87	2.87	3.03	2.94
Alleppey	2.54	2.54	2.54	2.54	2.40	1.91	2.31	2.31	2.31	2.52	2.52	2.52	2.41
Kottayam	2.52	2.56	2.56	2.56	2.56	2.56	2.04	2.04	2.04	3.04	3.04	3.14	2.56
Ernakulam	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichur	2.30	2.30	2.37	2.74	2.74	2.74	2.74	2.74	2.74	3.24	3.12	3.12	2.74
Palghat	2.44	2.44	2.50	2.46	2.48	2.43	2.39	2.39	2.44	2.48	2.39	2.45	2.44
Kozhikode	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Cannanore	2.95	2.95	2.95	3.02	3.10	3.10	3.18	3.44	3.53	3.25	3.37	3.37	3.38
Mason													
Trivandrum	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.12	3.12	3.12	3.11
Quilon	2.90	2.90	3.31	3.16	3.16	3.11	3.17	3.17	3.17	3.12	3.12	3.08	3.11
Alleppey	2.89	2.89	..	..	..	..	..	..	..	..	..	..	2.89
Kottayam	2.52	3.04	2.56	2.56	3.04	3.04	2.79	2.79	2.79	3.04	3.04	3.14	2.86
Ernakulam	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichur	2.25	2.25	2.50	2.65	2.65	2.65	2.65	2.65	2.65	2.75	3.12	3.12	2.66
Palghat	2.38	2.48	2.43	2.34	2.34	2.29	2.27	2·25	2.39	2.45	2.35	2.45	2.37
Kozhikode	3.17	3.17	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.28	3.24	3.24	3.26
Cannanore	3.25	3.25	3.25	3.31	3.44	3.44	3.41	3.41	3.46	3.56	3.54	3.54	3.41
Field Labour													
Trivandrum	1.45	1.56	1.56	1.56	1.56	1.56	1.46	1.46	1.40	1.68	1.68	1.68	1.55
Quilon	1.68	1.68	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.75	1.80	1.80	1.75
Alleppey	1.75	1.75	1.75	2.00	N.A.	2.00	2.00	2.00	2.00	1.75	1.75	1.75	1.86
Kottayam	1.51	1.64	1.60	1.60	1.64	1.64	1.68	1.68	1.68	1.60	1.60	1.65	1.63
Ernakulam	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichur	1.61	1.56	1.79	1.62	1.62	1.55	1.47	1.57	1.52	1.64	2.00	2.00	1.66
Palghat	1.20	1.43	1.56	1.37	1.28	1.28	1.44	1.34	1.34	1.38	1.38	1.38	1.37
Kozhikode	1.88	1.88	1.92	1.98	1.89	1.89	1.89	1.89	1.89	1.89	1.86	1.86	1.89
Cannanore	2.16	2.16	2.16	2.09	2.07	2.23	2.23	2.36	2.41	2.30	2.13	2.20	2.21

TABLE 6.1—(*contd.*)

THE AVERAGE DAILY WAGES FOR DIFFERENT DISTRICTS OF KERALA (WAGES IN RS.)

Districts	July 1960	August 1960	Sept. 1960	Oct. 1960	Nove. 1960	Dec. 1960	Jan. 1961	Feb. 1961	March 1961	April 1961	May 1961	June 1961	Average 1960-61
Carpenter.													
Trivandrum	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2·22	2.44	2.44	2.44	2.44	2.29
Quilon	3.08	3.08	3.25	3.17	3.17	3.17	3.16	3.16	3.16	3·16	3.16	3.16	3.16
Alleppey	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.70	3.25	3.25	2.66
Kottayam	3.15	3.15	3.15	3.15	3.21	3.21	3.20	3.20	3.20	3.53	3.53	3.53	3.27
Ernakulam	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichur	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.18	3.18	3.43	3.56	3.32
Palghat	2.50	2.50	2.50	2.45	2.40	2.40	2.50	2.50	2.50	2.50	2.50	2.50	2.48
Kozhikode	3.13	3.31	3.31	3.19	3.19	3.13	3.12	3.25	3.37	3.25	3.46	3.46	3.26
Cannanore	3.25	3.50	3.50	3.41	3.50	3.50	3.58	3.66	3.59	3.65	3.65	3.65	3.54
Mason													
Trivandrum	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.55	3.55	3.55	3.55	3.26
Quilon	3.08	3.08	3.25	3.16	3.25	3.25	3.25	3.25	3.25	3.50	3.50	3.50	3.28
Alleppey	..	..	..	..	..	..	..	..	..	..	3.50	3.50	3.50
Kottayam	3.15	3.15	3.15	3.15	3.21	3.21	3.20	3.20	3.20	3.53	3.53	3.53	3.27
Ernakulam	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichur	3.31	2.96	2.96	2.96	2.96	2.96	2.96	2.96	3.08	3.08	3.08	3.08	3.03
Palghat	2.50	2.45	2.50	2.31	2.31	2.31	2.44	2.44	2.44	2.50	2.50	2.50	2.43
Kozhikode	3.11	3.38	3.25	3.38	3.38	3.38	3.23	3.36	3.36	3.14	3.08	3.08	3.26
Cannanore	3.25	3.50	3.50	3.41	3.50	3.50	3.66	3.75	3.59	3.65	3.65	3.65	3.55
Field Labour													
Trivandrum	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.66	1.67	1.66	1.66	1.59
Quilon	1.85	1.85	1.62	1.75	1.80	1.80	1.83	1.83	1.85	1.73	1.73	1.73	1.80
Alleppey	1.75	..	..	..	..	..	1.75	1.88	2.00	1.69	1.69	1.69	1.78
Kottayam	1.65	1.65	1.68	1.68	1.68	1.63	1.77	1.77	1.77	1.75	1.75	1.75	1.71
Ernakulam	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichur	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.92	1.92	1.92	1.92	1.97
Palghat	1.47	1.47	1.48	1.48	1.43	1.43	1.53	1.53	1.43	1.46	1.34	1.34	1.45
Kozhikode	1.96	1.93	1.99	1.99	1.99	1.99	2.06	1.87	1.86	2.21	2.39	2.39	2.05
Cannanore	2.39	2.40	2.40	2.42	2.50	2.55	2.58	2.50	2.36	2.46	2.57	2.57	2.48

TABLE 7.1

NUMBER OF LIVESTOCK POULTRY AND AGRICULTURAL MACHINERY & IMPLEMENTS IN KERALA

(1961 Census)

Districts	Cattle											
	Males over three years				Females over three years (Breeding)						Young stock	Total
	Breeding	working	Others	Total	Breeding			Working	Others	Total		
					In Milk	Dry	Not calved					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
STATE	29319	515241	21471	566031	428194	502935	207277	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	359059
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
Cannanore	6778	70831	3038	80647	58812	73101	27273	1803	2302	163291	139095	383033

TABLE—7.1—(*contd.*)

Districts	Buffaloes							
	Males over three Years			Females over three years				
	Breeding	Working	Others	Total	Breeding			Working
					In milk	Dry	Not calved	
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
STATE	10627	267871	6614	285112	59542	49341	16846	7266
Trivandrum	708	20678	527	21913	7754	6381	2347	446
Quilon	479	13776	575	14830	3826	3717	1390	239
Alleppey	216	7577	164	7957	2323	2082	734	125
Kottayam	402	5171	233	5806	2776	2485	949	219
Ernakulam	379	11329	323	12031	3598	1857	754	372
Trichur	793	37271	597	38661	10555	6128	2301	464
Palghat	4001	122475	2505	128981	12488	9475	2682	2599
Kozhikode	2018	30912	1087	34017	9245	9125	3575	2012
Cannanore	1631	18682	603	20916	6977	8091	2114	790

TABLE 7.1— (*contd.*)

Districts	Sheep						
	Others	Total	Young stock	Total	One year and above	Below one year	Total
	(22)	(23)	(24)	(25)	(26)	(27)	(28)
STATE	2118	135113	64864	485089	18949	5292	24241
Trivandrum	249	17177	5171	44261	1049	494	1543
Quilon	128	9300	4233	28363	4151	1690	5841
Alleppey	96	5360	1695	15012	1528	610	2138
Kottayam	202	6631	2758	15195	1308	474	1782
Ernakulam	204	6785	2216	21032	173	142	315
Trichur	175	19623	9541	67825	226	102	335
Palghat	311	27555	22200	178736	8607	1328	9935
Kozhikode	412	24369	9793	68179	1758	399	2157
Cannanore	341	18313	7257	46486	149	46	195

TABLE 7.1—(*Contd.*)

Districts	Goats			Horses and Ponies			Mules
	One year and above	*Below one year*	*Total*	*3 years and above*	*below three years*	*Total*	
	(29)	(30)	(31)	(32)	(33)	(34)	(35)
STATE	869414	442848	1312262	366	42	408	31
Trivandrum	115819	66641	182460	42	..	42	1
Quilon	99069	50576	149645	4	..	4	..
Alleppey	60869	27499	88368	4	..	4	..
Kottayam	92341	45020	137361	110	12	122	10
Ernakulam	94383	50840	145223	11	..	11	..
Trichur	81997	45036	127033	7	4	11	..
Palghat	120772	53293	174065	131	16	147	4
Kozhikode	147001	73889	220890	32	10	42	16
Cannanore	57163	30054	87217	25	..	25	..

TABLE 7.1—(*Contd.*)

Districts	*Donkeys*	*Camels*	*Pigs*	*Total live stock*	*Poultry*			
					Fowls	*Ducks*	*Others*	*Total*
	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
STATE	377	..	122381	4697954	8708664	387072	..	9095736
Trivandrum	4	..	8048	363173	762577	4756	..	767333
Quilon	..	..	1086	510673	807726	5518	..	813244
Alleppey	..	..	110	404889	882125	202644	..	1084769
Kottayam	159	..	61656	575344	1136275	74040	..	1210315
Ernakulam	..	..	45933	515750	1201635	45157	..	1246792
Trichur	..	..	2498	405383	920975	43147	..	964122
Palghat	202	..	719	696099	901442	4745	..	906187
Kozhikode	11	..	1043	708398	1388764	6186	..	1394950
Cannanore	1	..	1288	518245	707145	879	..	708024

TABLE—(7.1) (*Contd.*)

Districts	*Ploughs*		*Charts*	*Sugarcane crushers*		*Oil Engines*	*Electric pumps*	*Tractors*	*Ghanis*		*Persian wheels*
	Wooden	*Iron*		*Power*	*Bullocks*				*More than 5 seers*	*Less than 5 seers*	
	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
STATE	562281	6141	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

This part deals with the other important items of information like indices relating to agricultural economy notes on certain crops, common pests attacking paddy and their remedies etc.

* 1. Index of Agricultural Production.

The index numbers of agricultural production for the State from 1957-58 to 1960-61 (with 1952-53 as lease) are given in Table I. The indices registered an increase of about 9 points over the period. The rate of increase in 59-60 was more marked than the rest (about 5 points).

The group indices for food grains were also on the increase over the period; the rate of annual increase was uniform (about 3 points) except for a haphazard Jump of about 9 points in 59-60. The indices for the component items of this group registered a similar increase excepting Jowar and Pulses. In this case of the former the index fell in 58-59 by about 9 points and in 59-60 by about 3 points. The indices for pulses also showed a decrease, but less marked, the total decrease over the period being only 1.4 points.

The indices for non-food grains, after registering an upward trend in 58-59 and 59-60 remained almost stationary in 60-61, the total increase over the period being 7 points.

Among the component items under this group, indices of plantation crops, fibres and, miscellaneous tree crops registered an increase of more than 10 points while those for oil seeds did not show any appreciable change over the period.

The indices for plantation and miscellaneous tree crops did not show a uniform growth, the increase during the period being mostly due to a haphazard increase in 58-59 and 59-60 respectively; in the case of fibres the indices decreased in 58-59 over the previous year, but increased in the succeeding two years.

INDEX NUMBERS OF AGRICULTURAL PRODUCTION
(BASE 1956-57 = 100)

	Weights	*1957-58*	*1958-59*	*1959-60*	*1960-61*
All Crops	100.00	102.2	105.5	110.9	111.7
a. Food Grains	29.18	104.2	107.5	116.7	119.8
(i) Cereals	28.90	104.3	107.6	116.9	120.1
Paddy	28.63	104.3	107.6	117.0	120.2
Jower	0.02	84.2	75.4	72.6	72.6
Ragi	0.25	106.1	107.9	115.1	117.6

* For details on the coverage and method of calculation of the index numbers see page 85 of the season and crop report for 57-58 to 58-59.

	Wrights	1957-58	1958-59	1959-60	1960-61
(ii) Pulses	0.28	95.3	94.6	93.7	93.9
b. Non-Food Grains	70.82	101.4	104.7	108.6	108.4
(i) Oil Seeds	30.28	100.0	102.2	105.6	101.0
Cocoanut	28.81	100.5	102.0	105.7	101.2
Groundnut	0.53	70.2	100.0	81.2	86.8
Sesamum	0.47	101.1	90.1	67.6	40.1
Lemongrass oil	0.47	105.0	132.1	166.3	168.5
(ii) Fibres	0.31	96.3	78.6	82.5	106.1
Cotton	0.31	96.3	78.6	82.5	106.1
(iii) Plantation crops	15.24	101.0	11.7	112.3	112.9
Tea	9.38	100.0	116.3	116.3	116.3
Coffee	1.71	107.4	105.3	110.4	110.4
Rubber	4.15	100.8	103.9	103.9	106.4
(iv) Miscellaneous Crops	24.99	103.3	103.7	110.2	114.7
Sugarcane	0.75	98.8	99.3	101.5	106.4
Pepper	2.81	97.1	93.4	92.8	99.2
Cardamom	1.28	100.0	106.0	101.4	101.6
Ginger	0.74	86.0	71.6	91.8	103.6
Turmeric	0.28	130.6	91.6	98.9	99.6
Arecanut	7.68	102.1	102.7	109.0	117.0
Banana	1.22	105.9	101.8	102.8	102.2
Tapioca	8.12	104.3	107.1	115.5	116.2
Cashewnut	1.93	117.8	123.6	139.2	144.2
Tobacco	0.18	104.6	106.3	129.0	150.3

2. Cost of living index numbers.

Monthly cost of living index numbers for selected centres in Kerala for the years 1959-60 and 1960-61 are given in Table II. The following are the centres:—

1. Trivandrum.
2. Quilon.
3. Punalur.
4. Alleppey.
5. Changanachery.
6. Kottayam.
7. Alwaye.
8. Ernakulam.
9. Trichur.
10. Chalakudy.
11. Munnar.
12. Kozhikode.

The base period for the centres in Travancore-Cochin area is August 1939 while for Kozhikode centre the average for July 1935 to June 1936 is taken as the base. The cost of living index numbers show an upward trend during 1960-61 when compared to that of the previous year in all centres except Punalur. In Punalur the index decreased by about 1·9 per cent during 1960-61.

The average index numbers for each year together with the percentage variation during 1960-61 are given below.

TABLE II

Cost of living index number for selected centres.

Sl. No.	*Centre.*	*Average*		*Percentage Increase.*
		1959-60	1960-61	
1.	Trivandrum	447	467	4·5
2.	Quilon	461	468	1·5
3.	Punalur	470	461	(—1·9)
4.	Alleppey	431	450	4·4
5.	Changanacherry	446	460	3·1
6.	Kottayam	436	455	4·4
7.	Alwaye	437	471	7·7
8.	Ernakulam	451	482	6·8
9.	Trichur	464	477	2·8
10.	Chalakudy	475	485	2·1
11.	Munnar	454	475	4·6
12.	Kozhikode	474	484	2·1

TABLE II.

Working class cost of Living Index numbers for Selected Centres—(*contd.*)

Year	Month	Trivandrum	Quilon	Punalur	Alleppey	Changanacherry	Kottayam	Alwaye	Ernakulam	Trichur	Chalakudy	Munnar	Kozhikode
1959	July	441	462	498	440	466	448	513	457	481	492	463	509
	August	432	464	486	431	451	436	503	451	474	486	455	476
	September	442	473	489	432	460	438	511	457	485	494	455	487
	October	450	475	486	431	456	445	503	458	477	485	451	488
	November	456	479	491	434	457	444	501	460	473	482	453	489
	December	454	475	470	426	448	435	480	449	460	471	445	467
1960	January	448	457	451	422	437	428	462	436	444	465	441	452
	February	445	446	448	423	433	429	449	441	446	460	448	455
	March	443	440	450	418	423	426	446	438	447	462	451	452
	April	444	444	451	437	430	428	447	443	452	461	455	461
	May	455	455	462	442	442	435	457	457	456	465	461	476
	June	456	458	460	445	449	445	466	467	467	478	468	479
	July	454	453	460	445	452	448	468	472	468	479	468	483
	August	451	457	455	447	454	449	470	472	468	481	469	477
	September	455	460	451	450	457	451	470	475	469	485	467	481
	October	464	467	465	456	459	458	476	485	479	488	470	480
	November	474	464	471	451	465	461	472	490	483	490	475	481
	December	480	460	471	443	459	455	463	484	486	480	480	474
1961	January	473	462	460	438	459	453	461	479	480	479	482	471
	February	472	469	456	446	457	450	470	480	479	479	478	476
	March	468	471	456	450	456	451	468	483	475	482	476	485
	April	472	477	458	454	464	455	472	484	478	492	477	493
	May	471	483	459	454	465	459	475	484	479	493	477	500
	June	471	493	474	467	474	467	482	491	483	493	481	512

Index Numbers of Parity between Prices Received and paid by Farmers.

The indices measure the economic prosperity of the farmer in relation to the fluctuations in farm prices, cultivation cost and domestic expenditure compared to the conditions in the base period. The index is defined as the ratio of the prices paid by the farmer and the prices received by him expressed as a percentage.

(a) *Index number of prices received by the farmer*: This measures the relative changes in the receipts of the farmer from the important agricultural produces consequent on the fluctuation in farm prices, compared to those of the base year 52-53. The price relates properly weighted and averaged give the index of prices received.

(b) *Index number of prices paid*: This again measures the relative changes incurred by the farmer on farm cultivation cost and domestic expenditure as a result of the variation in wages, cost of implements, manure maintenance of live stock and the prices of consumer goods compared to those of the base year. The Geometric mean of the index of farm cultivation, cost and domestic expenditure is defined as the index of prices paid.

The index of farm cultivation cost is again a properly weighted average of the different component items of cultivation cost. The index of domestic expenditure is taken as the average of the cost of living indices for the different centres with the bone period shifted to 52-53.

The indices of prices received as well as those of farm cultivation cost are given in the following table. The parity indices are also given alongside.

The indices of parity registered an upward trend from July to November of the Agricultural year '60-61 over the corresponding period of the previous Agricultural year. In the remaining months the reverse trend is observed.

Table III

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

Year and month		*Index of prices received*	*Index of farm cultivation cost*	*Index of parity*
	1	2	3	4
1959	July	95	102	86
	August	90	104	81
	September	95	105	85
	October	94	109	82
	November	99	110	87
	December	103	108	92
1960	January	108	109	97
	February	108	112	96
	March	111	111	100
	April	114	111	102
	May	116	111	103
	June	116	111	102
	July	115	112	101
	August	110	112	97
	September	107	113	93
	October	107	113	92
	November	106	114	91
	December	105	115	90
1961	January	103	118	87
	February	103	119	87
	March	105	118	89
	April	114	123	94
	May	112	123	93
	June	112	120	93

4. Quarterly retail prices of certain commodities in each District. The quarterly prices for the following commodities are given in table IV.

1. Coconut (with husk)
2. Coconut Oil
3. Rice
4. Black gram
5. Gingelly oil
6. Tapioca
7. Sugar
8. Chillies
9. Coffee powder
10. Tea
11. Tobacco (Jaffna)
12. Tobacco (Ordinary)

Coconut: The prices in 1960-61 were generally higher than that of 1959-60 throughout the State. In 1959-60 the price varied from Rs. 17.22 to Rs. 24.03 while it varied from Rs. 21.88 to Rs. 29.90 in 1960-61. The price was maximum in Kottayam District during both the years. The average price per hundred nuts during 1959-60 and 1960-61 were Rs. 21.76 and Rs. 24.17 respectively.

Coconut Oil: The rising trend in prices of coconuts is reflected in the case of coconut oil also throughout the State. The minimum price in 1959-60 was Rs. 2.82 per edangazhi in Trichur District during the first quarter, while the price was a maximum of Rs. 3.30 during second quarter of 1959-60 in Quilon District. The minimum price in 1960-61 was Rs. 2.97 (in Kozhikode District in the 4th quarter) and the maximum price was Rs. 3.73 (in Palghat District in the second quarter) per Edangazhi. The average price per Edangazhi during the two years 1959-60 and 1960-61 were Rs. 3.05 and Rs. 3.33 respectively.

Rice: The price of rice per Edangazhi during 1960-61 was Re 0.70 while the price per Edangazhi was Re. 0.69 in 1959-60. However the price levels during the two years had no wide difference throughout the state. The average price of rice in each District during the two years is given below:

District	*Price in*	
	1959-60 (*Rs.*)	1960-61 (*Rs.*)
1. Trivandrum	0.71	0.73
2. Quilon	0.70	0.69
3. Alleppey	0.72	0.71
4. Kottayam	0.69	0.72
5. Ernakulam	0.70	0.69
6. Trichur	0.66	0.68
7. Palghat	0.68	0.68
8. Kozhikode	0.70	0.70
9. Cannanore	0.68	0.71

Trivandrum District recorded the highest price of Re. 0.73 per Edangazhi while in Trichur and Palghat Districts, the average price came to Re. 0.68 during 1960-61.

Blackgram: The price level was more or less steady during the two years. There was no wide difference in the price levels among the districts. During the third quarter in both the years a uniform fall in price was observed throughout the State.

Gingelly Oil: The average price of gingelly oil in Kozhikode was the highest and that of Trichur and Quilon was the lowest during 1960-91. The average price in each District for 1959-60 and 1960-61 is given below:

District	Average Price in 1959-60 (*Rs.*)	1960-61 (*Rs.*)
1. Trivandrum	3.20	4.10
2. Quilon	3.32	3.86
3. Alleppey	3.50	4.11
4. Kottayam	3.50	4.05
5. Ernakulam	3.25	4.05
6. Trichur	3.20	3.86
7. Palghat	3.33	4.24
9. Kozhikode	3.50	4.30
9. Cannanore	3.31	4.04

There was more or less a steady increase in the retail price of gingelly oil from the first quarter of 1959-60 to the fourth quarter of 1960-61 and this trend was observed in all the Districts.

Tapioca.—In Trichur District the price of Tapioca remained constant in all the four quarters of 1959-60 and 1960-61. During the year 1960-61 the price of Tapioca remained stationary in Trivandrum District also, The price of Tapioca in Trivandrum District was the lowest and that of Cannanore was the highest during both the years. The price of Tapioca had a slight fall from 1959-60 to 1960-61 in all the Districts except Cannanore.

Sugars.—In Alleppey, Kottayam, and Palghat Districts the price of sugar remained statisonary in all the four quarters of 1960-61. During the 3rd and 4th quarters of 1959-60 the price of sugar was comparatively lower than that of the first and second quarters, the reason being price control was introduced for the commodity from the 3rd quarter 1959-60 onwards.

Chillies.—During the first and 4th quarters of 1959-60 the price of chillies was lower compared to the other two quarters Palghat District recorded the maximum price (i. e. Rs. 1.73 per pound during the 3rd quarter of 1959-60. But during 1960-61 (1st quarter (maximum price was only Rs. 1.47 and that too in Trichur District. The average price was observed maximum in Trichur District in both the years.

Coffee Powder.—The price of Coffee powder showed slight variations during the period. The price per pound varied from Rs. 2.27 (in Kozhikode District during the 4th quarter) to Rs. 3.26 (in the same quarter in Trivandrum District) during the year 1960-61.

Tea.—The maximum price per pound came up to Rs. 3.30 in 1960-61 while it was Rs. 3.17 in 1959-60 and this was observed in Trivandrum District.

Tobacco (Jaffna).—The prices are not quoted for both the years in respect of Trichnr, Palghat, Kozhikode Districts and for the 3rd and 4th quarters of 1959-60 in respect of Ernakulam District. Among the other Districts the price in Quilon District was invariably less. Generally the price was higher in 1959-60 than in 1960-61. The average price in 1959-60 was Rs. 3.80 per pound while in 1960-61 Rs. 3.36 per pound.

Tobacco (ordinary).—This costs only less than half the price of Jaffna tobacco. Price varies from Rs. 1.50 to Rs. 2.22 per lb. The average price per pound during the two years 1959-60 and 1960-61 were Rs. 1.72 and Rs. 1.78 respectively.

TABLE IV—(*contd.*)

QUARTERLY RETAIL PRICES OF CERTAIN COMMODITIES IN EACH DISTRICT.

Serial Number	Item	Unit.	Quarter of the year	1959-60								
				Trivandrum Rs. nP.	Quilon Rs nP.	Alleppey Rs. nP	Kottayam Rs nP.	Ernakulam Rs. nP.	Trichur Rs. nP.	Palghat Rs. nP.	Kozhikode Rs. nP.	Cannanore Rs. nP.
1	Cocoanut (without husk)	100 Nos.	I	17.22	18.38	21.36	23.05	22.63	19.92	20.92	20.22	21.08
			II	19.73	21.91	23.77	23.74	23.96	20.94	22.60	19.38	21.76
			III	20.95	22.36	23.28	24.03	23.94	22.05	20.88	19.88	23.17
			IV	20.48	23.38	23.30	24.03	23.94	21.83	20.62	19.65	23.08
2	Cocoanut Oil	Edangazhi	I	3.07	3.22	2.98	3.04	2.89	2.82	3.04	3.13	2.87
			II	3.21	3.30	3.04	3.12	9.98	3.04	3.20	3.18	2.93
			III	3.28	3.13	2.93	3.03	3.07	3.08	3.27	3.01	3.00
			IV	3.25	3.11	2.85	2.97	3.02	2.99	3.18	2.93	2.91
3	Rice	,,	I	0.72	0.77	0.78	0.76	0.73	0.73	0.69	0.75	0.72
			II	0.74	0.72	0.74	0.71	0.70	0.63	0.70	0.68	0.67
			III	0.67	0.64	0.67	0.63	0.65	0.60	0.64	0.65	0.65
			IV	0.71	0.66	0.70	0.66	0.70	0.67	0.68	0.70	0.69
4	Black gram	,,	I	0.32	0.33	0.31	0.33	0.32	0.31	0.33	0.37	0.30
			II	0.32	0.34	0.31	0.31	0.33	0.35	0.30	0.30	0.30
			III	0.31	0.31	0.30	0.30	0.31	0.30	0.32	0.30	0.31
			IV	0.31	0.32	0.29	0.30	0.31	0.30	0.32	0.30	0.31

TABLE IV—(*contd.*)

QUARTERLY RETAIL PRICES OF CERTAIN COMMODITIES IN EACH DISTRICT.

Serial Number	Item	Unit	Quarter of the year	1960-61								
				Trivandrum Rs. nP.	Quilon Rs. nP.	Alleppey Rs nP.	Kottayam Rs nP.	Ernakulum Rs. nP.	Trichur Rs. nP	Palghat Rs. nP.	Kozhikode Rs. nP.	Cannanore Rs. nP.
1	Cocoanut (without husk)	100 Nos.	I	21 88	22.77	23.54	25.22	25.12	23.24	22.51	19.78	22.79
			II	24.65	25.31	24.61	28.72	26.56	26.11	23.52	20,81	23.39
			III	23.23	23.37	25.16	28.07	26.75	25.75	23.26	23.15	24.02
			IV	23.30	22.42	24.67	29.90	24.36	24.83	21.24	23.15	24.05
2	Cocoanut Oil	Edangazhi	I	3.32	3.32	3.07	3.11	3.20	3.16	3.38	3.15	3.01
			II	3.52	3.66	3.04	3.37	3.59	3.48	3.73	3.48	3.30
			III	3.64	3.59	3.23	3.53	3.41	3.30	3.61	3.31	3.18
			IV	3.61	3.10	3.10	3.26	3.38	3.24	3.46	2.97	3.22
3	Rice	,,	I	0.72	0.69	0.74	0.69	0.69	0.67	0.71	0.72	0.71
			II	0.72	0.74	0.75	0.72	0.71	0.68	0.70	0.73	0.71
			III	0.70	0.65	0.67	0.70	0.66	0.66	0.63	0.66	0.69
			IV	0.76	0.68	0.67	0.78	0.70	0.70	0.66	0.68	0.73
4	Black gram	,,	I	0.33	0.32	0.30	0.31	0.31	0.30	0.33	0.31	0.32
			II	0.33	0.31	0.30	0.30	0.29	0.31	0.33	0.30	0.32
			III	0.32	0.30	0.30	0.31	0.30	0.32	0.33	0.31	0.32
			IV	0.33	0.31	0.33	0.33	0.32	0.33	0.33	0,32	0.33

Table IV—(*contd.*)

QUARTERLY RETAIL PRICE OF CERTAIN COMMODITIES IN EACH DISTRICT

Sl. No.	Item	Unit	Quarter of the year	1959-60								
				Trivandrum Rs. nP.	Quilon Rs. nP.	Alleppey Rs. nP.	Kottayam Rs. nP.	Ernakulam Rs. nP.	Trichur Rs. nP.	Palghat Rs. nP.	Kozhikode Rs. nP.	Cannanore Rs. nP.
5	Gingelly Oil	Edangazhi	I	2.96	3.39	3.58	3.51	3.27	3.17	3.12	3.55	3.24
			II	3.22	3.42	3.61	3.56	3.17	3.18	3.12	3.62	3.05
			III	3.26	3.25	3.49	3.45	3.27	3.22	3.53	3.37	3.60
			IV	3.35	3.22	3.32	3.48	3.28	3.25	3.54	3.47	3.33
6	Tapioca	Lbs.	I	0.05	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06
			II	0.05	0.07	0.05	0.07	0.06	0.06	0.05	0.06	0.08
			III	0.05	0.06	0.06	0.07	0.06	0.07	0.06	0.07	0.08
			IV	0.04	0.06	0.05	0.06	0.06	0.07	0.06	0.07	0.09
7	Sugar	,,	I O. M.	0.68	0.66	0.69	0.67	0.70	0.69	0.69	0.69	0.71
			II O. M.	0.88	0.81	0.95	0.90	0.95	0.98	1.00	0.96	0.84
			III F. P.	0.55	0.55	0.55	0.56	0.58	0.55	0.54	0.56	0.55
			IV F. P.	0.55	0.56	0.56	0.56	0.57	0.55	0.55	0.56	0.56
8	Chillies	,,	I	1.19	1.24	1.24	1.24	1.31	1.34	1.30	1.29	1.29
			II	1.51	1.58	1.57	1.60	1.64	1.68	1.61	1.61	1.57
			III	1.57	1.59	1.61	1.59	1.69	1.63	1.73	1.63	1.61
			IV	1.16	1.17	1.24	1.21	1.24	1.31	1.31	1.30	1.26

O. M.=Open market.
F. P.=Fair price.

Table IV—(*contd.*)

QUARTERLY RETAIL PRICE OF CERTAIN COMMODITIES IN EACH DISTRICT

Sl. No.	Item	Unit	Quarter of the year	1960-61								
				Trivandrum Rs. nP.	Quilon Rs. nP.	Alleppey Rs. nP.	Kottayam Rs. nP.	Ernakulam Rs. nP.	Trichur Rs. nP.	Palghat Rs. nP.	Kozhikode Rs. nP.	Cannanore Rs. nP.
5	Gingelly Oil	Edangazhi	I	3.54	3.40	3.56	3.68	3.57	3.43	3.82	3.85	3.35
			II	3.98	3.73	4.00	3.74	3.96	3.74	4.06	4.14	3.69
			III	4.49	4.09	4.27	4 27	4.12	4.05	4.42	4.46	4.50
			IV	4.39	4.23	4.61	4.50	4.54	4.21	4.65	4.75	4.62
6	Tapioca	Lbs.	I	0.04	0.04	0.04	0.06	0.06	0.05	0.07	0.06	0.09
			II	0.04	0 04	0.04	0.05	0.05	0.05	0.05	0.05	0.09
			III	0.04	0.04	0.05	0.06	0.05	0.05	0.06	0.06	0.09
			IV	0.04	0.05	0.05	0.06	0.04	0.05	0.05	0.06	0.10
7	Sugar	,,	I F.P.	0.56	0.55	0.56	0.56	0.56	0.56	0.55	0.55	0.56
			II ,,	0.56	0.56	0.56	0.56	0.56	0.56	0.55	0.56	0.55
			III ,,	0.57	0.55	0.56	0.56	0.57	0.56	0.55	0.56	0.55
			IV ,,	0.55	0.57	0.56	0.56	0.59	0.57	0.55	0.56	0.56
8	Chillies	,,	I	1.36	1.33	1.37	1.34	1.42	1.47	1.38	1.33	1.30
			II	1.31	1.29	1.32	1.30	1.38	1.41	1.34	1.32	1.18
			III	1.26	1.09	1.26	1.25	1.30	1.30	1.28	1.30	1.17
			IV	1.15	1.09	1.25	1.18	1.17	1.27	1.27	1.13	1.14

F. P—Fair price.

Table IV—(*Contd.*)

QUARTERLY RETAIL PRICE OF CERTAIN COMMODITIES IN EACH DISTRICT

Serial Number	Item	Unit	Quarter of the year	1959-6								
				Trivandrum Rs. nP.	Quilon Rs. nP.	Alleppey Rs. nP.	Kottayam Rs. nP.	Ernakulam Rs. nP.	Trichur Rs. nP.	Palghat Rs. nP.	Kozhikode Rs. nP.	Cannanore Rs. nP.
9	Coffee powder	Lbs.	I	3·00	2·58	3·00	2·52	2·55	2·78	2·74	2·34	2·42
			II	3·08	2·67	2·80	2·50	2·49	2·85	3·02	2·38	2·65
			III	3·10	3·00	2·85	2·40	2·49	2·92	3·00	2·52	2·66
			IV	3·08	3·07	2·80	2·34	2·49	2·97	2·95	2·54	2·65
10	Tea	,,	I	2·91	2·34	2·65	2·25	2·38	2·70	2·68	2·46	2·28
			II	3·05	2·35	2·61	2·31	2·52	2·70	2·87	2·56	2·43
			III	3·16	2·83	2·67	2·32	2·61	2·89	3·01	2·71	2·55
			IV	3·17	2·89	2·68	2·28	2·64	2·96	3·08	2·70	2·59
11	Tobacco (Jaffna)	,,	I	3·72	3·40	3·89	4·11	5·00	..	..	..	..
			II	3·62	3·69	3.82	4·12	5·00	..	..	..	..
			III	3·22	3·35	3.63	3·91	N.Q.	N.Q.	N.Q.	N.Q.	N.Q.
			IV	3·22	3·05	3.46	4·15	N.Q.	N.Q.	N.Q.	N.Q.	N.Q.
12	Tobacco (Ordinary)	,,	I	1·57	1·60	1·58	1·73	1·74	1·65	1·66	1·80	1·79
			II	1·49	1·57	1·55	1·65	2·15	1·66	1·88	1·95	1·79
			III	1·50	1·51	1·53	1·62	2·14	1·79	1·64	2·02	1·80
			IV	1·50	1·50	1·53	1·61	2·15	1·82	1·69	2·04	1·80

N.Q.—Not quoted.

Table IV—(*Contd.*)

QUARTERLY RETAIL PRICE OF CERTAIN COMMODITIES IN EACH DISTRICT

Serial Number	Item	Unit	Quarter of the year	1960-61								
				Trivandrum Rs. nP.	Quilon Rs. nP.	Alleppey Rs. nP.	Kottayam Rs. nP.	Ernakulam Rs. nP.	Trichur Rs. nP.	Palghat Rs. nP.	Kozhikode Rs. nP.	Cannanore Rs. nP.
9	Coffee powder	Lbs.	I	3·01	2·99	2·80	2·31	2·50	3·06	3·04	2·36	2·64
			II	3·03	3·03	2·85	2·35	2·52	3·05	3·05	2·37	2·64
			III	3·20	2·99	2·85	2·37	2·54	3·06	3·05	2·32	2 60
			IV	3·26	3·07	2·88	2·54	2·29	3·11	3·00	2·27	2·80
10	Tea	,,	I	3·16	2·83	2·34	2·21	2·65	2·97	3·10	2·62	2·57
			II	3·20	2·60	2·36	2·26	2·66	2·97	3·06	2·79	2·60
			III	3·23	2·42	2·45	2·34	2·77	2·97	3·07	2·72	2·56
			IV	3·30	2·41	2·54	2·56	2·86	3·16	3·10	2·60	2·91
11	Tobacco (Jaffna)	,,	I	3·22	3·06	3·51	3·72	..	..	..	..	..
			II	3·23	3·14	3·52	3·67	..	..	..	..	..
			III	3·22	3·19	3·53	3·68	..	..	..	..	..
			IV	3·27	3·00	3·50	3 36	..	..	..	..	..
12	Tobacco (Ordinary)	,,	I	1·50	1·50	1·65	1·65	2·22	1.87	1·71	2·04	1·89
			II	1·50	1·50	1·66	1·63	2·16	1.81	1·55	2·03	2·00
			III	1·50	1·56	1·65	1·62	2·02	1.88	1·56	2·00	1·99
			IV	1·50	1·50	1·85	1·65	2·12	1.83	1·95	2·00	2·02

Table V

STATISTICS OF EXPORT OF IMPORTANT AGRICULTURAL COMMODITIES THROUGH PORTS OF KERALA

Sl No.	Name of Commodity	Quantity exported				Total value		Average export price	
		Unit	1959-60	Unit	1960-61	1959-60 Rs.	1960-61 Rs.	1959-60 Rs.	1960-61 Rs.
1	Betelnut	Cwt.	92678	M. Tons	8944	23044527	47139062	..	..
2	Cardamom	,,	4362	,,	325	5057627	6272318	..	..
3	Cashew Kernels	Tons	33226	,,	38394	150703567	165961778	..	..
4	Cocoanuts	Nos.	146702892	Nos.	112122919	31840525	27313275	..	..
5	Cocoanut oil	Gals.	2742743	Ltrs.	12731018	28932321	37299578	..	..
6	Copra	Tons	18998	M. Tons	33230	32467549	49799127	..	..
7	Coffee	Cwt.	112797	,,	7521	20277948	23563376	..	..
8	Ginger	,,	150865	,,	11646	12327877	17380276	..	..
9	Lemongrass oil	Gals.	236855	Ltrs.	N. A.	13024821	12092813	..	..
10	Pepper	Cwt.	529520	M. Tons	19821	126217493	101066743	..	..
11	Rubber (New)	Lbs.	44421440	,,	N. A.	62251119	46569099	..	..
12	Tea	Lbs.	84109697	,,	36046	242179255	209202907	..	..

Figures for 1960-61 are provisional.

6. Notes on certain crops in Kerala

I. 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 productton 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 percolotes 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 the 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" are plucked. Plucking is done throughtout 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 are 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 percent of the world production. There are two important species of coffee grown in India, namely, Arabica and Robusta. Robusta flourishes at lower levels and has more powers of resistance against extremes of climate and pests and diseases. It is easily distinguishable from Arabica 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 2,500 ft. to 4,500 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 subsoil 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 plot is ordinarily eight to nine feet. The plots are manured well and watered frequently.

In the second method of propogation—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 superphosphate, ammonium sulphate, copper sulphate and urea.

Yield:—Under good climatic conditions a coffee plant yields ½ 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 pulpy 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 percent of the total world out-put 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"x18". 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 'Phytoph ora 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 diseases 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 u ing 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 coagulam 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 these 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 posses 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°—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 2,500 to 5,000 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 mosovic 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 plants with gammaxere 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 percent 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-fied 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 3,000 ft.

Soil.—The suitable soils for pepper cultivation are clay loam, red oam 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 the vines. Ieeu 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. Sometimes the skin of the ripe berries is removed before drying. This kind of 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 lbs. 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 upto 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 effects 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 well-trained 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 on slaught 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 rhizoms.

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 usally affected by a disease known as 'Soft-rot'. 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 rhizoms stored as seeds is advocated as a preventive measure. Another important disease is known as 'Varmiculária'. The leaves become covered with yellowish and brownish spots and gradually dry up. Spraying of 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 continued 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 markets 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 lemon grass 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, Taliparamba, 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 undergrowth 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 lb. of seeds are sown. The seeds are sown broad-cast. The crop is also grown by transplanting of seedlings raised in separate nurseries. The cost of cultivation of this crop is very low. Much care is not needed during the 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	,, —	2½ ,,	,,
3rd	,,	2 ,,	,,
4th	,,	2 ,,	,,
5th	,,	2 ,,	,,

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 are 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 a 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 lemon grass 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.	*Type of Soil.*	*Details of distribution.*
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	Kottarakara, Kunnathoor and part of Quilon, Pathanapuram and Pathanamthitta Taluks.
	3. Hill and forest soil	Part of Pathanapuram and Pathanamthitta Taluks.
Alleppey	1. Sandy loam	Karthigappally and Mavelikara Taluks.
	2. Sandy Soil	Shertallai and Ambalapuzha Taluks.
	3. Clay loam with much of abidity	Kuttanad.
	4. Laterite soil	Chengannur and part of Mavelikara.
Kottayam	1. Laterite soil	Peermade and part of Meenachil, Changanacherry and Kottayam Taluks.
	2. Alluvial soil	Vaikom parts of Changanacherry and Kottayam, Devicolam & Udumbanchola.
Ernakulam	1. Laterite	Thodupuzha and Muvattupuzha and part of Kunnathunad.
	2. Sandy loam	Parur, Cochin, Kanayannur.
	3. Alluvial	Part of Alwaye and Kunnathunad.
Trichur	1. Sandy loam	Part of Mukundapuram, Trichur and Chowghat, Taluks.
	2. Laterite	Eastern area of Trichur and Western portion of Talapilly.
	3. Granite	Northern part of Talappilly.
	4. Clayey	Backwater area in Chowghat & part of Mukundapuram.
	5. Alluvial soil	Portion of Chowghat and Kunnathunad Taluks.
Palghat	1. Laterite	Interior regions of the District.
	2. Sandy	Along coastal and river side areas.
	3. Black soil	North-Eastern portion of Chittur Taluk.
Kozhikode	1. Laterite	Major part of the district barring coastal area.
	2. Sandy	Coastal strip.
Cannanore	1. Laterite	Major part barring coastal area.
	2. Sandy	Coastal area.

8. Conversion Ratio Between the Raw Materials and the Processed Product

Rice.

Rice (cleaned) Production.	— 2/3 paddy production.

Cotton.

Cotton lint production.	— 1/3 kapas production.
Cotton seed production.	— 2/3 of kapas production.
	— 2 times of cotton lint Production.

Groundnut

Kernel to nuts in shell.	— 70 percent.
Oils to nuts in shell.	— 28 percent.
Oils to kernals crushed.	— 40 percent.
Cake to kernals crushed	— 60 percent.

Sesamum.

Oil to seeds crushed	— 40 percent.
Cake to seeds crushed.	— 60 percent.

Castor Seed.

Oil to seeds crushed.	— 37 percent.
Cake to seeds crushed.	— 63 percent.

Cocoanuts.

Copra to nuts one ton Copra.	— 6775 nuts.
Oil to copra crushed.	— 62 percent.
Cake to copra crushed.	— 38 percent.

Neem Seed.

Oil to kernals crushed.	— 45 to 50 percent.
Cake to kernals crushed.	— 50 to 55 percent.

Sugar.

Gur from cane crushed.	— 10 percent.
Crystal sugar from gur refined.	—62·40 percent.
Do. from cane crushed.	— 9·97 percent.
Khandassari sugar from gur refined	— 37·5 percent.
Molasses from cane crushed.	— 3·5 percent.

Cashewnuts

Cashew kernels.	— 25 percent of cashewnuts.
Butter from mixed milk	— 6·3 percent.
Ghee from mixed milk	— 5·3 percent.

SOURCE — "FERTILISER STATISTICS"

9. Average Analysis of Important Fertilisers

Sl. No.	Name of Fertiliser	Percentage		
		Nitrogen (N)	Phosphoric (P_2O_5)	Potash
(1)	(2)	(3)	(4)	(5)
1.	Nitrate of Potash 70%	8—10	..	30—33
2.	Ammoninm Phosphate 60%	17—18	20—21	.
3.	Urea	46	..	..
4.	Nitrate of Soda	15—16	..	..
5.	Sulphate of Ammonia	20—6	..	..
6.	Ammonium Sulphate Nirtate	26	..	..
7.	Ammonium Nitrate	32—33	..	..
8.	Calcium Cynamide	18—20	..	..
9.	Nitroline	20—21	..	..
10.	Super phoshate (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.	Safflower cake (Undecorticated)	4.9	1.4	1.2
21.	Do. (Decorticated)	7.9	2.2	1.9
22.	Cocoanut 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 cake	6.2	2.0	1.2
	MANURES OF ANIMAL ORIGIN			
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	..
	BULKY ORGANIC MANURES.			
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.

APPENDIX C

Insect pest affecting Paddy crops, their distribution and some Practical methods of Control.

Crop	*Pest (Scientific name)*	*Distribution*	*Control*
(1)	(2)	(3)	(4)
Paddy	Paddy may work or the swaming catterpillar (Spodopteramanritia boisd).	This is a sporadic pest. Attacks mostly Viruppu (Autumn) crop of paddy throughout the State.	(i) Apply 10 per cent B. H. C. dust at 15 to 20 lb. per acre. (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). (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 lbs. per acre to promote rapid recuperation.
,,	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.	(i) Spray Folidol E 605 thrice as follows :— First spreying 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 sprayings are to be done when a good number of moths or eggs are found in the field. (ii) Spray D. D. T. at the rate of 1 lb. of 50 percent wettable powder in 25 gallons of water as follows. One spraying in the nursery, dip the seedlings in

(1)	(2)	(3)	(4)
Paddy—*(contd.)*			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.
	Rice bug (Lip to corisa actu : T).	This is found throughout the State.	(i) In the early stage of attack collect the bugs by a hand net. (ii) Apply B. H. C. 10 per cent dust at the rate of 20 to 25 lb. per acre.
	Rice (Hispa Arinigera Ol) (Nilaparvata Sp.)	Very common in Karunagappally, Haripad, Mavelikara, Kottarakara and Karthigappally of Quilon District and all parts of Alleppey and Trichur Districts.	(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).
	Paddy gall fly (Pachydiplosis oryal W).	Commonly found in Viruppu crops in the District of Quilon and Trichur.	(i) During seedling 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.

(1)	(2)	(3)	(4)
Paddy—(*contd.*)	Rice grass hopper (Heroglyphids.)	Commonly found in the various parts of Palghat and Tellicherry Districts though the damage done is a minor form.	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. V. 10 per cent.
	Leaf roller (Craphalocrocis medainalis G).	Commonly found in Viruppu crop in the Districts of Quilon and Trichur.	Spray D. D. T. suspension at the rate of lb. of 50 per cent wettable powder in 25 gallons of water (30 to 35 gallons required per acre).
	Paddy cockchaferbuttle (Phyllognathus dronysins F).	Found in Kottayam District.	Prior to sowing plough into the soil 28 lb. of 5 per cent Aldrin dust or 56 lb. of 10 per cent B. H. C. dust per acre.
	The paddy jassid. (The green jassid Nephotettix sp. and the white jassid) Tettigoniella spectra Dt)	Found in Kottayam District.	(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 buttle (Leptisan Pygamae)	Commonly noticed in Ottappalam and nearly places of the Palghat District, resulting in heavy damage to paddy crops.	(i) 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.

APPENDIX D.

List of centres selected for recording metrological information—1961.

Trivandrum District.

1. Attingal
2. Nedumangad
3. Neyyattinkara
4. Parassala
5. Ponmudi
6. Trivandrum
7. Varkala

Quilon District.

1. Adoor
2. Alleppey
3. Ambalapuzha
4. Arukutty
5. Arayankavu
6. Chengannur
7. Haripad
8. Karunagapally
9. Kayankulam
10. Konni
11. Kottarakkara
12. Mavelikara
13. Nilamel
13. Paravur
15. Pathanamthitta
16. Punalur
17. Quilon
17. Sherthalai
19. Thiruvalla

Kottayam District.

1. Alwaye
2. Changanacherry
3. Chinnar
4. Devicolam
5. Ettumanur
6. Kanjirapally
7. Karikode
8. Kottayam
9. Kumali
10. Malayattur
11. Marayur
12. Munnar
13. Muvattupuzha
14. Neriamangalam
15. Palai
16. Parur
17. Peermade Residency
18. Peermade Taluk
19. Perumbavoor
20. Vaikom
21. Vandanmettu
22. Veloor

Trichur District.

1. Cochin
2. Cochin Fort
3. Cranganore
4. Ernakulam
5. Mukundapuram
6. Thalapally
7. Trichur

Palghat District.

1. Alathur
2. Cherpolsseri
3. Chittur
4. Mannarghat
5. Ottappalam
6. Palghat
7. Parali
3. Perinthalmanna
9. Ponnani

Kozhikode District.

1. Badagara
2. Kozhikode
3. Kuttiyadi
4. Manjeri
5. Nilambur
6. Quilandi
7. Tirurangadi
8. Vythiri

Cannanore District.

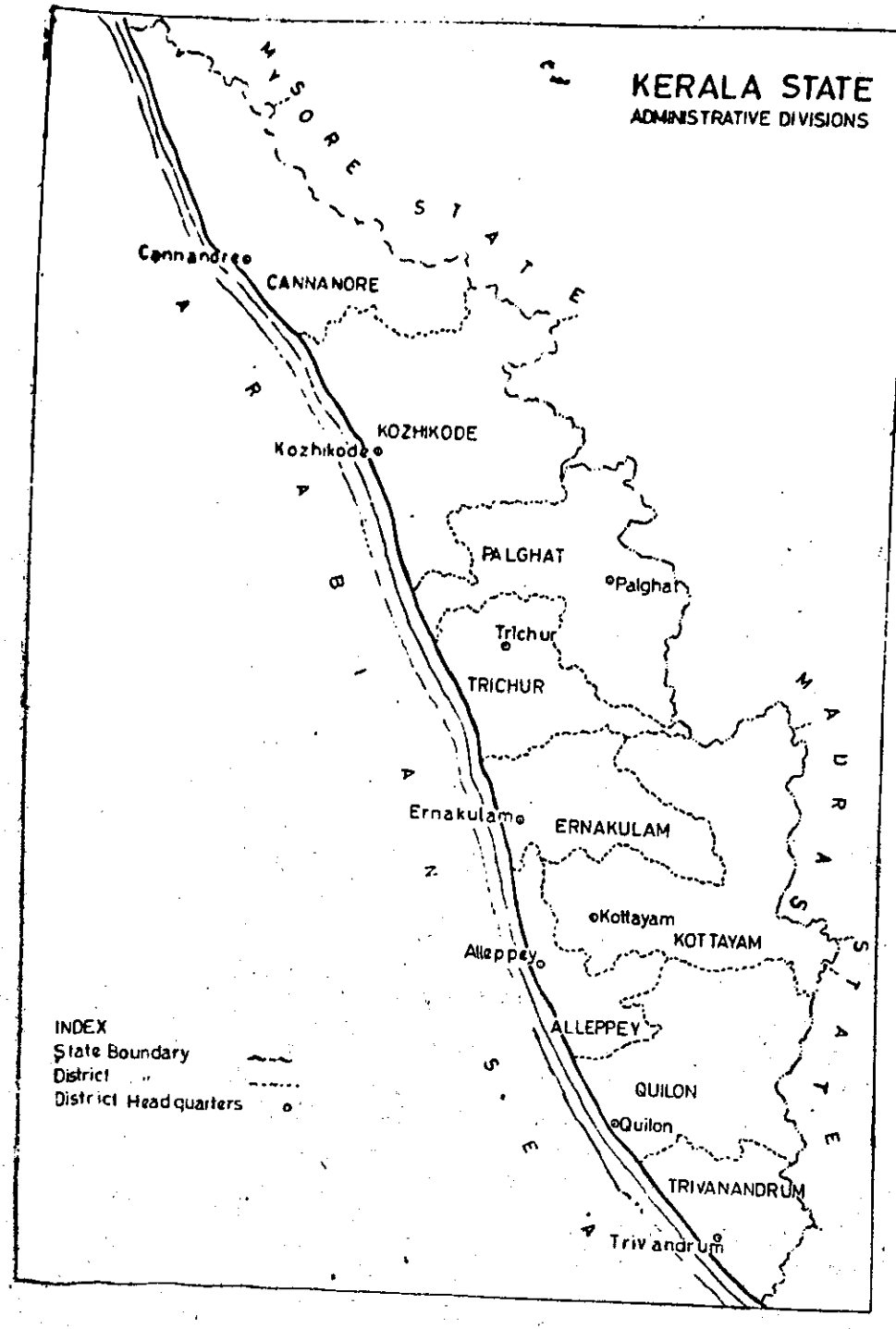
1. Cannanore
2. Hosdurg
3. rikkur
4. Kasargode
5. Mananthody
6. Payyannur
7. Taliparamba
8. Tellicherry

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

Sl. No.	English	Botanical	Malayalam
1	Alexndrian lamel	Calophyllum inophyllen	Punna
2	Amarenthus	,,	Keera or Cheera
3	Arrow root	Curcuma angustifolia	Kuva
4	Ash gourd	Banianceassa certifera	Kumbalanga
5	Bajra	Pannretam typhodeum	Kambu
6	Bamblaimas	Cittrus madima	Bamblimas
7	Barley	Hordeum Volgana	Barley
8	Bangalagram	Oicer arietenum	Kadala
9	Betal leaves	Piper betel	Vettila
10	Betel nut	Areca catecha	Adakka or Pakku
11	Bitter gourd	Mamordica charntia	Pavakka or Kaipakka
12	Black gram	Phasedur radiatus	Uzhunnu
13	Breed fruit	Artocarpus commuris	Simachakka or Kadachakka
14	Brinjal	Solanum malongena	Vazhuthanga
15	Bottle gourd	Lagenaria Vulgaris	Churakkai
16	Cabage	Erasica olavacea	Mottakkose
17	Cardamom	Electaria cardamom	Elakka
18	Carrot	Doncees carota	Mullanki
19	Cashewnut	Anacardium occidantale	Kasuandi or Parangiandi
20	Castor	Ricinus communis	Avanakku
21	Chillies (dry)	Capeicum annum	Vattal mulaku or Kappal ,,
22	,, (Green)	Do.	Pacha mulaku
23	Cinnamon	Cinnamonam zaylanicum	Karava or Cazhana
24	Cloves	Enginuia ceryophylate	Crampu
25	Cluster beams	Cyanopsis psoralicides	Kothavara
26	Cocoanut	Cocos nucipera	Nalikera or Thenga
27	Coloccoesia	Colocasia Antiqueram	Chempu
28	Corriander	Corriandrum sativum	Kothamally
29	Cotton	Cossypium harbaccum	Pavuthi
30	Cowgoram	Vigna catiang	Karamani or Kottapayaru
31	Cucumbur	Cucumis sativan	Vallarikka
32	Cumur	Cumminum Yminum	Jeerakam
33	Dramstic	Moringa Clerifara	Muringakka
34	Elephant foot yam	Amorphaphallus Companalathur	Chena
35	Field beans	Dolichos Hablal	Mochakkota
36	Garlic	Allium Sativum	Veluthullu
37	Ginger	Zingiber Officinalis	Inchi or Chucku
38	Grape	Vitis vinifar	Munthiringa

Sl. No.	English.	Botanical.	Malayalam.
39	Greengram	Phaseslus mango	Cherupayaru
40	Groundnut	Arachis hypogea	Nilakadala
41	Guavi	Psidum guajava	Perakka
42	Horsegram	Dolichers Biflorous	Munithra or Kanam
43	Italian millet	Setaria italica	Thina
44	Jack fruit	Artocarpus intigrifoli	Chakka
45	Jowar	Sorghum Volgara	Cholam
46	Jute	Corchorous Capsularis	Chanam
47	Kari leaf	Murraya Zocnigari	Karivapila
48	Ladies finger	Habiscus esculentus	Vendakka
49	Lemongrass	Cymbopogon spicies	Ezhumpull or Thailappullu
50	Lime fruits	Citrus aurantifolia	Cherunaranga
51	do.	Citrus senensis	Madhuranarnga
52	do.	Citrus senensis	Maduranaranga
53	Long pepper	Piper longum	Tippali
54	Maize	Fea mayas	Mokka cholam
55	Mango	Magnifera indica	Mambazham
56	Neem	Azhdirachta Indica	Veppu
57	Nut-mag	Myrstica foregrus	Jathikka
58	Onion	Allium Cepa	Chevannulli
59	Opium	Papayar Somniferum	Karuppu
60	Paddy	Dryza Sativa	Nellu
61	Palmyrah	Borassus flabellifar	Karimpana
62	Pappaya	Cariota papaya	Ommakka or Kappalanga
63	Pepper (Black)	Piper nigrum	Kurumulaku or Nallamulaku
64	Pine apple	Ananes comesus	Kaithachakka or Prithichakka
65	Plantain	Musa sepientun	Vazha
66	Pomegranate	Punicagranalum	Mathalam
67	Pumpkin	Cucurbitamaxima	Mathanga
68	Ragi	Eleusive Coracana	Panjappullu or Koovaraku
69	Red gram	Cajanus indicus	Thuvara
70	Rose apple	Engenia jamos	Jampa
71	Samai	Panicum miliata	Chama
72	Sesamum	Sesamum indicum	Ellu
73	Snake gourd	Trichosan thesaguim	Padavalanga
74	Sugarcane	Seachhuram offici-narum	Karimbu
75	Sweet Potato	Ipmoea batatas	Sarkaravalli or Madhura Kizhangu
76	Sword beams	Canavalia ensiforms	Valaringa
77	Tamarind	Tamarindur indica	Valampuli
78	Tapioca	Manikot utilissima	Marachini or Kappa
79	Tobacco	Nicotiona tobacum	Pukayila

Sl. No.	*English.*	*Botanical.*	*Malayalam.*
80	Tomato	Hyeopersicum	Thakkali
81	Turmeric	Curcuma longa.	Manjal
82	Water melon	Citrullus vulgaris	Thannimathan
83	Wheat	Triticum valgare	Gothambu
84	Winged beans	Psophocarpustebra gonolobus	Chathurapayaru
85	Yam	Diowrea bulbiforia	Kachil
86	do.	Engenia cumim	Njarapazham
87	do.	Dioswrea acullota	Cheruvalli-kzhongu
88	do.	Coleus parriplorus	Koorka or Cheevakizhangu
89	do.	Luffa acutangula	Pichanka
90	do.	Gareinia cambogia	Kodampulli or Pevaru


KERALA STATE
ADMINISTRATIVE DIVISIONS
MYSORE STATE
Cannanore
CANNANORE
KOZHIKODE
Kozhikode
PALGHAT
Palghat
Trichur
TRICHUR
Ernakulam
ERNAKULAM
Kottayam
KOTTAYAM
Alleppey
ALLEPPEY
QUILON
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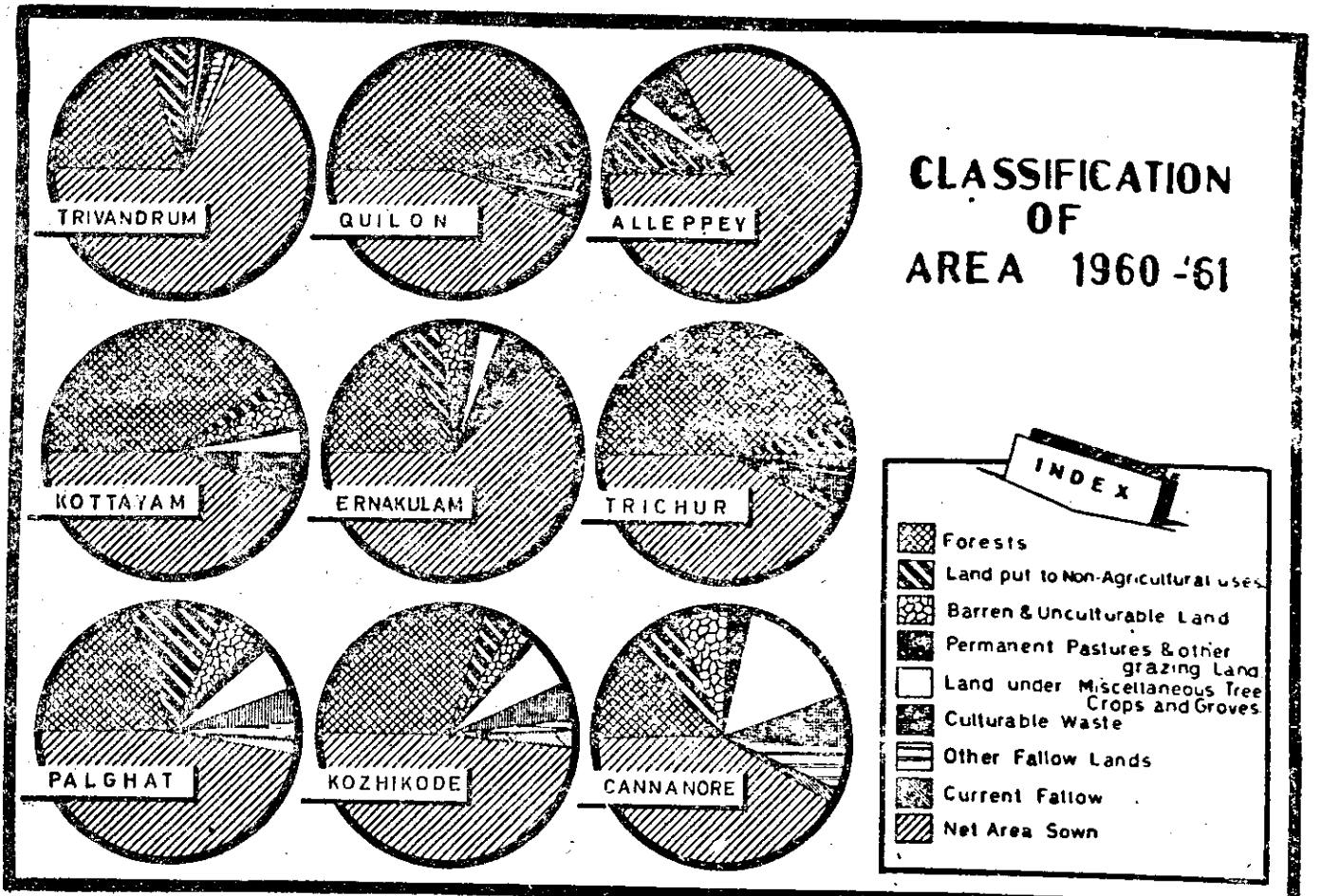
TRIVANDRUM
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CANNANORE
CLASSIFICATION OF AREA 1960 -'61
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Barren & Unculturable Land
Permanent Pastures & other grazing Land
Land under Miscellaneous Tree Crops and Groves
Culturable Waste
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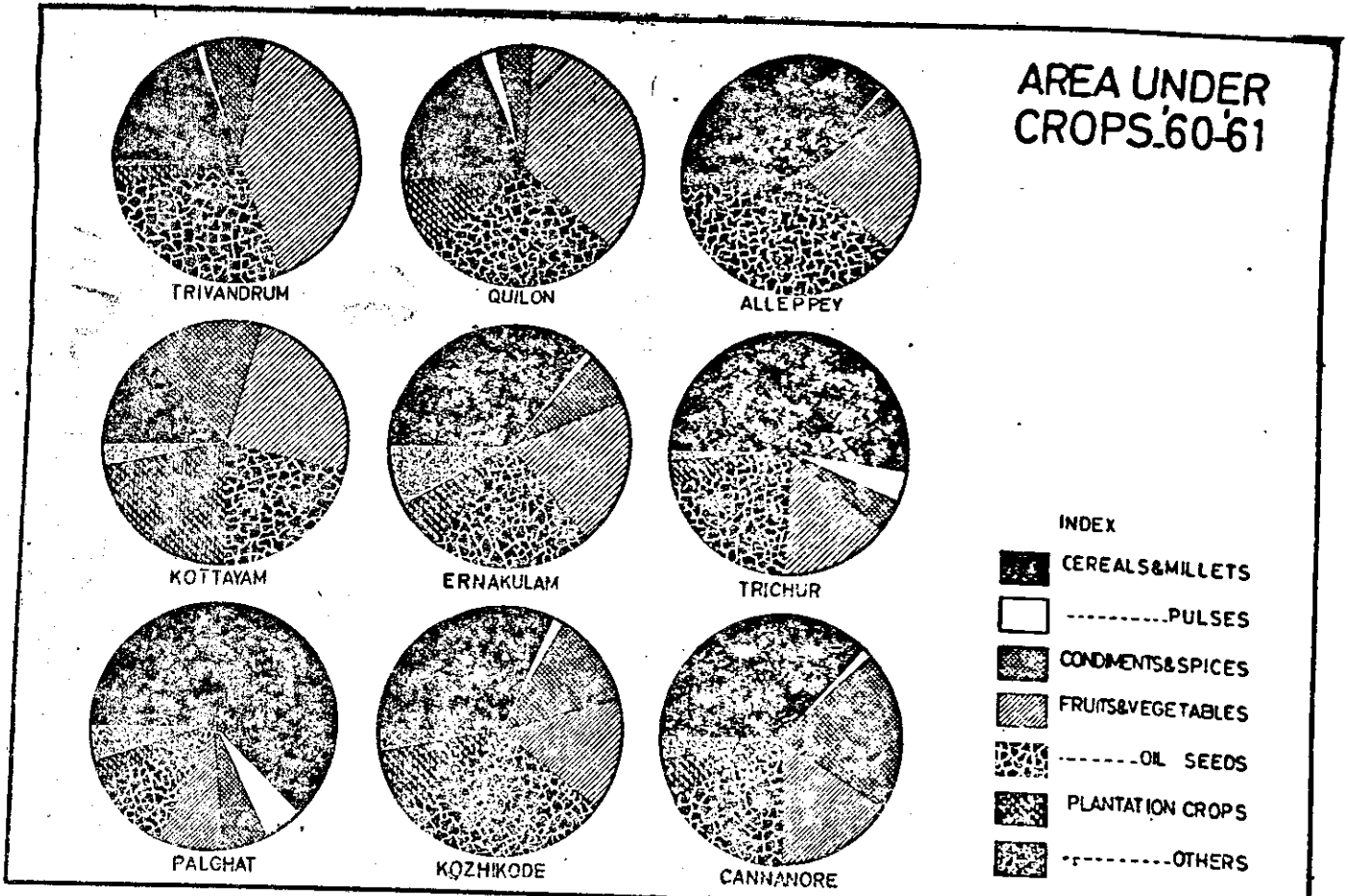
AREA UNDER CROPS_60-61
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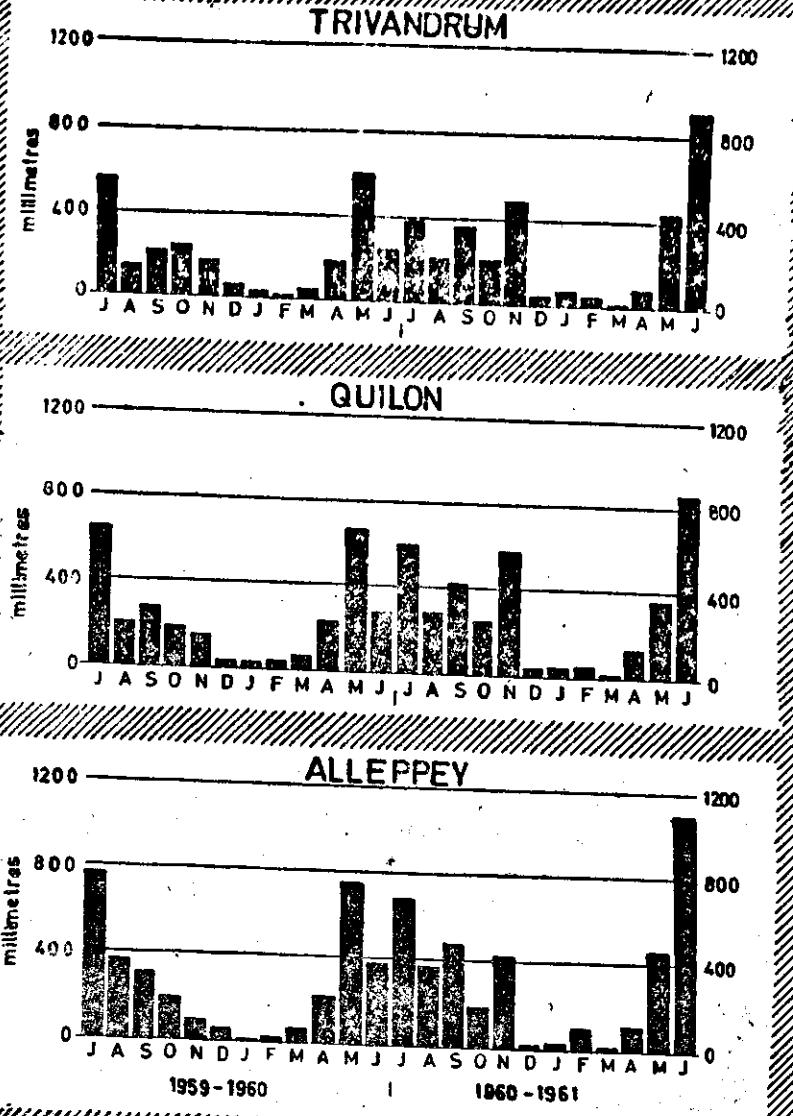
FRUITS&VEGETABLES
OIL SEEDS
PLANTATION CROPS
OTHERS

AVERAGE MONTHLY RAINFALL



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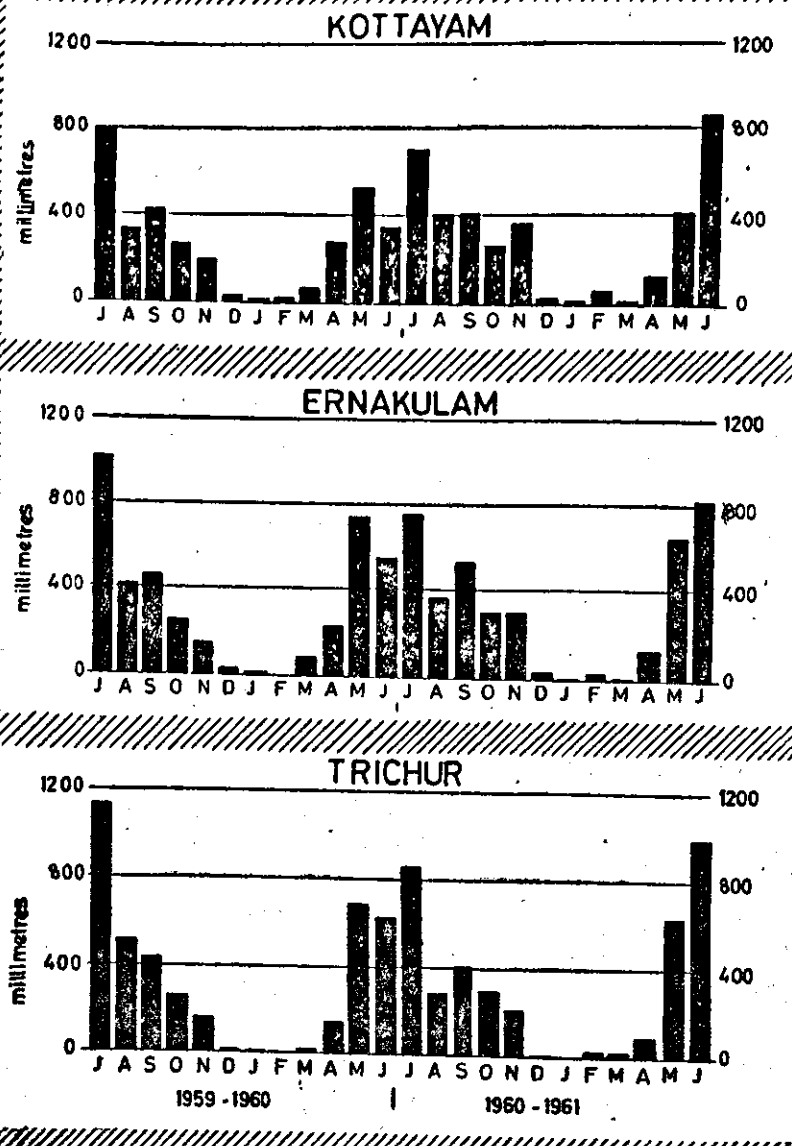

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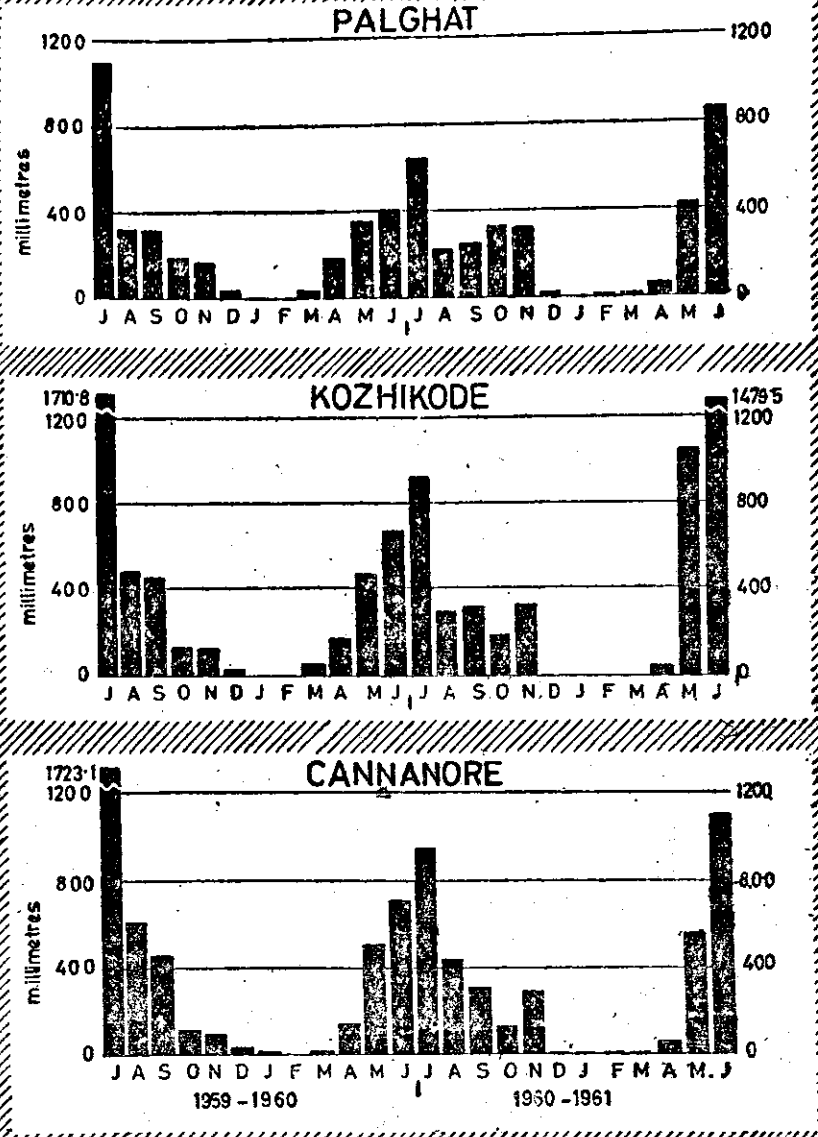

INDEX NUMBERS OF AGRICULTURAL PRODUCTION IN KERALA

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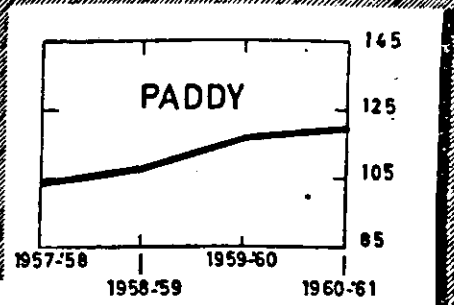

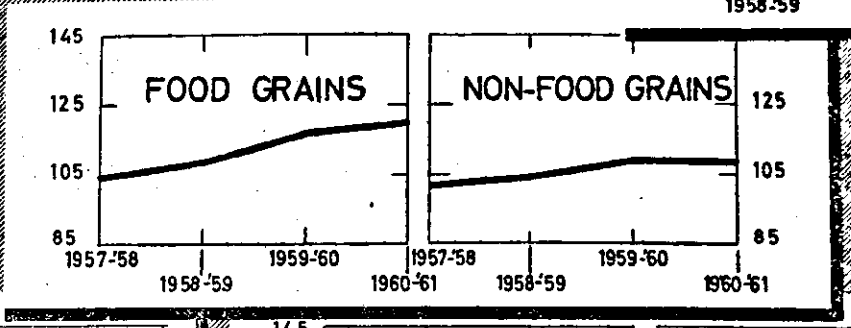

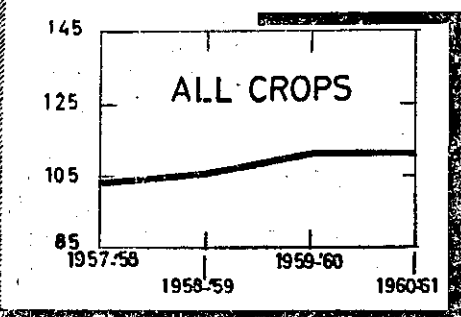

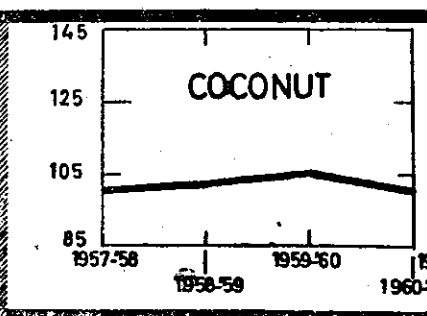

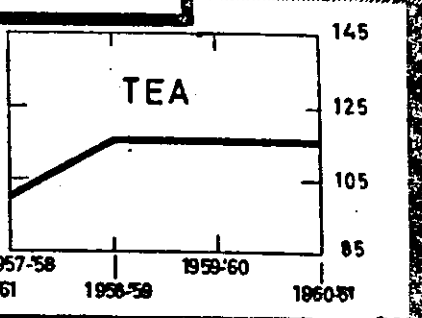

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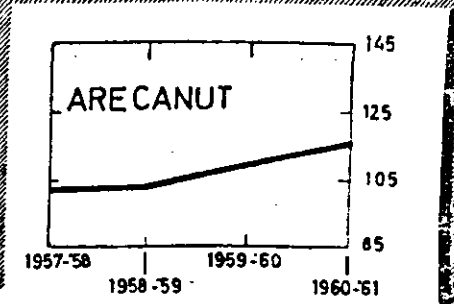
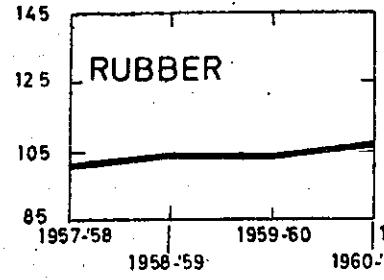
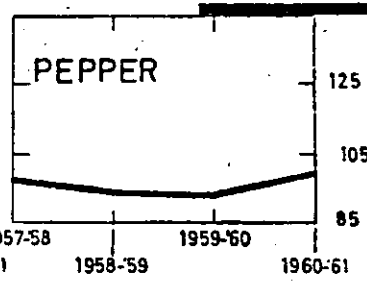
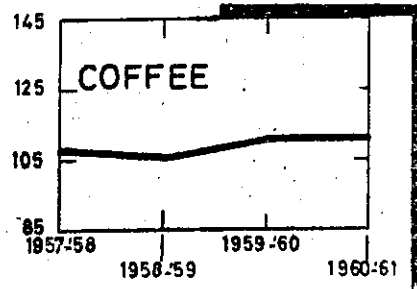
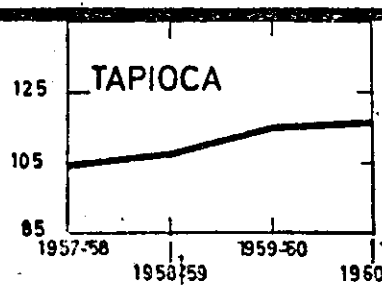
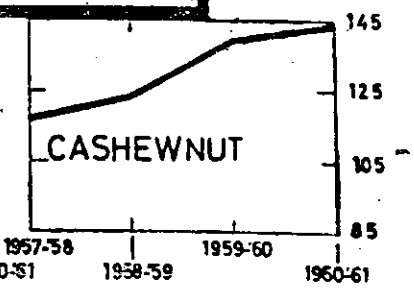






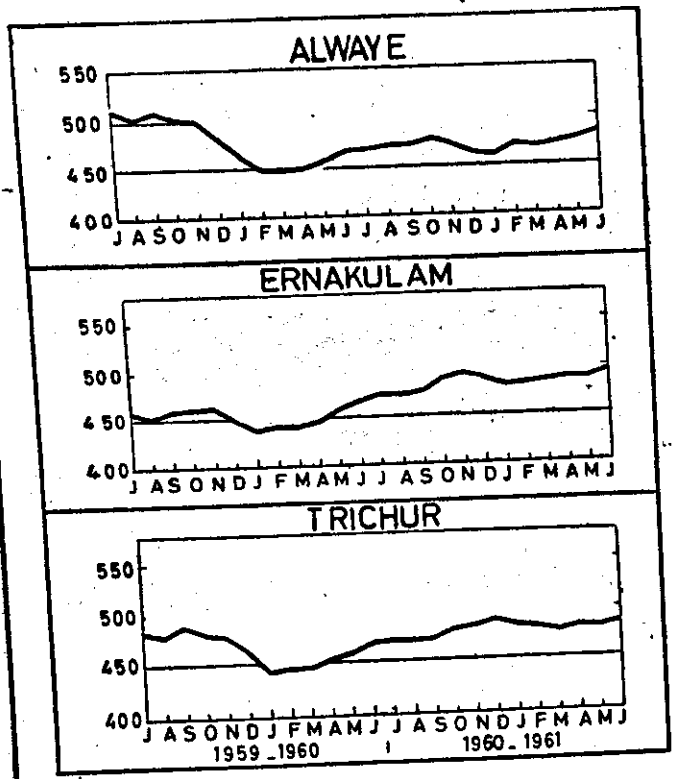


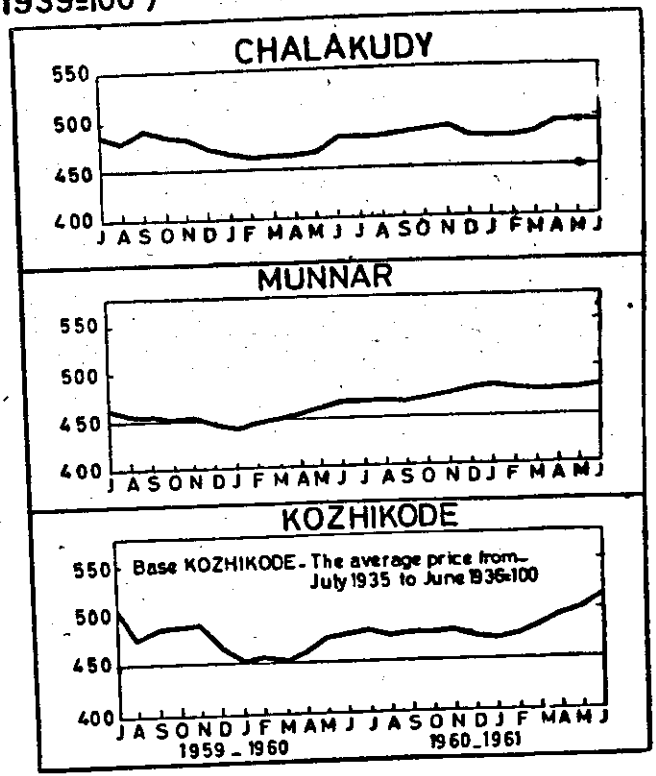




WORKING CLASS COST OF LIVING INDICES

(BASE AUG: 1939=100)





WORKING CLASS COST OF LIVING INDICES

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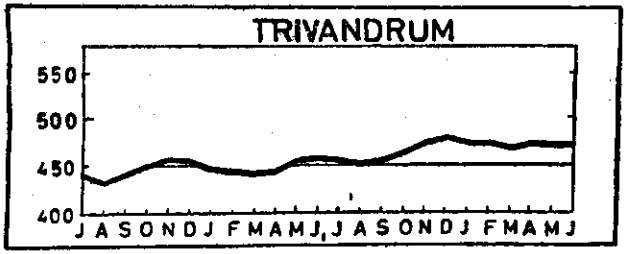
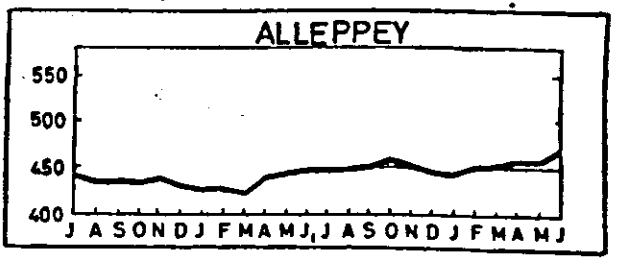
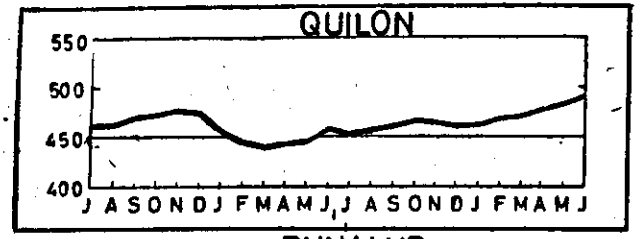
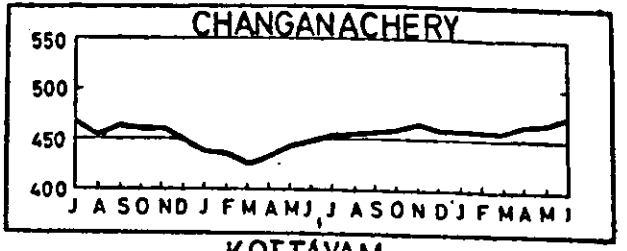
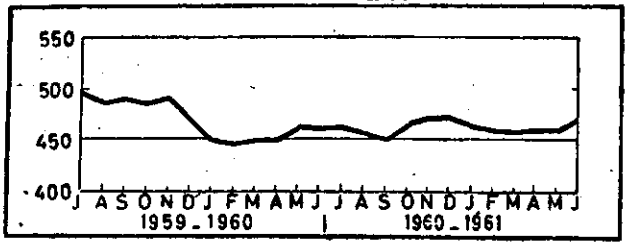
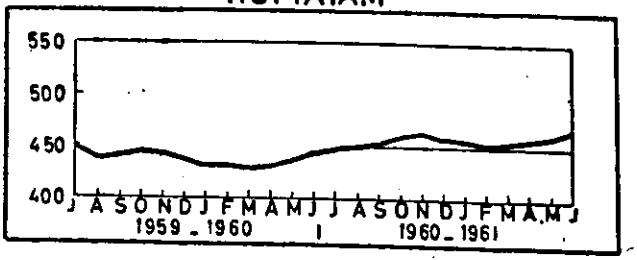




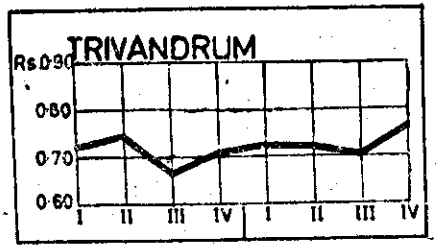


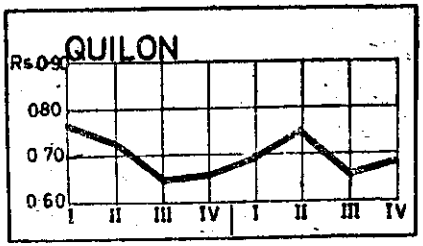


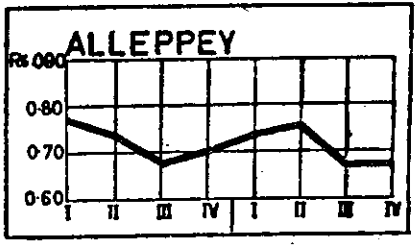


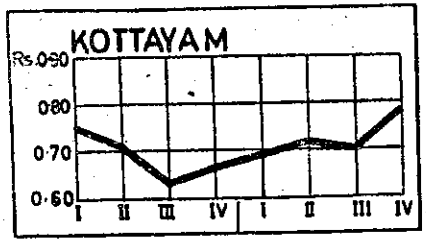


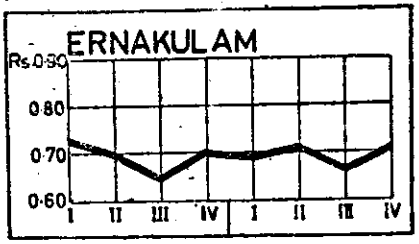
QUARTERLY RETAIL PRICES OF RICE - (Edangazhi)

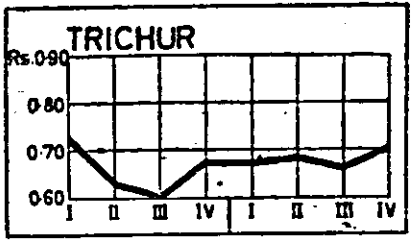


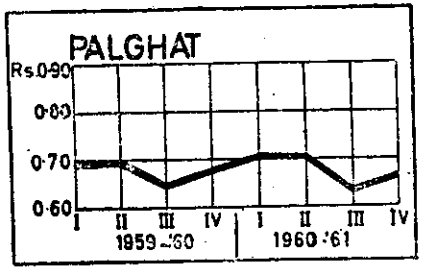


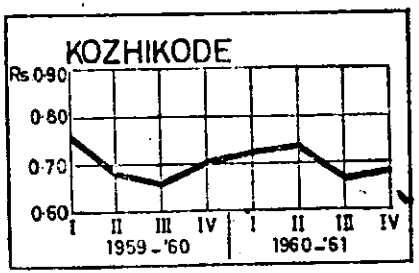


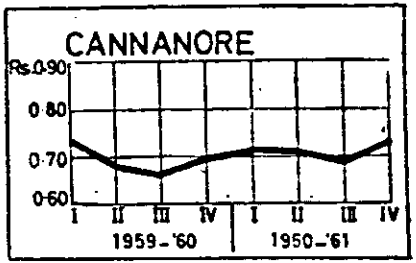






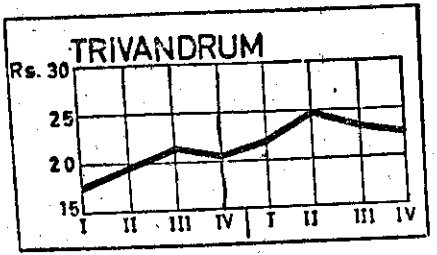


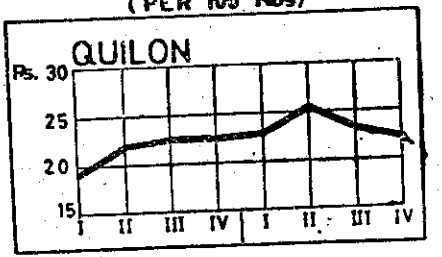


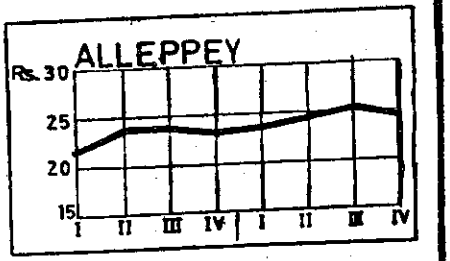


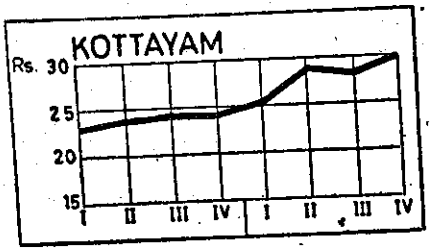
QUARTERLY RETAIL PRICES OF COCONUT (with out husk)

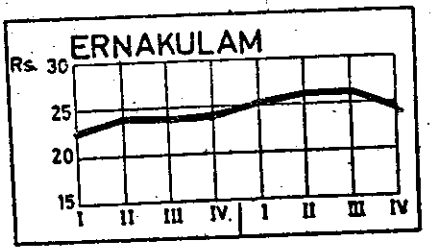
(PER 100 Nos)

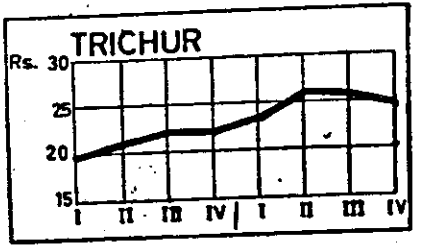


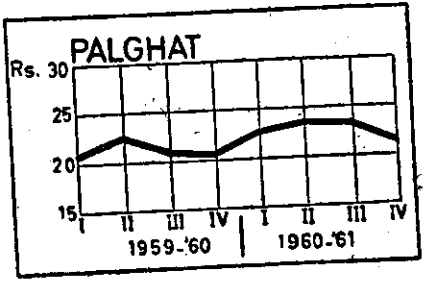


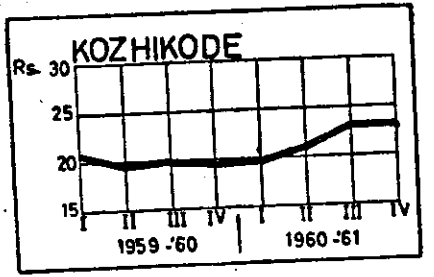


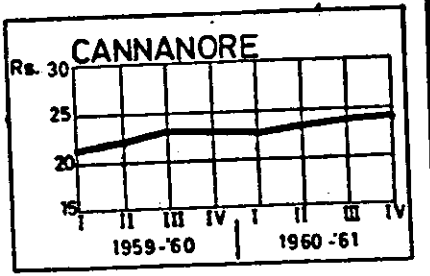




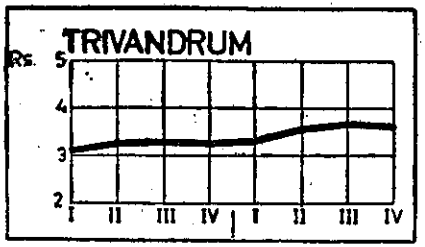


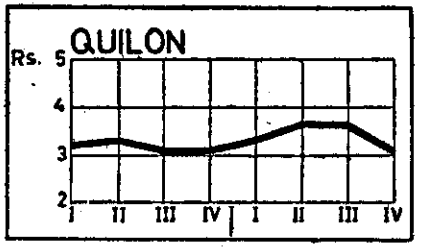


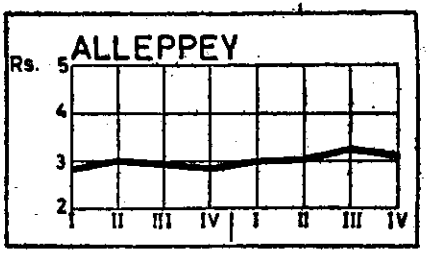


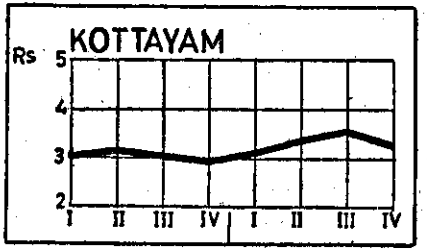


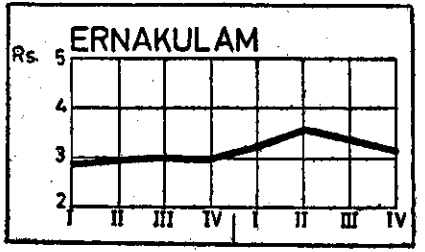
QUARTERLY RETAIL PRICES OF COCONUT OIL(Edangazhi)

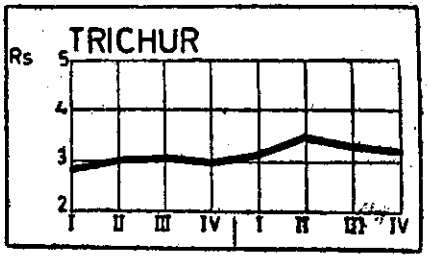


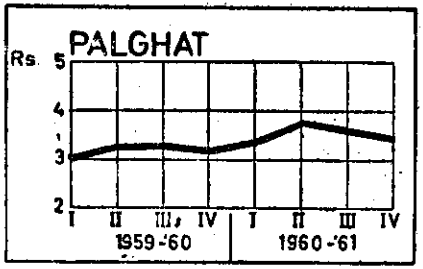


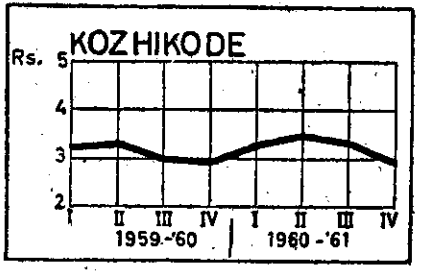


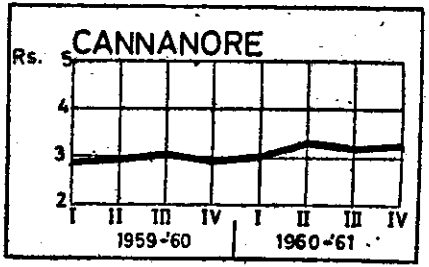




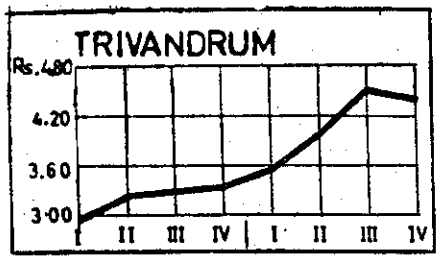


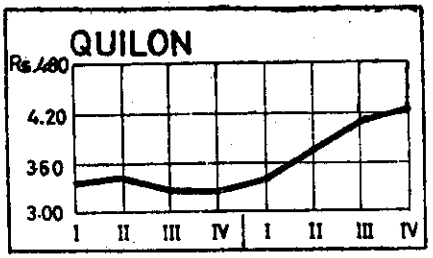


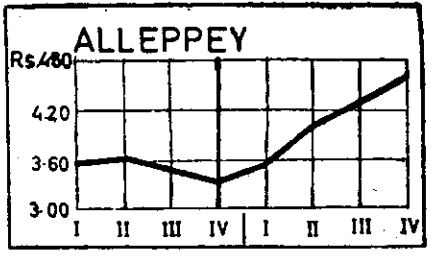


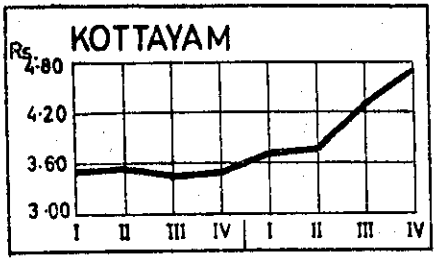


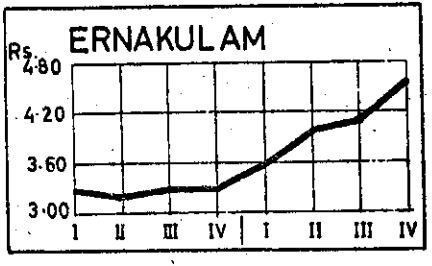
QUARTERLY RETAIL PRICES OF GINGELLY OIL (Edangazhi)

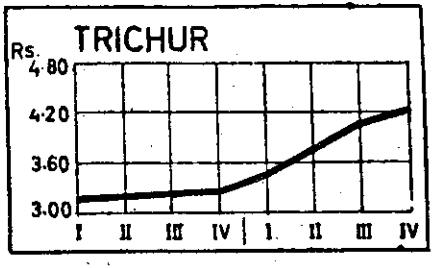


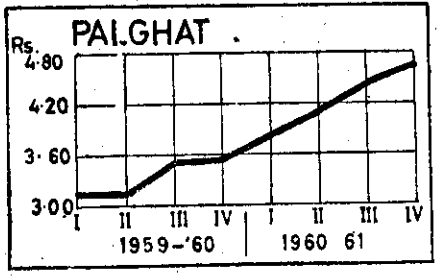


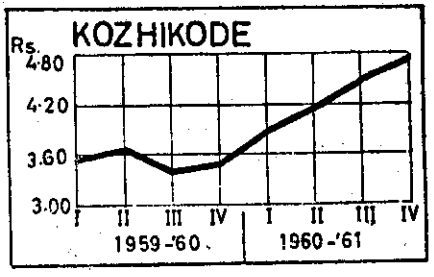


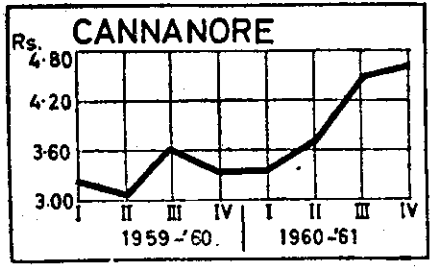




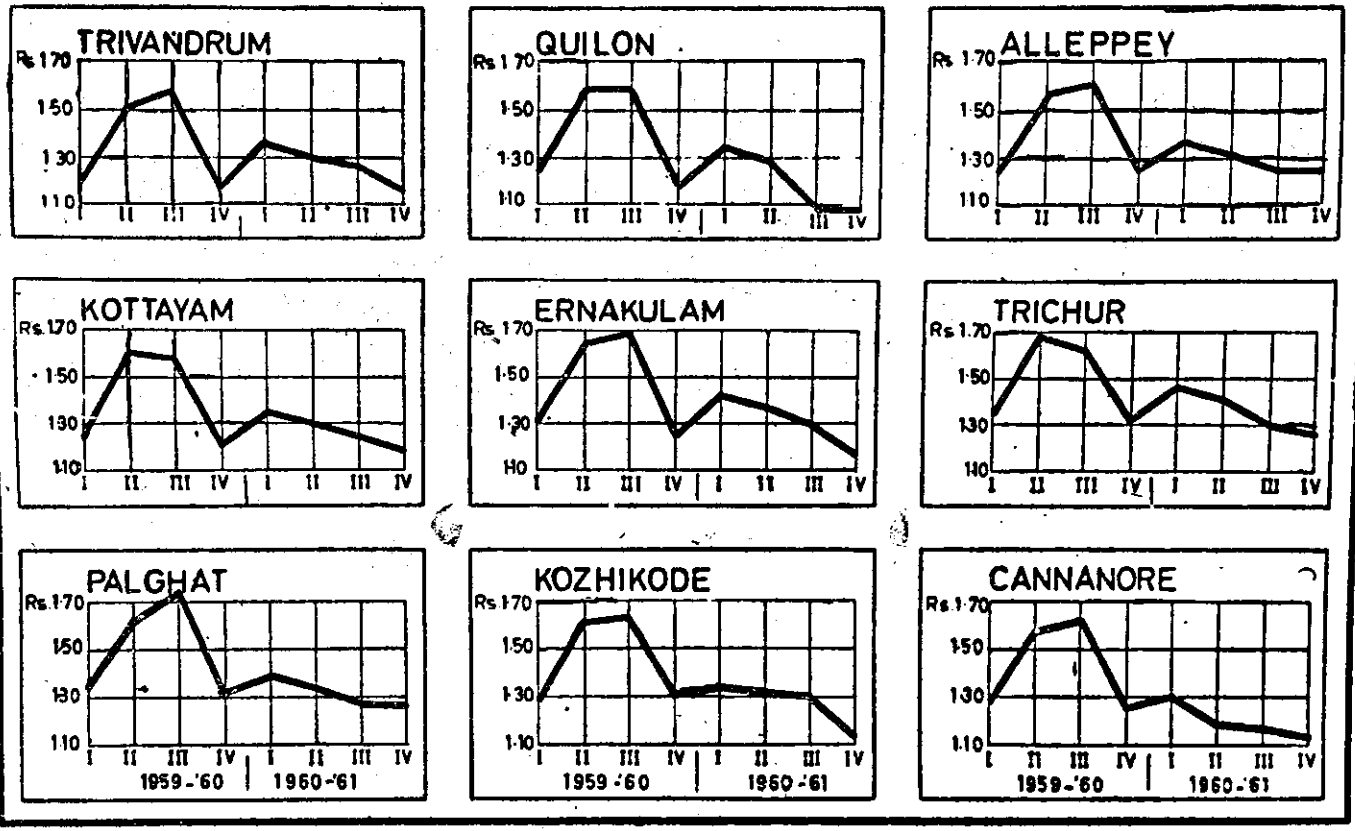




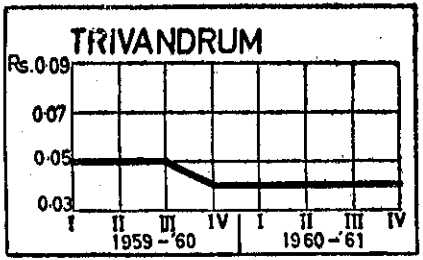


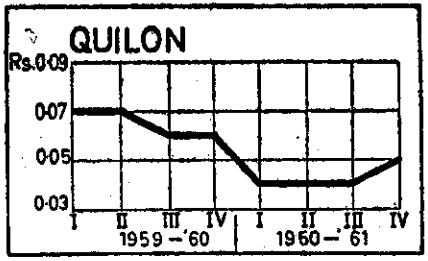


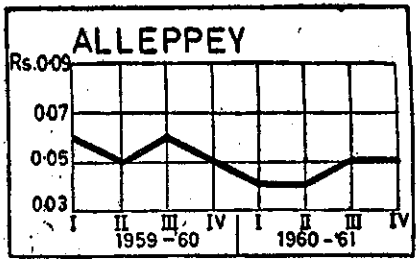
.QUARTERLY RETAIL PRICES OF CHILLIES (lb.)

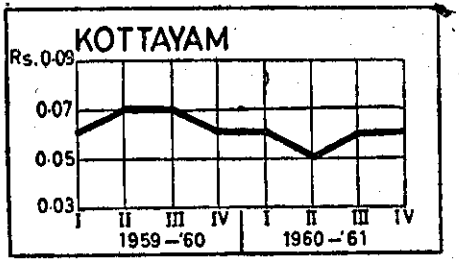


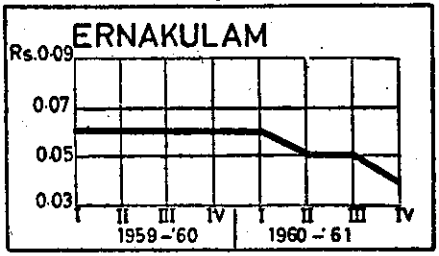
QUARTERLY RETAIL PRICES OF TAPIOCA (lb)

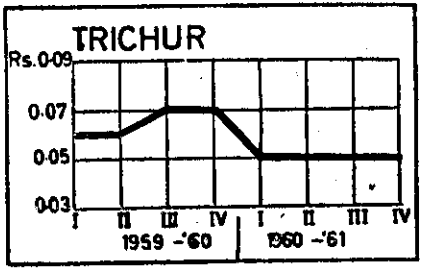


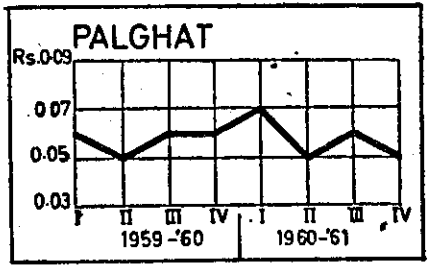


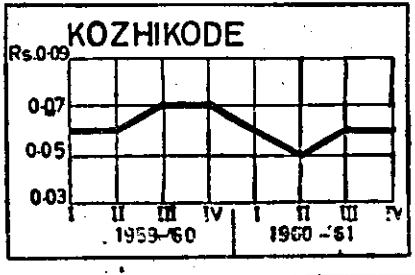




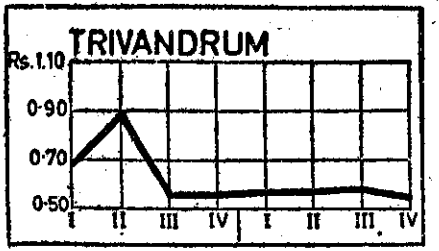


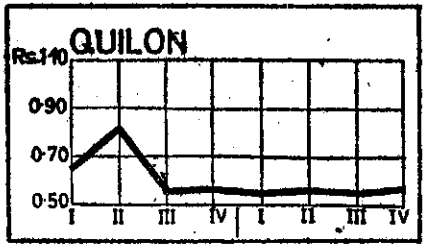


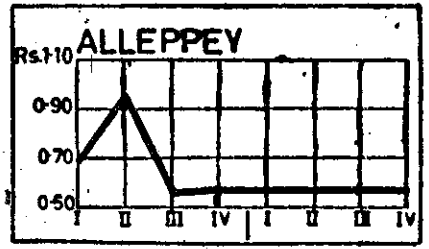


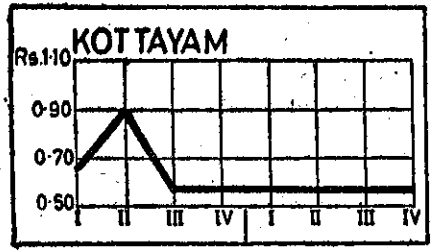


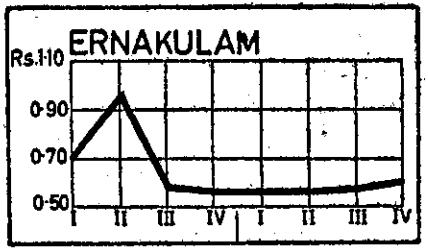
QUARTERLY RETAIL PRICES OF SUGAR - (1 lb.)

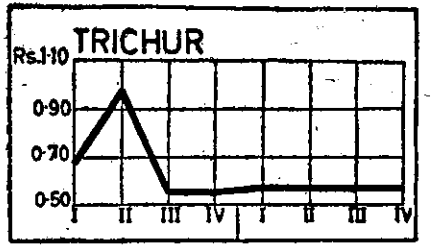


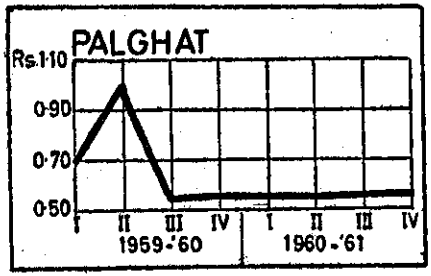


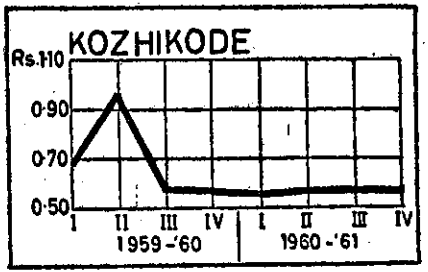


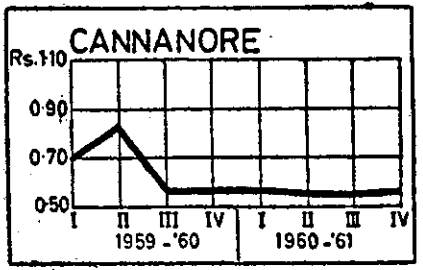












QUARTERLY RETAIL PRICES OF BLACK GRAM (lb)