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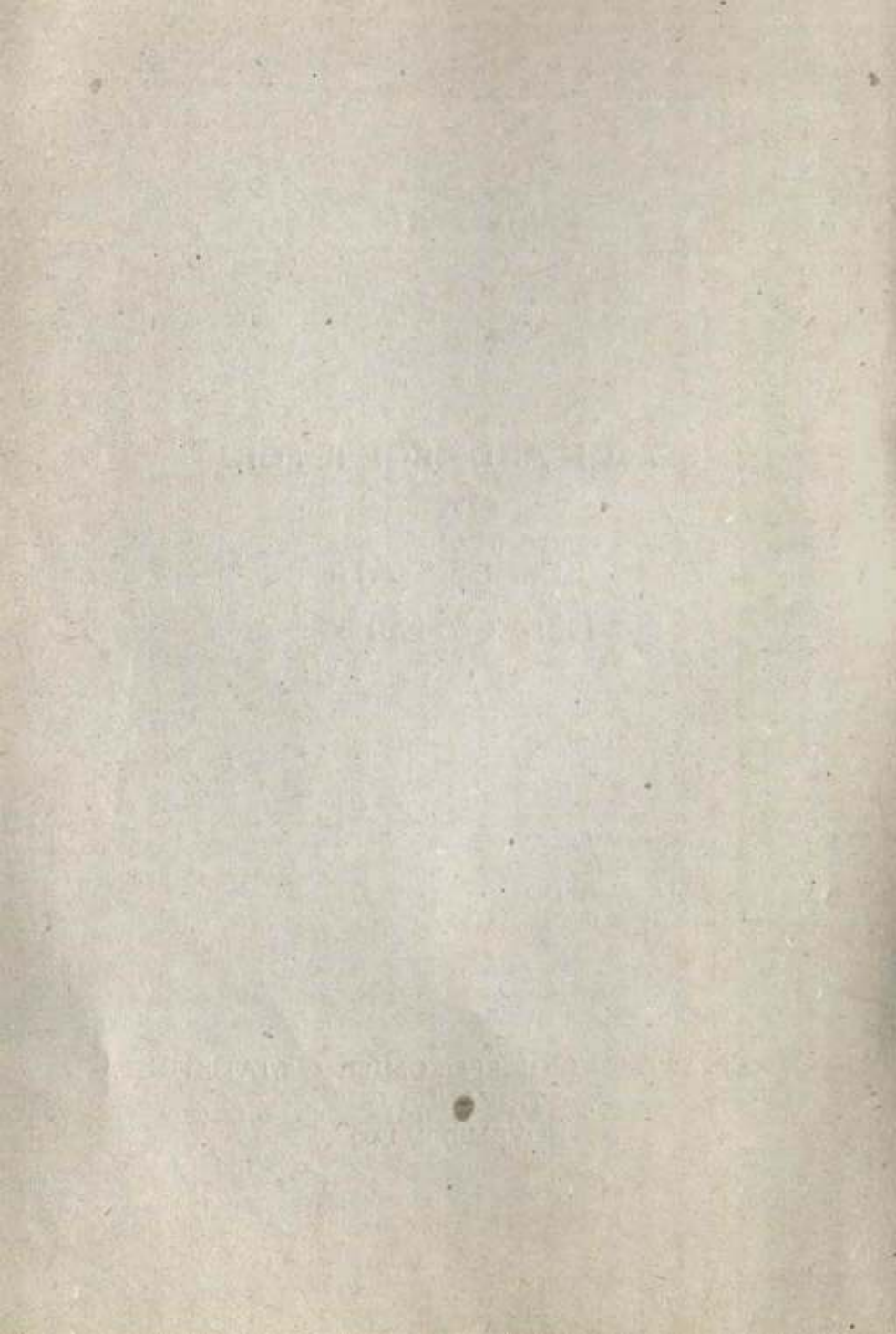
GOVERNMENT OF KERALA

SEASON AND CROP REPORT
OF
KERALA STATE
1981-82 & 1982-83

DEPARTMENT OF ECONOMICS & STATISTICS
TRIVANDRUM
NOVEMBER 1985

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PREFACE

This issue of the 'Season and Crop Report of Kerala State' deals with the various aspects of the State's agricultural economy for the years 1981-82 and 1982-83. The data on land use, area under crops and production of crops furnished in this report are based on the results obtained through EARAS.

The report has been prepared by Shri T. V. Issac, Research Officer and edited by Smt. J. Padmam, Assistant Director under the overall supervision of Sri K. Achuthan, Joint Director and Smt. P. L. Sreedevi Amma, Additional Director.

Suggestions for the improvement of the future issues of this publication are welcome.

Trivandrum,
November 1985.

N. GEORGE JOHN,
Director.

PART I

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SEASON AND CROP REPORT OF KERALA STATE

(1981-82 & 1982-83)

Introduction

Kerala State lies at the South-west corner of Indian Peninsula between 8° 18' and 12° 48' north latitudes and 74° 52' and 77° 22' east longitudes. It has a geographical area of 38863 Sq. Km. which forms only 1.18% of the total area of the country. The State comprises a narrow strip of land stretching to a distance of 580 Km. from Parasala in the South to Thalapady in the North between the western ghats and the Arabian Sea. The width of the State varies from 130 Km. in the middle to 32 Km. in the extremities.

The physical configuration of the State is a diversified one. From the forest clad western ghats the land mass undulates to the golden shores of the Arabian sea presenting a series of hills and valleys intersected by numerous rivers and streams. In the west the land is more or less level and is adorned by many lakes and lagoons. These diverse characteristics of the land and consequent plant growth demarcate the State into three distinct natural regions viz. the high land, the mid land and the low land. The high land region comprises the hill tracts. The mid land region lies between the high land and low land regions. Most of the reserved forests are situated on the high land region. The major forest produces are teak wood, rose wood and numerous other varieties of hard and soft woods. Annual rain fall is very high in this region. The high land region is suited for the cultivation of plantation crops like tea, coffee, cardamom and rubber. The mid land region is famous for its diverse crops. While rice is grown in valleys, coconut, arecanut, rubber, pepper, tapioca etc. are grown in abundance on the slopes of the hills. The low land is monopolised by cocoanut and rice.

Agriculture is the main occupation of the people and paddy, coconut, rubber, arecanut, pepper, tapioca etc. are the important crops cultivated. Paddy, being a seasonal crop is cultivated during the three seasons viz. Autumn (virippu), Winter (Mundakan) and Summer (Punja) of the year. Autumn and Winter crops are mostly rainfed and irrigated from natural streams and irrigation canals. Summer crop is raised mostly as a single crop on waterlogged areas and reclaimed lagoon lands by dewatering during Summer. Taking advantage of irrigation facilities more and more lands are brought under Summer crop year after year. High input cost coupled with low return on paddy have an adverse effect on area and yield rate of paddy now-a-days. Other important seasonal crops cultivated in the State are tapioca, banana, ginger, pulses, sesamum and other tubers. Perennial crops occupy the pride of place among crops and about 70% of the net area sown is covered by perennial crops alone.

Besides coconut, arecanut, pepper and rubber, jack and mango are the other crops extensively grown in the State. Intensive multiple cropping of perennial and seasonal crops in dry lands is the general pattern of cultivation in the State.

The State is blessed with a salubrious climate. The climate is of tropical forests with heavy rain-fall, a warm humidity of atmosphere and a fairly uniform temperature. The temperature normally varies between 21° c and 33° c. The normal rainfall is 3000 mm. per annum.

1.2 Area

For administrative purposes the State is divided into 14 districts viz. Trivandrum, Quilon, Pathanamthitta*, Alleppey, Kottayam, Idukki, Ernakulam, Trichur, Palghat, Malappuram, Kozhikode, Wynad, Cannanore and Kasaragode*.

The total geographical area of the State is 38863 Sq. Km. This forms only 1.18% of the total area of the Indian Union. In area Kerala holds only the 16th rank among the Indian States. The district-wise distribution of area is given in table 1.2 below:

TABLE 1.2

District-wise distribution of Area of the State—1981

<i>Sl. No.</i>	<i>District</i>	<i>Area in Sq. Km.</i>	<i>Percentage to total area</i>
1.	Trivandrum	2192	5.64
2.	Quilon	4620	11.89
3.	Alleppey	1883	4.85
4.	Kottayam	2204	5.67
5.	Idukki	5061	13.02
6.	Ernakulam	2408	6.19
7.	Trichur	3032	7.80
8.	Palghat	4480	11.53
9.	Malappuram	3548	9.13
10.	Kozhikode	2345	6.03
11.	Wynad	2132	5.49
12.	Cannanore	4958	12.76
	State	38863	100.00

*Newly formed Districts during 1983-84.

Idukki is the largest district while Appelley is the smallest district of the State. The four districts viz. Idukki, Cannanore, Quilon and Palghat cover 49% of the total area of the State.

1.3 Population

The population of the State as per the 1981 Census was 254.54 lakhs as against 213.47 lakhs during 1971 census. It is the most densely populated State in India. The density of population in Kerala in 1981 was 655 as against 216 for the country as a whole. The district-wise distribution of population and density of population are given in Table 1.3.

TABLE 1.3

District-wise Distribution of Population and Density of Population

District	Population in lakhs	Density of Population per
	1981	1981 S. Km.
Trivandrum	25.96	1184
Quilon	28.14	609
Alleppey	23.50	1248
Kottayam	16.97	770
Idukki	9.72	192
Ernakulam	25.35	1053
Trichur	24.40	805
Palghat	20.44	456
Malappuram	24.02	677
Kozhikode	22.45	957
Wynad	5.54	260
Cannanore	28.04	565
State	254.54	655

1.4 Climate and Rainfall

The climate is controlled by the South West (from June to August) and North East (from October to December) monsoon winds blowing over the State. Under the influence of these winds wide spread rain occur in Kerala throughout the year except for a few broken periods of dry weather. About 66% of the rain is received from the South West monsoon alone. The

normal rainfall is 3017.6 mm. It varies from 2001.6 mm. in Trivandrum to 3796 mm. in Kozhikode district. A notable feature of the distribution of the rainfall is that it progressively increases from South to North and from West to East. The normal and actual rainfall for the years 1981-82 and 1982-83 are given in table 1.4 below:

TABLE 1.4

District-wise Normal and Actual Rainfall

<i>District</i>	<i>Normal rainfall (m.m.)</i>	<i>Actual rainfall (m.m.)</i>	
		1981-82	1982-83
Trivandrum	2001.6	1144.2	558.5
Quilon	2760.2	2634.1	898.9
Pathanamthitta	N.S.A.	N.S.A.	369.9
Alleppey	3012.0	2423.2	1012.5
Kottayam	3462.6	2204.5	1059.3
Idukki	2898.9	2400.5	1072.2
Ernakulam	3548.5	2225.2	1438.5
Trichur	3177.4	2456.2	2062.5
Palghat	2397.7	2576.2	1276.6
Malappuram	2900.1	N.A.	67.9
Kozhikode	3796.0	2127.1	2558.8
Wynad	N.S.A.	N.S.A.	449.3*
Cannanore	3437.9	2746.5	2024.1*
State	3017.6	2293.7	1391.9

N.S.A.—Not separately available

*Incomplete

The normal rainfall for the recently formed districts of Wynad and Pathanamthitta have not been worked out. The year 1981-82 was a year of less rain and the year 1982-83 witnessed unprecedented drought conditions. Both the monsoons failed during 1982-83. During 1981-82 also North East monsoon had failed. The monthly normal rainfall and the monthly average rainfall for the years 1981-82 and 1982-83 are given in tables 3.1.1 and 3.2.1

1.5 Soil

The different types of soil found in the State are classified as follows:—

1. The hilly and forest soil seen all along the eastern part of the State.
2. Sandy soil seen in the coastal belt.
3. The laterite soil seen in the mid-land.
4. The black soil occurring in patches in the eastern border of Palghat District.
5. The peat or kari soil seen in Alleppey district.
6. The alluvial soil seen along the southern and eastern parts of Vembanad lake and in small patches in Trivandrum District.
7. Red soil seen on the eastern tip of Trivandrum Taluk.

1.6 Communication

The State has got a fairly well developed system of roads which inter links various District headquarters of the State. Border districts of the neighbouring States are also connected by road. But more development in this regard is needed in the high-land region of the State. There is a railway line connecting both the northern and southern ends of the State by a broadgauge line and another link line from Shoranur to Palghat. When the section between Cochin-Shoranur-Palghat is completely double lined the traffic congestion in this busy section would ease considerably. If the existing broadgauge line from Kanyakumari (Tamil Nadu) to Mangalore (Karnataka) via Kerala is extended upto Bombay by a coastal line quick movement of goods between Bombay and Kerala could have been facilitated at comparably cheaper rate and the economy of the State would have received a big boost. At present Trivandrum is connected with Madras, Bangalore, Bombay, Ahamedabad, Delhi, Bongai gaon (Assam) via Calcutta and Jammu Thavi by direct trains.

The backwaters and the inter linking canal system provide ample scope for the development of cheap inland water transport system.

There is a major port at Cochin. Three intermediate ports and eight minor ports provide ample coastal traffic facilities by sea for the State.

There are two aerodromes at Trivandrum and Cochin and a third one is proposed to be constructed at Kozhikode. When completed the three municipal corporations could be connected by air also. International flights to Gulf countries, Mali and Colombo are being operated from Trivandrum. Domestic flights to Delhi, Bombay, Madras and Bangalore are also being operated from these airports.

Postal and telephone facilities are superior to other States of the Indian Union at present.

1.7 Land Utilisation

The particulars of different land uses are estimated on the basis of the data collected through the Timely Reporting Survey. In 1981-82 the survey covered 265 villages with 20% sample size. In 1982-83 the sample size remained the same and the number of villages covered under the survey was 266.

The land utilisation particulars of the State for the years 1981-82 and 1982-83 are given in table 2.1 of the summary tables and 3.1.2, 3.2.2 3.1.3 and 3.2.3 of the detailed tables.

The district-wise area under important land uses are discussed below. From 1981-82 onwards land use particulars of Wynad District also are separately available. Since this district was formed by carving out portions of Calicut and Cannanore districts there is no comparison of area under different land uses over the years in respect of these districts. Moreover the area discussed under various land uses are based on the area of the State according to village papers and would differ slightly from the geographical area of the State as compiled by the Surveyor General of India.

(a) Forests

TABLE 1.7(a)

District-wise Distribution of Area under Forests

District	Area under Forests in hectares		Percentage to total area of the Forests	Percentage to the total area of the District
	1981-82	1982-83		
Trivandrum	49861	49861	4.61	22.78
Quilon	236048	236048	21.83	49.76
Alleppey	518	518	0.04	0.28
Kottayam	8141	8141	0.75	3.70
Idukki	260993	260993	24.13	50.67
Ernakulam	8123	8123	0.75	3.45
Trichur	103619	103619	9.58	34.61
Palghat	136257	136257	12.60	31.04
Malappuram	103417	103417	9.56	35.90
Kozhikode	41386	41386	3.83	17.74
Wynad	78787	78787	7.29	38.88
Cannanore	54359	54359	5.03	11.49
State	1081509	1081509	100.00	27.84

The total area under forests in the State is estimated at 10815 Sq. km. for both 1981-82 and 1982-83. This forms 27.8% of the total geographical area of the State. The area under the forests was the highest in Idukki district with 2610 Sq.km. or 24% of the total area under forests. The districts of Idukki and Quilon accounted for about 46% of the total forest area of the State. In these two districts about 50% of the area is covered by forests.

(b) *Land Put to Non-agricultural Uses*

The area under non-agricultural uses during the years 1981-82 and 1982-83 are estimated at 276451 hectares and 275908 hectares respectively. The corresponding figure for the year 1980-81 was 269824 hectares. This shows an impressive growth of 3.5% in the utilisation of land for non-agricultural purposes during 1982-83 over the previous year. The district-wise distribution of land under the above category is presented in table 1.7 (b) below:

TABLE 1.7(b)

Distribution of Area under Non-agricultural Uses

District	Area under non-agricultural uses (in hectares)		Percentage to total		Percentage to geographical area	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Trivandrum	16932	17555	6.13	6.36	7.75	8.03
Quilon	24826	24439	8.98	8.86	5.23	5.28
Alleppey	30761	30800	11.13	11.16	16.88	16.36
Kottayam	19376	18879	7.01	6.84	8.83	8.58
Idukki	15324	15445	5.54	5.60	2.98	3.04
Ernakulam	33114	33946	11.98	12.30	14.07	14.08
Trichur	22107	22328	8.00	8.09	7.38	7.36
Palghat	31686	32021	11.46	11.61	7.22	7.14
Malappuram	18943	18773	6.85	6.80	5.22	5.30
Kozhikode	16789	16030	6.07	5.81	7.20	6.82
Wynad	5977	5085	2.16	1.84	2.57	2.39
Cannanore	40607	40607	14.69	14.72	8.19	8.19
State	276451	275908	100.00	100.00	6.86	7.10

From the above table it may be seen that the percentage of area under agricultural uses to the total area under this category was highest in respect of Cannanore district both for 1981-82 and 1982-83. The area under this category was lowest in Wynad district for both the years. But the percentage of area under non-agricultural uses to the geographical area was highest in Alleppey district followed by Ernakulam and the other districts are far below in this respect. Alleppey district is the most densely populated district with numerous rivers and lakes. According to 1981 census Ernakulam district has the highest percentage of urban area to geographical area of the district. Industrially Ernakulam is the most developed district of the State.

(c) *Barren and Uncultivable Land*

The area under barren and uncultivable land for the years 1980-81, 1981-82 and 1982-83 are estimated at 85770 hectares, 85600 hectares and 86217 hectares respectively. The district-wise distribution of area under this category is furnished in table 1.7(c) below:

TABLE 1.7(c)

District-wise Distribution of Area under Barren and Uncultivable Land

<i>District</i>	<i>Area under barren and uncultivable land (in hectares)</i>		<i>Percentage to total</i>	
	1981-82	1982-83	1981-82	1982-83
Trivandrum	2280	2255	2.66	2.62
Quilon	2160	2181	2.52	2.53
Alleppey	576	576	0.67	0.67
Kottayam	2175	2112	2.54	2.45
Idukki	17336	17389	20.25	20.17
Ernakulam	2676	2662	3.13	3.09
Trichur	2437	2443	2.85	2.83
Palghat	13888	13888	16.22	16.11
Malappuram	7706	7738	9.01	8.98
Kozhikode	1754	1754	2.05	2.03
Wynad	2702	2675	3.16	3.10
Cannanore	29910	30544	34.94	35.42
State	85600	86217	100.00	100.00

The highest area under this category was in Cannanore District. The districts of Cannanore, Idukki and Palghat together possessed 71% of the total area under this category.

(d) *Permanent Pastures and Grazing Lands*

The area under this category is estimated at 5432 hectares during 1980-81, 5382 hectares during 1981-82 and 5311 hectares during 1982-83. About 42% of the total area under this category was in Idukki district alone. Idukki and Cannanore districts together accounted for about 73% of the total area under this category.

(e) *Land under Miscellaneous Tree Crops*

The land under miscellaneous tree crops for the years 1980-81, 1981-82 and 1982-83 are estimated at 63875 hectares, 55187 hectares and 54705 hectares respectively. This shows a declining trend in the area under this type of utilisation over the years. The area under this category was highest in Idukki district followed by Cannanore district. These two districts together commanded about 55% of the total area under this category.

(f) *Cultivable Waste Land*

The estimated area under this category was 130213 hectares in 1982-83 as against 130204 hectares during 1981-82 and 129032 hectares during 1980-81. District-wise break-up of these data for the years 1981-82 and 1982-83 are given in table 1.7(f) below.

TABLE 1.7(f)

District-wise Distribution of Area under Cultivable Waste Land

District	Area under Cultivable Waste Land (in hectare)		Percentage to total	
	1981-82	1982-83	1981-82	1982-83
Trivandrum	2756	2284	1.98	1.76
Quilon	1286	1125	0.99	0.86
Alleppey	1925	2070	1.48	1.59
Kottayam	1835	1787	1.41	1.37
Idukki	39971	39374	30.70	30.24
Ernakulam	4917	5110	3.78	3.92
Trichur	5493	5473	4.22	4.20
Palghat	26071	25644	20.02	19.69
Malappuram	13965	14101	10.73	10.83
Kozhikode	3234	3132	2.48	2.42
Wynad	4435	6476	3.41	4.97
Cannanore	24496	23637	18.80	18.15
State	130204	130213	100.00	100.00

From the above table it may be seen that the area under cultivable waste land was highest in Idukki district with about 30% of the total area under this category and the lowest was in Quilon district. About 30% of the area under this category came from the districts of Idukki, Palghat, Cannanore and Malappuram. There is a slight increase in this class in Alleppey, Ernakulam and Wynad districts.

(g) *Fallow other than Current Fallow:*

The area under fallow other than current fallow was estimated at 27425 hectares during 1982-83 as against 26827 hectares during 1981-82 and 26896 hectares during 1980-81.

(h) *Current fallow:*

The area under current fallow was estimated at 44455 hectares during 1982-83 as against 54487 hectares during 1981-82 and 43579 hectares during 1980-81. The district-wise distribution of area under this category is shown in Table 1.7 (h).

TABLE 1.7(h)

District-wise Distribution of Current Fallow;

<i>District</i>	<i>Area under current fallow (in hectares)</i>		<i>Percentage to total</i>	
	1981-82	1982-83	1981-82	1982-83
Trivandrum	1472	1162	2.70	2.61
Quilon	1891	1669	3.47	3.75
Alleppey	2131	2337	3.91	5.26
Kottayam	2737	2227	5.02	5.01
Idukki	1725	1919	3.17	4.32
Ernakulam	3771	3204	6.92	7.21
Trichur	4561	4561	8.37	10.26
Palghat	6491	6111	11.91	13.75
Malappuram	9166	9478	16.83	21.32
Kozhikode	2395	2364	4.40	5.32
Wynad	4518	1276	8.29	2.87
Cannanore	13629	8147	25.01	18.32
State	54487	44455	100.00	100.00

From the above table it may be seen that 25% of the total area under this category was in Cannanore District in 1981-82 and 21% of the same was in Malappuram district in 1982-83. The area of land lying as current fallow was lowest in Trivandrum district for the above two years. In Wynad district the area under current fallow has reduced to one-fourth while in Cannanore it has decreased considerably during 1982-83. Trivandrum, Kottayam Ernakulam also showed a decrease in the area under this group

(i) *Net area Sown:*

The estimates of area under this category during 1982-83 has increased by 9004 hectares over 1981-82. The respective estimates under net area sown for 1980-81, 1981-82 and 1982-83 were 2179590 hectares, 2169850 hectares and 2179754 hectares. The District-wise distribution of the data for the years 1981-82 and 1982-83 are given in table 1.7 (i)

TABLE 1.7 (i)

District-wise distribution of net area sown

<i>District</i>	<i>Net area sown hectares</i>		<i>As percentage to total</i>		<i>As percentage to the area of the District</i>	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Trivandrum	143404	143470	6.61	6.58	65.42	65.46
Quilon	205998	207117	9.49	9.50	44.59	44.83
Alleppey	145046	144609	6.69	6.63	77.01	76.79
Kottayam	182571	183729	8.41	8.43	82.85	83.35
Idukki	160724	161154	7.41	7.39	31.75	31.85
Ernakulam	178614	178094	8.23	8.17	74.17	73.96
Trichur	156501	156749	7.21	7.19	51.62	51.68
Palghat	212884	212189	8.81	9.74	47.52	47.37
Malappuram	201689	201530	9.30	9.25	56.85	56.79
Kozhikode	162284	164194	7.48	7.53	69.21	70.02
Wynad	109356	112072	5.04	5.15	51.31	52.58
Cannanore	310779	314847	14.32	14.44	62.69	63.49
State	2169850	2179754	100.00	100.00	55.83	56.09

The net area sown was highest in Cannanore district with 314847 hectares or 14% of the total net area sown in the State during 1982-83. The lowest area under net area sown was in Wynad district with 112072 hectares or 5.9% of the total area under this category during the same period. The percentage of net area sown to the geographical area of the district was highest in Kottayam district with 83% and the same was lowest in Idukki district with only 31.8% as against a State average of 56% during 1982-83. This ratio was less in the districts of Idukki, Quilon, Palghat and Trichur than the State average. No noticeable change is found in the total net area sown in each district.

(j) *Area sown more than Once*

Area sown more than once in the State is estimated at 682319 hectares during 1982-83 as against 735407 hectares during 1980-81. The estimates show that the area sown more than once has decreased during 1982-83 over the years. The district-wise distribution of area sown are given in table 1.7(j) below:

TABLE 1.7(j)

District-wise Distribution of Area Sown more than Once

District	Area sown more than once (in hectares)		Percentage to total	
	1981-82	1982-83	1981-82	1982-83
Trivandrum	87543	77813	11.91	11.40
Quilon	90938	84302	12.36	12.36
Alleppey	77059	67636	10.48	9.91
Kottayam	49282	41367	6.70	6.06
Idukki	8565	15023	1.16	2.20
Ernakulam	79272	76099	10.78	11.15
Trichur	83394	72106	11.34	10.57
Palghat	121371	115475	16.51	16.92
Malappuram	47701	48194	6.49	7.06
Kozhikode	27755	34161	3.77	5.01
Wynad	42754	19948	5.81	2.93
Cannanore	19773	30195	2.69	4.43
State	735407	682319	100.00	100.00

From the above table it may be seen that the area sown more than once was the highest in Palghat district both for 1981-82 and 1982-83 and the same was lowest in Idukki district for both the years. The area sown more than once was comparably higher in the districts of Quilon, Trivandrum, Trichur, Ernakulam and Alleppey. But one thing to be noticed is that the area sown more than once in the years 1981-82 and 1982-83 showed an increasing trend in Idukki district and Cannanore district.

(k) *Total cropped Area*

Total cropped area is the sum total of net area sown and area sown more than once. The total cropped area of the State for the years 1980-81, 1981-82 and 1982-83 are estimated at 2884840 hectares, 2905257 hectares and 2862073 hectares respectively. The total cropped area has increased by 20417 hectares during 1981-82 over the previous year and had decreased by 43184 hectares during 1982-83. The district-wise distribution of total cropped area for the years 1981-82 and 1982-83 are given in table 1.7 (k) below:

TABLE 1.7(k)

District-wise Distribution of Total Cropped area

District	Total cropped area (in hectares)		Percentage to total		As percentage to net area sown	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Trivandrum	230947	221283	7.95	7.73	161	154
Quilon	296336	291419	10.22	10.18	144	140
Alleppey	222105	212245	7.65	7.42	153	147
Kottayam	231853	225096	7.98	7.87	127	123
Idukki	169289	176177	5.83	6.15	105	109
Ernakulam	257886	254193	8.88	8.88	144	143
Trichur	239895	228855	8.25	8.00	153	146
Palghat	334255	327664	11.5	11.45	157	154
Malappuram	249390	249724	8.58	8.73	124	124
Kozhikode	190039	198355	6.54	6.93	117	121
Wynad	152110	132020	5.24	4.61	139	118
Cannanore	330552	345042	11.38	12.05	106	110
State	2905257	2862073	100.00	100.00	134	131

The total cropped area was highest in Palghat district for both 1981-82 and 1982-83 with about 11.5% of the total cropped area and the same was lowest in Wynad district. But the percentage of total cropped area to the net area sown i.e. the intensity of cultivation was highest in Trivandrum district in 1981-82 with 161%. In 1982-83 the intensity of cultivation was highest in Trivandrum and Palghat districts with 154% each and it was lowest in Idukki district for both the years. The intensity of cultivation in the districts of Idukki, Cannanore, Kozhikode, Malappuram and Kottayam was less than the State average for both the years.

(1) *Area under seasonal, Annual and Perennial Crop*

Out of the gross area under cultivation during the year 1981-82, 41.2% [table 1.7(1)] was covered by seasonal crops while 56.4% was covered by perennial crops and the remaining area was under annual crops. In 1982-83 the area under seasonal crops came down to 39.5% and the same under perennial crops went upto 58.1% while the area under annual crops remained at 2.4%.

The gross area under cultivation during the year 1982-83 has decreased from the previous year by about 43184 hectares. But the area under seasonal crops has decreased by about 66293 hectares. The increase in area under perennial crops during the year was 25143 hectares. Hence it is quite reasonable to assume that a sizeable area under seasonal crops was kept fallow during the year 1982-83 or converted to land under non-agricultural uses. The severe drought conditions prevailed during the year has forced the farmers to keep a sizable area under seasonal crops fallow. The district-wise distribution of area under perennial, seasonal and annual crops are given in table 1.7 (1).

The area under seasonal crops was highest in Palghat district both as a percentage to total area under seasonal crops and to gross cropped area of the District. In Trichur and Alleppey also the area under seasonal crops was more than one half of the gross cropped area of the district. In all other districts perennial crops occupy more than 50% of the gross cropped area. The percentage of perennial crops to gross cropped area was highest in Idukki district while the percentage of area under perennial crops to total area under perennial crops was highest in Cannanore district. The area under annual crops was highest in Alleppey district during 1981-82 while it was highest in Palghat district during 1982-83.

TABLE 1.7 (I)
District-wise Distribution of Area under Seasonal, Annual and Perennial Crops (in hectares)

District	Area under seasonal crops (in hectares)		Percentage to total		Area under annual crops (in hectares)		Percentage to total		Perennial crops		Percentage to total	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Trivandrum	97794 (42.3)	88532 (40.0)	8.16	7.83	7611 (3.3)	6533 (3.0)	10.98	9.72	125602 (54.4)	126218 (57.0)	7.66	7.59
Quilon	123365 (41.5)	117257 (40.2)	10.30	10.37	5760 (1.9)	6073 (2.1)	8.31	9.03	167811 (56.6)	168089 (57.7)	10.24	10.11
Alleppey	119894 (54.0)	112093 (52.8)	10.01	9.91	7964 (3.6)	6767 (3.2)	11.49	10.06	94247 (42.4)	93385 (44.0)	5.75	5.62
Kottayam	69533 (30.0)	64943 (28.8)	5.81	5.74	4991 (2.2)	5531 (2.5)	7.20	8.22	157329 (67.8)	154622 (68.7)	9.61	9.29
Idukki	25348 (15.0)	26042 (14.8)	2.12	2.30	5692 (3.4)	4315 (2.4)	8.21	6.41	138249 (81.6)	145820 (82.8)	8.44	8.76
Ernakulam	125770 (48.8)	118341 (46.6)	10.50	10.46	6083 (2.4)	6523 (2.6)	8.78	9.70	126033 (48.8)	129329 (50.8)	7.69	7.77
Trichur	131066 (54.6)	121011 (52.9)	10.95	10.70	5084 (2.1)	4768 (2.1)	7.34	7.09	103745 (43.3)	109076 (45.0)	6.33	6.19
Palghat	233481 (69.9)	217021 (65.2)	19.50	19.19	6393 (1.9)	12022 (3.7)	9.23	17.87	94301 (28.2)	98621 (30.1)	5.76	5.93
Malappuram	107724 (43.21)	105264 (42.1)	9.00	9.31	4526 (1.8)	4702 (1.9)	6.53	6.99	137140 (55.1)	139758 (56.1)	8.37	8.40
Kozhikode	36481 (19.2)	35134 (17.7)	3.05	3.11	7854 (4.1)	3084 (1.6)	11.33	4.58	145704 (76.7)	160137 (90.7)	8.89	9.62
Wynad	36227 (23.8)	35683 (27.0)	3.03	3.16	2107 (1.4)	1992 (1.5)	3.04	2.96	113776 (74.8)	94345 (71.5)	6.94	5.67
Cannanore	90616 (27.4)	89625 (26.0)	7.57	7.92	5236 (1.6)	4957 (1.4)	7.56	7.37	234700 (71.0)	250460 (72.6)	14.32	15.05
State	1197239 (41.2)	1130946 (39.5)	100.00	100.00	69301 (2.4)	67267 (2.4)	100.00	100.00	1638717 (56.4)	1663860 (58.1)	100.00	100.00

1.8 Area under Crops

The details of area under crops in the State have been furnished in table 2.3 of summary tables and district-wise details in tables 3.4.1 to 3.4.4 of detailed tables. The crops in the State are broadly classified into food and non-food crops.

1.8 (A) Food crops

The area under food crops was estimated at 1714378 hectares in 1982-83 against 1781932 hectares in 1981-82 and 1778001 hectares during 1980-81. Though the area under food crops has increased in 1981-82 over the previous year it has decreased by 3.8% during 1982-83. The district-wise distribution of area under food crops and their respective percentages to total area under food crops and the total cropped area of the district are furnished in Table 1.8 (A).

TABLE 1.8 (A)

District-wise Distribution of Area under Food Crops

District	Area under food crops (in hectares)		Percentage to total		Percentage to cropped area	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Trivandrum	143709	132547	8.06	7.74	62.23	59.90
Quilon	164357	159576	9.22	9.31	55.35	54.76
Alleppey	146042	136706	8.20	7.98	65.75	64.61
Kottayam	105260	99717	5.91	5.82	45.40	44.30
Idukki	98775	98490	5.54	5.74	58.35	55.90
Ernakulam	161611	154301	9.07	9.00	62.67	60.70
Trichur	167011	157111	9.37	9.16	69.62	68.65
Palghat	266470	255499	14.95	14.90	79.72	77.98
Malappuram	161435	159156	9.06	9.28	64.73	63.73
Kozhikode	80682	77404	4.53	4.52	42.46	39.02
Wynad	62993	62463	3.54	3.64	41.41	47.31
Cannanore	223587	221408	12.55	12.91	67.64	64.17
State	1781932	1714378	100.00	10.00	61.33	59.90

The area under food crops was highest in Palghat district with 255493 hactres or 14.9% of the total area under food crops during 1982-83 and the same was lowest in Wynad district. The percentage of area under food crops to total cropped area of the district was also highest in Palghat district with 77.98% in 1982-83. The percentage of area under food crops to total cropped area was less than half in the districts of Kottayam, Kozhikode and Wynad districts and it was less than the State average in Quilon and Idukki districts in addition to the above mentioned districts.

The salient features of some important food crops are discussed in the following paragraphs:

(1) *Paddy*

Paddy is the most important food crop cultivated in the State. Being a seasonal crop it is cultivated during the three seasons of Autumn, Winter and summer. The season-wise break-up of area under paddy cultivated for the years 1981-82 and 1982-83 are given in table 1.8 A.1.

TABLE 1.8 A.1

Season-wise Distribution of Area under Paddy

<i>Season</i>	<i>Area under paddy (Hectares)</i>		
	1980-81	1981-82	1982-83
Autumn	349243 43.5	347098 43.0	342669 44.0
Winter	354132 44.2	356073 44.1	352273 45.3
Summer	98324 12.3	103700 12.9	83548 10.7
Total	801699 100.00	806871 100.00	778490 100.00

From the above table it may be seen that the area under paddy was fluctuating year after year. Though the area under paddy has increased during 1981-82 over the previous year the area under Autumn paddy has decreased and it has continued to decrease during the next year also. The fluctuation in the area under summer paddy was more marked

than the same for other seasons. Many factors like weather condition, cost of cultivation, ruling price of paddy etc. influence the decision of farmers in raising paddy crop.

The district-wise distribution of paddy during the years 1981-82 and 1982-83 are furnished in table 1.8 A.2.

TABLE 1.8 A.2

District-wise Distribution of Area under Paddy 1981-83

District	Area under paddy (in hectares)		Percentage to total		Percentage to total cropped area	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Trivandrum	30775	29391	3.80	3.78	13.33	13.28
Quilon	50406	49601	6.25	6.37	16.98	17.02
Alleppey	88606	83862	10.98	10.77	39.89	39.51
Kottayam	34428	34596	4.27	4.44	14.85	15.37
Idukki	8957	9249	1.11	1.19	5.29	5.25
Ernakulam	100884	96010	12.50	12.33	39.12	37.77
Trichur	115511	107711	14.32	13.84	48.15	47.07
Palghat	180877	173158	22.42	22.24	54.11	52.85
Malappuram	78974	78502	9.79	10.08	31.67	31.44
Kozhikode	26953	26488	3.34	3.40	14.18	13.33
Wynad	30089	30482	3.73	3.92	19.78	23.09
Cannanore	60411	59440	7.49	7.64	18.28	17.23
State	806871	778490	100.00	100.00	27.77	27.20

The area under paddy as usual was the highest in Palghat and was the lowest in Idukki district. More than 22% of the total area was in Palghat district alone and this together with that of the districts of Trichur, Ernakulam and Alleppey cover about 59% of the total area under paddy. The percentage of area under paddy to total cropped area of the district was also higher in these districts than the same for the State as a whole. Palghat district has the unique distinction of being the only district with more than half of the total cropped area under paddy. The area under paddy has decreased by 3.52% during 1982-83 over the previous year due to the severe droughts prevailed during the year.

2. *Other Cereals and Millets*

Jowar, ragi, chama are the other important cereals and millets cultivated in the State. The total area under these crops are estimated at 4825 hectares during 1982-83 as against 5412 hectares in 1981-82 and 6112 hectares during 1980-81. The area under other cereals and millets shows a decreasing trend over the years. Palghat district continues to be the major districts growing other cereals and millets.

3. *Pulses*

The area under pulses is estimated at 30055 hectares during 1982-83 as against 33910 hectares during 1981-82 and 33859 hectares during 1980-81. The downward movement in the area under pulses continued during the years 1981-83 also. Palghat district accounts for nearly one-third of the total area under pulses.

4. *Sugarcane*

The area under sugarcane is estimated at 7814 hectares during 1982-83 as against 8381 hectares during the previous year, 8041 hectares during 1980-81 and 7790 hectares during 1979-80. This shows that the area under sugarcane is fluctuating over the years. Since sugarcane is cultivated on wet lands frequent changes in the cropping pattern depending upon the relative prices of paddy, sugarcane or banana affects the area under sugarcane in the major sugarcane growing districts of Idukki, Palghat and Alleppey.

5. *Pepper*

Pepper is an important spice cultivated extensively throughout the State. The area under pepper was highest in Cannanore district both for 1981-82 and 1982-83 with about 26 thousand hectares. The estimates of area under this crop for the State as a whole for the two years were 1.08 lakh hectares and 1.07 lakh hectares respectively. Kozhikode, Kottayam and Idukki are the other major pepper growing districts of the State.

6. *Chillies*

The estimates of area under chillies for the years 1982-83 and 1981-82 were 1250 hectares and 1269 hectares respectively. One peculiarity of this crop is that it is cultivated only in the Malabar region on a commercial basis.

7. *Ginger*

The area under ginger is estimated at 12662 hectares during 1982-83 as against 13447 hectares during 1981-82. Kottayam is the leading district in the cultivation of ginger.

8. *Turmeric*

Turmeric, the most commonly used spice, is cultivated on a limited scale throughout the State. The area under turmeric is estimated at 2847 hectares in 1982-83 as against 3200 hectares during the previous year.

9. *Cardamom*

Cardamom is cultivated on the slopes of western ghats. Idukki district accounts for nearly 84% of the total area under cardamom in the State. The total area under cardamom was estimated at 54388 hectares during 1982-83 as against 54516 hectares during the previous year. Cardamom is not cultivated in the districts of Alleppey, Ernakulam and Trichur.

10. *Arecanut*

Arecanut is an important perennial crop cultivated throughout the State. In the Kasargode area of Cannanore district arecanut is a major crop. The area under arecanut is estimated at 60816 hectares during 1982-83 as against 61261 hectares during 1981-82. Cannanore district accounts for nearly one quarter of the total area under arecanut.

11. *Tamarind*

The area under tamarind is estimated at 10978 hectares during 1982-83 as against 11529 hectares during 1981-82 showing a decreasing trend. Tamarind is cultivated throughout the State and Palghat is the leading district in the cultivation of this crop.

12. *Mango*

Mango is a fruit tree extensively grown in the State. The area under mango is estimated at 60205 hectares during 1982-83 as against 60181 hectares during the previous year. The area under mango is fairly uniform among the districts with the exception of Idukki where the area under mango is the lowest.

13. *Jack*

Jack is another fruit tree grown extensively in the State. It is not only a source of fruit but also of timber. The distribution of area under jack is fairly uniform among the districts. The area under this crop is estimated at 59990 hectares during 1982-83 as against 61037 hectares during the previous year.

14. *Banana*

The area under banana is estimated at 14068 hectares in 1981-82 and 14126 hectares during 1982-83. Malappuram and Ernakulam are the two districts where banana is cultivated more extensively than other districts.

15. *Cashewnut*

The area under cashew during the year 1982-83 is estimated at 1.41 lakh hectares as against 1.40 lakh hectares during 1981-82 and 1.41 lakh hectares during 1980-81. Nearly half of the area under cashew was enumerated from Cannanore district alone.

16. *Tapioca*

Tapioca is a near substitute to rice, the staple food of the people of Kerala. So tapioca is extensively cultivated in the State. But the area under tapioca is showing a progressively decreasing trend over the years. Since the price and off take of tapioca depend upon the availability and price of rice, frequent fluctuations do occur in the price of tapioca which adversely affects farmers and hence the decline in area under this crop. A second reason for this is that the food habit of the people have changed over the years. Still tapioca is extensively cultivated in Quilon and Trivandrum districts where there are markets for industrial purposes also. The area under tapioca is estimated at 2.28 lakh hectares during 1982-83 as against 2.48 lakh hectares during 1981-82.

B. *Non-Food Crops*

The major non-food crops cultivated in the State are oil seeds and plantation crops like tea, coffee and rubber. The area under non-food crops shows an increasing trend over the years. The area under non-food crops have increased from 11.07 lakhs hectares during 1980-81 to 11.23 lakh hectares in 1981-82 and to 11.48 lakh hectares during 1982-83. The area under non-food crops during 1982-83 constituted 40% of the total cropped area. The salient features of the main non food crops are discussed below.

(a) *Groundnut*

Groundnut is cultivated mostly in Palghat district where the soil is suitable for the cultivation of this crop. The area under groundnut during the year 1982-83 is estimated at 10276 hectares as against 9707 hectares during the previous year.

(b) *Sesamum*

Sesamum is an oil seed cultivated throughout the State. Alleppey district dominates the other districts, in the cultivation of this crop. About one third of the area under sesamum was in Alleppey district alone. The total area under this crop during the year 1982-83 was estimated at 14153 hectares as against 15037 hectares during the previous year.

(c) *Coconut*

Coconut is the most important non-food crop which is extensively cultivated throughout the State. The area under coconut is about 59% of the

area under non- food crops and 23% of the total cropped area during 1982-83. The area under this crop during the year 1982-83 is estimated at 6.74 lakh hectares as against 6.67 lakh hectares during the year 1981-82 and 6.51 lakh hectares during the year 1980-81. The area under coconut was highest in Kozhikode district and was the lowest in Wynad district during both 1981-82 and 1982-83.

(d) *Cotton*

Palghat is the only cotton growing district and the area under this crop during the year 1982-83 is estimated at 5900 hectares as against 6777 hectares during 1981-82 and 6223 hectares during the year 1980-81. This shows that the area under this crop has a fluctuating trend over the years.

(e) *Tobacco*

Tobacco is cultivated only in Cannanore district. The area under this crop is estimated at 536 hectares during 1982-83 as against 570 hectares during 1981-82.

(f) *Tea*

Tea is a plantation crop cultivated mostly on the slopes of the western ghats. The area under tea during the year 1982-83 is estimated at 35205 hectares as against 35625 hectares during the previous year.

(g) *Coffee*

Coffee is grown in all the districts though the high ranges of the western ghats are particularly suited for this crop. Wynad is famous for coffee cultivation. Nearly 80% of the area under coffee was in this district alone. The area under coffee was estimated at 57905 hectares during 1982-83 as against 57949 hectares during the previous year.

(h) *Rubber*

Rubber is the most important plantation crop cultivated extensively barring the coastal areas, of the state. The area under rubber is estimated at 2.56 lakhs hectares during the year 1982-83 as against 2.38 lakh hectares during the previous year. The area under rubber has increased by about 18000 hectares during the year 1982-83.

(i) *Cocoa*

Cocoa is a recent addition to the plantation crops of the State. But there is no big cocoa plantation as such in the State. It is grown intermixed with coconut trees and other trees. Kottayam is the leading district in the cultivation of this crop. The area under cocoa for the year 1982-83 is estimated at 18254 hectares as against 23381 hectares during the previous year. The area under cocoa is coming down year after year for want of a ready and remunerative market for cocoa-beans.

1.9. Irrigation

The net area under irrigation in the state for the year 1981-82 was estimated at 2.39 lakh hectares. Government canals are the main source of irrigation in the State. Private canals, tanks and wells serve only about fifty five thousand hectares of area. An area of 33 thousand hectares were irrigated under minor and lift irrigation (government) schemes. The percentage of area irrigated to net area sown works out to only 11%. The source wise details of area under irrigation are given in Table 2.2 of summary tables.

1.10. Weather and Crop Conditions

The State experiences the benefit of both south west and northeast monsoons and therefore normally receives good rainfall over the major part of the year. This does not mean that the seasonal distribution of rain may not be unfavourable to cultivation. Generally it is due to flood rather than drought that crop damages occur in Kerala. However the year 1982-83 was an exception to this when the State was virtually under the grip of an unprecedented drought. Many crops including perennials like coconut, arecanut, cocoa, pepper, cardamom etc. withered away in large numbers and the agricultural economy of the State lay crippled. The weather and crop conditions for the years 1981-82 and 1982-83 are discussed briefly for each district in the following paragraphs.

(a) 1981-82

(i) *Trivandrum*

The major crops cultivated in this district are paddy, tapioca, coconut, arecanut, pepper and rubber.

The rainfall in the district during the year was far less than normal and also than last year's total rainfall. But this shortfall in rain did not affect the crops as the distribution of the rain was favourable to crops during the major crop seasons of Autumn and Winter. But from December onwards rainfall was erratic. Yet the general climatic condition was favourable to all crops.

(2) *Quilon*

The major crops cultivated in this district are paddy, coconut, arecanut, pepper, tapioca, banana and rubber.

The rainfall conditions during the major crop seasons of Autumn and Winter were normal and the crop conditions were also good during this period. Though there were floods in certain places during Autumn, this did not affect the crops seriously. But the rainfall during the second half of the year was erratic. Still the general climatic and crop conditions were favourable during the year.

Alleppey

The major crops cultivated in the districts are paddy, coconut, arecanut, tapioca and banana.

The rainfall conditions during the year was favourable to crops. Though total rainfall was less than normal the distribution of rainfall was favourable to crops. Hence yield rate of paddy in this district during the year was higher than that of the same for the last three years. Though the rainfall was erratic during the second half of the year it had not adversely affected the seasonal crops at all. The overall weather condition during the year was favourable to all crops in the district.

Kottayam

The major crops cultivated in this district are paddy, coconut, arecanut pepper, tapioca, rubber and plantain. The south west monsoon was near normal. There were isolated cases of floods in certain parts of Changanacherry and Vaikom taluks during Autumn season. But this has not affected the crops. But north east monsoon was weak in this district and near drought conditions prevailed in the second half of the year. But this has not affected the production and yield rate of major crops during the year. In fact they were better than that of the previous year.

Idukki

The main crops cultivated in this district are the plantation crops like tea, coffee, cardamom, rubber, etc., and paddy, tapioca, pepper and coconut. Though total rainfall was less than normal and also less than previous year's total it has not affected any crops. There was heavy rainfall during winter season in Thodupuzha taluk. But the sudden withdrawal of monsoon and ensued drought conditions affected the crops in the dry lands in this district. But this has not effected the overall production and yield rate of any crop during the year under review.

Ernakulam

The important crops cultivated in this district are paddy, tapioca, coconut arecanut, pepper and banana. The general rainfall conditions during the year was satisfactory for all the crops though total rainfall was much less than normal and also last year's total. But the distribution of available rainfall to crops was favourable in that it kept away natural calamities like flood, drought, pest attack, etc. The production as well as yield rate of major crops were better than those of the previous year.

Trichur

The major crops cultivated in this district are paddy, coconut, arecanut, tapioca, pepper and rubber. Though total rainfall was less than normal its distribution was favourable to crops. Natural calamities like flood, drought,

pest attack, etc., were minimum and consequently production as well as average yield per hectare of all crops were good during the year.

Palghat

Though total rainfall was less than normal and also the previous year's total extreme vagaries of weather were absent during the year. The general rain fall condition as well as the crop condition were generally satisfactory in this district. Important crops cultivated in this district are paddy, coconut, banana, arecanut and rubber. Though the rainfall was less than normal in other districts this district got more than normal rainfall. Consequently there were isolated cases of flood in some parts of the district during the kharif season. But it has not affected the crops very much. The major crop of this district viz. paddy got a boost consequent on copious rains and the farmers were able to harvest a rich crop. The crop condition was generally favourable to all crops in this district.

Malappuram

Important crops cultivated in this district are paddy, coconut, arecanut, banana and rubber. Though the rain fall data for this district was not available it was less than normal going by the trend in other districts. But there were isolated cases of flood during Autumn and drought conditions prevailed during second half of the year in certain parts of the district. There were crop losses due to flood during Khariff season in certain parts of Tirur, Ernad and Perinthalmanna taluks. Though there was an attack of brown hopper on paddy it was able to control the menace in time. The general weather and crop conditions in the rabi season were reported to be normal.

Kozhikode

The main crops cultivated in the district are paddy coconut, arecanut, rubber, pepper, tapioca, cashew etc. The total rainfall during the year was far less than the normal and also previous years total. Yet there were heavy rain and floods in several parts of the district during Kharif season. The rainfall conditions were erratic during the second half of the year. During the Rabi season though the rainfall was moderate its favourable distribution helped to reap a rich harvest.

Wynad

The major crops of this district are coffee, tea, pepper, paddy and tapioca. In Wynad there is no Autumn crop of paddy as such. The paddy strains sown during this season is of high duration and is harvested only during winter. Rainfall data for this newly formed district are not separately

available. Rainfall conditions were normal during the early part of the year though it was erratic towards the end of the year. But this has not affected the crops.

Cannanore

Paddy, pepper, cashew, coconut, arecanut, tapioca, banana and rubber are the important crops cultivated in this district. Rainfall during the year was above normal. There were heavy rain and floods during Autumn season and consequent damage to crops. But rainfall during winter season was moderate and the crop condition was satisfactory. The production and average yield per hectare of most of the crops were better than those of the previous year.

On the whole though the rainfall during the year was far less than normal in many districts mainly due to the late and weak south west monsoon in the year, the overall distribution of rainfall was favourable to crops. Vagaries of weather like flood, drought etc. were minimum during the first half of the year. Consequently the production and average yield of crops during the kharif and rabi seasons were good. Though drought conditions towards the end of the year had adversely affected the perennial crops in certain districts, on the whole the yield rates of perennial crops were good during the year.

(b) 1982-83

The year 1982-83 witnessed severe drought conditions at a scale unprecedented in living memory. The south west monsoon set in the state very late and it was feeble too. Consequently sowing and transplanting of paddy could not be undertaken in many fields raising rainfed paddy. The area under paddy cultivation, therefore, got reduced. Since north east monsoon was also a failure the area under both winter and summer crops of paddy have decreased, considerably during the year. Perennial crops like cocoa, pepper, cardamom, arecanut and coconut withered away in large numbers. The crop loss is estimated to run hundreds of crores of rupees. The recovery will take a long time as the drought has severely hit the perennial crops which dominate the agricultural sector of the State. Unseasonal rains at the harvest stage have also done havoc to standing crops in certain parts of the district.

The weather and crop conditions for each district are discussed briefly in the following pages.

Trivandrum

The main crops cultivated in the district are paddy, tapioca, coconut, arecanut, rubber and pepper. The south west monsoon arrived late and it was weak also. Consequently sowing and transplanting of paddy was

undertaken on limited scales in many parts of the district. Unseasonal rains at the harvest stage have also done havoc to standing crops in certain parts of the district. The north east monsoon was also weak. The highest rainfall occurred was in October. Total rain fall during the year was just above one fourth of the normal rainfall. There were heavy damages to perennial crops also. The drought conditions severely affected most parts of the district in varying degrees.

Quilon

The important crops cultivated in the district are paddy, coconut, tapioca, pepper, rubber, banana, etc. The south west monsoon was late and weak. Though this has affected the extent of Autumn paddy it has not seriously affected the crop once the sowing and transplanting of paddy was over. The north east monsoon was also very weak. Consequently the area under the seasonal crops have shrunk during the year considerably. Perennial crops like coconut arecanut, pepper, etc. withered away in large numbers dealing a severe blow to the agricultural economy of the district.

Alleppey

Total rainfall during the year was only one third of the normal rainfall which reflected the gravity of the drought conditions prevailed in the district during the year. The south west monsoon was weak while the north east monsoon was a near failure. Consequently the area and production of seasonal crops were reduced considerably. Perennial crops like coconut, arecanut etc. withered away in many places. Shortfall in rain and rain water raised the problem of salinity in certain parts of the district. In general the weather conditions were not suitable for any crop during the year.

Kottayam

Paddy, coconut, arecanut, rubber, pepper, tapioca and cocoa are the important crops cultivated in this district. The district has experienced severe drought conditions during the year. The south west monsoon which used to lash this district with fury was late and weak during the year. North east monsoon was also a flop. Though the Autumn crop of paddy was not a failure the area under this crop shrunk noticeably. The winter and summer crops failed due to scarcity of water and also salinity in certain parts near the Vembanad lake. In the dry land most of the cocoa plants and pepper were destroyed. Coconut, arecanut and other crops also withered away in large numbers. In the absence of sufficient rain production and yield of all crops suffered heavily during the year.

Idukki

The important crops cultivated in this district are tea, coffee, cardamom, rubber, pepper, paddy, coconut arecanut and tapioca. Most of the crops

suffered heavily due to the unprecedented drought prevailed during the year. Rainfall during both the south west and north east monsoons were much less than normal. As much as 60% of the cardamom crop withered away in addition to many other perennial trees like coconut arecanut, pepper and cocoa. In general the weather conditions were unfavourable to all crops. Consequently production of almost all crops came down drastically.

Ernakulam

The main crops cultivated in this district are paddy, coconut, arecanut, pepper, tapioca, rubber and tubers. The south west monsoon which generally lash this district with fury was very feeble, during the year. There was not enough rainfall during the north east monsoon season also. Though Autumn crop of paddy was not a failure the area under this crop got reduced due to late and insufficient rains. The drought conditions severely affected the winter and summer crops. Perennial crops like coconut, arecanut and pepper withered away in large numbers. The climatic condition was quite unfavourable to crops during the year.

Trichur

The important crops cultivated in the district are paddy, coconut, arecanut, tapioca, pepper, rubber and banana. Though the south west monsoon was late and weak it has not affected the Autumn paddy once the sowing and transplanting operations were over. Still the area under paddy stood reduced during all the three crop seasons due to drought conditions. The drought also severely affected perennial crops like arecanut, coconut, pepper etc. In general the climate was unfavourable to crops and the damage ran into several crores of rupees.

Palghat

Paddy is the major crop cultivated in this district. Pulses, coconut, arecanut, rubber, cashewnut and tapioca, are the other important crops of the district. As in other districts severe drought conditions existed in this district also. Autumn crop of paddy was an average one. But the drought conditions affected the winter and summer crops of paddy, and the perennial crops. In general the weather conditions were unfavourable to crops and there were severe crop losses in the district during the year.

Malappuram

The main crops cultivated in this district are paddy, coconut, arecanut, cashew, rubber, pepper and banana. The total rainfall in this district during the year was much below normal. There were no rains from January to April. Due to insufficient rains a large area usually brought under paddy was forced to be kept fallow during all the crop seasons of the year. Perennial crops like coconut, arecanut and pepper withered away in large numbers in many parts of the district. Consequently the agricultural economy of the district was in shambles by the end of the year.

Kozhikode

The major crops cultivated in the district are paddy coconut, arecanut, cashew, rubber, pepper and tapioca. Total rainfall was far less than normal. There was no rain from December to April and severe drought conditions prevailed during this period. Though the drought conditions did not affect seriously the Autumn crop, winter and summer crops of paddy were seriously affected. Perennial crops like coconut, arecanut and pepper withered away in many parts of the district. Consequently agricultural production suffered heavily during the year.

Wynad

The major crops of this district are coffee, pepper, tea, paddy and tapioca. The paddy in Wynad is of a long duration strain that is harvested in winter. The winter crop of paddy was not a success due to drought. Perennial crops also suffered heavily during the year. Rainfall was much less than normal. The climate was not favourable to crops during the year.

Cannanore

The main crops cultivated in the district are paddy, coconut, pepper arecanut, cashew, rubber, tapioca, banana, lemongrass oil etc. The year witnessed one of the worst drought in living memory. There was no rain at all from December to April. Winter and summer crops fared badly. Pepper vines, coconut and arecanut trees withered away in large number in many parts of the district and there was huge loss to agricultural production in the district during the year.

In general the year 1982-83 was an year of severe drought in all districts. Rainfall was far less than normal. Both the monsoons played a hide and seek game failing the crops miserably. The agricultural operations in the main-crop season of Autumn was delayed in the absence of timely monsoon showers. But once the sowing and transplanting of paddy was over the weather was not adverse though the area under this crop stood restricted. During the winter and summer seasons most crops failed. In the prolonged dry spell that prevailed during the latter half of the year many crops including perennial crops withered away in large numbers. The agricultural production suffered severe set backs and the economy of the state which is agriculture oriented lay crippled.

1.11 Production of important crops

The details of production of important crops in the State are given in table 2.4 of summary tables and 3.6 of the detailed tables. The salient features of production of important crops are discussed below.

(i) *Paddy*

Though paddy is the staple food crop of the State only about the half of the total requirement of this grain is produced in the State. The rest is imported from other states and the central pool. The total rice production of the state for the year 1982-83 is estimated at 13.06 tons as against 13.39 lakh tons during the previous year. The production of rice has shown fluctuating trends over the years. The district-wise details of production of rice are given in table 1.11.1.

TABLE 1.11.1
District-wise Distribution of Rice Production

<i>District</i>	<i>Production of rice (tons)</i>		<i>Yield per hectare (kg.)</i>	
	1981-82	1982-83	1981-82	1982-83
Trivandrum	44837 3.35	45829 3.51	1457	1559
Quilon	83369 6.22	85846 6.57	1654	1731
Alleppey	173162 12.93	149768 11.47	1954	1786
Kottayam	64603 4.83	83544 6.40	1877	2415
Idukki	16108 1.20	20625 1.58	1798	2230
Ernakulam	148995 11.12	149818 11.47	1477	1560
Trichur	155473 11.62	149393 11.44	1346	1387
Palghat	385389 28.77	365218 27.96	2131	2109
Malappuram	105190 7.85	98724 7.56	1332	1258
Kozhikode	27504 2.05	28388 2.17	1020	1072
Wynad	55082 4.11	48241 3.69	1831	1583
Cannanore	79681 5.95	80810 6.19	1322	1360
State	13,39,393 100.00	13,06,197 100.00	1660	1678

Palghat remains to be the major rice producing district of the State. Against nearly 22% of the total area under paddy about 28% of the total rice produced in the State was in Palghat district during 1982-83. The yield per hectare of paddy was highest in Palghat district and the same was lowest in Kozhikode district during 1981-82. But during the year 1982-83 the yield per hectare was highest in Kottayam district with 2415 kg. per hectare while the lowest average yield per hectare was estimated for Kozhikode district with only 1072 kg./hectare. While the area under paddy decreased by about 3.5% over the previous year the production has decreased by only 2.5%. Though the rice granaries of Palghat and Alleppey showed decrease in average yield per hectare, most of the other districts showed appreciable increase in the average yielded per hectare. The yield per hectare was greater than the average for the State as a whole in the districts of Alleppey, Kottayam, Idukki and Palghat for both the years. So also the yield per hectare was higher than the state average in Wynad in 1981-82 and in Quilon during 1982-83.

The season wise production of rice for the years 1981-82 and 1982-83 was as follows.

TABLE 1.11.2

Seasonwise Production of Rice 1981-83

<i>Season</i>	<i>Production of rice (in tonnes)</i>			<i>Yield per hectare (kg.)</i>		
	1980-81	1981-82	1982-83	1980-81	1981-82	1982-83
Autumn	553748	556918	578828	1586	1605	1689
Winter	548500	589154	565704	1549	1655	1606
Summer	169714	193321	161665	1726	1966	1935
State	1271962	1339393	1306197	1587	1660	1678

From the above table it may be seen that the production of summer crop of paddy is subject to frequent fluctuations as the area brought under summer paddy fluctuates depending upon weather conditions and input costs. The production of rice as well as the yield rate show increasing trend over the years for the Autumn crop of paddy. But for the winter and summer crops production as well as the average yield per hectare were higher in 1981-82 than both 1980-81 and 1982-83. Seasonwise the average yield per hectare was highest for summer crop for all the three years. Alleppey, Ernakulam and Trichur are the major districts raising summer crop of paddy. Most of

these lands are water logged lagoon lands where only one crop is raised by dewatering the fields during summer and this explains to a large extent the relatively higher yield per hectare of summer paddy.

(ii) *Pulses*

The production of pulses shows a decreasing trend over the years. The production estimates of this crop for the year 1982-83 was 19904 tonnes as against 22286 tons during 1981-82 and 22479 tons during 1980-81. Palghat leads other districts in the production of pulses.

(iii) *Sugarcane*

The production of gur during the year 1982-83 was estimated at 82135 tons as against 49749 tons during 1981-82 and 48178 hectares during 1980-81. The high increase in the production of gur noticed during the year 1982-83 was that the estimate was based on crop cutting survey conducted during the year unlike the previous years estimates which were done on the basis of condition factors. Idukki, Palghat and Alleppey are the major gur producing districts of the State.

(iv) *Black Pepper*

The production of black pepper shows a declining trend over the years. It has decreased from 28519 tons in 1980-81 to 27511 tons in 1981-82 and to 24526 tons in 1982-83. 28% of the total production was from Cannanore during 1982-83. 52% of the total pepper production was from the three northern districts of Kozhikode, Wynad and Cannanore.

(v) *Dry Ginger*

The production of dry ginger showed a fluctuating trend over the years. It has increased from 32039 tons in 1980-81 to 34379 tons in 1981-82 and has decreased to 31581 tons during 1982-83. Kottayam leads other districts in the production of dry ginger with 25% of the total production.

(vi) *Turmeric (cured)*

The production of turmeric shows a downward trend over the years. The production of turmeric was estimated at 5192 tons in 1982-83 as against 6027 tons during 1981-82 and 6141 tons during 1980-81. About 25% of the turmeric was produced in Ernakulam district alone during 1982-83.

(vii) *Cardamom (processed)*

Nearly 82% of the total of 1900 tons of cardamom produced in the State during 1982-83 was from Idukki district alone. The production of Cardamom during the year was less by 25% than the previous year's estimate and 41% less than that of 1980-81. Wynad and Palghat are the other major cardamom producing districts.

(viii) *Betel nuts*

The estimated production of betel nut for the year 1982-83 was 11027 million nuts as against 10702 million nuts during 1981-82 and 10805 million nuts during the year 1980-81. Cannanore district leads the other districts in the production of betelnut with 25% of the total production and together with the districts of Ernakulam, Trichur, Malappuram and Kozhikode share about 76% of the total estimated production of betelnut.

(ix) *Banana*

The production of banana is estimated at 1.65 lakhs tons during the year 1982-83 as against 1.82 lakh tons during 1981-82 and 1.76 lakh tons during 1980-81. Malappuram district leads the other districts in the production of banana with 16% share of the total production.

(x) *Other plantains*

The production of other plantain during the year 1982-83 is estimated at 1.24 lakh tons as against 1.45 lakh tons during 1981-82 and 1.41 lakh tons during 1980-81. Trivandrum district leads the other districts in the production of other plantains with 20% share of the total production.

(xi) *Cashewnut*

The production of raw cashew nut shows a downward trend over the years. The estimated production of raw cashew nut during the year 1982-83 was 75495 tons as against 78898 tons during 1981-82 and 81900 tons during 1980-81. Nearly 53% of the total production of raw cashew nut was from Cannanore district alone during 1982-83 as against 62% during the year-1980-81. In numerical terms this decrease was a huge figure of 10700 tons for a single district.

Tapioca

The estimates of the production of tapioca was fluctuating over the years. The production estimates for this crop during the year 1982-83 was 38.4 lakh tons as against 37.4 lakh tons during 1981-82 and 40.6 lakhs tons during 1980-81.

Since tapioca is an important cereal substitute of the State it is produced on a fairly large scale in most of the districts. But Quilon leads the other districts and together with Trivandrum shares about 46% of the total production of tapioca. The district wise distribution of the production figures are given in table 1.11.3 below.

TABLE 1.11.3

Districtwise distribution of production and yield rate of Tapioca 1981-83

District	Production of tapioca (in lakh tons)		Yield rate tons/ hectare	
	1981-82	1982-83	1981-82	1982-83
Trivandrum	9.05	8.60	15.00	16.00
Quilon	8.27	9.04	13.68	16.30
Alleppey	2.67	2.52	13.98	16.83
Kottayam	4.05	4.45	16.50	20.73
Idukki	2.03	2.86	21.13	26.08
Ernakulam	2.43	2.07	19.63	19.25
Trichur	0.76	1.02	12.45	18.58
Palghat	1.91	1.85	15.05	14.43
Malappuram	2.35	2.21	13.00	12.48
Kozhikode	0.49	0.39	13.88	12.35
Wynad	0.66	0.59	22.35	24.70
Cannanore	2.74	2.89	15.30	15.43
State	37.45	38.49	15.10	16.91

The production of tapioca was highest in Trivandrum district during 1981-82 and the average yield per hectare was highest in Wynad district with 22.35 tons. The lowest yield rate was reported from Trichur. During 1982-83 the production was highest in Quilon. The yield per hectare of tapioca was highest in Idukki and it was lowest in Trichur during 1982-83. The average yield per hectare was less than the state average in Quilon and Trivandrum districts for both the years under review.

(xiii) *Ground nut*

The estimates of production of groundnuts which showed a downward trend till 1980-81 began to show the reverse trend during the succeeding two years under review. It has increased from 8225 tons in 1980-81 to 8572 tons in 1981-82 and to 9074 tons during 1982-83.

(xiv) *Sesamum*

The estimates of production of sesamum shows a fluctuating trend over the years. The production estimates has increased from 3883 tonnes in 1980-81 to 4000 tons in 1981-82 and decreased to 3648 tons during 1982-83.

(xv) *Coconut*

The production of coconut during the year 1982-83 was estimated at 3184 million nuts as against 3006 million tons during the previous year. Kozhikode district leads the other districts with about 20% share of the total production of nuts.

(xvi) *Cotton*

In the State cotton is a monopoly produce of Palghat district. The quantity of cotton produced during the year 1982-83 was estimated at 9336 bales of 170 kg. as against 10724 balse during the previous year.

(xvii) *Tobacco*

Tobacco is produced only in Cannanore district. The production of tobacco for the year 1982-83 is estimated at 987 tons as against 1050 tons during the previous year.

(xviii) *Tea*

The production of tea for the year 1982-83 is estimated at 45439 tonnes as against 45467 tonnes during the previous year. Idukki is the biggest tea producing district. About 77% of the total tea produced during the year 1982-83 was from this district alone.

(xix) *Coffee*

The production of coffee during the year 1982-83 was estimated at 21785 tonnes as against 33653 tonnes during 1981-82 and 23540 tonnes during 1980-81. This shows that there was wild fluctuations in the production of coffee in recent years. About 82% of the coffee was produced in Wynad district alone.

(xx) *Rubber*

The estimated production of rubber during the year 1982-83 was 152662 tonnes as against 139455 tonnes during the previous year. This shows an increase of about 10% over the previous year. Kottayam district leads the other districts in the production of rubber with about 26% share of the total rubber produced in the State. Quilon is the other major rubber producing district and together with Kottayam share about 44% of the total production of this commodity.

(xxi) *Cocoa*

The estimated production of cocoa during the years 1982-83 was 3173 tonnes as against 2894 tonnes during 1981-82 and 3020 tons during 1980-81.

1.12. Farm Price of Certain Commodities

The average farm price of certain commodities is given in table 2.5 of summary tables and 3.6.1 and 3.6.2 of detailed tables.

1.13. Livestock, Poultry and Agricultural Implements

The details of livestock as obtained through the livestock censuses of 1977 and 1982 are furnished in 2.6 of the summary tables and 3.8 of the detailed tables.

1.14. Sowing, Harvesting and Peak Marketing Periods

The information on these topics have been furnished in table 2.7 of summary tables.

PART II

SUMMARY TABLES

- 2.1. Classification of area
- 2.2. Source of Irrigation
- 2.3. Area under Crops
- 2.4. Production of important crops
- 2.5. Average farm prices of certain commodities
- 2.6. Livestock, Poultry and Agricultural Machinery
- 2.7. Sowing, Harvesting and Peak Marketing Seasons.

TABLE 2.1

Classification of Area (Hectares)

<i>Head of classification</i>	<i>Area</i>		<i>Percentage</i>	
	1981-82	1982-83	1981-82	1982-83
1. Total area by village				
Papers	3885497	3885497	100.00	100.00
2. Forests	1081509	1081509	27.84	27.84
3. Land put to non-agri- cultural uses	276451	275908	7.12	7.10
4. Barren and uncultivable lands	85600	86217	2.20	2.22
5. Permanent Pastures and grazing lands	5382	5311	0.14	0.14
6. Land under miscella- neous tree crops	55187	54705	1.42	1.41
7. Cultivable waste lands	130204	130213	3.35	3.35
8. Current fallow	54487	44455	1.40	1.14
9. Other fallow	26827	27425	0.69	0.70
10. Net area sown	2169850	2179754	55.34	56.10
11. Total cropped area	2905257	2862073	74.77	73.66
12. Area Sown more than once	735407	682319	18.93	17.56

TABLE 2.2

**Source of Irrigation water Supply and net area Irrigated
1981-82 and 1982-83**

<i>Source of irrigation</i>		<i>Net area Irrigated (in hectares)</i>	
(1)	(2)	(3)	(4)
		1981-82	1982-83
1.	Government Canals	100687	104321
2.	Private Canals	5195	4356
3.	Government Tanks and Wells	4946	5271
4.	Private tanks and Wells	51706	57048
5.	Minor and Lift Irrigation (Government Scheme)	33702	36154
6.	Other Sources	43238	51594
7.	Total	239574	258744
8.	Percentage of area irrigated to net area sown	11.04	11.90

TABLE 2.3

Area under crops in Kerala 1981-83

<i>Name of crop</i>		<i>Area in hectares</i>	
		1981-82	1982-83
Cereals and millets	1. Paddy	806871	778490
	2. Jowar	1169	1231
	3. Ragi	1435	1233
	4. Other Cereals & Millets	2808	2361
	5. Total Cereals & Millets	812283	783315
Pulses	6. Tur	..	..
	7. Other Pulses	..	..
	8. Total pulses including Tur	33910	30055
Sugar crops	9. Sugarcane	8381	7814
	10. Palmirah	12715	11633
	11. Total Sugar crops	21096	19447
Spices & Condiments	12. Pepper	108242	107467
	13. Chillies	1269	1250
	14. Ginger	13447	12662
	15. Turmeric	3200	2847
	16. Cardamom	54516	54388
	17. Arecanut (Betel nut)	61251	60816
	18. Other Condiments & Spices	4224	4224
	19. Total Condiments & Spices	258478	255632
	Fresh Fruit	20. Mango	60181	60205
21. Jack		61037	59990
22. Banana		14068	14126
23. Other Plantains		35921	33912
24. Pineapple		5373	4466
25. Other fruits		23950	21273
Dried Fruits	26. Cashew	139960	141307
	27. Total fruits	340490	335279
	28. Tapioca	248069	227617

<i>Name of Crop</i>	<i>Area in Hectares</i>		
	1981-82	1982-83	
Vegetables	29. Sweet Potatoes	5316	5006
	30. Tubers	32980	30238
	31. Other Vegetables	29310	27789
	32. Total Vegetables	315675	290650
	33. Other food crops	10978	10978
	34. Total food crops	1781932	1714378
Oil Seeds	35. Coconut	666618	674378
	36. Sesamum	15037	14153
	37. Groundnut	9707	10276
	38. Other Oil seeds	1929	2030
	39. Total oil seeds	693291	700837
Fibres	40. Cotton	6777	5900
	41. Tobacco	570	536
Drugs	42. Tea	35625	32205
	43. Coffee	57949	57905
Narcotics	44. Rubber	237769	256283
Plantation Crops	Cocoa	23381	18234
	45. Total	354724	367627
Other non-food crops	46. Fodder grass	2338	1767
	47. Green manure crops	9480	8387
	48. Lemon grass	6371	7177
	49. Betel leaves	1092	1049
	50. Other crops	48682	54415
	51. Total Non-food crops	1123325	1147695
	52. Total area under all crops	2905257	2862073
	53. Area sown more than area	735407	682319
	54. Net area sown	2166950	2179754

TABLE 2.4

Production of important crops in Kerala 1981-82 & 1982-83

Name of Crops	Unit in tonnes	Quantity	
		1981-82	1982-83
Rice	"	1339393	1306197
Jowar	"	525	507
Ragi	"	1100	920
Other cereals	"	..	1511
Other pulses	"	22286	19904
Sugarcane	"	49749	82135
Pepper (Black)	"	27571	24526
Chillies (Dry)	"	1159	1143
Ginger	"	34379	31581
Turmeric (cured)	"	6027	5192
Cardamom (Processed)	"	2800	1900
Areacanut (Betel nut)	Million nuts,	10702	11027
Banana	Tonnes	182415	164913
Other plantains	"	145112	124486
Cashewnuts	"	78898	75495
Tapioca	"	3745142	3848718
Sweet Potatoes	Tonnes	34674	33098
Ground nut	"	8572	9074
Sesamum	"	4000	3648
Coconut	Million nuts	3006	3184
Cotton	Bales of 170 Kg.	10724	9336
Tobacco	Tonnes	1050	987
Tea	"	45467	45439
Coffee	"	33655	21785
Rubber	"	139455	152662

TABLE 2.5

Average Farm Price of certain Commodities 1981-82 & 1982-83.

Name of Crop	Unit	Average Farm	
		Price Rs.	Weighted average
		1981-82	1982-83
Paddy	Quintal	182.85	209.61
Coconut with husk	100	115.37	144.31
Arecanut (ripe)	100	7.83	8.09
Tapioca raw (raw)	Quintal	49.86	66.56
Cashewnut	„	687.30	468.07
Banana	100	42.78	46.09
Pepper (Black)	Quintal	1172.98	1176.31
Ginger	Quintal	885.33	1344.13
Sugarcane	M.T.	177.41	159.77

TABLE 2.6

Number of Livestock, Poultry and Agricultural Machinery

Sl. No.		Census (1977)		Census (1982)	
(1)	(2)	(3)	(4)	(5)	
1.	Cattle	Male over 3 3 years	(a) Breeding	3462	10699
			(b) Working	353672	233048
			(c) Others	13980	22226
			Total	371114	265973
	Female over 3 years	(a) Breeding			
		1. In milk	705040	864272	
		2. Dry	585474	561476	
		3. Not calved	74794	83483	
		(b) Working	2569	..	
		(c) Others	3103	3384	
		Total	1370980	1512615	
		Young stock	1263965	1318187	
		Total cattle	3006059	3096775	
		2.	Buffaloes	Males over 3 years	(a) Breeding	1777	3282
(b) Working	210199				166088
(c) Others	6798				13431
Total	218774				182801
Females over 3 years	1. In Milk		86698	82730	
	2. Dry		55646	48878	
	3. Not calved		9013	5710	
	(b) Working		5039	..	
	(c) Others		1196	1473	
	Total		157592	138791	
	Young Stock		78034	86992	
	Total Buffaloes		454400	408584	

(1)	(2)	(3)	(4)	(5)
3.	Goat	(a) One year and above	956695	1165438
		(b) Below one year	726602	838357
		Total	1683297	2003795
4.	Sheep	(a) One year & above	2546	3610
		(b) Below one year	..	3449
		Total	2546	7059
5.	Horse and Ponies	(a) 3 years & above	90	46
		(b) Below 3 years	..	26
		Total	90	72
6.	Mules		Nil.	323
7.	Donkeys		266	370
8.	Camels		..	4
9.	Pigs		172375	127147
		Others (Elephant)	..	451
		Total live stock	5319033	5644580
		Dogs		1156438
		Others		434677
10.	Poultry	(a) Fowls	12956186	14519039
		(b) Ducks	429569	530354
		(c) Others	3095	34017
11.	Ploughs	(a) Wooden	316975	228566
		(c) Iron (Steel)	69191	47385
12.	Carts		20525	8245
13.	Sugarcane crushes	Power	459	3925
		Bullocks	863	95
14.	Oil Engineers		28759	24475
15.	Electric Pumps		25973	74456
16.	Tractors		783	1335

TABLE 2.7

Sowing, Harvesting and Peak marketing season of Principal Crops in Kerala

Sl. No.	Name of crop	Season	Sowing	Period of flowering	Harvesting	Peak marketing
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Rice	Autumn Winter Summer	April—July August—November October—December January—March	July—October October—January January—March March—May	August—October November—January March—May April—June	September—November December—March March—June April—July
2.	Ragi	I crop II Crop III Crop	April—July September—October May—June December	August—September October—November September—October January—February	September—November December—January October—November February	September—November December—January October—November
3.	Small Millets	Autumn Summer	April—July January—February	July—November March	September—November April	December—January April
4.	Red gram	Autumn Winter Summer	May—August August—November February—March	June—September September—November May	August—October October—January May	August—October December—January June
5.	Horsegram	Autumn Winter Summer	February—April September—November December—February	March—April October—November January—April	April—June November—January April	May—June November—February April
6.	Green gram	Autumn Winter Summer	June—August October September—October	August—September November October—November	August—September November—December November—December	September—December November—December December—January

7. Black gram	Winter Summer	March— ⁷ une September—October	⁷ uly—August October—November	⁷ une—September November—December	September—October Decem ^r — ⁷ anuary
8. Other pulses	Autumn Winter— Summer	April— ⁷ uly September—December December—March	⁷ uly—August October—December ⁷ anuary—April	⁷ uly—October November—February February— ⁷ une	⁷ uly—November December—March ⁷ April
9. Sogracane	Autumn, Winter Summer	October—February November—March ⁷ une—October	.. .. September—October	October—December December—February October— ⁷ anuary	November—December ⁷ anuary—February ⁷ anuary
10. Ginger	Autumn Winter	March— ⁷ uly March— ⁷ une	.. ..	November—February December—February	December—February December—March
11. Pepper	Winter Summer	⁷ une—August ⁷ uly	⁷ uly—October July—September	November—February January—April	November—March March—May
12. Cotton	Winter	June—October	November—December	December—March	February—March
13. Sesamum	Autumn Winter Summer	April—August August—October December—February	July—September October—December February—April	August—October December—April March—May	July—October December—February March—May
14. Sweet Potatoes	Winter Winter Summer	April—July October—November December—March	.. .. ..	September—No ember January—February Marc —June	November—February February—March April—June
15. Turmeric		April—July	..	November—February	November—March
16. Lemongrass		May—June .. ..	.. .. ..	July—November January—February April—May	July—November January—February April—May

(1)	(2)	(3)	(4)	(5)	(6)	(7)
17.	Tapioca	Autumn Winter Summer	July—October March—May June—October October—November	.. .. .. ..	July—August November—March March—July April—May	July—September December—February March—July ..
18.	Mango		..	December	April—May	April—May
19.	Arceanut		..	June	September	September
20.	Tubers	Autumn Winter	February—March March—April	.. ..	July—September November—January	August—September December—January
21.	Banana	Autumn Winter	August—September December—January	April—May August—October	July—August November—January	July—August December—January
22.	Tobacco	Winter	November—December	..	March—April	May—June

PART III
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Normal Rainfall in Kerala (in m.m)

Sl.No.	District	July	August	Septem-ber	Octo-ber	Novem-ber	Decem-ber	Janu-ary	Febru-ary	March	April	May	June	Total
1	Trivandrum	257.4	204.5	168.9	280.2	210.2	70.1	21.2	18.0	48.0	128.1	213.9	391.1	2001.6
2	Quilon	449.6	318.1	226.1	344.9	242.9	68.4	24.1	32.1	83.6	166.3	260.3	547.4	2760.2
3	Pathanamthitta	..	..	..	..	..	..	..	..	..	..	..	..	..
4	Alleppey	552.3	370.3	272.7	330.2	219.4	64.1	25.9	29.3	59.0	133.5	291.5	663.8	3012.0
5	Kottayam	657.7	447.5	296.5	383.8	244.7	73.6	28.8	30.3	85.4	176.9	324.1	713.3	3462.6
6	Idukki	655.1	432.9	262.7	304.4	198.5	68.8	31.1	24.1	44.6	111.7	200.9	556.7	2898.8
7	Ernakulam	785.3	518.0	293.9	359.7	212.6	54.2	16.8	22.4	51.6	129.5	308.4	796.1	3548.5
8	Trichur	761.4	458.6	250.3	307.5	158.3	30.3	9.3	8.8	28.6	86.6	274.3	803.4	3177.4
9	Palghat	649.9	363.0	169.5	257.2	140.9	29.7	9.8	9.3	27.0	79.6	158.4	503.4	2397.7
10	Malappuram	787.0	405.0	198.8	290.0	163.8	30.9	6.7	6.5	19.3	78.7	211.0	702.4	2900.7
11	Kozhikode	1117.4	599.2	262.4	290.2	163.7	34.2	10.4	7.6	20.0	92.4	254.0	944.5	3796.0
12	Wynad	..	..	..	..	..	..	..	..	..	..	..	..	..
13	Cannanore	1063.5	584.8	239.4	218.0	106.0	22.8	5.3	4.8	11.1	58.6	200.6	923.0	3437.9
14	State	686.4	422.6	242.0	306.9	190.9	51.2	18.5	19.3	46.4	115.6	245.0	672.8	3017.6

TABLE 2

Number of Livestock, Poultry and Agricultural Machinery and implements in Kerala—1982

District	Cattle							Female over 3 years				
	Male over three years				Total - In milk	Breeding	In milk	Breeding	Not culled	Total	Young stock	Total
	Breeding	working	others	Total									working	Total	Young stock
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Trivandrum	735	7367	1078	9180	71569	30033	4290	191	106083	82238	197501	
Quilon	967	19229	1904	22100	114691	87113	11273	423	213500	183694	419294	
Alleppey	383	4410	930	5723	96207	69161	9927	542	175837	137665	319225	
Kottayam	763	4070	795	5628	84100	61737	8074	211	154122	123603	283353	
Idukki	782	6965	789	8536	48684	33633	3944	112	86273	71219	166028	
Ernakulam	911	29262	1594	31767	88076	48211	6341	334	142962	129638	304367	
Trichur	870	19821	2680	23371	67359	33720	4875	368	106322	103962	239655	
Palghat	839	46844	2465	50148	68878	42710	3683	125	115596	108069	273813	
Malappuram	1153	35355	2999	39507	47455	28028	4074	312	79869	73988	193364	
Kozhikode	956	10320	1570	12846	56978	41644	10032	100	108754	84968	212568	
Wynad	685	17704	1278	19667	24632	18037	2748	440	45857	45440	108964	
Cannanore	1655	31701	4144	37500	95643	67449	14122	226	177440	169703	384643	
State	10699	233048	22226	265973	864272	561476	83483	3384	1512615	1318187	3096775	

TABLE 2. (Contd.)

No. of Live Stock, Poultry and Agricultural Machinery and implements in Kerala

District	Bullfroes												
	Males over three years						Female over three years						
	(1)	(13)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
	Breeding working others			Total	Breeding		Noticalted working		Others	In milk	Young stock	Total	Total
Trivandrum	291	5843	796	6870	4952	495	..	105	10700	16252	8316	31438	
Quilon	299	6922	605	7826	3826	466	..	77	5583	9952	6303	24081	
Alleppey	93	3213	528	3834	1509	112	..	35	2238	3894	1955	9683	
Kottayam	119	1467	296	1882	1495	149	..	14	2563	4221	1828	7931	
Idukki	173	2148	328	2649	2695	224	..	49	4448	7416	4128	14193	
Ernakulam	153	13825	851	14829	2039	167	..	32	6089	8327	4116	27272	
Trichur	482	17024	1478	18984	6112	799	..	190	11996	19097	16250	54331	
Palghat	369	63840	2110	66319	9194	693	..	280	11802	21969	14066	102354	
Malappuram	435	28688	1929	31052	6821	1154	..	332	11221	19528	13848	64428	
Kozhikode	85	716	124	925	1422	172	..	23	2778	4395	1880	7200	
Wyanad	291	14331	1023	15645	3004	476	..	291	4200	7971	5026	28642	
Cannanore	492	8071	3423	11986	5809	803	..	45	9112	15769	9276	37031	
State	3282	165086	13431	182801	48878	5710	..	1473	82730	138791	86992	408504	

TABLE 2 (Contd.)

District	Sheep			Goats			Horses and ponies		
	One year and above (26)	Below one year (27)	Total (28)	One year and above (29)	Below one year (30)	Total (31)	3 years and above (32)	Below three years (33)	Total (34)
Trivandrum	367	333	720	106048	79777	185825	18	1	19
Qulon	826	480	1306	137394	98341	235735	..	1	1
Alleppey	384	280	664	80073	58335	138408	..	3	3
Kottayam	221	258	479	97479	61867	159346	3	..	3
Idukki	424	338	762	58836	40305	99141	12	10	22
Ernakulam	127	126	253	103830	76524	180354	..	1	1
Trichur	152	330	482	104528	81842	186370	4	..	4
Palghat	680	610	1290	113467	81198	194665	4	8	12
Malappuram	250	373	623	132188	92425	224613	1	2	3
Kozhikode	17	60	77	90413	63617	154030	2	..	2
Wynad	39	92	131	31670	25312	56982	1	..	1
Cannanore	103	169	272	109512	78814	188326	1	..	1
State	3610	3449	7059	1165438	838357	2003795	46	26	72

TABLE 2 (Contd.)

District	Elephant	Camels	Mules	Donkeys	Pigs	Dogs	Others	Total live stock including dogs
(1)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)
Trivandrum	4	..	..	2	8724	156160	20217	600610
Quilon	49	3	..	..	1026	168794	26454	876743
Alleppey	38	..	..	..	584	98277	60295	627177
Kottayam	97	..	..	3	41239	90820	61063	644334
Idukki	26	..	322	105	34201	87318	43412	445531
Ernakulam	66	..	..	6	15335	113768	79639	721061
Trichur	74	..	..	1	2118	65644	16811	539490
Palghat	9	..	..	122	982	98398	5365	677010
Malappuram	24	..	..	5	183	46626	19805	549674
Kozhikode	24	..	..	..	1279	72292	31926	479398
Wynad	28	..	..	125	4248	53247	13409	265777
Canmarore	12	1	1	..	17228	105095	56281	788891
State	451	4	323	370	127147	1156439	434677	7235696

TABLE (Contd.)

District	Poultry			Plough			Sugarcane Crushers		
	Foxels (43)	Doucks (44)	Others (45)	Total (46)	Wooden (47)	Steel (48)	Carts (49)	Power (50)	Bullocks (51)
(1)									
Trivandrum	1414548	13694	3243	1431488	5462	5093	170	30	4
Quilon	1479058	30701	1762	1511521	11501	13117	658	26	5
Alleppey	1378143	206001	3796	1587940	7385	4234	217	140	22
Kottayam	1134613	67803	4802	1207218	4342	695	165	285	19
Idukki	554221	8336	1798	564355	5523	1684	39	63	16
Ernakulam	1489939	126003	8210	1624152	29662	4055	263	940	5
Trichur	1494043	37030	2365	1534388	16080	3729	782	1589	3
Palghat	1285688	10035	1421	1297144	65279	4649	5718	359	9
Malappuram	1657291	13643	2626	1673560	33225	3029	81	170	2
Kozhikode	1041574	7497	1678	1050749	4932	808	11	28	..
Wynad	360887	2611	922	364420	14801	4347	70	67	1
Cannanore	1229034	6997	1394	1237425	30354	1945	71	228	9
State	14519039	530354	34017	15083410	228566	47385	8245	3925	95

TABLE 2 (Contd.)

District	Oil Engine	Electric pumps	Tractors	Percian Wheels
(1)	(52)	(53)	(54)	(55)
Trivandrum	37	456	29	12
Quilon	18	922	15	20
Alleppey	127	5070	71	161
Kottayam	54	2303	59	46
Idukki	467	566	85	..
Ernakulam	158	18283	141	26
Trichur	211	25763	132	31
Palghat	564	7063	593	5
Malappuram	135	5293	85	..
Kozhikode	42	773	77	8
Wynad	33	123	12	..
Cannanore	212	7841	45	..
State	2058	74456	1335	309

TABLE 3.1.1.

Monthly Rainfall statement for 1981-82 (in m.m.)

Districts	July	August	September	October	November	December	January	February	March	April	May	June	Total
Trivandrum	126.2	96.4	164.7	295.1	176.1	14.0	0.8	—	10.3	59.4	141.6	118.6	1144.2
Quilon	799.1	292.3	397.7	264.7	178.4	18.4	4.8	—	84.1	95.4	176.3	322.9	2634.1
Alleppey	388.7	473.3	468.6	397.6	99.8	36.0	—	—	61.1	73.1	206.5	218.5	2423.2
Kottayam	414.9	465.7	483.9	132.8	166.5	25.9	—	—	10.3	30.7	177.8	296.0	2204.5
Idukki	521.3	467.0	395.2	279.5	143.8	178.4	—	—	29.1	56.7	125.2	204.3	2400.5
Ernakulam	407.0	384.9	368.3	526.0	156.1	266.6	—	—	3.1	149.0	31.0	173.2	2225.2
Trichur	421.2	439.9	586.7	303.7	172.2	28.1	—	—	1.4	27.5	148.6	326.9	2456.2
Palghat	641.5	739.6	360.5	232.4	99.0	1.5	—	—	0.2	45.0	155.1	301.4	2576.2
Malappuram	x	x	x	x	x	x	x	x	x	x	x	x	x
Kozhikode	415.9	443.9	325.4	289.7	89.4	24.2	—	—	5.9	52.2	132.1	348.4	2127.1
Cannanore	806.1	725.8	303.6	245.7	106.7	29.0	—	—	0.4	8.3	112.5	408.4	2746.5
State	494.0	452.9	385.5	290.8	138.8	38.2	0.6	..	20.6	59.7	140.7	271.9	2293.7

x — Not available from the centres

— — Nil report received.

Rainfall data are not available for Wynad District Separately for the year.

TABLE 3.2.1
Monthly rainfall statement for the year 1982-83 (in m. m.)

District	July	August	September	October	November	December	January	February	March	April	May	June	Total
Trivandrum	56.0	25.0	4.4	120.3	78.0	13.7	—	—	—	42.6	99.3	125.2	558.5
Quilon	180.4	133.4	14.8	263.8	101.9	14.8	—	—	0.2	13.9	23.9	151.8	898.9
Pathanamthitta	x	x	x	x	x	x	x	x	x	32.9	152.7	184.3	369.9
Alleppey	193.6	161.4	31.3	189.9	49.6	30.5	—	—	—	51.0	84.8	220.4	1012.5
Kottayam	176.0	126.0	19.1	251.4	97.1	6.0	—	0.7	1.0	19.8	75.7	286.5	1059.3
Idukki	201.8	127.9	22.3	185.4	88.8	12.1	—	0.8	5.8	20.9	107.8	298.6	1072.2
Ernakulam	741.8	73.9	16.1	170.4	33.9	4.1	—	4.8	..	19.1	33.0	341.4	1438.5
Trichur	715.8	432.9	56.9	229.5	146.0	5.2	—	—	—	1.2	40.1	434.9	2062.5
Palghat	375.6	74.8	7.0	184.9	158.2	0.1	—	—	—	—	113.8	362.2	1276.6
Malappuram	x	x	x	x	x	—	—	—	—	—	67.9	x	67.9
Kozhikode	948.4	455.5	95.4	136.3	150.2	—	—	—	—	0.7	108.4	663.9	2558.8
Wynad	x	x	x	x	x	—	—	—	—	9.4	133.7	304.1	449.3
Cannanore	781.3	556.2	30.4	69.9	74.6	—	—	—	—	—	73.7	438.0	2024.1
State	437.0	216.7	29.8	181.5	97.8	8.6	—	0.5	0.8	16.3	85.3	317.6	1391.9

x — Not available from the Centres

— — Nil Report received

TABLE 3.1.2
Classification of area under land utilisation 1981-82 (in Hectares)

District	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Total Geographical area	Forest	Land put to non-agricultural uses	Barron & uncultivable land	Permanent pastures & grazing land	Land under miscellaneous tree crops	Cultivable waste	Fallow other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area	
Trivandrum	218600	49861	16932	2280	34	276	2576	1765	1472	149404	87543	230947	
Quilon	474290	236048	24826	2160	37	936	1286	1108	1891	205998	90938	296936	
Alleppey	182270	518	30761	576	15	168	1925	1130	2131	145046	77059	222105	
Kottayam	219550	8141	19376	2175	66	360	1835	2289	2737	182571	49282	231853	
Idukki	515048	260993	153224	17336	2215	15450	39971	1310	1725	160724	8565	169289	
Ernakulam	235319	8123	33114	2676	198	1335	4917	2571	3771	178614	79272	257886	
Trichur	299390	103619	22107	2437	157	1425	5493	3090	4561	156501	83394	239895	
Palghat	438980	136257	31686	13888	341	8244	26071	3118	6491	212884	121371	334255	
Malappuram	363230	103417	18943	7706	439	3786	13965	4119	9166	201689	47701	246390	
Kozhikode	233330	41386	16798	1754	114	3816	3234	1549	2395	162284	27755	190039	
Wynad	212560	78787	5977	2702	337	4656	4435	1792	4518	109356	42754	152110	
Cannanore	492930	54359	40607	29910	1429	14735	24496	2986	13629	310779	19773	280552	
State	3885497	1081509	276457	85600	5382	55187	13024	26827	54487	2169850	735407	2905257	

TABLE 3.1.3

Classification of area according to utilisation District-wise 1981-82 (Percentage distribution)

Name of District	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Total geographical area	Forest	Land put to non Agh. use	Barren and uncultivable land	Permanent pastures & grazing land	Land under Misc. tree crops	Cultivable waste	Fallow other than current fallows	Current fallow	Net area sown	Area sown more than once	Total cropped area
Trivandrum	5.62	4.61	6.13	2.66	0.63	0.50	1.98	6.60	3.31	6.61	12.24	7.95
Quilon	12.21	21.83	8.98	2.52	0.69	1.70	0.99	4.13	4.25	9.49	12.71	10.22
Alleppey	4.69	0.04	11.13	0.67	0.28	0.30	1.48	4.20	4.79	6.69	10.77	7.65
Kottayam	5.65	0.75	7.01	2.54	1.23	0.65	1.41	8.53	6.15	8.41	6.89	7.98
Idukki	12.26	24.13	5.54	20.25	41.16	28.00	30.70	4.88	3.88	7.41	1.20	5.83
Ernakulam	6.05	0.75	11.98	3.13	3.68	2.42	3.78	9.58	8.48	8.23	11.08	8.88
Trichur	7.70	9.58	8.00	2.85	2.92	2.58	4.22	11.52	10.25	7.21	11.65	8.26
Palghat	11.30	12.60	11.46	16.22	6.33	14.94	20.02	11.61	14.59	9.81	16.97	11.51
Malappuram	9.35	9.56	6.85	9.01	8.15	6.86	10.73	15.35	20.60	9.30	6.67	8.58
Kozhikode	6.01	9.83	6.07	2.05	2.12	6.91	2.48	5.77	5.38	7.48	3.88	6.54
Wynad	5.47	7.29	2.16	3.16	6.26	8.44	3.41	6.70	10.16	5.04	3.18	5.24
Cannanore	12.69	5.03	14.69	34.94	26.55	26.70	17.80	11.13	8.16	14.42	2.76	11.38
State	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	27.84	7.12	2.20	0.14	1.42	3.35	0.69	1.40	55.84	18.93	74.77

TABLE 3.2.2
Classification of Area Under Land Utilisation (In Hictares) 1982-83

District	Total Geographical area	Forest	Land put to non-agricultural use	Barren & uncultivable land	Permanent pastures and grazing land	Land under misc. tree crops	Cultivable waste	Fallow other than current fallow	Current fallow	Net sown area	Area sown more than once	Total cropped area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	218600	49861	17555	2255	36	235	2284	1742	1162	143470	77813	221283
Quilon	474290	236048	24439	2181	37	465	1125	1209	1669	207117	84302	291419
Alleppey	182270	518	30800	576	15	153	2070	1192	2337	144609	67636	212245
Kottayam	219550	8141	18879	2112	66	346	1787	2263	2227	183729	41367	225096
Idukki	515048	260993	15445	17389	2215	15319	39374	1240	1919	161154	15023	176177
Ernakulam	235319	8123	33946	2662	166	1339	5110	2675	3204	178094	76099	254193
Trichur	299390	103619	22328	2443	157	1267	5473	2793	4561	156749	72106	228855
Palghat	438980	136257	32021	13888	300	9462	25644	3108	6111	212189	115475	327664
Malappuram	363230	108417	18773	7738	439	3725	14101	4029	9478	201530	48194	249724
Kozhikode	233330	41386	16030	1754	114	3003	3132	1953	2364	164194	34161	198355
Wynad	212560	78787	5085	2675	84	4656	6476	1449	1276	112072	19948	132020
Cannanore	492930	54359	40607	30544	1682	14735	23637	4372	8147	314047	30195	345042
State	3985497	1081509	275908	86217	5311	54705	130213	27425	44455	2179754	682319	2962073

Classification of area under land utilisation 1982-83 (Percentage distribution)

District	Total geographical area	Forest	Land put to non-agricultural use	Barren & uncultivable land	Permanent pastures & grazing land	Land under Misc. tree crops	Cultivable waste	Fallow other than current fallow	Current fallow	Net sown area	Area sown more than once	Total cropped area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	5.62	4.61	6.36	2.62	0.68	0.43	1.75	6.35	2.61	6.58	11.40	7.73
Quilon	12.21	21.83	8.86	2.53	0.70	0.85	0.86	4.41	3.75	9.50	12.35	10.18
Alleppey	4.69	0.04	11.16	0.67	0.28	0.28	1.59	4.35	5.26	6.63	9.92	7.42
Kottayam	5.65	0.75	6.84	2.45	1.24	0.63	1.37	8.25	5.00	8.43	6.06	7.86
Idukki	13.26	24.13	5.60	20.17	4.71	28.00	30.24	4.52	4.32	7.39	2.20	6.16
Ernakulam	6.05	0.75	12.30	3.09	3.13	2.46	3.92	9.75	7.21	8.17	11.15	8.86
Trichur	7.70	9.58	8.09	2.83	2.96	2.32	4.20	10.18	10.26	7.19	10.57	8.00
Palghat	11.30	12.60	11.62	16.11	5.65	17.30	19.64	11.34	13.75	9.75	16.92	11.45
Malappuram	9.35	9.56	6.80	3.98	8.27	6.31	10.83	14.69	21.32	9.25	7.06	8.73
Kozhikode	6.01	3.83	5.81	2.03	2.15	5.49	2.41	4.93	5.32	7.53	5.02	6.93
Wynad	5.47	7.29	1.84	3.10	1.58	8.50	4.98	5.28	2.87	5.14	2.92	4.61
Cannanore	12.69	5.03	14.73	35.43	31.67	26.94	18.16	15.95	18.33	14.44	4.43	12.05
State	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	27.84	7.10	2.22	0.14	1.41	3.35	0.70	1.14	56.10	17.56	73.66

TABLE 3.14
Area Under Crops 1981-82 (in hectares)

District	Cereals & Millets				Pulses including Tur								
	Rice		Jowar	Ragi	Other cereals & Millets	Autumn	Winter	Summer	Total	Total food grains			
	Autumn	Winter									Summer	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Trivandrum	14800	14868	1107	30775	..	19	..	30794	77	630	2428	3135	39929
Quilon	24540	25087	779	50406	..	7	..	50413	1057	561	430	2048	52461
Alleppey	34047	26231	28328	89506	..	8	..	88614	72	336	414	882	89436
Kottayam	14435	12704	7289	34428	..	4	..	34432	308	238	1510	2056	36408
Idukki	3514	5138	305	8957	25	328	225	9535	189	350	1283	1822	11957
Ernakulam	40102	41379	19403	100884	5	2	180	101071	868	294	305	1467	102538
Trichur	41794	51570	22147	115511	11	36	104	115662	2405	426	457	3288	118950
Palghat	90044	86815	4018	180877	1068	975	2112	185032	3619	5928	1160	10707	195739
Malappuram	37516	35830	5628	78974	..	11	69	79054	750	354	824	1928	80982
Kozhikode	10086	14034	2833	26953	..	28	3	26984	318	516	621	1455	28439
Wynad	68	22693	7328	30089	..	1	..	30090	6	15	336	357	30447
Cannanore	36152	19724	4535	60411	60	16	115	60602	44	3700	1081	4825	65427
State	347098	356073	105700	806871	1169	1435	2808	812283	9713	13348	10849	33910	846193

TABLE 3.14—Contd.

District	Species and condiments													
	Sugar cane					Spices and condiments						Cinnamon Total		
(1)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)		(26)	(27)	(28)
	Sugar cane	Palm-rak	Total	Pepper	Chillies	Ginger	Turmeric	Cardamom	Betelnut	Tamarind	Cloves	Nutmeg	Cinnamon	Total
Trivandrum	24	693	717	5304	..	164	51	164	3306	1879	131	87	13	11179
Quilon	307	36	343	9801	..	1239	113	149	4426	751	73	105	35	16692
Alleppey	2990	22	3012	4816	..	224	28	..	2837	228	27	170	15	8345
Kottayam	242	446	688	12868	..	3214	808	22	2558	482	291	499	84	20826
Idukki	2124	280	2404	12182	..	1144	180	45172	2389	190	42	189	38	61526
Ernakulam	55	398	453	6811	..	2425	637	..	6212	825	95	1397	57	18459
Trichur	8	965	973	4036	112	123	185	..	6601	1474	18	341	60	12841
Palghat	2568	7538	10106	1546	202	363	2386	3407	2395	2880	2	63	210	11354
Malappuram	15	1469	1484	4016	84	491	104	184	8753	1287	8	119	..	15046
Kozhikode	3	361	364	13588	75	1745	200	411	5427	639	4	4	140	22233
Wynad	21	320	341	7355	..	1065	260	3741	1361	129	13	8	9	13941
Cannanore	24	187	211	25839	906	1250	347	1266	14986	565	7	520	350	46036
State	8381	12715	21096	108242	1269	13447	3200	5416	61251	11529	711	2502	1011	258478

TABLE 3.1.4.—Contd.

District	Fresh Fruits					Vegetables							
	Mango	Jack	Banana	Other Plantain	Pineapple	Papaya	Others	Total	Dried fruit cashew trees	Total fruit trees	Drum sticks	Tubers	Sweet Potatoes
(1)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)
Trivandrum	7557	7320	860	6087	450	724	1326	24324	6460	30784	3535	2502	140
Quilon	6516	5347	1562	3117	644	492	580	18258	8750	27008	1184	5849	40
Alleppey	4407	3875	774	3767	354	841	933	14951	3730	18681	1191	5293	82
Kottayam	5071	4795	1081	3163	430	869	974	15382	1467	16850	1435	3510	24
Idukki	1910	2252	204	2981	376	758	1048	9529	1243	10772	309	1492	168
Ernakulam	5084	4031	1629	3796	513	1126	646	16825	3923	20748	1300	2905	60
Trichur	4299	3873	1432	3095	484	1726	976	15885	7307	23192	845	2482	135
Paigat	5135	4220	1545	2010	266	465	2352	15993	13190	29183	717	1966	2023
Malappuram	6109	5850	2159	1751	276	1449	716	18310	20477	38787	918	2699	1587
Kozhikode	5565	6118	1070	1797	416	988	876	16830	4363	21193	2457	1939	65
Wynad	2799	6667	577	1347	160	137	1100	12787	1017	13804	133	957	12
Cannanore	6729	6689	1175	3010	1004	1052	1796	21455	68033	89488	672	1386	980
State	60181	61037	14068	35921	5373	10627	13323	200530	139960	340490	14696	32980	5316

TABLE 3.1.4.—Contd.

District	Tapioca										Oil seeds						
	Autumn		Winter		Summer		Total		Others		Total		Total		Total		
	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	
Trivandrum	26334	26827	7159	60320	603	67100	143709	6	19	73515	271	73811	..				
Quilon	18390	40990	1071	60451	329	67853	164357	..	2883	84544	62	87489	..				
Alleppey	2663	15320	1111	19094	908	26568	146042	..	4829	62118	118	67065	..				
Kottayam	1464	22578	518	24560	879	30408	105260	..	40	50751	144	50935	..				
Idukki	1267	8320	48	9635	1112	12716	98775	..	260	17371	72	17703	..				
Ernakulam	3785	7942	655	12382	2766	19413	161611	..	2057	62317	195	64569	..				
Trichur	1044	4849	264	6157	1436	11055	167011	..	1595	57312	168	59015	..				
Palghat	6655	5735	324	12714	2668	20088	266470	9618	1075	22916	598	34207	6777				
Malappuram	6850	9718	1536	18104	1828	25136	161435	3	1842	57919	37	59801	..				
Kozhikode	2010	1440	244	3694	298	8453	80682	-	26	97308	60	97394	..				
Wynad	1917	1302	376	2995	363	4460	62993	..	128	3535	75	3738	..				
Cannanore	1763	15121	1079	17963	1424	22425	223587	80	283	77012	129	77504	..				
Total	73542	160142	14385	248069	14614	315675	1781932	9707	15037	666618	1929	693291	6777				

TABLE 3.1.1.4—*Contd.*

District	Drugs and Narcotics					Plantation Crops					Green manure crops (65)	Other non-food crops (66)	Total non-food crops (67)	Grand Total (Total cropped area) (68)
	Betel leaves (55)	Tobacco (56)	Lemon grass (57)	Total (58)	Tea (59)	Coffee (60)	Rubber (61)	Cocoa (62)	Total (63)	Fodder crops (64)				
Trivandrum	190	..	60	250	1072	48	6735	1018	10873	295	224	1785	87238	230947
Quilon	190	..	44	234	1653	378	38890	1556	42477	257	706	1416	132579	296996
Alleppey	79	..	10	89	..	21	3273	3165	7459	184	239	1027	76063	222105
Kottayam	75	..	56	131	2230	958	63232	6153	72573	467	287	2200	126593	231853
Idukki	7	..	1363	1370	23967	4827	17449	2184	48427	454	214	2346	70514	169289
Ernakulam	90	..	533	623	30	247	23334	3680	27291	121	246	3425	96275	257886
Trichur	65	..	55	120	447	33	9386	1269	11135	122	445	1987	72884	239895
Palghat	4	..	110	114	665	2351	11084	308	14408	30	1304	10945	67785	334255
Malappuram	325	..	109	434	174	..	19281	673	20128	31	2873	4688	87955	249390
Kozhikode	42	..	766	808	..	..	6311	1744	8055	25	912	2163	109357	190039
Wynad	2	..	1903	1905	5387	49086	24424	311	79208	94	454	3718	89117	152110
Cannanore	23	570	1362	1955	..	..	11370	1320	12690	258	1576	12982	106965	330552
State	1092	570	6371	8033	35625	57949	237769	23381	354724	2338	9480	48682	1123325	2905257

TABLE 3.2.4

Area under Crops 1982-83 (in hectare)

District	Cereals & Millets				Jowar	Ragi	Other cereals & millets	Pulses including Tur				
	Rice		Total	Autumn				Autumn	Winter	Summer	Total	
	Winter	Summer										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	14581	14375	435	29391	..	19	..	29410	191	630	1843	2664
Quilon	24435	24458	708	49601	..	7	..	49608	958	553	430	1941
Alleppey	32545	26801	24516	83862	..	4	..	83866	66	254	404	724
Kottayam	14181	13261	7154	34596	..	4	..	34600	308	238	1589	2135
Idukki	3854	5236	159	9249	25	212	225	9711	189	380	447	1016
Ernakulam	40053	40877	15080	96010	5	7	180	96202	535	439	433	1407
Trichur	40661	49716	17334	107711	11	36	104	107862	2101	241	433	2775
Palghat	89438	81044	2676	173158	1130	884	1713	176895	3874	5211	1968	10453
Malappuram	36731	37450	4321	78502	..	15	69	78586	230	107	420	757
Kozhikode	10086	14228	2174	26488	..	28	3	26519	222	516	526	1264
Wynad	71	24255	6156	30482	..	1	..	30483	6	15	72	93
Cannanore	36033	20572	2835	59440	60	16	67	59583	38	3140	1648	4826
State	942669	852273	83548	778490	1231	1233	2861	783315	8718	11724	9613	30055

TABLE 3. 2. 4. (Contd.)

District	Total food grains				Sugar crops			Spices and Condiments								
	(14)	(15)	(16)	(17)	Sugar-cane	Palmy-rah	Total	Pepper	Chillies	Ginger	Turmeric	Cardamom	Betal nuts	Tamarind	Cloves	
(1)		(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)				
Trivandrum	32074	31	460	491	5436	..	158	39	164	3306	1710	130				
Quilon	51549	350	36	386	10196	..	1312	90	149	4407	820	80				
Alleppey	84590	3101	470	3571	4816	..	187	22	..	2850	228	27				
Kottayam	96735	309	470	779	12286	..	2988	552	22	2357	482	380				
Idukki	10727	1751	220	1971	12182	..	1054	192	45172	2387	190	47				
Ernakulam	97609	41	377	418	6532	..	1945	704	..	6212	810	153				
Trichur	110637	5	860	865	4173	..	78	186	..	6468	1533	30				
Palghat	187338	2175	6747	8922	1546	274	340	286	3274	2395	2723	10				
Malappuram	79343	9	1278	1287	4298	84	399	92	184	8945	1217	3				
Kozhikode	27783	3	303	306	12502	75	1600	179	412	5270	593	13				
Wynad	30576	15	232	247	7661	..	1158	175	4251	1361	129	7				
Cannanore	64409	24	180	204	25839	817	1443	330	760	14858	543	3				
State	813370	7814	11633	19447	107467	1250	12662	2847	54388	60816	10978	883				

TABLE 3.2.4. (Contd.)

District	Spices (contd.)				Fresh fruits				Total	Others	Total	Dry fruits
	Nutmeg	Cinnamon	Total	Mango	Jack	Banana	Other plain-fruit	Pine-apple					Peppercorn
(1)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)
Trivandrum	90	10	11043	7487	7150	754	5196	402	616	1242	22847	6693
Quilon	113	7	17194	6203	5347	1647	3275	618	528	456	18074	8750
Alleppey	180	16	8326	4720	3403	830	2529	227	644	691	13044	3730
Kottayam	503	56	19626	4071	4267	1245	3306	577	640	642	12748	1613
Idukki	147	25	61396	1743	2937	164	2018	376	758	956	8952	1227
Ernakulam	1333	34	17723	4990	4410	2043	3773	568	1064	635	17533	4107
Trichur	237	35	12740	4660	3873	1228	3171	291	1560	504	15287	7657
Palghat	100	240	11188	5413	4220	1467	2210	266	564	2300	16440	13190
Malappuram	119	13	15354	6109	5417	2159	2095	144	1368	598	17884	21080
Kozhikode	43	120	20807	5837	5930	946	1992	105	988	824	16622	4220
Wynad	8	7	14757	2799	6347	468	1347	160	88	936	12145	997
Cannanore	535	350	45478	6173	6639	1175	3000	732	850	1777	20396	68033
State	3408	933	255632	60205	59990	14126	33912	4466	9668	11605	196972	141307

TABLE 3.2.4. (Contd.)

District	Total fruit trees		Vegetables					Tapioca				Total food crops
	(38)	(39)	Drum stick	Tubers	Sweet-potatoes	Autumn	Winter	Summer	Total	Other vegetables	Total vegetables		Total food crops
(1)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	
Trivandrum	29540	3160	1793	158	23781	23228	6724	53733	555	59399	132547	
Quilon	26824	1543	6246	64	15100	39483	842	55425	345	63623	159576	
Alleppey	16774	753	6666	51	2115	11970	887	14972	1003	23445	136706	
Kottayam	16361	1227	2535	23	1464	19575	429	21468	968	26216	99717	
Idukki	10179	447	1492	168	1267	9683	48	10998	1112	14217	98490	
Ernakulam	21640	1200	2316	54	2973	7121	688	10782	2559	16911	154301	
Trichur	22954	787	2426	135	934	4288	271	5493	1074	9915	157111	
Palghat	29630	767	1078	1723	6902	5558	371	12831	2022	18421	255499	
Malappuram	38964	1080	2007	1666	6628	9628	1415	17671	1784	24208	159156	
Kozhikode	20842	2195	1939	91	1747	1163	244	3154	287	7666	77404	
Wynad	13142	95	957	17	844	1098	437	2379	293	3741	62463	
Cannanore	88429	647	783	856	1405	16538	768	18711	1891	22888	221408	
State	335279	13901	30238	5006	65160	149333	13124	227617	13888	290650	1714378	

TABLE 3.2.4. (Contd.)

District	Oil seeds				Drugs and Narcotics				Total	
	Ground nut (49)	Sesamum (50)	Coconut (51)	Others (52)	Total (53)	Fibre cotton (54)	Betel leaves (55)	Tobacco (56)		Lemon grass (57)
Trivandrum	8	14	73727	221	73970	..	150	..	49	199
Quilon	..	2226	85178	60	87464	..	183	..	22	205
Alleppey	..	4602	62118	97	66817	..	80	..	6	86
Kottayam	..	39	50876	144	51059	..	94	..	56	150
Idukki	..	299	17371	121	17791	..	6	..	2316	2322
Ernakulam	..	2372	62916	242	65530	..	98	..	555	653
Trichur	1	982	57312	145	58440	..	73	..	70	143
Palghat	10184	945	23688	606	35423	5900	4	..	109	113
Malappuram	3	2215	60970	95	63283	..	295	..	80	375
Kozhikode	..	26	96392	116	96534	..	38	..	760	798
Wynad	..	128	3535	58	3721	..	2	..	1900	1902
Cannanore	80	305	78295	125	78805	..	26	536	1254	1816
State	10276	14153	674378	2030	700837	5900	1049	536	7177	8762

TABLE 3.2.4. (Contd.)

District	Plantation crops							Total	Green manure crops (65)	Other non-food crops (66)	Total non-food crops (67)	Grand total (68)
	Tea (59)	Coffee (60)	Rubber (61)	Cocoa (62)	Fodder-crops (64)							
(1)												
Trivandrum	1001	48	10158	1060	12267	215	395	1690	88736	221283		
Quilon	1552	378	38666	1162	41758	287	693	1436	131843	291419		
Alleppey	..	21	4814	2430	7265	161	268	942	75539	212245		
Kottayam	2137	958	62454	5894	71443	297	188	2242	125379	225096		
Idukki	23838	4783	24285	1960	54865	279	160	2269	77687	176177		
Ernakulam	2	247	25316	2176	27741	114	223	5631	99892	234193		
Trichur	447	33	9445	724	10649	74	344	2094	71744	228855		
Palghat	665	2351	13866	194	17076	30	950	12673	72165	327664		
Malappuram	174	..	19330	458	19962	31	2229	4688	90568	249724		
Kozhikode	..	..	17822	705	18527	17	912	2163	120951	198355
Wynad	5389	49086	2945	311	57731	76	454	5673	69537	132020		
Cannanore	..	..	27182	1160	28342	186	1571	12914	123634	345042
State	35205	57905	256283	18234	367627	1767	8387	54415	1147695	2862073		

TABLE 3.1.5

Percentage distribution of area under crops to total cropped area of each district 1981-82

District	Total cropped area (2)	Total food crops (3)	Total non-food crops (4)	Net area sown (5)	Rice (6)	Other Cereals millets (7)	Cereals millets and pulses			
							Total cereals millets (8)	Total pulses (9)	Total food-grains (10)	
(1)										
Trivandrum	100.00	62.23	37.73	62.09	13.33	..	13.33	1.36	14.69	
Quilon	100.00	55.35	44.65	69.38	16.98	..	16.98	0.69	17.67	
Alleppey	100.00	65.75	34.25	65.31	39.89	..	39.90	0.37	40.27	
Kottayam	100.00	45.40	54.60	78.74	14.85	..	14.85	0.89	15.74	
Idukki	100.00	58.35	41.65	94.94	5.29	0.35	5.64	10.76	6.70	
Ernakulam	100.00	62.67	37.33	69.26	39.12	0.07	39.19	0.57	39.76	
Trichur	100.00	69.62	30.38	65.24	48.15	0.06	48.21	1.37	49.58	
Palghat	100.00	79.63	20.27	63.69	54.11	0.25	55.36	3.20	58.56	
Malappuram	100.00	64.73	35.27	80.87	31.67	0.03	31.70	0.77	32.47	
Kozhikode	100.00	42.46	57.54	85.40	14.18	0.02	14.20	0.76	14.96	
Wynad	100.00	41.41	58.59	71.89	19.78	..	19.78	0.24	20.02	
Cannanore	100.00	67.64	32.36	81.67	18.28	0.05	18.33	1.46	19.79	
State	100.00	61.34	38.66	74.69	27.77	0.19	27.96	1.17	29.13	

TABLE 3.1.5 (Contd.)

District	Fresh fruits				Dried fruits				Vegetables		
	Banana (11)	Plantain (12)	Pineapple (13)	Other fruits (14)	Cashew (15)	Total fruits (16)	Topioca (17)	Sweet potatoes (18)	Tubers (19)	Other vegetables (20)	
(1)											
Tiruvallur	0.37	2.64	0.19	0.39	2.80	13.33	26.12	0.06	1.08	1.79	
Quilon	0.53	1.05	0.22	0.35	2.95	9.10	20.36	0.01	1.97	0.51	
Alleppey	0.35	1.70	0.16	0.80	1.68	8.41	8.60	0.04	2.38	0.94	
Kottayam	0.47	1.36	0.19	0.78	0.63	7.27	16.59	0.01	1.51	1.01	
Idukki	0.12	1.76	0.22	1.07	0.73	6.36	5.69	0.10	0.88	0.84	
Ernakulam	0.63	1.47	0.20	0.69	1.52	8.05	4.80	0.06	1.13	1.60	
Trichur	0.60	1.29	0.20	1.13	3.05	9.67	2.57	0.06	1.04	0.94	
Palghat	0.46	0.60	0.08	0.85	3.95	18.73	3.80	0.61	0.59	1.01	
Malappuram	0.87	0.70	0.11	0.86	8.21	15.55	7.26	0.64	1.08	1.12	
Kozhikode	0.56	0.95	0.22	0.98	2.30	11.15	1.94	0.03	1.02	1.46	
Wynad	0.38	0.89	0.11	0.81	0.67	9.08	1.97	..	0.63	0.33	
Cannanore	0.36	0.91	0.30	0.86	20.58	27.07	5.43	0.30	0.42	0.63	
State	0.48	1.24	0.19	1.02	4.82	11.72	8.54	0.18	1.14	1.01	

TABLE 3.1.5 (Contd.)

District	Oil Seeds											
	Total vegeta- bles (21)	Total fruits vegetables (22)	Total food crops (23)	Coconut (24)	Sesamum (25)	Ground nut (26)	Other seeds (27)	Total (28)	Tobacco (29)	Tea (30)	Coffee (31)	Rubber (32)
(1)												
Trivandrum	29.05	42.56	62.23	31.83	0.00	0.00	0.12	31.96	..	0.46	0.02	3.78
Qanlon	22.85	31.95	55.35	28.47	0.97	..	0.02	29.46	..	0.56	0.13	13.10
Alleppey	11.96	20.37	55.75	27.97	2.17	..	0.05	30.20	..	..	0.01	1.92
Kottayam	13.12	20.38	45.40	21.89	0.01	..	0.06	21.96	..	0.96	0.41	27.27
Idukki	7.51	13.87	58.35	10.26	0.15	..	0.04	10.46	..	14.16	2.85	10.31
Ernakulam	7.53	15.57	62.67	24.16	0.80	..	0.08	25.04	..	0.00	0.10	9.05
Trichur	4.61	14.28	69.62	23.89	0.67	..	0.07	24.63	..	0.10	0.00	3.91
Palghat	6.01	14.75	79.63	6.86	0.32	2.88	0.18	10.23	..	0.20	0.70	3.32
Malappuram	10.10	25.65	64.73	23.22	0.74	0.00	..	23.98	..	0.07	..	7.73
Kozhikode	4.45	15.61	42.46	51.20	0.01	..	0.05	51.25	..	..	..	3.32
Wynad	2.93	12.01	4.14	2.32	0.08	..	0.05	2.46	..	3.54	32.27	16.06
Canaraote	6.78	33.65	67.64	23.30	0.09	0.02	0.04	23.45	0.17	..	..	3.44
State	10.67	22.59	61.94	22.95	0.52	0.33	0.07	23.86	0.02	1.23	2.00	8.16

TABLE 3.1.5 (Contd.)

	Sugar crops			Condiments & spices					Fresh fruits		
	Sugarcane (33)	Others (34)	Total (35)	Pepper (36)	Ginger (37)	Cardamom (38)	Betelnut (39)	Others (40)	Total spices (41)	Mango (42)	Jack (43)
Trivandrum	0.01	0.30	0.31	2.33	0.07	0.07	1.43	0.90	4.80	3.27	3.17
Quilon	0.10	0.01	0.11	3.30	0.42	0.05	1.49	0.36	5.62	2.19	1.80
Alleppey	1.35	0.01	1.36	2.17	0.10	..	1.23	0.21	3.76	1.98	1.74
Kottayam	0.11	0.19	0.30	5.55	1.39	0.01	1.10	0.93	8.98	1.76	2.07
Idukki	1.25	0.17	1.42	7.20	0.67	26.68	1.41	0.38	96.34	1.13	1.33
Ernakulam	0.03	0.15	0.18	2.64	0.94	..	2.41	1.20	7.19	1.97	1.56
Trichur	0.01	0.40	0.41	1.63	0.05	..	2.75	0.87	5.35	1.79	1.61
Palghat	0.77	2.25	3.02	0.46	0.11	1.02	0.72	1.09	3.40	1.54	1.26
Malappuram	0.01	0.59	0.60	1.61	0.10	0.07	3.51	0.74	6.03	2.45	2.35
Kozhikode	0.00	0.19	0.19	7.15	0.92	0.22	2.86	0.55	11.70	2.93	3.22
Wysad	0.01	0.21	0.22	4.84	0.70	2.46	0.90	0.27	9.17	1.84	4.33
Cannanore	0.00	0.06	0.06	7.82	0.38	0.33	4.53	0.82	13.93	2.04	2.02
State	0.29	0.44	0.73	3.73	0.46	1.88	2.11	0.72	8.90	2.07	2.10

TABLE 3.1.5—Contd.

District	Lemon grass oil	Cocoa	Total Cotton	Betel leaves	Fodder crops	Green maize crops	Other non food crops	Total non food crops	Total Total cropped area		
(1)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
Trivandrum	0.05	0.44	4.73	..	0.08	0.13	0.10	0.77	1.08	37.77	100.00
Quilon	0.01	0.52	14.32	..	0.06	0.09	0.24	0.48	0.87	44.65	100.00
Alleppey	..	1.43	3.36	..	0.04	0.08	0.11	0.46	0.69	34.25	100.00
Kottayam	0.02	2.65	31.31	..	0.03	0.20	0.12	0.95	1.30	54.60	100.00
Idukki	0.81	1.29	39.42	..	0.00	0.27	0.13	1.39	1.79	41.65	100.00
Ernakulam	0.21	1.43	10.79	..	0.04	0.05	0.09	1.33	11.51	37.33	100.00
Trichur	0.02	0.53	4.56	..	0.03	0.05	0.19	0.83	1.10	30.38	100.00
Palghat	0.03	0.09	4.34	2.03	0.00	0.00	0.39	3.27	5.69	20.27	100.00
Malappuram	0.04	0.27	8.11	..	0.13	0.00	1.15	1.88	3.16	35.27	100.00
Kozhikode	0.40	0.92	4.64	..	0.02	0.00	0.48	1.14	1.64	57.54	100.00
Wynad	1.25	0.20	53.32	..	0.00	0.00	0.30	2.44	2.74	58.59	100.00
Cannanore	0.41	0.40	4.42	..	0.01	0.08	0.48	3.93	4.50	32.36	100.00
State	0.22	0.81	12.46	0.23	0.04	0.08	0.33	1.68	2.36	38.66	100.00

TABLE 3.2.5

Percentage distribution of area under crops to total cropped area of each District (1962-83)

District	(1)	(2)	(3)	(4)	(5)	Cereals millets and pulses				(10)
						Total cropped area food crops	Total non-food crops	Net area sown	Rice		Other cereals and millets	Total cereals and millets	Total Pulses	Total food grains
Trivandrum		100.00	59.90	40.10	64.84	13.28	13.29	1.20	14.50	
Quilon		100.00	54.76	45.24	71.07	17.02	17.02	0.67	17.69	
Alleppey		100.00	64.41	35.59	68.13	39.51	39.51	0.34	39.85	
Kottayam		100.00	44.30	55.70	81.62	15.37	15.37	0.95	16.32	
Idukki		100.00	55.90	44.10	91.47	5.25	5.51	0.58	6.09	
Ernakulam		100.00	60.70	39.30	70.06	37.77	37.85	0.55	38.40	
Trichur		100.00	68.65	31.35	68.49	47.07	47.13	1.21	48.34	
Palghat		100.00	77.98	22.02	64.76	52.85	53.98	3.19	57.17	
Malappuram		100.00	63.73	36.27	80.70	31.44	31.47	0.30	31.77	
Kozhikode		100.00	39.02	60.98	82.78	13.35	13.37	0.64	14.01	
Wynad		100.00	47.31	52.69	84.89	23.09	23.09	0.07	23.16	
Gannanore		100.00	64.17	35.83	91.25	17.23	17.27	1.40	18.67	
State		100.00	59.90	40.10	73.66	27.20	27.37	0.17	28.42	

TABLE 3.2.5 (Continued)

(1)	Sugar crops		Spices and condiments										Fresh Fruits						
	Sugar-	Others	Total		Pepper		Ginger		Cardamom		Betelnut		Others			Total spices	Mango	Jack	Banana
			(11)	(12)	(13)	(14)	(15)	(16)	(16)	(17)	(17)	(18)	(19)	(20)	(21)					(22)
Trivandrum	0.01	0.21	0.22	2.46	0.07	0.07	0.07	1.49	0.90	4.99	3.38	3.23	0.34						
Quilon	0.12	0.01	0.13	3.30	0.45	0.05	1.51	0.39	5.90	2.13	1.84	0.57							
Alleppey	1.46	0.22	1.68	2.27	0.09	1.34	0.22	3.92	2.22	1.60	0.39								
Kottayam	0.14	0.21	0.35	5.46	1.33	0.01	1.05	0.87	8.72	1.81	1.90	0.55							
Idukki	0.99	0.13	1.12	6.92	0.60	25.64	1.36	0.33	34.85	0.99	1.67	0.09							
Ernakulam	0.02	0.15	0.17	2.57	0.77	2.44	0.29	6.07	1.96	1.74	0.80								
Trichur	0.00	0.38	0.38	1.82	0.03	2.83	0.89	5.57	2.04	1.69	0.54								
Palghat	0.66	2.06	2.72	0.47	0.10	1.00	0.73	1.11	3.41	1.65	1.29	0.45							
Malappuram	0.00	0.51	0.51	1.72	0.16	0.07	3.58	0.62	6.15	2.45	2.17	0.87							
Kozhikode	0.00	0.15	0.15	6.30	0.81	0.21	2.66	0.51	10.49	2.94	2.99	0.48							
Wynad	0.01	0.14	0.15	5.80	0.88	3.22	1.03	0.25	11.18	2.12	4.81	0.35							
Cannanore	0.01	0.05	0.06	7.49	0.42	0.22	4.31	0.74	13.18	1.79	1.92	0.34							
State	0.27	0.41	0.68	3.76	0.44	1.90	2.13	0.70	8.92	2.10	2.10	0.49							

TABLE 3.2.5 (contd.)

District	Fresh fruits		Other fruits		Dried fruits	Total fruit trees		Vegetable		Tubers	Total Vegetables		Total fruits & food crops
	Plantain	Pineapple	Pineapple	Other fruits		Cashew	Tapooca	Sweet potato	Other vegetable		Vegetables	Total		Total
					(23)					(24)			(25)		(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
Trivandrum	2.35	0.18	0.84	3.03	13.35	24.28	0.07	0.81	1.68	26.84	40.19	59.90	
Quilon	1.12	0.21	0.34	3.00	9.21	19.02	0.02	2.14	0.65	21.83	31.04	54.76	
Alleppey	1.19	0.11	0.63	1.76	7.90	7.05	0.02	3.14	0.84	11.05	18.95	64.41	
Kottayam	1.47	0.26	0.36	0.72	7.27	9.54	0.01	1.13	0.96	11.65	18.92	44.30	
Idukki	1.15	0.21	0.97	0.70	5.78	6.24	0.10	0.85	0.88	8.07	13.85	55.90	
Ernakulam	1.46	0.22	0.69	1.62	8.51	4.24	0.02	0.91	1.48	6.65	15.16	60.70	
Trichur	1.39	0.13	0.89	3.35	10.03	2.40	0.60	1.06	0.27	4.33	14.36	68.65	
Palghat	0.67	0.08	0.87	4.03	9.04	3.92	0.53	0.33	0.84	5.62	14.66	77.98	
Malapuram	0.84	0.86	0.77	8.44	15.60	7.08	0.67	0.80	1.14	9.69	25.29	63.73	
Kozhikode	1.00	0.05	0.92	2.13	10.51	1.59	0.05	0.98	1.25	3.87	14.38	39.02	
Wayanad	1.02	0.12	0.77	0.76	9.95	1.80	0.01	0.73	0.29	2.83	12.78	47.31	
Cannanore	0.87	0.21	1.78	19.72	25.63	5.42	0.25	0.23	0.73	6.63	32.26	64.17	
State	1.19	0.16	0.74	4.94	11.72	7.95	0.18	1.06	0.97	10.16	21.88	59.90	

TABLE 3.2.5 (contd.)

Districts	Oil seeds		Ground-nut	Other oil seeds		Total	Drugs					
	Coconut	Sesamum		(36)	(37)		(38)	(39)	(40)	Tobacco	Tea	Coffee	Plantation crops
			(35)			(36)						
(1)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	
Trivandrum	33.32	0.01	0.00	0.10	33.43	..	0.45	0.02	4.59	0.02	0.48	
Quilon	29.23	0.76	..	..	30.01	..	0.53	0.13	13.27	0.01	0.40
Alleppey	29.27	2.17	..	0.04	31.48	..	..	0.01	2.27	0.00	1.15
Kottayam	22.60	0.02	..	0.06	22.68	..	0.95	0.43	27.75	0.03	2.62	
Idukki	9.86	0.17	..	0.07	10.10	..	13.53	2.72	13.78	1.32	1.11	
Ernakulam	24.75	0.93	..	0.10	25.78	..	0.10	0.10	9.96	0.22	0.86	
Trichur	25.04	0.43	..	0.06	25.53	..	0.20	0.01	4.13	0.03	0.32	
Palghat	7.23	0.29	3.11	0.19	10.82	..	0.20	0.72	4.23	0.02	0.06	
Malappuram	24.42	0.89	0.00	0.04	25.34	..	0.07	..	7.74	0.03	0.18	
Kozhikode	49.60	0.01	0.06	0.06	49.67	..	..	..	8.99	0.38	0.36
Wayanad	2.68	0.10	..	0.04	2.82	..	4.08	37.18	2.23	1.44	0.24	
Cannanore	22.69	0.09	0.02	0.04	22.84	0.16	..	..	7.88	0.36	0.34
State	23.56	0.50	0.36	0.07	24.49	0.02	1.23	2.02	8.95	0.25	0.64	

TABLE 3.2.5 (contd)

Districts	Total (46)	Cotton (47)	Betel leaves (48)	Fodder crops (49)	green maize crops (50)	Other non-food crops (51)	Total (52)	Total non-food crops (53)	Total cropped area (54)
(1)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
Trivandrum	5.56	..	0.07	0.10	0.18	0.76	1.11	40.10	100.00
Quilon	14.34	..	0.06	0.10	0.24	0.49	0.89	45.24	100.00
Alleppey	3.43	..	0.04	0.08	0.13	0.44	0.69	35.59	100.00
Kottayam	31.78	..	0.04	0.13	0.08	1.00	1.25	55.70	100.00
Idukki	32.46	..	0.00	0.16	0.09	1.29	1.54	44.10	100.00
Ernakulam	11.14	..	0.04	0.05	0.09	2.22	2.40	39.30	100.00
Trichur	4.69	..	0.03	0.03	0.15	0.92	1.13	31.35	100.00
Palghat	5.23	1.80	0.00	0.01	0.29	3.87	5.97	22.02	100.00
Malappuram	8.02	..	0.12	0.01	0.89	1.88	2.90	36.27	100.00
Kozhikode	9.73	..	0.02	0.01	0.46	1.09	1.58	60.98	100.00
Wayanad	43.17	..	..	0.06	0.34	4.30	4.70	52.69	100.00
Cannanore	8.74	..	0.01	0.05	0.46	3.74	4.26	35.83	100.00
State	13.11	0.21	0.04	0.06	0.29	1.90	2.50	40.10	100.00

Production of Important Crops 1981-82 (In Tonnes)

District	Rice					Jowar	Ragi	Other cereals	Pulses	Sugar Cane (Gar)	Black pepper	Dry Chillies	Dry Ginger	Cured Turmeric
	Autumn	Winter	Summer	Total	(1)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Trivandrum	20707	22897	1233	44837	..	16	..	749	118	1734	..	400	99	
Quilon	39102	43371	896	83369	..	6	..	1628	1351	2784	..	3968	213	
Alleppey	53748	44917	74497	173162	..	7	..	670	15518	968	..	552	55	
Kottayam	28138	21180	15285	64603	..	3	..	1472	1271	1686	..	9215	1508	
Idukki	6114	9682	312	16108	11	282	144	1479	19020	21010	..	2733	319	
Ernakulam	57138	62974	28883	148995	2	2	115	1050	340	1117	..	6140	1180	
Taichur	47193	74310	33970	155473	4	40	67	2348	33	537	2	128	291	
Pulhat	203506	175043	6840	385389	481	683	1352	6606	17771	187	180	607	459	
Malappuram	44860	52248	8082	105190	..	10	44	1431	94	1072	74	873	157	
Kozhikode	9136	14427	3941	27504	..	26	2	1107	19	4701	60	4328	461	
Cannanore	47218	25996	6467	79681	27	24	74	3474	83	7648	843	3394	686	
Wynad	58	42109	12915	55082	..	1	..	272	131	3067	..	2641	599	
State	556918	589154	193321	1339993	525	1100	1798	22286	49749	127511	1159	34379	6027	

TABLE—3.1.6 (Contd.)

District	Processed Carda- mom (No. in million)	Betel- nuts (No. in million)	Tama- rind	Mango	Jack (No. in thousand)	Banana	Other plant- ain	Pippaya	Raw cashew nuts	Tapioca	Sweet potatof	Ground nut
(1)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
Trivandrum	5	314	4763	24409	24193	9856	32687	13756	4018	904800	845	5
Quilon	8	669	1554	28716	19853	15647	11561	4428	6011	826970	241	..
Alleppey	..	325	164	8814	16205	9395	11399	3364	2029	266934	495	..
Kottayam	1	362	543	22785	18681	17072	16660	4345	1448	405240	145	..
Idukki	2300	412	236	2966	7950	2341	15695	1516	1444	203588	1050	..
Ernakulam	..	1175	1118	31404	18490	18646	14759	4504	2346	243059	362	..
Trichur	..	1394	3068	26555	6057	22683	8332	6904	1659	76655	815	..
Palghat	171	344	7511	14378	18162	21034	4046	4185	3113	191346	127545	8493
Malappuram	9	1496	2290	52971	28881	29568	5617	8694	8682	233952	10787	3
Kozhikode	13	1616	1542	21389	27959	14477	6126	4940	4359	49426	414	..
Wayanad	213	189	311	9785	30468	7807	4592	685	1472	66938	76	..
Cannanore	80	2406	968	35845	31933	13889	13638	4208	42317	274834	6699	71
State	2860	10702	24068	280017	248232	182415	145112	61529	78898	3745542	34674	8572

TABLE 3.1.6 (Contd.)

District	Seasamum	Coconut (Nos. in Million)	Cotton bales of 170 kg.	Tobacco	Lemon- grass Oil	Tea	Coffee	Rubber	Cocoa	Peanutshells
(1)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
Trivandrum	5	355	..	..	4	906	45	5906	85	5704
Quilon	721	356	..	..	3	797	355	25984	106	7558
Alleppey	869	295	..	..	7	..	20	2767	430	9652
Kottayam	9	200	..	..	4	283	901	36842	1034	4643
Idukki	57	44	..	..	94	34871	4537	11487	282	4330
Ernakulam	761	344	..	..	11	..	232	13934	482	5654
Trichur	431	381	..	..	6	912	30	6083	126	4030
Palghat	312	77	10724	..	13	1187	1085	4300	13	3240
Malappuram	626	247	..	..	3	84	..	9931	52	2949
Kozhikode	8	443	..	..	13	..	..	3321	178	5610
Wynad	40	4	..	..	32	6427	26450	12842	32	2150
Cannanore	161	260	..	1050	42	..	..	5978	74	17282
State	4000	3006	10724	1050	232	45467	33655	139455	2894	66810

TABLE 3.2.6.

Production of important crops during 1982-83

District	Rice				Total	Jowar	Ragi	Other Cereals	Pulses	Sugar-cane (gur)	Black Pepper	Dry Chillies	Dry ginger
	Autumn	Winter	Summer	(5)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Trivandrum	23174	22108	547	45829	..	16	..	637	228	1098	..	386	
Quilon	43592	41288	966	85846	..	6	..	1527	2576	2712	..	3553	
Alleppey	46026	43127	60615	149768	..	3	..	590	28814	535	..	461	
Kottayam	30748	28647	24149	83544	..	3	..	1529	2871	2211	..	7966	
Idukki	9124	11341	160	20625	11	182	144	825	24654	1888	..	2442	
Ernakulam	65388	63216	21214	149818	2	6	115	1007	415	882	..	4876	
Trichur	52509	68382	28502	149393	4	30	67	1981	51	826	..	81	
Palghat	209159	151679	4373	365211	463	610	1096	6449	22011	240	243	568	
Malappuram	40717	50260	7747	98724	..	13	44	562	91	1302	74	709	
Kozhikode	9310	16758	2320	28388	..	26	2	962	30	3000	66	3850	
Wynad	64	40406	7771	48241	..	1	..	71	152	2881	..	2786	
Cannanore	49017	28492	3301	80810	27	24	43	3764	242	6951	760	3903	
State	578828	565704	161665	1306197	507	920	1511	19904	82135	24526	1143	31581	

TABLE 3.2.6—Contd.

District	Cured, Processed Betelnuts Termeric Cardamom (million nuts)	Tamarind Mango	Jack (nos. in 000)	Banana	Other plantation cashewnut	Raw Tapioca	Sweet Potato	Pappaya				
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Trivandrum	76	3	343	4335	21525	29631	7431	24275	2918	859728	954	131756
Quilon	170	5	684	1697	27064	18859	14518	10811	5653	903428	386	4295
Alleppey	43	..	262	164	8496	20153	5743	6429	1380	251979	308	3330
Kottayam	979	1	358	543	24153	16791	17139	15148	118	445032	139	4345
Idiokki	330	1560	290	236	2977	9011	1751	10413	639	286828	1082	1516
Ernakulam	1265	..	1074	1098	32365	21366	22448	14375	3318	207554	326	4414
Trichur	291	..	1573	3190	20010	15089	19062	8279	4455	102060	815	6904
Palghat	459	116	376	7102	14853	15800	18374	3960	2598	185151	11181	4185
Malappuram	139	6	1861	2165	52971	26207	29505	6048	9486	220334	11324	8694
Kozhikode	408	9	1583	1431	20406	27100	11903	6655	4963	38952	545	4940
Wynad	399	145	341	311	9785	29006	5889	4500	167	58761	108	685
Cannanore	633	55	2782	930	32884	31933	13750	13593	39800	288711	5910	4208
State	5192	1900	11027	23202	267489	254946	164913	124486	75495	3848718	33078	61272

TABLE 3.2.6—Contd.

District	Groundnut (26)	Sesamium (27)	Coconut (Mill nuts) (28)	Cotton (Bales of 170 kg.) (29)	Tobacco (30)	Lemongrass oil (31)	Tea (32)	Coffee (33)	Rubber (34)	Cocoa (35)	Pine apple (36)	Drum stick (37)
Trivandrum	7	4	279	..	..	3	943	22	6319	20	5226	3795
Quilon	..	534	319	..	..	2	681	171	26812	41	7416	1584
Alleppey	..	828	367	..	..	1	..	10	2917	182	2270	541
Kottayam	..	9	326	..	..	4	289	433	39681	454	6347	475
Idukki	..	60	45	..	..	160	34413	2167	14543	339	4512	469
Eriakulam	..	688	932	..	..	65	..	112	15639	228	6248	948
Trichur	1	265	355	..	..	8	903	15	6283	53	2328	1899
Palghat	8992	265	80	9936	..	13	1349	1075	5435	4	2394	769
Malappuram	3	775	251	..	..	2	78	..	10522	22	1584	1134
Kozhikode	..	8	622	..	..	13	..	..	10688	41	1365	2070
Wynad	..	38	6	..	..	32	6788	17780	1279	33	2080	102
Cannanore	71	174	292	..	987	38	..	..	12549	44	12444	701
State	9074	3648	3184	9336	987	341	45439	21785	152662	1461	54214	13937

TABLE 3.2.7

Average Farm prices (Harvest price) in Rs. for Certain Commodities 1981-82

District	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Paddy Quintal	Coconut 100 Nos.	Arecanut Quintal	Tapioca Quintal	Cashewnut Quintal	Bonana 100 Nos.	Pepper Quintal	Ginger Quintal	Sugarcane Quintal	
Trivandrum	197.04	105.03	8.34	47.17	731.56	51.15	1160.94	N.A.	..	
Quilon	193.59	115.79	6.90	45.07	652.43	47.78	1213.80	934.62	186.00	
Alleppey	185.05	119.06	7.80	50.79	610.17	44.40	1075.00	1025.00	170.00	
Kottayam	192.08	114.41	7.11	60.74	780.00	47.77	1160.58	894.41	..	
Idukki	196.63	127.57	6.47	56.63	693.33	39.84	1172.34	860.88	..	
Ernakulam	194.56	119.63	7.63	39.07	754.44	39.33	1182.71	836.04	..	
Trichur	174.58	126.33	10.44	52.54	695.63	45.11	1159.39	N.A.	..	
Palghat	171.27	121.08	7.52	36.82	709.17	41.93	1160.57	889.54	203.64	
Malappuram	160.94	103.09	9.12	42.78	636.67	41.68	1171.32	846.25	..	
Kozhikode	186.71	106.15	7.30	57.83	677.58	36.75	1236.93	841.42	150.00	
Wynad	..	..	..	..	..	..	..	..	..
Cannanore	158.87	110.70	5.53	58.97	609.32	34.81	1203.16	850.79	..	
State	182.85	115.37	7.83	49.86	687.30	42.78	1172.98	885.33	177.41	

TABLE 3.2.7.

Average farm prices (Harvest price) in Rs. for certain commodities 1982-83

District	Paddy Quintal	Coconut 100 Nos.	Areca nut 100 Nos.	Tapioca Quintal	Cashewnut Quintal	Banana 100 Nos.	Pepper Quintal	Ginger Quintal	Sugarcane Quintal
Trivandrum	227.08	127.50	9.32	59.43	586.47	59.26	1163.44	..	..
Quilon	223.36	144.70	8.84	50.75	524.20	53.95	1160.56	1688.00	..
Alleppey	212.89	148.57	8.53	53.73	435.21	49.40	1067.50	1616.67	170.00
Kottayam	216.74	142.80	7.19	74.28	525.00	52.67	1176.17	1683.00	148.89
Idukki	223.77	159.86	7.77	78.50	400.00	41.88	1179.20	1616.54	..
Ernakulam	218.67	157.87	7.70	60.27	417.71	44.25	1197.40	1587.25	..
Trichur	212.75	158.57	11.50	71.37	462.26	42.29	1132.45	..	..
Palghat	203.93	148.27	7.70	59.27	439.56	45.88	1184.69	1650.14	160.42
Malappuram	190.84	138.71	9.26	57.29	411.83	46.52	1164.54	1455.56	..
Kozhikode	215.37	136.19	5.85	86.94	479.25	39.97	1211.62	1644.97	..
Wynad	189.19	125.00	6.25	74.38	450.00	38.69	1262.29	1579.17	..
Cannanore	180.78	143.76	7.17	72.51	485.32	38.36	1215.90	1608.24	..
State	209.61	144.31	8.09	66.56	468.07	46.09	1176.31	1344.13	159.77

Agricultural wages 1981-82

Unskilled Paddy field labour (Men)—(in Rs.)

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
Trivandrum	12.00	12.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Quilon	13.50	13.75	13.75	13.75	13.75	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Alleppey	12.50	12.50	12.50	12.50	12.50	13.00	13.00	13.00	13.00	13.50	13.50	13.50
Kottayam	9.75	9.75	10.00	10.00	10.25	10.75	11.25	11.75	11.75	11.75	11.75	11.75
Idukki	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Trichur	14.25	14.25	14.25	14.25	14.25	14.25	14.50	14.50	14.50	14.50	14.50	14.50
Palghat	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.50	9.50
Malappuram	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	14.00
Kozhikode	12.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Wynad	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
State	12.40	12.45	12.57	12.57	12.50	12.72	12.80	12.85	12.85	12.90	12.95	13.02

TABLE 3,1,8 (Contd.)

Agricultural Wages 1981-82

Unskilled Paddy field labour (Women) — in Rs.)

District	July	August	Septem-ber	Octo-ber	Novem-ber	Decem-ber	Janu-ary	Febru-ary	March	April	May	June
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Quilon	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Alleppey	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50
Kottayam	7.50	7.50	7.50	7.50	8.00	8.50	8.50	8.50	8.50	8.50	8.50	8.50
Idiakk	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.00	8.50	8.50	8.50
Trichur	8.50	8.75	9.00	9.00	9.00	9.50	9.50	9.50	9.50	9.50	9.50	10.00
Palghat	6.50	6.50	6.00	6.50	6.50	6.50	6.75	7.00	7.00	7.50	8.00	8.00
Malappuram	8.25	8.50	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	9.00
Kozhikode	10.00	10.00	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25
Wynad	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
State	8.57	8.62	8.65	8.70	8.75	8.85	8.87	8.90	8.90	8.95	9.00	9.07

TABLE 3.2.8
Agricultural Wages 1962-83

Unskilled paddy field labour (Men)—(in Rs.)

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)
Trivandrum	13.00	13.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.50
Quilon	14.00	14.00	14.00	14.00	14.00	14.00	15.00	15.00	15.00	15.00	15.00	15.00
Alleppey	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.50	15.00	15.50	15.50
Kottayam	12.00	12.00	12.50	13.00	13.00	13.00	13.00	13.50	13.50	13.50	14.00	14.00
Idukki	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.50	14.00	14.00
Trichur	14.50	14.50	14.50	14.50	14.50	14.50	15.00	15.00	15.00	15.00	15.00	15.00
Palghat	9.50	9.50	9.50	9.50	9.50	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Malappuram	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.50	14.50	14.50
Kozhikode	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Wynad	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
State	13.15	13.20	13.30	13.35	13.35	13.40	13.55	13.60	13.70	13.80	13.95	14.00

TABLE 3.2.8—(Contd.)

Agricultural Wages—1982-83

Paddy field labour — Women—(in Rs.)

District	July	August	Septem-ber	Octo-ber	Novem-ber	Decem-ber	Janu-ary	Febru-ary	March	April	May	June
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Quilon	10.00	10.50	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Alleppey	8.50	8.50	8.50	8.50	8.50	9.00	10.00	10.00	10.00	10.00	10.00	10.00
Kottayam	8.50	8.50	8.50	8.50	8.50	8.50	8.50	9.00	9.50	9.50	11.00	11.00
Idukki	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	9.50	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Trichur	10.00	10.00	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
Palghat	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Malappuram	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.50	9.50	10.00	10.00	10.00
Kozhikode	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25
Wynad	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	8.00	8.00	8.00	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25
State	9.17	9.27	9.37	9.40	9.40	9.45	9.55	9.65	9.70	9.75	9.90	9.90

Agricultural Wages—1981-82

Skilled Labour—(a) Carpenter

Districts	July	August	September	October	November	December	January	February	March	April	May	June	Average
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Trivandrum	20.75	21.00	21.00	21.00	21.00	22.00	22.00	22.00	22.75	22.75	23.00	23.00	21.85
Quilon	22.00	22.00	22.00	22.00	22.00	22.00	22.50	23.00	23.00	23.00	23.00	23.00	22.46
Alleppey	22.00	22.00	22.00	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.04
Kottayam	22.75	22.75	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.29
Idukki	..	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	23.00	23.00	23.00	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.29
Trichur	22.75	23.00	23.00	23.00	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.23
Palghat	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Malappuram	21.00	21.50	21.50	21.50	21.50	21.50	22.50	22.50	22.50	22.50	22.50	22.50	21.96
Kozhikode	22.75	22.75	22.75	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	22.94
Wynad	..	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.75	22.75	22.75	22.56
State	21.95	22.05	22.07	22.20	22.25	22.45	22.65	22.70	22.80	22.80	22.83	22.83	22.46

TABLE 3.1.8—Contd.

Agricultural Wages—1961-62

Skilled Labour—(b) Mason (in Rs.)

District	July	August	September	October	November	December	January	February	March	April	May	June	Average
Trivandrum	20.75	21.00	21.00	21.00	21.00	22.00	22.00	22.00	22.75	22.75	23.00	23.75	21.92
Qullon	22.00	22.00	22.00	22.00	22.00	22.50	23.00	23.00	23.00	23.00	23.00	23.00	22.54
Alleppey	22.00	22.00	22.50	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.21
Kottayam	22.75	22.75	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.29
Idukki	..	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	23.00	23.00	23.00	23.00	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.25
Trichur	22.50	23.00	23.00	23.00	23.00	23.00	23.50	23.50	23.50	23.50	23.50	23.50	23.21
Palghat	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Malappuram	21.00	21.50	21.50	21.50	21.50	21.50	22.50	22.50	22.50	22.50	22.50	22.50	21.96
Kozhikode	22.75	22.75	22.75	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.50	22.98
Wynad	..	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.75	23.00	22.75	22.58
State	21.92	22.05	22.12	22.20	22.24	22.45	22.70	22.70	22.77	22.80	22.82	22.98	22.49

TABLE 3.2.9—Contd.

Agricultural Wages 1982-83

Skilled labour—(a) Carpenter—(in Rs.)

Districts	July	August	September	October	November	December	January	February	March	April	May	June	Average
Trivandrum	23.00	24.00	24.00	24.00	24.00	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.21
Quilon	23.00	23.00	23.00	23.00	23.50	23.00	23.00	23.00	24.00	24.00	24.00	24.50	23.37
Alleppey	23.50	23.50	23.50	23.50	23.50	23.50	24.00	24.00	24.00	24.00	24.00	24.00	23.75
Kottayam	23.50	23.50	23.50	23.50	23.50	23.50	23.50	24.00	24.00	24.00	25.00	25.00	23.92
Idukki	..	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	23.50	23.50	23.50	24.00	24.00	24.00	24.00	24.50	24.50	24.50	24.50	24.50	24.08
Trichur	23.50	23.50	23.50	23.50	23.50..	23.50	23.50	23.50	23.50	24.50	24.50	24.50	23.62
Palghat	20.00	21.00	21.50	21.50	22.00	22.00	22.50	22.50	22.50	22.50	23.00	23.50	23.04
Malappuram	22.50	22.50	22.50	22.50	22.50	23.00	23.50	23.00	23.00	23.50	23.50	23.50	22.96
Kozhikode	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
Wynad	..	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
State	22.85	23.05	23.10	23.15	23.20	23.30	23.45	23.50	23.60	23.75	23.90	24.00	23.49

Agricultural Wages 1982-83

Skilled labour—(b) Mason—(in Rs.)

District	July	August	September	October	November	December	January	February	March	April	May	June	Average
Trivandrum	24.50	24.50	24.50	24.50	24.50	25.00	25.00	25.00	25.00	25.00	25.00	25.00	24.79
Quilon	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	24.00	24.00	24.00	24.50	23.37
Alleppey	23.50	23.50	23.00	23.50	23.50	23.50	24.00	24.00	24.00	24.00	24.00	24.00	23.71
Kottayam	23.50	23.50	23.50	23.50	23.50	23.50	23.50	24.00	24.00	24.00	25.00	25.00	23.79
Idukki	..	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	23.50	23.50	23.50	24.00	24.00	24.00	24.00	24.50	24.50	24.50	24.50	24.50	24.08
Trichur	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	24.50	24.50	24.50	23.62
Palghat	20.00	21.00	21.50	21.50	22.00	22.00	22.50	22.50	22.50	22.50	23.00	23.50	22.04
Malappuram	22.50	22.50	22.50	22.50	22.50	23.00	23.00	23.00	23.50	23.50	23.50	23.50	22.96
Kozhikode	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
Wynad	..	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
State	23.05	23.15	23.15	23.25	23.30	23.40	23.50	23.60	23.75	23.85	24.00	24.10	23.49

PART IV

- 4.1 Working Class Cost of Living Indices
- 4.2 Parity Index
- 4.3 Quarterly Retail Prices
 - 4.1.1 Statement showing the Consumer Price Index numbers from August 1981 to July 1982 (New series)
 - 4.1.2 Statement showing the consumer price index numbers for 1982-83.
 - 4.1.3 Statement showing the consumer price index numbers for the year 1982-83 (old series)
 - 4.1.4 Statement showing the consumer price index numbers for the year 1982-83 (old series)
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- 4.10 List of centres selected for recording meteorological information
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4.1. Working Class Cost of Living Indices

The consumer price index numbers for the State are being computed with respect to fifteen selected centres with the revised base 1970=100 from August 1975 onwards. These indices for the State for the years 1980-81 to 1982-83 are furnished in table 4.1 below:

TABLE 4.1
Yearly Average cost of Living Indices

No.	Centre	Average cost of Living Indices			Difference over the previous year	
		1980-81	1981-82	1982-83	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Trivandrum	221	236	260	15	24
2.	Quilon	224	244	268	20	24
3.	Punalur	214	231	257	17	26
4.	Alleppey	219	236	260	17	24
5.	Kottayam	220	239	259	19	20
6.	Mundakayam	213	239	254	26	15
7.	Munnar	224	230	250	6	20
8.	Ernakulam	213	237	261	24	24
9.	Chalakudy	220	240	261	20	21
10.	Trichur	225	233	256	8	23
11.	Palghat	217	232	255	15	23
12.	Malappuram	219	236	261	17	25
13.	Meppadi	220	242	263	22	21
14.	Kozhikode	223	232	251	9	19
15.	Cannanore	216	233	255	17	22

4.2 Parity Index

The index of parity measures the variation in the economic prosperity of the farmer in relation to changing farm prices, farm cultivation costs and domestic expenditure as compared to the position in the base period. This is defined as the ratio of the index of prices received and the index of the prices paid by farmers expressed as a percentage.

For the construction of the index the following important crops are considered.

- | | | |
|-------------|--------------|---------------|
| 1. Paddy | 4. Cashewnut | 7. Pepper |
| 2. Coconut | 5. Tapioca | 8. Banana |
| 3. Arecanut | 6. Ginger | 9. Sugarcane. |

The indices of parity between prices received and prices paid by the farmers during each month of the years 1979-80 to 1982-83 are given in Table 4.2 below:

TABLE 4.2

Index Numbers of parity

<i>Month</i>	<i>Index numbers of parity</i>		
	1980-81	1981-82	1982-83
July	92	86	87
August	90	86	87
September	89	85	86
October	90	84	86
November	91	84	85
December	88	87	87
January	88	79	88
February	89	80	88
March	88	81	86
April	91	81	91
May	91	82	94
June	89	86	97

Base: 1952-53 = 100.

Index of parity shows a consistently decreasing trend over the years up to the years 1981-82. The index of parity during the months of 1982-83 shows an increasing trend over the corresponding months of the previous year.

4.3 Quarterly Retail prices

The district-wise quarterly average retail prices of 12 important commodities for the years 1981-82 and 1982-83 are given in table 4.2. The salient features in the movement of the prices of these commodities are presented in the following paragraphs.

(1) *Coconut Oil/litre*

The maximum price of Rs. 15.46 was reported for the first quarter of 1981-82 from Kottayam and the lowest price of Rs. 11.76 was quoted from Trichur during the third quarter. While the price of this commodity was highest during the first quarter in all the districts it moved downwards till the third quarter and then began to rise again during the last quarter.

During 1982-83 the highest price of Rs. 20.12 was reported from Trivandrum during the second quarter and the lowest price of Rs. 14.29 was reported from Quilon during the first quarter. During the year 1981-82 though there was no definite trend in the movement of prices of this commodity it was highest during the third quarter in most of the districts.

(2) *Coconut/dozen*

The price of coconut was highest in Idukki with Rs. 23.71 during the third quarter and the lowest price was quoted from Quilon with Rs. 13.52 during the last quarter. While the price showed an upward movement in all the districts the prices showed a downward trend in Trivandrum district during the year 1981-82.

During 1982-83 coconut prices were highest in Idukki with Rs. 27.34 during the third quarter and the lowest price of Rs. 15.08 was quoted from Quilon during the first quarter.

(3) *Rice (F. P.)/kg.*

The fair price of rice ranged between 1.81 and 1.97 during 1981-82 as against Rs. 1.91 and Rs. 2.20 during 1982-83. The abnormal increase in price in Cannanore during the first quarter of 1982-83 may be due to quality change.

(4) *Black gram/kg.*

The price of blackgram ranged between Rs. 4.36 in Trichur during the third quarter and Rs. 6.30 in Idukki during the last quarter of 1982-83. The price of this commodity varied between Rs. 3.81 during the third quarter at Cannanore and Rs. 5.30 at Kozhikode during the second quarter of 1981-82.

(5) *Gingelly Oil/litre*

The price of gingelly oil ranged between Rs. 14.17 at Alleppey during the second quarter and Rs. 17.23 at Ernakulam during the last quarter of 1981-82.

During 1982-83 the highest price ruled was at Trivandrum during the last quarter with Rs. 20.02 and the lowest price of Rs. 14.37 was quoted from Alleppey during the first quarter.

(6) *Tapioca/kg.*

The price of tapioca ranged between 50 paise at Trivandrum and Rs. 1.14 at Cannanore during the third quarter of 1981-82. But during 1982-83 the price ranged from 0.70 at Trivandrum to 1.34 at Idukki.

(7) *Sugar (FP) /kg.*

The price of sugar distributed through the fair price shops ranged between Rs. 3.50 and Rs. 3.65 during 1981-82 while the same ranged between Rs. 3.65 and Rs. 3.75 during 1982-83.

(8) *Chillies*

The price of chillies fluctuated between Rs. 9.83 during the second quarter of 1981-82 and Rs. 18.29 at Cannanore during the first quarter. In all the centres the prices showed a downward trend during the last quarters of 1981-82.

The prices of this commodity again showed an upward trend during the first two quarters and began to fall during the last quarters of 1982-83 as happened during the previous year.

(9) *Coffee Powder/kg.*

The price of Coffee powder varied between Rs. 16.00 at Idukki during the first quarter and Rs. 20.50 at Kozhikode during the same part of 1981-82.

During the year 1982-83 the price range was from Rs. 15.30 at Idukki during the third quarter to Rs. 22.91 at Cannanore during the last quarter.

(10) *Tea/kg.*

The price of tea fluctuated between Rs. 15.50 at Idukki during the second quarter and Rs. 24.83 at Kottayam during the last quarter of 1981-82.

The price varied between Rs. 17.00 at Idukki during the first quarter and Rs. 36.21 at Quilon during the last quarter of 1982-83.

4.4. Export of Agricultural Commodities

The details of agricultural commodities exported through the ports of Kerala during the years 1981-82 and 1982-83 are furnished in table 4.4.

4.5. Notes on certain crops in Kerala1. *Tea*

India continues to be the biggest producer of Tea in the world. Tea is one of the principal foreign exchange earners. Tea industry substantially contributes to the national exchequer and also provides employment to a

large number of people. India accounts for nearly 46 per cent of the world production of tea. India ranked first among the exporters of tea in the international market but of late Ceylon has wrested the first rank from India.

Climate.—A hot moist climate is most suitable for tea plantation, the temperature varying from 55F to 95F and an annual rainfall ranging between 100 to 130 inches. Tea is usually cultivated at altitudes ranging from 3000 feet to 5000 feet above mean sea level.

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

Planting.—After removing the forest growth and providing for roads, drains and building sites the planting is done. The actual spacing of 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 over crowding and providing for a coverage of about 3000 plants per acre. "Hedge planting" i.e. planting in rows 5' apart with a spacing of 2' between the bushes in a row is also done in new estates. Before planting is done pits of 9" square and 18" 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 those plants are removed from the nursery after 6 to 18th 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.—Plucking is usually done by women and children. The young and fresh sprouted leaves with two leaves and a bud are plucked. Plucking is done through out 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 phosphorus 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 teabush. 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 60 to 80 years.

From the garden to market.—The leaves plucked from tea garden have 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 rack for a period of 18 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 rolls 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 change 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 classifications of grade. They are leaf grades and broken grades.

The former group is mainly divided into orange pekoe and pekoe souchong; broken orange pekoe, broken pekoe 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 small quantity. In this process the fresh leaf is subject to heat treatment by steaming or roasting. The green leaf after the treatment is rolled and dried the process being repeated till the desired degree of dryness is reached.

2. *Coffee.* Coffee was first discovered in Africa, although the earliest cultivation began in Southern Arabia; Coffee as an important plantation crop was introduced in India and Africa. The production of coffee in India is only 1 per cent of the world production. There are two main species of coffee grown in India namely Arabica and Robusta. Robusta flourished at lower levels and has more power of resistance against extremes of climate, 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 altitudes is ranging between 1500 to 6000 feet above mean sea level. The most suitable altitude is between 2500 feet to 5000 feet. 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° . A good dry spell from about December to March with a few intermittent showers of March and April and heavy rainfall in July and August constitute ideal conditions for the growth of the coffee plant. (Report of the Plantation Enquiry Commission of Coffee 1956, Government of India).

Soil.—Coffee requires sandy soil or clay loam soils, with a good subsoil drainage system.

Planting.—Coffee is grown from seed usually. It is also propagated through 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 transplanted. The spacing between each plant is ordinarily eight to nine feet. The plants are manured well and watered frequently.

In the second method of propagation lower branch of the tree 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 tree from the full intensity of the sun and for soil conservation.

Pruning.—Usually the 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.

Manures.—The important manures used for the coffee plants are super phosphate, ammonium sulphate, copper sulphate and urca.

Yield.—Under good climatic conditions a coffee plant yields, 1/2 to 2 lbs. of green coffee in a season. Good yield may be obtained from a plant for a period of 20-30 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 and the pulpy skin of the cherries are automatically removed. Then those cherries are put into big tanks for about 24 hours. A jelly like substance known as honey will be formed by these cherries due to fermentation. This honey is removed by

through washing (canals). Then these cherries are spread out to dry for 2 to 3 weeks. When these 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 parchments.

3. *Rubber.* In India attempts were first made to plant rubber in Belgaum and Raichur in the Bombay State. 94 per cent of the total area under Rubber is in the Kerala State. 92 per cent of the total production of Rubber in India is also from Kerala. India's place in the world acreage under rubber is comparatively very low. India's production comes 2.2 per cent of the total world output of natural rubber. Before a tyre factory was established in India in 1938 the raw rubber was exported to foreign countries.

Climate.—Rubber is usually grown in the tropical belt lying within 15° N and 10° S of the equator and usually at an altitude of 1000 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 still alluvial soil which is neither too steep nor too swampy is suited for cultivating rubber.

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

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

Diseases.—There are two serious leaf diseases of rubber now prevailing in India. They are "orduimhovca" and phytothra meadi which cause secondary leaf fall. These diseases affect the growth of the tree and the yield of the tree. Another disease known as brown blotch is prevalent in the trees which are used for frequent tapping. The symptom of the disease is the cessation of the latex production by the trees in the affected portion of the bark.

From the estate to the market.—The latex brought by the tappers is first of all freed from sand; bark and other impurities by straining at the coagulating shed constructed specially for the purpose. In the case of crepe rubber coagulation is done by using acetic acid. For changing latex into sheet rubber, the latex after being bulked and diluted is put into shallow pans. For removing water and for getting a definite shape the coagulum is pressed by hand. Then these 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 are placed in specially constructed houses known as smoke houses and hot air with temperature of 115° F to 120° F is allowed to circulate in the room. This is done for 15 days. The colour of the sheet will change from white to black. 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*. Kerala ranks first as the largest producer of cardamom. 80 per cent of the world output of this valuable spice is produced in India. India's competitors are Ceylon, Indo China and Guatemala. Cardamom possess an aromatic odour and it is commonly used for flavouring and medicines.

Climate.—The best climate suitable for cardamom, cultivation is 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 and annual rainfall of 60-80 inches. The best altitude for cardamom planting is between 2500 to 5000 feet.

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

Planting.—During February—March the forest land chosen for planting the cardamom is cleared. But care is taken that big tree providing shades are not cut down. Small pits of 2 feet squares 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 disease. 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 3rd 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 plants.—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 *phyllanthess emblica*. A mixture of caster cake bone meals and pottasium chlorate is also considered to be a good manure.

Diseases.—The most important disease affecting the cardamom plantation is the virus disease 'Katte' which is rampant in most cardamom plantation. 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 the caused by thrips mite etc. Dusting the plants with gamaxene is the remedy.

From the estate to the market.—The capsules of the cardamom are dried in the sun or specially built dry houses by using artificial heat. Usually 3-4 days are taken for drying the cardamom in the sunlight but at the same time 48 hours is only needed for artificial drying. The sundried produce retains the mucilaginous coating on the seeds and possesses characteristic sweet aroma. The dried capsules are then cleaned. The final product of green cardamom is 20 to 28 per cent of the green harvested produce.

Some times bleaching is done by exposure to sulphur fumes. This changes 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.

The middle east and Sweeden absorbed a large quantity of the exports of cardamom from India.

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 rainfed 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 14° F. It grows in places with altitude less than 3000 ft.

Soil.—The suitable soils for pepper cultivation are clay loam or sandy loam soils the first being the most suitable.

Planting.—The crop is propagated vegetatively by means of cutting. It is a wood climber and requires some support for vines. Jack and mango trees are commonly used as support for vine. On a plantation basis they are planted at a distapce of 10 ft. apart. The vine is rarely allowed to grow beyond a height of 20 ft. lest the plucking of the pepper berries become difficult.

Plucking—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 become black. Some times 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 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 vary between 1/4 lb to 2 lbs of dried produce.

Life of the plant.—The life of the plant ranges between 20 to 30 years. But rarely some varieties have been found to live upto 60 years.

Manure.—The best manures to be used for the pepper gardens are powdered bean cake, fish guano and dried prawn.

Diseases.—One of the major diseases that affects pepper is pollu by which the pepper berries are rendered hollow.

From garden to market—The dried, black pepper is graded and packed. The pepper is generally packed in double gunny bags. Pepper is mainly exported to U.S.A and U.K.

6. *Ginger*

The three important ginger growing regions are India, Jamaica and Sierra Leone. Of these ginger producing regions the best variety is seen in Jamaica and Sierra Leone. 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 drained, sandy clay, loam, red loam or laterite soils.

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

Harvesting.—The harvesting is done by digging out the rhizomes.

Manure.—Usually cattle manures are used.

Yield.—The yield is generally eight to ten times of the seed rate. In Kerala the average yield of ginger is about 1.5 tonnes per hectare.

Pests and diseases.—Ginger crop is usually affected by a disease known as soft root. The colour of the green plants are changed into pale yellow and the production goes down. Use of mercuric chloride 0.05 per cent for treating the rhizomes sorted as seed is advocated as preventive measure. Another important disease is known as varimicularia. The leaves become covered with yellowish and brownish spots and gradually dry up. Spraying with 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 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 times 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 are exported to foreign market. The D grade being small pieces of ginger is mostly consumed internally in India.

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

7. *Lemongrass.*—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 Flexroses stapli*"

The important lemongrass growing areas are Ceylon, Java, West Indies Malaya, Gualaemala and India. Guatemala and India 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, Odakkalai, Thodupuzha, Muvattupuzha, Wynad, Taliparamba etc. At Odakkalai there is a lemongrass oil research station.

4.6 Classification of soils in Kerala

<i>District</i>	<i>Type of soils</i>	<i>Details of distribution</i>
(1)	(2)	(3)
Trivandrum	1. Fairly rich brown loam of laterite origin	Middle part of the district.
	2. Sandy loam	Western coastal region
	3. Richest dark brown loam of granite origin	Eastern hilly part of the district
Quilon	1. Sandy loam	Karunagappally and part of Quilon Taluk
	2. Laterite soil	Kottarakkara, Kunnathur and parts 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	Sherthallai and Ambalapuzha Taluks.
	3. Clay loam with much of acidity	Kuttanad
	4. Laterite soil	Chengannur and part of Mavelikkara
Kottayam	1. Laterite soil	Part of Meenachil-Changanacherry and Kottayam.
	2. Alluvial soil	Vaikom part of Changanacherry and Kottayam.
Idukki	1. Laterite soil	Peermade and Thodupuzha Taluks
	2. Alluvial soil	Devicolam and Udumbanchola Taluks

(1)	(2)	(3)
Ernakulam	1. Laterite	Muvattupuzha and part of Kunnathunad.
	2. Sandy loam	Parur Cochin and 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 Western portion of Talappilly.
	3. Granite	Northern part of Talappally
	4. Clay	Backwater area in Chowghat and part of Mukundapuram.
	5. Alluvial soil	Portion of Chowghat and Kunnathunad Taluks.
Palghat	1. Laterite	Interior regions of the district.
	2. Sandy	Along riverside areas
	3. Black soil	North-eastern portion of Chittur Taluk
Malappuram	1. Laterite soil	Major part of the district barring coastal area.
	2. Sandy	Coastal strip
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

4.7 Conversion ratio between the raw materials and the processed product

Rice	Rice (cleaned) production 2/3 of paddy production.	
Cotton	Cotton lint production 1/3 of kapas production Cotton seed production 2/3 of kapas production. 2 limits of cotton lint production	
Groundnut	Kernel to nuts in sheell	70 per cent
	Oils to nuts in shell	28 "
	Oil to kernels crushed	40 "
	Cake to kernels crushed	60 "
Sesamum	Oil to seeds crushed	40 "
	Cake to seeds crushed	60 "
Caster seeds	Oil seeds crushed	37 "
	Cake to seeds crushed	63 "
Coconuts	Copra to nuts-one ton copra	6775 nuts
	Oil to copra crushed	62 per cent
	Cake to copra crushed	38 "
Neem seed	Oil to kernel crushed	45 to 50 per cent
	Cake to kernels crushed	50 to 55 "
Sugar	Gur from cane crushed	10 "
	Crystal sugar from gur refined	62.40 "
	Crystal sugar from cane crushed	9.97 "
	Khandassari sugar from gur refined	37.5 "
	Molasses from cane crushed	3.5 "
Cashewnuts	Cashew kernels	25 per cent of cashewnut
	Butter from mixed milk	6.3 per cent
	Ghee from mixed milk	5.3 "

4.8 Average analysis of important fertilisers

Sl. No.	Name of fertiliser	Nitrogen (N. percent)	Phosphate ($P^2 O^5$)	Potash ($K^2 O$)
(1)	(2)	(3)	(4)	(5)
1	Ammonium Sulphate Nitrate	26.0	..	..
2	Ammonium Sulphate	20.5	..	..
3	Ammonium Nitrate	33.5	..	..
4	Ammonium Phosphate	16.0	20.0	..
5	Calcium Ammonium Nitrate	20.5	..	..
6	Nitrate Soda	16.5	..	..
7	Calcium Nitrate	15.3	..	..
8	Calcium Cynamide	20.0	..	..
9	Urea	46.0	..	..
10	Super Phosphate-Single	..	18.00	..
11	Super Phosphate-Double	..	35.00	..
12	Super Phosphate	..	45.00	..
13	Rock Phosphate	..	28.3	..
14	Hyper Phosphate	..	27.3	..
15	Sulphate of potash	..	..	48.00
16	Muriate of Potash	..	..	50.00
17	Groundnut Cake	7.00	1.5	1.3
18	Castor Cake	4.3	2.0	1.0
19	Mustard Cake	4.5	1.5	..
20	Mushua Cake	2.5	0.8	1.8
21	Neem Cake	5.2	1.0	1.4
22	Gingelly Cake	6.2	2.0	1.2
23	Coconut Cake	3.0	1.9	1.8
24	Poultry Manure	1.2-1.5	..	..
25	Sheep Manure	0.8-6	..	..
26	Horse Manure	0.8-6	..	..
27	Farm Yard Manure	0.4	0.3	0.2
28	Fresh Cow Dung	1.57	0.25	0.18
29	Compost	0.5	0.25	0.5
30	Bone Meal	3.5	21.0	..
31	Fish Meal	4.10	3.0	0.3
32	Blood (Dried)	11.5	1.5	1.6
33	Meat Meal	11.0	..	0.6
34	White Fish Meal	10.0	10.0	1.0

4.9. Insect pests affecting paddy crops, their distribution and some practical methods of control

<i>Sl. No.</i>	<i>Name of pest</i>	<i>Name of damage</i>	<i>Control measure</i>
(1)	(2)	(3)	(4)
1.	Rice Swarming Caterpillar (<i>Spod optera mauritia</i>)	Defoliation plants reduced to stumps nursery and early growing stages attacked.	Spray D. D. T. at 1.5 Kg., a. i. per hectare or endrin at 250 gm. a. i. per hectare.
2.	Rice stem borer (<i>Schoenabius in cestulus</i>)	Caterpillar bores into stem causing 'dead hearts' and 'white ear heads'. All stages of plant susceptible to attack	Set light traps in the field to catch and destroy moths. Collect egg masses from nursery plant and destroy them. Spray endrin or parathion at 250 kg., a.i., per hectare at intervals of 15-20 days from 15th day after sowing and upto flowering.
3.	Rice bug (<i>leptocoris acuta</i>)	Sucks 'milk' of tender grains leaving them chaffy	Dust B.H.C. or spray endrin or parathion at doses given above.
4.	Rice Hispa <i>Disladispa</i> (<i>Hispa armigera</i>)	Adults feed on the green matter of leaves and grubs mine the leaves.	Spray D. D. T., endrin or parathion at above doses.
5.	Rice case worm <i>Nympha depunctalis</i>	Catterpillar in lead case defoliates	do.
7.	Paddy gall fly (Diptera)	The maggot bores into central shoot and cause the formation of elongated hollow gall called 'silver shoot'.	Spray enedrin or parathion at 250 gm. a. i. per hectare 4 times at weekly intervals from 15th day after transplantation set up light traps.

(1)	(2)	(3)	(4)
7. Paddy Mealy bug	Lives within leaf sheaths in colonies sucking sap causing stunting of crop.	Spray parathion at 250 gm. a. i. per hectare phosphamidon (Dimecro 100%) solution at 100 ml. per hectare or Dimothocate (Regor at 312 ml. per hectare.	
8. Paddy leaf hoppers and Jaosids.	Cause-weakening of crop by desapping in colonies.	Dust B.H.C.	
9. Paddy leaf roller <i>Cnaphalocitis medinalis</i> G.	Catterpillar folds leaves and feeds on green matter, attacked fields show white patches.	Dust B.H.C. or spray D.D.T. at doses given above.	

4.10. List of centres selected for recording meteorological information

TRIVANDRUM DISTRICT

Name of centres

- | | |
|-------------------|---------------------------|
| 1. Ponmudi | 6. Neyyattinkara |
| 2. Varkala | 7. Parassala |
| 3. Attingal | 8. Trivandrum (Aerodrome) |
| 4. Nedumangad | 9. Vellayani (AM) |
| 5. Trivandrum (b) | 10. Kovalam |

QUILON DISTRICT

- | | |
|-----------------------|-------------------------------------|
| 11. Pathanamthitta | 19. Nilamel (Chadayamangalam) |
| 12. Konni | 20. Paravoor |
| 13. Adoor (Kunnathur) | 21. Kayamkulam |
| 14. Karunagappally | 22. Kulathupuzha (NR) |
| 15. Punalur | 23. Kottarakkara |
| 16. Kottarakkara | 24. Thenmalai (Railway Rain-gauges) |
| 17. Arienkavu | 25. Quilon do. |
| 18. Quilon | |

ALLEPPEY DISTRICT

- | | |
|------------------|-------------------|
| 26. Arukutty | 31. Chengannur |
| 27. Sherthalai | 32. Haripad |
| 28. Alleppey (b) | 33. Mavelikara |
| 29. Ambalapuzha | 34. Kayamkulam |
| 30. Thiruvalla | 35. Alleppey (NR) |

IDUKKI DISTRICT

- | | |
|---------------|---------------------------|
| 36. Chinnar | 41. Peerumade Taluk |
| 37. Marayur | 42. Peerumade Residency |
| 38. Munnar | 43. Vandanmettu |
| 39. Devicolam | 44. Veloor |
| 40. Kumily | 45. Karikode (Thodupuzha) |

KOTTAYAM DISTRICT

- | | |
|-------------------|------------------------|
| 46. Vaikom | 51. Changanacherry |
| 47. Palai | 52. Kottayam (Agromet) |
| 48. Ettumannur | 53. Kottayam |
| 49. Kanjirappally | 54. Pallom |
| 50. Kottayam | 55. Kumarakom |

ERNAKULAM DISTRICT

- | | |
|--------------------------|-------------------|
| 56. Malayattur (Kodanad) | 63. Cochin (b) |
| 57. Parur | 64. Puthencruz |
| 58. Perumbavoor | 65. Kuthattukulam |
| 59. Alwaye | 66. Kolani |
| 60. Neriya Mangalam | 67. Alwaye |
| 61. Ernakulam | 68. Piravam |
| 62. Muvattupuzha | |

TRICHUR DISTRICT

- | | |
|----------------------------------|---------------------------------|
| 69. Cranganore | 75. Chalakudy |
| 70. Mukundapuram (Iringalakuda) | 76. Pazhayannur (NR) |
| 71. Trichur | 77. Trichur (Railway Raingauge) |
| 72. Thalappilly (Wadakkancherry) | 78. Potta |
| 73. Ollukkara (Mannuthy) | 79. Muttathur |
| 74. Peechi | 80. Thumboormozhi. |

PALGHAT DISTRICT

- | | |
|----------------|-------------------------------------|
| 81. Alathur | 88. Pattambi (Agromet) |
| 82. Palghat | 89. Nemmara (NR) |
| 83. Parli | 90. Nelliampathy (NR) |
| 84. Ottappalam | 91. Nattukal (NR) |
| 85. Cherplassy | 92. Kollengode (Railway Rain-gauge) |
| 86. Mannarghat | 93. Olavakkot (do.) |
| 87. Chittoor | 94. Shoranur (do.) |

MALAPPURAM DISTRICT

- | | |
|--------------------|---------------------------------------|
| 95. Perinthalmanna | 98. Thirurangadi |
| 96. Ponnani | 99. Nilambur |
| 97. Manjeri | 100. Angadipuram (Railway Rain-gauge) |

KOZHIKODE DISTRICT

- | | |
|-----------------------|-----------------------------------|
| 101. Kozhikode | 108. Kuppadi (NR) |
| 102. Vythiri | 109. Mattunga (NR) |
| 103. Quilandy | 110. Lakkidi (NR) |
| 104. Badagara | 111. Thangarapady (NR) |
| 105. Kuttiadi | 112. Calicut (Railway Raingauges) |
| 106. Kuttiadi (NR) | 113. Pantalayini (do.) |
| 107. Ambalavayal (NR) | 114. Kakkayam. |

CANNANORE DISTRICT

- | | |
|-------------------------|-----------------------------------|
| 115. Kasargod | 125. Cannanore (NR) |
| 116. Taliparamba | 126. Manjeswar (NR) |
| 117. Cannanore | 127. Vemom * (Mananthody) (NR) |
| 118. Hosdurg | 128. Thirunelli (Mananthody) (NR) |
| 119. Tellicherry | 129. Konnath (NR) |
| 120. Irikkur | 130. Chandanathode (NR) |
| 121. Payyannur | 131. Peria (NR) |
| 122. Mananthody | 132. Chedloth Range (NR) |
| 123. Mahe | 133. Cannanore (Railway |
| 124. Kasargod (Agromet) | Raingauage) |

Source: Revenue Board.

4.11. Glossery of English, botanical and Malayalam

NAME OF CROPS

<i>Sl. No.</i>	<i>English Name</i>	<i>Malayalam Name</i>	<i>Botanical Name</i>
CEREALS			
1	Paddy	Nellu	Oryza Sativa
2	Ragi	Koovaraku	Eleusine Coracana
3	Jowar	Cholam	Sorghum Valgare
4	Bajra	Kambu	Ponnistum Typhodem
5	Kodamillet	Varagu	Paspalum Scrobiculatum
6	Chama	Chama	Panicum Miliare
7	Wheat	Gothampu	Triticum Vulgare
8	Barely	Barley	Hordeum Vulgare
9	Maize	Mokke Cholam	Zea mays
PULSES			
1	Blackgram	Uzhunnu	Phaseolus mungo
2	Greengram	Cherupayar	Phaseolus Aureus
3	Horsegram	Muthira	Dolichos Biflorus
4	Redgram	Thuvara	Gajanus Cajan
5	Cowpea	Perumpayar	Vigna Sinensis
SUGAR			
1	Sugarcane	Karimbu	Sacharum Officinarum
2	Palmyrah	Karimpana	Borassus flabellifar
CONDIMENTS AND SPICES			
1	Chilly	Mulagu	Capsium Sapp
2	Turmeric	Manjal	Cureuma lenga
3	Cardamom	Elom	Elatteria cardamom
4	Coriander	Kothamalli	Coriandrum Stativum
5	Mustard	Kadugu	Brassica spp
6	Pepper	Kurumulagu	Pipper Nigrum
7	Cumin	Jeerakam	Ciminumoymium
8	Garlic	Veluthully	Allium Sativum
9	Longpepper	Thippili	Piperlongum
10	Ginger	Inchi	Zingiber officinal
11	Nutmeg	Jathi	Myristica Fragrans
12	Cinnamon	Karuvappatta	Cinnamomum Zoylanica
13	Clove	Grampu	Eugenia Caryophyllate
14	Cinchona	Cinhona	Cinchona Officinalis
16	Arecanut	Adacka	Areca Catechu

<i>Sl. No.</i>	<i>English Name</i>	<i>Malayalam Name</i>	<i>Botanical Name</i>
FRIUITS			
1	Banana	Vazha	Musa Paradisiaca
2	Plantain	Vazha	Mussepientium
3	Bread fruit	Seemaplavu	Artocarpustincisa
4	Bullocks heart	Malamunthiri	Anonareticulate
5	Cashew	Kasumavu	Anacardium Occidentable
6	Grape vine	Munthiri	Vitis Vinifere
7	Custardapple	Seetha pazham	Anona Squamosa
8	Guava	Pera	Psidium Guajava
9	Jujube	Elantha	Aiz rphs jujuba
10	Jack fruit	Plavu	Artocarpus Integriofolia
11	Lemon	Naranga	Citrus Lemon
12	Lime	Naranga	Citrus Aurantifolia
13	Mango	Mavu	Mangifer Indica
14	Pappaya	Pappaka	Carica Pappaya
15	Pineapple	Kaithachakka	Anans sativa
16	Pemegranate	Mathalam	Punica Cranatum
17	Sapota	Sapota	Achras Achras Sapota
18	Pomello	Bamplimas	Citrus Mahima
19	Orange	Orange	Citrus retiaulate
20	Mangosteen	Mangosteen	Garcinia mangesteens

VEGETABLES

1	Tapioca	Maracheini	Manihot Utilissima
2	Elephantear	Chempu	Celocasinttiquorum
3	Elephant foot	Chena	Amorphophallus
4	Potato	Uralakizhangu	Solanumtubersoum
5	Sweet potato	Cheenikizhangu	Impomoca batatas
6	Radish	Mullangi	Raphasus sativus
7	Yam	Kachil	Dioscareia spp
8	Turnip	Seema Mullangi	Brassica Campestris
9	Carrot	Carrot	Daucus Carota
10	Bed pumpkin	Vellarimathan	Gucurbita Maxime
11	Brinjal	Vazhuthana	Solanum Malengena
12	Tomato	Thakkali	Lydopprescum esculentum
13	Amaranthus	Cheera	Amaranthus spp
14	Lady's finger	Venda	Abelmoschus esculentum
15	Britter gourd	Pavakka	Mamordica Charantia
16	Bottle gourd	Churukka	Lagenaria Siceraria
17	Snake gourd	Padavalanga	Trichosanthese angunia
18	Ridge gourd	Peechanga	Luffaacutangulata

Monthly Statement showing the Consumer Price Index Numbers from August 1981 to July 1982

(Base: 1970=100)

(New series)

Centre	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	August	September	October	November	December	January	February	March	April	May	June	July	Average
1. Trivandrum	284	224	233	232	233	234	235	236	238	240	243	245	236
2. Quilon	242	242	242	243	243	242	242	241	242	244	248	251	244
3. Ponnalur	228	222	228	227	228	229	230	231	231	233	236	239	231
4. Alleppey	235	235	234	233	233	234	235	235	235	237	240	243	236
5. Kottayam	236	237	236	236	237	238	239	238	240	242	245	246	239
6. Munnar	237	237	238	239	241	241	239	237	237	238	241	241	239
7. Ernakulam	229	229	228	228	228	229	229	229	229	231	234	236	230
8. Chalakudy	235	236	235	235	235	235	236	236	238	240	242	244	237
9. Trichur	238	239	238	238	238	239	238	239	240	241	244	246	240
10. Palghat	231	231	230	230	232	233	234	234	234	235	238	240	233
11. Malappuram	233	234	233	232	231	230	230	229	231	233	235	238	232
12. Kozhikode	235	235	234	234	235	235	234	234	236	238	241	244	236
13. Meppadi	237	238	239	240	241	241	241	241	243	243	246	249	242
14. Cannanore	231	232	231	230	231	231	231	230	232	233	237	239	232
15. Mundakayam	230	231	230	231	232	233	234	233	233	234	237	238	233

TABLE 4.1.2

Statement showing the Consumer Price Index Numbers from August 1982 to 1983

Centre	(Base: 1970=100)												July Average
	August	September	October	November	December	January	February	March	April	May	June	July	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1. Trivandrum	247	248	248	251	254	258	259	259	262	267	274	278	260
2. Quilon	254	256	256	260	262	266	268	269	272	278	286	291	268
3. Punalur	241	242	244	248	251	254	257	258	261	267	275	282	257
4. Alleppey	246	247	247	250	253	257	260	260	263	270	273	283	260
5. Kottayam	248	249	249	251	254	258	260	260	262	267	273	279	269
6. Munnar	242	243	245	248	249	251	254	255	258	262	267	271	254
7. Ernakulam	239	240	241	244	246	248	250	250	252	257	263	268	250
8. Chalakudy	246	246	248	251	254	257	260	262	265	272	279	286	261
9. Trichur	248	249	250	254	256	259	262	262	265	271	278	282	261
10. Palghat	243	243	244	246	248	251	254	256	260	267	275	281	256
11. Malappuram	241	243	245	248	251	254	257	257	260	265	270	273	255
12. Kozhikode	247	248	249	252	253	255	258	258	260	265	271	275	261
13. Meppadi	252	253	254	256	258	259	262	263	266	272	278	284	263
14. Cannanore	241	242	242	246	247	248	249	450	253	259	265	271	251
15. Mundakayam	240	240	242	246	249	253	256	256	259	265	272	276	255

Monthly statement of consumer price index numbers for the agricultural year 1981-82

(Old series)

Centre	July	August	September	October	November	December	January	February	March	April	May	June	Average
1. Trivandrum	2014	2031	2031	2022	2014	2022	2031	2040	2048	2066	2083	2109	2043
2. Quilon	2041	2067	2067	2067	2075	2075	2067	2067	2058	2067	2084	2118	2071
3. Punalur	1894	1911	1911	1911	1902	1911	1919	1927	1936	1936	1953	1978	1924
4. Alleppey	1987	2005	2005	1995	1987	1987	1996	2005	2005	2005	2022	2047	2004
5. Kottayam	2039	2065	2074	2065	2065	2074	2083	2091	2083	2100	2118	2144	2083
6. Ernakulam	2004	2022	2022	2013	2013	2013	2022	2022	2022	2022	2040	2066	2023
7. Trichur	2067	2085	2094	2085	2085	2085	2094	2085	2094	2102	2111	2137	2094
8. Chalakudy	2037	2063	2072	2063	2063	2063	2063	2072	2072	2080	2107	2125	2074
9. Kozhikode	2220	2240	2240	2230	2230	2240	2240	2230	2230	2249	2268	2297	2243
10. Munnar	1880	1896	1896	1904	1912	1928	1928	1912	1896	1896	1904	1928	1907

Base for all centres except Kozhikode: 1939-100

Kozhikode 1935-100

TABLE 4.1.4

Monthly statement of Consumer price index numbers for the agricultural year 1982-83

(Old serial)

Centre	July (3)	August (4)	September (5)	October (6)	November (7)	December (8)	January (8)	February (10)	March (11)	April (12)	May (13)	June (14)	Average (15)
1. Trivandrum	2127	2144	2153	2153	2179	2205	2239	2248	2248	2274	2318	2378	2222
2. Quilon	2144	2169	2186	2186	2220	2237	2272	2289	2297	2323	2374	2442	2262
3. Punalur	2003	2020	2028	2045	2078	2103	2129	2154	2162	2187	2237	2305	2121
4. Alleppey	2073	2098	2107	2107	2133	2158	2192	2218	2218	2243	2303	2371	2185
5. Kottayam	2153	2170	2179	2179	2196	2223	2258	2275	2275	2293	2336	2389	2244
6. Ernakulam	2084	2110	2119	2128	2155	2172	2190	2208	2208	2225	2269	2322	2183
7. Trichur	2155	2172	2181	2190	2225	2243	2269	2295	2295	2321	2374	2435	2263
8. Chalakudy	2142	2160	2160	2177	2204	2230	2256	2283	2300	2327	2388	2450	2256
9. Munnar	1928	1936	1944	1960	1984	1992	2008	2032	2040	2064	2096	2136	2010
10. Kozhikode	2325	2354	2363	2373	2402	2411	2430	2459	2459	2478	2525	2583	2430

Base for all centres except Kozhikode 1939-100
Kozhikode 1985-100

TABLE 4.3.1

Quarterly average retail prices at District Headquarters for 1981-82

Commodity	Quarters	Trivandrum	Quilon	Allephey	Kottayam	Idukki	Ernakulam	Trichur	Palghat	Malappuram	Kozhikode	Cannanore
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Coconut Oil/ltr.	I	14.97	13.31	14.00	15.46	14.35	15.03	13.97	13.93	13.78	14.08	14.33
	II	13.96	12.69	13.03	14.69	13.49	14.06	12.82	13.26	13.20	13.26	13.33
	III	13.10	11.98	11.80	13.69	12.87	13.73	11.76	12.37	12.25	12.07	12.21
	IV	13.18	12.33	12.49	14.03	12.90	13.65	12.15	12.63	12.46	12.97	12.67
Coconut/doz.	I	13.58	15.10	19.33	17.87	22.80	18.43	17.22	16.58	16.97	17.25	17.80
	II	13.90	14.25	17.56	16.27	22.08	17.00	17.56	16.40	16.79	15.80	17.04
	III	14.80	13.68	14.65	16.00	23.71	15.20	15.64	14.80	15.63	15.35	16.00
	IV	15.15	13.52	15.45	16.00	22.67	16.50	15.43	13.75	15.25	15.17	16.08
Rice (F.P.)/Kg.	I	1.81	1.81	1.81	1.81	1.87	1.81	1.81	1.81	1.81	1.81	1.81
	II	1.91	1.91	1.91	1.92	1.97	1.91	1.91	1.91	1.91	1.91	1.91
	III	1.91	1.91	1.91	1.91	1.97	1.91	1.91	1.91	1.92	1.91	1.91
	IV	1.91	1.91	1.91	1.91	1.97	1.91	1.91	1.91	1.92	1.91	1.91
Blackgram/Kg.	I	4.54	4.09	4.20	4.18	4.67	4.01	3.85	4.37	4.92	5.24	3.95
	II	4.57	4.00	4.22	4.20	4.74	4.11	3.83	4.43	4.79	5.30	3.86
	III	4.28	3.92	4.13	4.18	4.52	4.03	3.79	4.25	3.99	5.18	3.81

Coffee powder/Kg.	I	20.00	20.50	20.50	20.00	16.00	20.20	20.00	19.20	20.00	20.50	20.10
	II	20.47	20.50	20.50	20.00	16.58	20.00	20.00	19.20	20.40	20.50	20.10
	III	20.50	20.50	20.50	20.00	17.00	20.00	20.00	19.95	20.33	20.50	20.10
	IV	20.50	20.50	20.50	20.00	17.00	20.00	20.33	20.00	20.29	20.50	20.10
Tea/Kg.	I	23.87	20.45	21.87	20.60	15.83	20.00	19.98	18.40	18.50	19.66	18.89
	II	24.00	20.45	24.00	20.60	15.50	20.00	19.98	18.40	18.50	19.66	18.89
	III	24.10	24.00	24.45	24.21	16.40	21.40	21.27	18.40	22.42	19.66	18.89
	IV	24.40	24.00	24.60	24.83	16.54	24.20	23.85	18.40	24.89	19.66	18.87
Tobacco/Kg. (Jaffna)	I	9.00	9.63	10.70	11.25	16.00	14.00	13.17	12.00	..	..	..
	II	9.00	8.07	10.21	11.25	14.92	14.00	13.70	12.00	..	..	..
	III	9.00	8.00	9.63	10.94	14.00	14.00	13.75	12.00	12.98	..	..
	IV	9.00	8.00	9.88	10.58	14.00	14.00	12.46	..	13.00	..	..
Tobacco/Kg. (Vadakkan)	I	10.00	10.00	9.65	12.25	13.00	10.00	13.00	13.00	12.00	14.00	15.00
	II	10.00	10.00	9.50	12.25	12.71	10.00	12.01	13.00	12.00	13.79	15.00
	III	10.00	10.00	9.13	12.13	12.50	10.00	11.50	12.33	11.97	13.08	14.67
	IV	10.00	10.00	9.21	11.00	11.50	10.00	10.96	12.00	12.00	12.50	12.50

Quarterly average retail prices at District Headquarters for the year 1962-63

Commodity	Quarters											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Coconut/doz	I	15.60	15.08	19.94	17.13	21.79	15.64	16.20	15.25	16.00	15.65	17.65
	II	18.20	17.52	20.25	20.24	25.20	22.80	19.93	16.14	17.71	16.81	19.31
	III	17.70	17.63	20.05	21.92	27.34	21.54	22.00	17.18	20.25	20.70	21.20
	IV	16.14	16.52	20.93	21.80	25.68	20.95	22.05	19.26	18.00	19.72	21.20
Coconut oil/Ltr.	I	15.65	14.44	14.69	16.18	15.28	15.89	14.29	14.81	14.60	14.63	14.78
	II	20.12	17.10	17.27	18.17	18.69	16.92	16.92	17.43	17.17	17.10	16.97
	III	20.09	17.73	18.11	17.30	18.86	18.36	17.01	17.90	17.23	16.56	17.23
	IV	19.84	17.07	18.74	18.84	17.69	18.54	16.33	17.01	16.92	17.13	17.14
Rice (F.P.)/Kg.	I	1.91	1.91	1.91	1.91	1.97	1.91	1.91	1.91	1.93	1.91	2.20
	II	2.04	2.01	..	2.04	2.01	2.02	..	..	2.02	2.03	2.03
	III	2.04	2.04	..	2.04	2.01	2.04	2.05	..	2.05	2.04	2.05
	IV	2.04	..	..	2.04	..	2.04	2.05	..	2.14	2.04	2.04
Blackgram/Kg.	I	5.95	5.36	5.89	5.97	6.42	5.01	4.74	6.11	5.86	5.53	4.45
	II	5.17	5.09	4.83	4.94	5.65	5.00	4.53	4.77	5.39	5.16	4.72
	III	4.68	4.81	4.63	4.69	5.51	4.55	4.36	4.75	5.01	5.00	4.60
	IV	5.26	5.38	5.59	5.60	6.30	5.25	5.33	5.52	5.53	5.00	4.61

Commodity

Quarters Tricandrum Quilon Alleppey Kottayam Idakkki Ernakulam Trichur Palghat Malappuram Kozhikode Cannanore

Gingelly oil/Ltr.	I	17.08	15.75	14.37	16.48	15.98	16.63	15.49	14.76	15.39	13.39	15.23
	II	17.33	15.75	14.48	16.50	15.71	16.10	15.40	14.87	14.72	13.36	15.25
	III	19.52	16.43	15.83	15.82	16.08	17.96	16.94	16.19	16.21	13.26	16.41
	IV	20.02	18.23	18.08	18.62	16.64	18.35	17.45	16.92	16.95	15.52	16.67
Tapioca/Kg.	I	0.70	1.00	0.87	1.00	1.19	0.82	0.99	0.64	0.90	1.05	1.17
	II	0.73	1.00	0.90	1.00	1.10	1.00	0.99	0.69	0.95	1.17	1.20
	III	0.86	1.00	0.94	1.00	1.25	1.00	1.18	0.60	0.96	1.17	1.20
	IV	0.90	1.05	1.00	1.00	1.34	1.00	1.21	0.60	1.09	1.21	1.20
Sugar	I	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65
	II	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.67	3.65	3.68	3.65
	III	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
	IV	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
Chillies/Kg.	I	15.01	13.88	12.26	13.79	12.12	13.36	12.81	12.64	11.25	13.56	13.60
	II	15.16	12.97	12.80	14.30	12.57	13.93	13.90	13.00	11.43	13.09	14.02
	III	11.71	10.40	10.36	12.25	10.34	11.19	11.08	10.89	10.66	10.52	10.77
	IV	9.90	8.68	8.75	9.66	8.01	9.00	9.79	9.00	9.33	9.49	9.14
Coffee Powder/Kg.	I	20.79	21.08	20.97	20.08	17.00	20.58	15.42	20.00	20.42	20.75	15.24
	II	21.00	21.50	21.00	21.00	17.00	21.00	16.42	20.51	21.00	21.00	15.46
	III	21.44	20.00	16.50	21.83	15.30	21.67	17.67	20.75	21.38	18.07	21.47
	IV	22.31	20.00	16.50	22.00	..	22.73	18.00	22.63	22.90	19.40	22.91

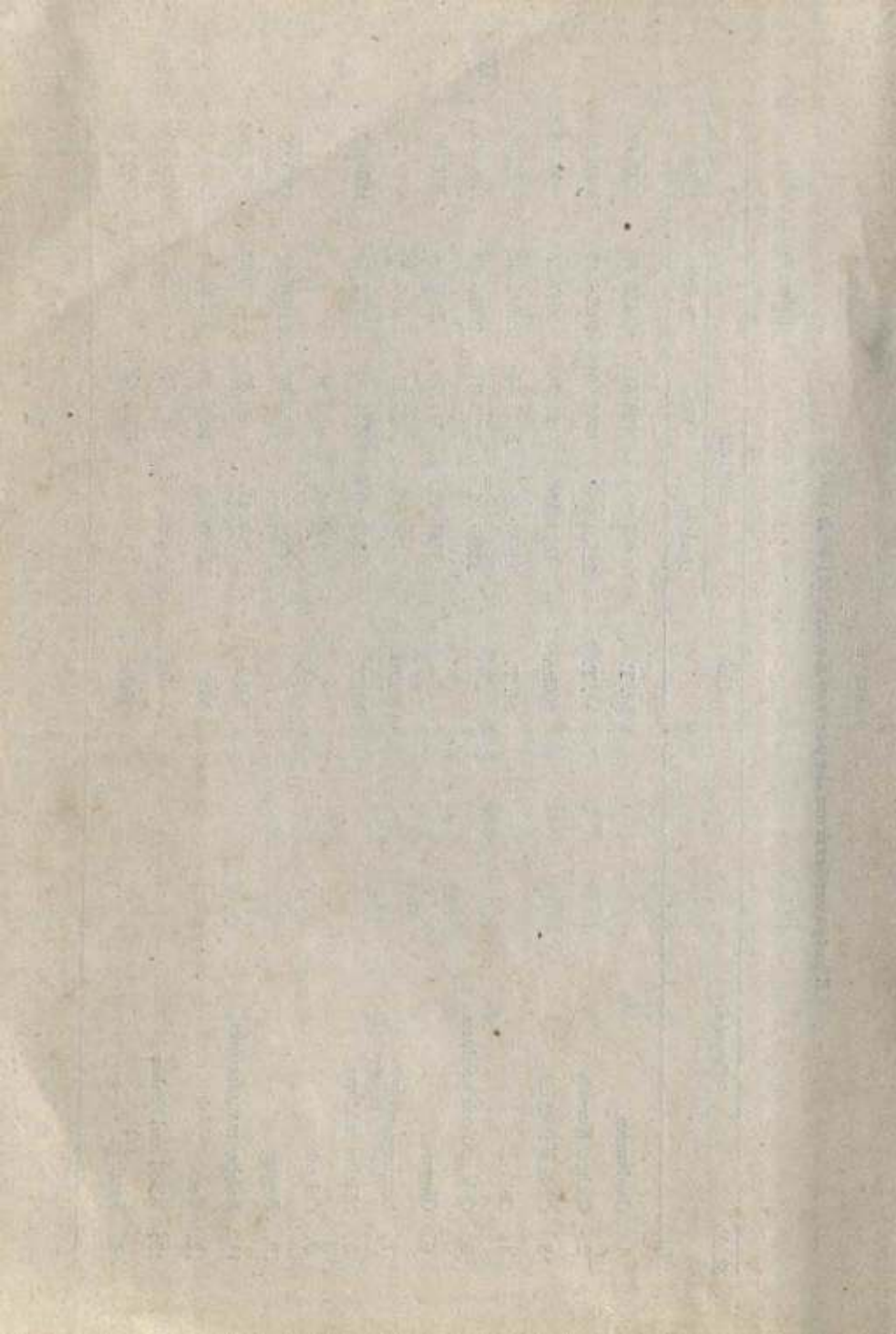
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Tea/Kg.	I	25.11	25.38	24.88	25.75	17.00	24.20	24.64	18.40	24.83	19.66	18.89
	II	26.20	26.50	25.80	26.13	17.00	24.20	26.86	26.90	26.67	26.75	27.07
	III	28.25	28.37	27.48	26.79	21.58	24.20	27.91	28.08	28.22	28.19	27.88
	IV	32.08	36.21	32.25	30.03	26.40	24.20	31.69	32.05	32.47	30.30	30.30
Tobacco/Kg. (Jaffna)	I	9.00	8.96	11.00	11.33	11.42	14.00	12.50	13.00	13.00	..	..
	II	9.13	8.27	11.00	11.40	11.33	14.00	12.50	13.00	13.00	..	..
	III	10.75	13.00	13.25	13.50	13.19	14.00	12.50	..	13.00	..	..
	IV	11.56	13.20	13.66	14.00	15.62	14.42	12.68	..	13.00	..	..
Tobacco/Kg. (	I	10.00	10.00	10.00	11.33	10.67	10.00	10.17	12.00	12.00	12.50	14.00
	II	10.13	8.80	10.00	11.60	10.00	10.00	10.80	12.00	12.00	12.50	14.00
	III	12.04	11.17	11.50	12.58	10.46	10.00	10.67	12.00	12.00	12.69	14.50
	IV	13.28	10.00	12.00	14.10	11.08	11.50	12.21	13.00	12.00	13.42	16.33

TABLE 4.4

Foreign export from the ports of Kerala 1981-82 & 1982-83

Value Rs. in lakhs)

Sl. No.	Commodity	Unit	1981-82		1982-83	
			Quantity	Value	Quantity	Value
1.	Cardamom	M. T.	406.92	420.61	435.47	607.72
2.	Cashew Kernals	M. T.	22328.05	11335.23	30256.43	12518.26
3.	Cashew shell oil	000ltr.	1007.32	151.34	3047.21	90.23
4.	Coffee	M. T.	32648.23	6125.03	29072.82	6738.04
5.	Cair and coir products	"	33347.43	2328.21	26686.99	2400.78
6.	Ginger	"	3151.89	317.78	2406.04	418.50
7.	Lemongrass oil	000ltr.	114.64	78.51	195.36	135.15
8.	Marine products	M. T.	24588.00	11351.78	32452.11	14270.37
9.	Oil cake	"	288.63	3.31	..	..
10.	Pepper	"	14979.75	3055.96	25204.52	3769.26
11.	Rubber manufactures	M. T.	208.95	49.89	430.82	48.56
12.	Tea	M. T.	39099.84	5996.94	34508.80	6389.29
13.	Wood and timber	Value	..	697.15	..	723.19
14.	Sundries	Value	..	8514.65	..	11806.53



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