GOVERNMENT OF KERALA

SEASON AND CROP REPORT OF KERALA STATE

1990-91 AND 1991-92

DEPARTMENT OF ECONOMICS & STATISTICS
THIRUVANANTHAPURAM
1997

GOVERNMENT OF KERALA

*
**
***
****
*****
****
***
**
*

SEASON AND CROP REPORT
'90-'91 and '91-'92

*
**
***
****
*****
****
***
**
*

DEPARTMENT OF ECONOMICS AND STATISTICS

TRIVANDRUM

1994

CONTENTS

Part-I

Part-II - Summary Tables

Part-III

Part-IV

.....

SEASON AND CROP REPORT OF KERALA
YEAR 1990-'91 AND 1991-'92

1.1 Introduction

With a geographical area of 38,863 Sq.Km; Kerala is one of the smallest States of Indian Union. It forms only 1.18% of the total area of the country. The State lies at the South West Corner of the Indian Peninsula, between 8.18' and 12.48' North Latitudes 74 52' and 77 22' East Longitude. Its coastal line is 880 Kms. long and its breadth varies from 130 kms. in the middle to 32 kms in the extromities.

1.2 Topography

The topography of the State is a peculiar one. The forest clad Western Ghats forms the eastern boundary of the State. From the Western Ghats the land mass undulates to the golden shores of the Arabian Sea, presenting a series of evergreen hills and valleys. Numerous rivers and streams flow west wards from the Western Ghats criss-crossing the hills and valleys until they empty into the Arabian Sea.

The land on the west coast is more or less flat and is adorned by lakes and lagoons. Due to these diverse characteristics of the land and consequent plant growth, the State is classified into three distinct regions viz., the High Land, the Middle Land and the Low Land.

The High Land region comprises the ghat, forests and most of the reserve forests. The major produces are teak wood, rose wood and numerous other varieties of hard and soft wood trees. The annual rainfall is very high in this regions compared to other regions. This land is suited for the cultivation of plantation crops like tea, coffee, cardamom and rubber. It covers an area of 18653 Sq.Kms.

The Middle Land region with an area of 16231 Sq.Kms. is famous for its diverse crops, while rice is grown in valleys, coconut, arecanut, rubber, pepper and tapioca are grown in the slopes of the hills. Thus major and minor crops are cultivated inter mixed with one another.

The low land covers an area of 2979 Sq.Kms. and is cultivated mainly by paddy and coconut. Fishing is also an important source of livelihood of the people in this region.

Paddy, coconut, arecanut, pepper, rubber, tapioca and banana are the important crops cultivated. Paddy being a seasonal crops and the main stapple food of Kerala is cultivated during the three seasons viz., Autumn (Virippu), Winter (Mundakan) and Summer (Puncha). Autumn crops is mainly rainfed while winter crop depends upon irrigations canals too for water. Summer crop is raised as a single crop originally on water-logged areas or reclaimed lagoon lands by dewatering during summer. The other important seasonal crops are pulses, raggi, seasamum, sugar cane, tapioca, groundnut, ginger, turmeric etc. Rubber is cultivated on the lower high land region and in the midland region.

The high cost of cultivation and comparatively low return had adversely affected both area and production of paddy. Since the rice produced in the State is less than half of the requirements the State has to depend on other neighbouring States for its food needs. There are also seasonal floods and draughts to which cause damage to crops.

1.3 Administrative regions

For administrative purposes the State is divided into 14 districts, viz., Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha, Kottayam, Idukki, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Wayanad, Cannore and Kasaragode. Each district is divided into Taluks and Villages. There are 61 Taluks and 1452 Villages in the State at present. The District-wise distribution of area according to Village records is given in the following table.

District-wise distribution of area of the State

Sl. No.	District	Area in Sq. Km.	% to Total
1	2	3	4
1.	Thiruvananthapuram	2192	5.64
2.	Kollam	2579	6.64
3.	Pathanamthitta	2731	7.03
4.	Alappuzha	1256	3.23
5.	Kottayam	2204	5.67
6.	Idukki	4998	12.86
7.	Ernakulam	2408	6.20
8.	Thrissur	3032	7.80
9.	Palakkad	4480	11.53
10.	Malappuram	3348	9.13
11.	Kozhikode	2345	6.03
12.	Wayanad	2132	5.49
13.	Cannoore	2997	7.71
14.	Kasaragod	1961	5.04
	State	**38863**	**100.00**

Idukki is the largest and Alappuzha is the smallest district of the State.

1.4 Rural development

The State is delimited into 152 Blocks for alround development of the rural areas. The important programmes implemented by these blocks are integrated Rural Development Programme (IRDP), Training of Youths for self employment (TRYSEM) National Rural Development Programe (NREP) and the Rural Landless Employment Guarantee Programme (RLEGP). Besides those various schemes under the poverty amelioration programme better known as 20 point programmes are also implemented in these blocks. The Group Forming Programme introduced with the help of Krishi Bhavans, which is located in every panchayat during 1989-'90 has been very effective in revitalising the rice production of the State.

1.5 Local self government

Panchayat in rural areas and Municipalities and Corporations in urban areas are the units of local self government in the State. At present, these are 983 panchayats, 64 municipalities and Corporations (61+3) in the State which are administered by the elected representatives of the local people.

1.6 Climate

The State is blessed with a moderate climate. Since the State is a narrow strip of land, that lies between high altitude mountains and sea extreme climates are not experienced in this State.

Rainfall

The State receives copious rains from the South West and North East monsoons. The South West monsoon starts from the beginning of June and extends upto September. The North East monsoon spell from October to December. Seasonal showers do also occur during the remaining months of the year.

District-wise distribution of average rainfall

Sl. No.	District	Average rainfall(m.m) 1991	1992
1	2	3	4
1.	Thiruvananthapuram	2137	2407
2.	Kollam	3036	3252
3.	Pathanamthitta	3374	3296
4.	Alappuzha	2680	3112
5.	Kottayam	2954	3382
6.	Idukki	4104	3794
7.	Ernakulam	3328	3533
8.	Thrissur	3393	3869
9.	Palakkad	2402	2334
10.	Malappuram	3000	3069
11.	Kozhikode	3265	3614
12.	Wayanad	2792	3189
13.	Cannore	3569	4097
14.	Kasaragod	3430	4007

Source:- Meteriological Centre, Thiruvananthapuram.

Temperature

Since Kerala is a narrow strip of land situated between high altitude mountains and sea, extreme temperature is not experienced. The average temperature of the State varies from 21^{c} to 33^{c}.

1.7 Soil

The different types of soil found in various parts of the State are classified as follows:-

1. The hilly and forest soil seen all along the central part of the State.

2. The sandy soil seen in the coastal belt.

3. The laterite soil seen in the middle.

4. The black soil seen in patches on the eastern boarder of Palakkad District.

5. The peat or kari soil seen in Alleppey.

6. The alluvial soil seen along the southern and eastern parts of vembanad lake and in small patches in Thiruvananthapuram District.

7. The read soil found in the eastern tip of Thiruvananthapuram District.

1.8 Minerals

The State is not rich in minerals. But rare mineral sands such as Ilimanite, Rutile monosite, zircon and Sillimanite are mined from the coastal line. Miner minerals like white quartz sand, fire clay ball clay, limeshell and China clay are also mined in the State. Major minerals like coal, iron etc. and Petroleum are conspicous by their absence. Consequently the state is industrially backward among other Indian States. The Kerala mineral exploitation and Development project undertook the exploration and development of primary gold, Gemstones, Ornamental stones, placeer gold and the programme for geological follow up.

1.9 Crops and Crop Seasons

The major crops grown in the State are food crops like paddy, pulses, tubers and tapioca, fruits like plantain, banana, mango, jack and cashew; spices like pepper, ginger, cardamom and arecanut; oil seeds like coconut, groundnut and gingelly and plantation crops like tea, coffee, rubber and cocoa.

The period of sowing of various crops are mainly in the rainy seasons. Autumn, winter and summer are the seasons for paddy - the staple food of the people of Kerala. But most of the seasonal crops are sown well before the south west monsoon sets in the state. Though perennial crops dominate the agriculture sector of the State, intensive mixed cropping is the general pattern of cultivation.

2.0 Land utilisation

The land utilisation particulars of the state for the year 1990-'91 and 1991-'92 are furnished in table 2.1 of the summary tables and 3.3 of the detailed tables. (The total area of the State referred to in various tables is according to the village papers while slightly differ from that under professional survey).

The district-wise area under various land uses are discussed in the following paragraph.

2.1 Forest

The district-wise distribution of area under forest 1990-'91 & 91-'92

(In hectares)

Sl. No.	District	Area under forest 90-'91 & 91-'92	Percentage to total 90-'91 & 91-'92	Percentage to total geographical area 90-'91 & '91-92
1	2	3	4	5
1.	Thiruvananthapuram	49861	4.61	22.81
2.	Kollam	81438	7.53	32.34
3.	Pathanamthitta	155214	14.35	57.75
4.	Alappuzha	-	-	-
5.	Kottayam	8141	0.75	3.71
6.	Idukki	260907	24.12	50.67
7.	Ernakulam	8123	0.75	3.45
8.	Thrissur	103619	9.58	34.61
9.	Palakkad	136257	12.60	31.04
10.	Malappuram	103417	9.56	28.47
11.	Kozhikode	41386	3.83	17.74
12.	Wayanad	78787	7.29	37.07
13.	Kannur	48934	4.51	16.42
14.	Kasaragode	5625	0.52	2.87
	STATE TOTAL	**1081509**	**100.00**	**27.83**

The area under forests form 27.83% of the total geographical area. Though the percentage of area under forest to total forest area was highest in respect of Idukki District, the percentage of area under forest to the geographical area of the district was highest in respect of Pathanamthitta District. In Idukki and Pathanamthitta more tham 50% of the geographical area were covered by forests. In Alappuzha district there was no forest at all.

2.2 Land put to non-agricultural uses

The area put to non-agricultural uses during the year 1990-'91 and 1991-'92 were estimated at 2.97 and 3.01 lakh hectares as against the previous years estimate of 2.85 lakh hectares. This forms 7.8% of the geographical area of the State. The District-wise distribution is given below:-

District-wise distribution of area under non-agricultural uses 1990-'91 to 1991-'92 (In hectares)

Sl. No.	District	Area under non-agricultural uses		% to total		% to total geographical area of the district	
		90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8
1.	Thiruvananthapuram	20785	20764	6.99	6.89	9.51	9.50
2.	Kollam	23887	23939	8.03	7.94	9.49	9.51
3.	Pathanamthitta	10884	10963	3.66	3.64	4.05	4.08
4.	Alappuzha	23546	23777	7.92	7.89	17.31	17.48
5.	Kottayam	21441	21861	7.21	7.25	9.77	9.96
6.	Idukki	16788	16927	5.65	5.62	3.26	3.29
7.	Ernakulam	34090	34386	11.46	11.41	14.49	14.61
8.	Thrissur	27485	27534	9.24	9.14	9.18	9.20
9.	Palakkad	31908	32865	10.74	10.90	7.27	7.49
10.	Malappuram	20983	21890	7.06	7.26	5.78	6.03
11.	Kozhikode	20949	21063	7.04	6.99	8.98	9.03
12.	Wayanad	6968	7188	2.34	2.39	3.28	3.38
13.	Kannur	22521	23083	7.57	7.66	7.59	7.78
14.	Kasaragode	15146	15131	5.09	5.02	7.72	7.72
	State	**297381**	**301371**	**100.00**	**100.00**	**7.65**	**7.76**

From the above table it may be seen that though the percentage of area under non-agricultural uses to total area under this category was highest in respect of Ernakulam, the percentage of the same to the geographical area of the district was highest in respect of Alappuzha district. In this connection it may be noted that Alappuzha is thickly populated district with numerous rivers and back waters.

2.3 Barren and uncultivable land

The area under barren and uncultivable land for the year 90-91 and 91-92 was estimated at 58308 and 55136 as against 65994 during the previous year 89-90. The area under this category covered about 1.42% of the geographical area of the State. The District-wise distribution of barren and uncultivable land is furnished below.

District-wise distribution of barren and un-cultivable land
1990-'91 & 1991-'92 (In hectares)

Sl. No.	District	Area under barren & unculti-vable land		% to total		% to total geographical area of the district	
		90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8
1.	Thiruvananthapuram	1262	1089	2.17	1.97	0.58	0.50
2.	Kollam	591	485	1.01	0.88	0.23	0.19
3.	Pathanamthitta	701	645	1.20	1.17	0.26	0.24
4.	Alappuzha	271	288	0.47	0.52	0.20	0.21
5.	Kottayam	2162	1818	3.71	3.30	0.98	0.83
6.	Idukki	13058	12144	22.39	22.02	2.54	2.36
7.	Ernakulam	1781	1795	3.06	3.26	0.76	0.76
8.	Thrissur	1448	1377	2.48	2.50	0.48	0.46
9.	Palakkad	9883	9487	16.95	17.21	2.25	2.16
10.	Malappuram	5048	4964	8.66	9.00	1.39	1.37
11.	Kozhikode	1861	1711	3.19	3.70	0.80	0.73
12.	Wayanad	1395	1291	2.39	2.34	0.66	0.61
13.	Kannur	6858	6350	11.76	11.52	2.31	2.14
14.	Kasaragod	11989	11692	20.56	21.21	6.11	5.96
	State	**58308**	**55136**	**100.00**	**100.00**	**1.50**	**1.41**

The area under this category was highest in Idukki district followed by Kasaragod. The percentage of area under this category to the total geographical area was in Kasaragod district.

2.4 Permanent pastures and grazing land

The estimated area under permanent pastures and grazing land for the years 90-91 and 91-92 was 1912 and 1779 hectares respectively as against 2916 hectares during the previous year (89-90). This formed only about 0.08 percentage of the total geographical area of the state. The area under this category was highest in Idukki district with 755 and 672 hectares for 1990-'91 and 1991-'92 respectively which is 39.5% and 37.8% of the total area under the category.

2.5 Land under miscellaneous tree crops

The area under miscellaneous tree crops for the year 1990-'91 and 1991-'92 was estimated as 34375 and 34294 hectares respectively as against 42548 hectares during the previous year (1989-'90). The total area under the category formed only 0.89% and 0.88% of the total geographical area of the State for 1990-'91 and 1991-'92 respectively. The area under miscellaneous tree crops was highest in Idukki District

with 32% (1990-'91) and 33% (1991-'92) of the total area under the category.

2.6 Cultivable waste land

The area under this category for 1990-'91 and 1991-'92 was estimated as 0.95 and 0.93 lakh hectares respectively as against 1.07 lakhs during 1989-'90. Cultivable waste land formed 2.43% (1990-'91) and 2.39% (1991-'92) of the total geographical area of the State. The highest area under this category is reported from Palakkad District. Idukki and Kasaragod are the other Districts with considerable area under this category. These three districts together covered about 67% of the total area under cultivable waste land (1991-'92).

The District-wise details are given below.

District-wise distribution of area under cultivable waste land 1990-'91 & 1991-'92 (In hectares)

Sl. No.	District	Area under culivable waste (hect.)		% to total		% to total geographical area of the district	
		90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8
1.	Thiruvananthapuram	686	644	0.72	0.69	0.31	0.29
2.	Kollam	609	468	0.64	0.50	0.25	0.19
3.	Pathanamthitta	380	434	0.40	0.47	0.14	0.16
4.	Alappuzha	2049	2127	2.17	2.29	1.51	1.56
5.	Kottayam	922	962	0.97	1.04	0.42	0.44
6.	Idukki	22543	22028	23.83	23.74	4.38	4.28
7.	Ernakulam	3308	3169	3.50	3.42	1.41	1.35
8.	Thrissur	3175	3096	3.36	3.34	1.06	1.03
9.	Palakkad	22759	22798	24.06	24.57	5.18	5.19
10.	Malappuram	10470	10162	11.07	10.95	2.88	2.80
11.	Kozhikode	1552	1531	1.64	1.65	0.67	0.66
12.	Wayanad	3541	3341	3.74	3.60	1.67	1.57
13.	Kannur	5330	4348	5.63	5.22	1.80	1.63
14.	Kasaragod	17284	17184	18.27	18.52	8.81	8.76
	State	**94608**	**92792**	**100.00**	**100.00**	**2.43**	**2.39**

2.7 Fallow other than current fallow

The area under this item during 1988-'89 and 1989-'90 is estimated at 28295 and 26609 hectares respectively as against 27727 hectares during 1987-'88. This formed only about 0.7% of the geographical area of the State. Palakkad District accounted for the highest area under this category followed by Malappuram district. The area was lowest in Pathanamthitta district.

2.8 Current fallow

The area under current fallow during 1990-'91 and 1991-'92 was estimated at 44164 and 43921 hectares respectively as against 46044 hectares during the previous year (1989-'90). This formed 1.14% and 1.13% of the total geographical area during 1990-'91 and 1991-'92 respectively. Palakkad District has the highest area under this category followed by Malappuram district. District-wise details are furnished below.

District-wise distribution of area under current fallow 1990-'91 & 1991-'92 (In hectares)

Sl. No.	District	Area under current fallow (hect.)		% to total		% to total geographical area of the district	
		90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8
1.	Thiruvananthapuram	813	768	1.84	1.74	0.37	0.35
2.	Kollam	1310	1347	2.97	3.07	0.52	0.53
3.	Pathanamthitta	970	1261	2.20	2.87	0.36	0.47
4.	Alappuzha	2706	2982	6.18	6.79	1.99	2.19
5.	Kottayam	3107	3126	7.03	7.12	1.42	1.42
6.	Idukki	1447	1041	3.28	2.37	0.28	0.20
7.	Ernakulam	2944	2792	6.67	6.36	1.25	1.19
8.	Thrissur	5314	5064	12.03	11.53	1.77	1.69
9.	Palakkad	8739	8026	19.79	18.27	1.99	1.83
10.	Malappuram	7099	7458	16.07	16.98	1.95	2.05
11.	Kozhikode	1750	1713	3.96	3.90	0.75	0.73
12.	Wayanad	2170	2151	4.91	4.90	1.02	1.01
13.	Kannur	3438	3602	7.78	8.20	1.16	1.21
14.	Kasaragod	2357	2590	5.34	5.90	1.20	1.32
	State	**44164**	**43921**	**100.00**	**100.00**	**1.14**	**1.13**

2.9 Net area sown

The net area sown during 1990-'91 and 1991-'92 was estimated at 22.47 and 22.48 lakh hectares respectively as against 22.32 lakhs hectares during 1989-'90. The net area sown covered above 58% of the total geographical area of the State.

District-wise distribution of net area sown 1990-'91 & 1991-'92

(In hectares)

Sl. No.	District	Net area sown (hect. in lakhs)		% to total		% to total geographical area of the district	
		90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8
1.	Thiruvananthapuram	1.44	1.45	6.43	6.45	66.09	66.22
2.	Kollam	1.43	1.43	6.37	6.36	56.85	56.92
3.	Pathanamthitta	1.01	1.00	4.46	4.45	37.26	37.05
4.	Alappuzha	1.06	1.05	4.70	4.67	77.67	77.35
5.	Kottayam	1.81	1.81	8.07	8.05	82.59	82.57
6.	Idukki	1.88	1.89	8.35	8.41	36.42	36.72
7.	Ernakulam	1.82	1.82	8.12	8.10	77.45	77.43
8.	Thrissur	1.54	1.55	6.85	6.90	51.42	51.70
9.	Palakkad	2.17	2.17	9.66	9.65	49.44	49.48
10.	Malappuram	2.10	2.09	9.35	9.30	57.83	57.50
11.	Kozhikode	1.63	1.63	7.24	7.25	69.75	69.79
12.	Wayanad	1.16	1.16	5.15	5.16	54.45	54.55
13.	Kannur	2.03	2.04	9.04	9.07	68.42	68.56
14.	Kasaragod	1.39	1.39	6.21	6.18	71.16	71.02
	State	**22.47**	**22.48**	**100.00**	**100.00**	**57.83**	**57.86**

The net area sown is highest in Palakkad District followed by Malappuram District. But the percentage of net area sown to total geographical area is highest in Kottayam District with 82.57% in 1990-'91, 82.5% in 1991-'92 and the same is lowest in Idukki District with only 36.42% and 36.72% in 1990-'91 and 1991-'92 respectively. The net area sown in the Districts of Kollam, Pathanamthitta, Idukki, Thirssur, Palakkad and Wayanad are below the State average during the two years and for 1991-'92 in Malappuram District also was below the State average.

2.10 Area sown more than once

The area under this category for the year 1990-'91 and 1991-'92 is estimated at 7.7 lakh hectares as against 7.9 lakh hectares during 1989-'90. The area sown more than once constituted 34% of the net area sown and 20% of the geographical area. The district-wise distribution of area sown more than once is presented in the following table.

District-wise distribution of area sown more than once 1990-'91 & 1991-'92 (In hectares)

Sl. No.	Dist.	Area sown more than once		% total		% to net area sown of the district		% to geographical area of the district	
		90-91	91-92	90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8	9	10
1.	TVPM	62574	57494	8.09	7.44	43.31	39.72	28.62	26.30
2.	KLM	79911	74929	10.34	9.69	55.81	52.27	31.73	29.75
3.	PTA	27294	27986	3.53	3.62	27.26	28.10	10.16	10.41
4.	ALP	68090	60751	8.81	7.86	64.43	57.73	50.04	44.65
5.	KTM	60568	54462	7.83	7.04	33.40	30.04	27.59	24.81
6.	IDK	7275	15892	0.94	2.05	3.88	8.40	1.41	3.09
7.	EKM	64523	64503	8.34	8.34	35.40	35.40	27.42	27.41
8.	TSR	60505	56872	7.82	7.35	39.30	36.75	20.21	18.99
9.	PLKD	122025	126143	15.78	16.32	56.22	58.07	27.80	28.74
10.	MLPM	64724	60120	8.37	7.78	30.81	28.79	17.82	16.55
11.	KZKD	52779	50339	6.83	6.51	32.42	30.91	22.62	21.57
12.	WYD	42576	60139	5.51	7.78	36.79	51.86	20.03	28.29
13.	KNR	58188	62061	7.53	8.03	28.65	30.50	19.61	20.91
14.	KSGD	2174	1458	0.28	0.19	1.56	1.05	1.11	0.74
	STATE	**773206**	**773149**	**100.00**	**100.00**	**34.41**	**34.39**	**19.90**	**19.90**

From the above table it is noted that the area sown more than once is highest in Palakkad and lowest in kasaragod District. But the percentage of the same area to net area sown as well as the percentage to geographical area is highest in respect of Alappuzha District.

2.11 Total cropped area

The total cropped area is the sum of the net area sown and the area sown more than once. The total cropped area of the state for 1990-'91 and 1991-'92 is estimated at about 30 lakh hectares. The cropped area for 1989-'90 also is 30 lakh hectares. The cropped area formed 77.8% (1990-'91) and 77.8% (1991-'92) of the geographical area and 13.4% of the net area sown. The district-wise distribution is given below.

District-wise distribution of total cropped area in 1990-'91 & 1991-'92 (In hectares)

Sl. No.	Dist.	Total cropped area (lakh hectares)		% to total		% to geographical area of the dist.		% to net area sown (intensity of cropping)	
		90-91	91-92	90-91	91-92	90-91	91-92	90-91	91-92
1	2	3	4	5	6	7	8	9	10
1.	TVPM	2.07	2.02	6.85	6.69	94.72	92.52	143	140
2.	KLM	2.23	2.18	7.39	7.22	88.59	86.67	156	152
3.	PTA	1.27	1.27	4.22	4.22	47.41	47.47	127	128
4.	ALP	1.74	1.66	5.75	5.49	127.72	122.00	164	158
5.	KTM	2.42	2.36	8.02	7.80	110.17	107.37	133	130
6.	IDK	1.95	2.05	6.45	6.79	37.84	39.81	102	108
7.	EKM	2.47	2.47	8.17	8.17	104.87	104.84	135	135
8.	TSR	2.14	2.14	7.10	7.01	71.63	70.69	139	137
9.	PLKD	3.39	3.43	11.23	11.37	77.24	78.22	156	158
10.	MLP	2.75	2.69	9.10	8.90	75.64	7.40	131	129
11.	KKD	2.16	2.13	7.14	7.06	12.37	91.36	132	152
12.	WYD	1.58	1.76	5.24	5.83	74.48	82.84	137	131
13.	KNR	2.61	2.66	8.65	8.79	88.03	89.47	129	130
14.	KSGD	1.42	1.41	4.69	4.66	72.26	71.77	101	101
	STATE	**30.20**	**30.21**	**100.00**	**100.00**	**77.72**	**77.75**	**134**	**134**

The total cropped area is highest in Palakkad District and lowest in Kozhikode District.

But the percentage of total cropped area to net area sown or the intensity of cropping is highest in Alappuzha District and lowest in Kasaragod District.

3.0 Area under crops

3.1 Classification of area under crops according to seasonal, annual and perennial crops

Crops are classified as seasonal, annual or perennial according to the duration of each crop. Crops which have duration of one season (Six month or less) are called seasonal crops. The crops which have a duration or more than one season and less than one year are called annual crops and crops which have a duration of more than one year are called perennial crops. The district-wise distribution of area under crops classified into seasonal, annual and perennial is furnished in the table given below.

District-wise distribution of area under Seasonal, Annual and Perennial crops 1990-91

(Area in hectares)

Sl. No.	District	Seasonal crops			Annual crops			Perennial			Total cropped area
		Area (Hect)	% to total	% to cropped area of the Dist.	Area (Hect)	% to total	% to cropped area of the Dist.	Area (Hect)	% to total	% to cropped area of the Dist.	
1	2	3	4	5	6	7	8	9	10	11	12
1.	Thiruvananthapuram	60767	7.20	29.35	5788	7.32	2.80	140560	6.70	67.85	207055
2.	Kollam	71925	8.53	32.24	5365	6.79	2.40	145802	6.95	65.36	223092
3.	Pathanamthitta	30912	3.66	24.26	4953	6.26	3.89	91584	4.37	71.85	127419
4.	Alappuzha	77362	9.17	44.52	3662	4.63	2.11	92744	4.42	53.37	173768
5.	Kottayam	45652	5.41	18.87	6529	8.26	2.70	189704	9.05	78.43	241885
6.	Idukki	16382	1.94	8.41	5009	6.34	2.57	173450	8.27	89.02	194841
7.	Ernakulam	79582	9.43	32.25	7304	9.24	2.96	159900	7.63	64.79	246786
8.	Thrissur	82544	9.78	38.49	6509	8.23	3.04	125402	5.98	58.47	214455
9.	Palakkad	203287	24.08	59.95	9854	12.46	2.91	125916	6.00	37.14	339057
10.	Malappuram	71855	8.51	26.15	7812	9.88	2.84	195098	9.30	71.01	274765
11.	Kozhikode	19154	2.27	8.89	4405	5.57	2.04	191972	9.16	89.07	215531
12.	Wayanad	31469	3.73	19.88	2942	3.72	1.86	123901	5.91	78.26	158312
13.	Kannur	32450	3.84	12.42	6370	8.06	2.44	222464	10.61	85.14	261284
14.	Kasaragod	20708	2.45	14.61	2558	3.24	1.81	118464	5.65	83.58	141730
	STATE	**844049**	**100.00**	**27.95**	**79060**	**100.00**	**2.62**	**2096871**	**100.00**	**69.43**	**3019980**

District-wise distribution of area under Seasonal, Annual and Perennial crops

Sl. No.	District	Seasonal crops			Annual crops			Perennial			Total cropped area
		Area (Hect)	% to total	% to cropped area of the Dist.	Area (Hect)	% to total	% to cropped area of the Dist.	Area (Hect)	% to total	% to cropped area of the Dist.	
1	2	3	4	5	6	7	8	9	10	11	12
1.	Thiruvananthapuram	57521	6.96	28.44	5344	6.92	2.64	139390	6.50	68.92	202255
2.	Kollam	69556	8.42	31.87	5373	6.96	2.46	143338	6.77	65.67	218267
3.	Pathanamthitta	29137	3.53	22.84	4548	5.89	3.57	93878	4.43	73.59	127563
4.	Alappuzha	71600	8.67	43.13	3199	4.14	1.93	91194	4.31	54.94	165993
5.	Kottayam	42398	5.13	17.98	6500	8.41	2.76	186843	8.82	79.26	235741
6.	Idukki	15651	1.89	7.64	4573	5.92	2.23	184775	8.72	90.13	204999
7.	Ernakulam	80746	9.78	32.73	7755	10.03	3.14	158219	7.47	64.13	246720
8.	Thrissur	76855	9.30	36.31	6292	8.15	2.97	128499	6.07	60.72	211646
9.	Palakkad	209365	25.35	60.97	9672	12.52	2.82	124335	5.87	36.21	343372
10.	Malappuram	69940	8.47	26.00	7485	9.69	2.78	191546	9.05	71.22	268971
11.	Kozhikode	18353	2.22	8.61	4033	5.22	1.89	190793	9.01	89.50	213179
12.	Wayanad	32369	3.92	18.38	3079	3.99	1.75	140647	6.64	79.87	176095
13.	Kannur	32985	3.99	12.42	6722	8.70	2.53	225851	10.66	85.05	265558
14.	Kasaragod	19564	2.37	13.90	2670	3.46	1.90	118523	5.60	84.20	140757
	STATE	**826040**	**100.00**	**27.34**	**77245**	**100.00**	**2.56**	**2117831**	**100.00**	**70.10**	**3021116**

From the above table it can be seen that out of the total cropped area of 30 lakhs hectares 8.44 (90-91) and 8.26 (91-92) lakhs hectares or 27.95% (90-91) and 27.34% (91-92) of the cropped area were covered by seasonal crops, 0.8 lakh hectare or 2.62% (90-91) and 2.56 (91-92) by annual crops and 20.96 (90-91) 21.18 lakhs hectares or 69.43% (90-91) 70.10% (91-92) of cropped area by perennial crops.

This area under seasonal crops is highest in Palakkad District with about 24% in 90-91 and 25% in 91-92 of the total area under seasonal crop of the State and the same was lowest in Idukki District (about 2%) Palakkad, Thrissur, Ernakulam, Alappuzha, Malappuram and Kollam together covered more than half of the area under seasonal crop. In the case of annual crops also Palakkad stands in the top of other districts in respect of area. The area under perennial crops is highest in Kannur District.

3.2 Classification of area under crops according to food and non-food crops.

The crops may be classified into food and non-food crops according to the use. Intensive multiple cropping of seasonal, annual and perennial crops is the pattern of cultivation in the State. The area under different crops classified into food and non-food crops are given in the table 2.2 of summary and 3.5 of detailed table.

District-wise distribution of area under food crops 1990-91

(in hectares)

Sl. No.	DIST.	Area under food crops (90-91)							
		Food grains	% to cropped area of the dist.	Fruits and vegetables	% to cropped area of the dist.	Sugar crops spices condiments	% to cropped area of the dist.	Total food-crops	% to cropped area of the dist.
1	2	3	4	5	6	7	8	9	10
1.	TVM	24524	11.84	61611	29.76	8398	4.06	94533	45.66
2.	KLM	31967	14.33	64818	29.06	12016	5.38	108801	48.77
3.	PTA	14427	11.33	28352	22.27	9809	7.67	52588	41.27
4.	ALP	61013	35.12	32619	18.78	5154	21.97	98786	56.87
5.	KTM	28061	11.61	32212	13.32	15148	6.25	75421	31.18
6.	IDK	6248	3.21	17095	8.78	73539	37.73	96882	49.72
7.	EKM	65320	26.47	31316	12.69	16018	6.49	112654	45.65
8.	TSR	75276	35.10	31254	14.58	14341	6.68	120871	56.36
9.	PKD	159618	47.09	49485	14.60	24157	7.11	233260	68.80
10.	MLPM	52740	19.20	61138	15.49	23889	15.45	137767	50.14
11.	KKD	12887	5.98	39809	18.47	24941	11.57	77637	36.02
12.	WYD	20641	13.04	17316	10.94	39455	24.92	77412	48.90
13.	KNR	22206	8.50	69768	26.70	44359	16.98	136333	52.18
14.	KSGD	15161	10.70	37259	26.29	20817	14.68	73237	51.67
	STATE	**590089**	**19.54**	**574052**	**19.01**	**332041**	**10.99**	**1496182**	**49.54**

District-wise distribution of area under food crops 1991-92

(In hectares)

Sl. No.	DIST.	Area under food crops (91-92)							
		Food grains	% to cropped area of the dist.	Fruits and vegetables	% to cropped area of the dist.	Sugar crops spices condiments	% to cropped area of the dist.	Total food crops	% to cropped area of the dist.
1	2	3	4	5	6	7	8	9	10
1.	TVM	22486	11.12	59214	29.28	8202	4.06	89902	44.46
2.	KLM	29863	13.32	65137	29.84	11524	5.28	106724	48.44
3.	PTA	13316	10.43	26948	21.11	9038	7.08	49302	38.63
4.	ALP	56166	33.85	31891	19.21	4782	2.88	92939	55.94
5.	KTM	25781	10.94	31368	13.30	14501	6.15	71650	30.39
6.	IDK	6049	2.96	17155	8.37	76271	37.21	99475	48.54
7.	EKM	67256	27.26	30123	12.21	15425	6.25	112804	45.72
8.	TSR	70149	33.14	30251	14.31	14437	6.83	144837	54.28
9.	PLKD	162396	47.29	49687	14.47	23662	6.89	235745	68.65
10.	MLPM	51233	19.05	60440	22.48	24337	9.05	136010	50.58
11.	KKD	12230	5.75	38629	18.12	25105	11.78	75964	35.65
12.	WYD	19938	11.31	18941	10.76	45361	25.76	84240	47.83
13.	KNR	22621	8.52	71459	26.91	47025	17.71	141105	53.14
14.	KSGD	14287	10.15	36352	25.81	20022	14.24	70661	50.20
	STATE	**572971**	**18.96**	**567595**	**18.79**	**339692**	**11.25**	**1480258**	**49.00**

From the above table it can be seen that food grains cultivation is concentrated into districts of Alappuzha, Ernakulam, Thrissur and Palakkad.

The percentage of area under food crops to gross cropped area is highest in Palakkad District ie., about 69% of cropped area of the district. It is lowest in Kottayam District ie., 31.18% (90-91) and 30.39% (91-92). The percentage of area under food crops of total cropped area are 49.54% (90-91) and 49% (91-92).

The various aspects of the area under important food crops are summerised in the following paragraphs.

4.0 irrigation.

Irrigation is essential for cultivation especially for crops like paddy which required large quantity of water to grow. Because of the nature of terrian and heavy rainfall Kerala is blessed with 41 west flowing and 3 east flowing rivers and these rivers provide vast potential for irrigation. It is estimated that about 6 lakhs hectares (net) or 14 lakhs hectares (gross) of area could be brought under irrigation in Kerala through major and medium irrigation. According to EARAS estimates 3.33 hectares (net) and 3.87 hectares (gross) have been brought under irrigation during 1991-92. Frequest floods and occasional drought conditions often affect the crops adversely. Because of heavy rainfall, flood control was the main concern of the farmers rather than irrigation. Though construction of dams and power generation are much easier than channeling of the impounded water to needy places was costly affair because of the nature of the terrian.

Consequently works on irrigation facilitates have not taken much headway in Kerala and vast potential remain untapped. With the commossioning of various power and irrigation schemes flood control has ben achieved to a considerable level. The lockening trend in rainfall noticed during the past few years has made it all the more to think of storing flood water during heavy rains and use it during draught periods by constructing check dams of varying capacities. There were on going major and medium irrigation projects in the State. Besides minor and lift irrigation schemes as well as flood control schemes were also being taken up and implemented. Out of the on going Chittur Puzha, Pampa and Kuttiyadi schemes were completed during the year. All the other schemes are in various stages of implementation. But most of the schemes targeted for completion and commissioning during the 7th Plan and following annual plan periods should not be completed due to various reasons. During 1991-92 the total area brought under irrigation is 333157 hectares (net) or 387411 (gross). The details if area irrigated under various sources are furnished in the table below.

Source-wise area under irrigation

Sl. No.	Source of irrigation	Area irrigated 1990-91 Total (hect)	1990-91 % to Total	1991-92 Total (hect)	1991-92 % to Total
1	2	3	4	5	6
1.	Government Canals	104265	31.28	102748	30.84
2.	Private Canals	3691	1.11	3585	1.08
3.	Govt. Tanks and Wells	3259	0.98	3241	0.97
4.	Private Tanks and Wells	111371	33.41	109549	32.88
5.	Minor & Life irrigation	22403	6.72	23896	8.17
6.	Other sources	88380	26.50	90138	27.06
	TOTAL	333369	100.00	333157	100.00

Weather and crop condition

The weather condition of Kerala is generally favourable for agriculture. It has the advantage of both South West and North East Monsoons. But the distribution of rainfall may not necessarily be favourable to crops. Always excess rainfall flood and draught conditions to affect the crops occassionally in varying degrees. The spread and intensity of rainfall had been much less from 1980-81 onwards. But there is remarkable recovery of rainfall pattern during 1992. The average rainfall received during the year was 3353 m.m. which is about 10% higher than the normal. The intensity of rainfall followed more or less the decaded trend during summer seasons. During 1991-92 the South West and North East Monsoon recorded excess rainfall causing heave floods in October and November. Eventhough the total rainfall received by the Southern Districts for the year as a whole is relatively less than the Northern Districts, the intensity in the months of October and November in the districts of Thiruvananthapuram, Kollam, Pathanamthitta, Kottayam and Idukki was significantly higher than the rest of the distrifts. Consequently there districts suffered intensive crop damage including land slides of serious nature.

Table - 2.1

Classification of area according to utilisation

Sl. No.	Head of classification	Area in Sq Km 90-91	Area in Sq Km 91-92	% to total 90-91	% to total 91-92
1	2	3	4	5	6
1.	Total area according to village papers	38855	38855	100.00	100.00
2.	Forest	10815	10815	27.83	27.83
3.	Land put to non-agricultural uses.	29.74	3014	7.65	7.76
4.	Barren and uncultivable land.	583	551	1.50	1.41
5.	Permanent pastures and other grazing land.	19	18	0.05	0.05
6.	Land under miscellaneous the crops.	344	343	0.89	0.88
7.	Cultivable waste.	946	928	2.43	2.39
8.	Current fallow.	442	439	1.14	1.13
9.	Fallow other than current fallow.	264	267	0.68	0.69
10.	Wet area sown.	22468	22480	57.83	57.86
11.	Area sown more than once	7732	7731	19.90	19.90
12.	Total cropped area.	30200	30211	77.72	77.75
13.	Total cultivated area.	23175	23186	59.64	59.67
14.	Total cultivable area.	24465	24457	62.96	62.94

Table - 2.2

Area under crops in Kerala 1990-91 and 1991-92

Class of crop		Name of crop	Area in Hectares 90-91	Area in Hectares 91-92	% change
1		2	3	4	5
Cereals & Millels	1	Paddy	559450	541327	-3.24
	2	Jower	4524	5152	+13.88
	3	Ragi	1272	1635	+28.54
	4	Other cereals and millels	1455	1936	+33.06
	5	Total cereals and millets	566704	550050	-2.94
Pulses including the	6	Pulses	23385	22921	-2.98
Sugar crops	7	Sugar cane	7625	6237	-18.20
	8	Palony sath	10433	10044	-3.73
	9	Total sugar crops	18058	16281	-9.84
Spices & condiments	10	Pepper	168507	178126	+5.71
	11	Chilles	551	531	-3.63
	12	Ginger	14143	15400	+8.89

Table 2.2 contd..

1		2	3	4	5
	13	Turmeric	2669	2738	+2.59
	14	Tamarind	14999	14998	-
	15	Cardamom	43826	43670	-0.36
	16	Arecanut (Betal)	64817	63437	-2.13
	17	Other spices	4471	4511	+0.11
	18	Total spices & condiments	313983	323411	+3.00
Fresh Fruits	19	Mango	75480	76605	+1.49
	20	Jack	71002	72239	+1.74
	21	Banana	22099	22602	+2.28
	22	Other plantain	43538	42467	-2.48
	23	Pineapple	4724	4870	+3.09
	24	Other fruits	20441	19426	-4.97
Dry fruits	26	Cashew nut	115621	112059	-3.08
	26	Total fruits	352905	350339	-0.73
	27	Tubers	33750	33066	-2.13
Vegetables	28	Sweet potato	2603	2457	-5.61
	29	Tapioca	146493	141881	-3.15
	30	Other vegetables	20516	21743	+5.98
	31	Total vegetables	221147	217257	-1.76
Oil seeds	32	Coconut	870022	863061	-0.80
	33	Sesamum	9433	9006	-4.53
	34	Ground nut	12819	14041	+9.53
	35	Other oil seeds	1819	1784	-1.92
	36	Total oil seeds	894093	887892	-0.69
Fibre	37	Cotton	10731	11922	+11.99
	38	Betel leaves	1074	1069	-0.47
	39	Tubacco	252	204	-19.05
Drugs & narcotics	40	Lemon grass	3416	2458	-29.04
	41	Tea	34616	34623	+0.02
	42	Coffee	75057	84016	+11.94
	43	Cocoa	11901	9956	-16.34
	44	Rubber	411615	425768	+3.44
	45	Total drugs, narcotics and plantation crops	537931	556821	+3.51
Other nonfood crops	46	Fodder grass	1731	1636	-5.49
	47	Green manure crops	12380	11779	-4.85
	48	Other non-food crops	66932	69535	+3.89
	49	Total non-food crops	1523798	1540858	+1.12

Table 2.2 contd..

1	2	3	4	5
50	Total cropped area	3019980	3021116	+0.04
51	Area sown more than once	773206	773149	-0.01
52	Net area sown	2246774	2247967	+0.05

Table - 2.3

Production of important crops 1990-91 and 1991-92

Sl. No.	Name of crop	Unit	Quantity produced 90-91	Quantity produced 91-92	% change
1	2	3	4	5	6
1.	Rice	Ton	1086578	1060530	-2.40
2.	Jower	"	2305	2623	+13.80
3.	Ragi	"	1042	1323	+26.97
4.	Other cereals	"	1131	1505	+33.07
5.	Pulses	"	16544	16185	-2.17
6.	Sugar cane	"	51977	42822	-17.61
7.	Black pepper	"	46802	50309	+7.49
8.	Dry chillies	"	544	526	-3.31
9.	Dry ginger	"	45685	50274	+10.04
10.	Cured turmeric	"	5123	5230	+2.09
11.	Processed cardamum	"	3450	3450	-
12.	Arecanut (Betal nuts)	Million nuts	13074	13116	+0.32
13.	Nutmeg	Ton	5919	6641	+12.20
14.	Tamarind	"	36441	37376	+2.57
15.	Jack	1000 Nos	266043	299439	+12.55
16.	Mango	Ton	241054	246050	+2.07
17.	Banana	"	295145	303090	+2.69
18.	Other plantain	"	196790	193315	-1.77
19.	Pineapple	"	46265	47241	+2.11
20.	Pappaya	"	55999	55971	-0.05
21.	Cashew nut	"	102771	104601	+1.78
22.	Drumstic	"	18828	19127	+1.59
23.	Sweet potato	"	21611	19951	-7.68
24.	Tapioca	"	2803001	2657865	-5.18
25.	Ground nut	"	9527	10436	+9.54
26.	Sesamum	"	2063	1986	-3.73
27.	Coconut	Million nuts	4232	4641	+9.66
28.	Cotton	Bale of 170 Kg.	17320	19242	+11.10
29.	Tobacco	Ton	472	382	-19.07
30.	Leman grass oil	"	160	119	-25.62
31.	Tea	"	60638	66080	+8.97
32.	Coffee	"	20910	20040	-4.16
33.	Rubber	"	307521	343109	+11.57
34.	Cocoa	"	5615	5351	-4.70

Table - 2.4

Average farm (harvest) prices of importent agricultural commodities

Sl. No.	Commodity	Unit	Average farm price 1990-91	Average farm price 1991-92	% change
1.	Paddy	Qlt.	299.61	374.77	+25.08
2.	Coconut	00' Nos	301.23	393.31	+30.57
3.	Arecanut	"	26.40	31.22	+18.26
4.	Tapioca	Qlt.	150.68	158.16	+4.96
5.	Cashew nut	"	1379.90	2093.44	+51.71
6.	Banana	00' Nos	75.41	80.77	+7.11
7.	Pepper	Qlt.	3212.75	2918.06	-9.13
8.	Ginger	"	2528.02	2143.71	-15.20
9.	Sugar cane	M.T.	328.63	338.21	+2.92

Table - 2.5

Sowing harvesting and peak marketting seasons of principal crops in Kerala

Sl. No.	Name of Crop	Name of Season	Period of sowing	Period of ploughing	Period of harvesting	Peak marketting period
1	2	3	4	5	6	7
1.	Rice	Autumn	April-July	July-October	August-October	September-November
		Winter	August-November	October-January	November-January	December-March
		Summer	October-December	January-March	March-May	March-June
2.	Ragi	I.Crop	April-July	August-September	September-November	September-November
		II.Crop	September-October	October-November	December-January	December-January
		III.Crop	May-June	September-October	October-November	October-November
			December	January-February	February	
3.	Small Millets	Autumn	April-July	July-November	September-November	December-January
		Summer	January-February	March	April	April
4.	Redgram	Autumn	May-August	June-September	August-October	August-October
		Winter	August-November	September-November	October-January	December-January
		Summer	February-March	May	May	June
5.	Horsegram	Autumn	February-April	March-April	April-June	May-June
		Winter	September-November	October-November	November-January	November-February
		Summer	December-February	January-April	April	April
6.	Greengram	Autumn	June-August	August-September	August-September	September-December
		Winter	October	November	November-December	November-December
		Summer	September-October	October-November	November-December	December-January
7.	Blackgram	Winter	March-June	July-August	June-September	September-October
		Summer	September-October	October-November	November-December	December-January

(contd.)

(Table 2.5 contd.)

1	2	3	4	5	6	7
8.	Other	Autumn Winter Summer	April-July September-December December-March	July-August October-December January-April	June-September November-February February-June	September-October December-March April
9.	Sugar Cane	Autumn Winter Summer	October-February November-March June-October	-- -- September-October	October-December December-February October-January	November-December January-February January
10.	Ginger	Autumn Winter	March-July March-June	-- --	November-February December-February	December-February December-March
11.	Pepper	Winter Summer	June-August July	July-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 Potato	Autumn Winter Summer	April-July October-November December-March		September-November January-February March-June	November-February February-March April-June
15.	Turmeric	—	April-July	--	November-February	November-March
16.	Lemongrass	--	May-June	--	January-February April-May	January-February April-May

(contd.)

(Table 2.5 contd.)

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

Table - 3.1

Normal Rainfall in Kerala

(In m.m)

District	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	22	19	45	120	225	377	279	157	170	280	182	67	1943
Kollam	24	31	75	166	242	487	428	273	212	350	216	60	2554
Pathanamthitta	28	41	99	202	306	585	550	372	272	339	342	62	3098
Alappuzha	25	27	56	129	323	637	547	327	271	333	228	61	2964
Kottayam	24	24	52	125	310	697	640	400	285	331	188	55	3131
Idukki	19	23	47	129	228	638	831	518	305	310	167	50	3265
Ernakulam	15	17	41	134	318	740	721	451	288	312	172	45	3254
Thrissur	7	10	27	86	296	769	759	443	257	301	144	31	3130
Palakkad	8	9	27	87	161	477	633	349	165	249	136	28	2329
Malappuram	5	7	21	86	221	688	797	399	205	291	157	30	2907
Kozhikode	9	7	21	93	297	925	1034	547	257	284	157	36	3667
Wayanad	7	9	23	99	183	762	1261	644	252	226	99	23	3588
Kannur	4	4	8	64	244	891	1085	570	249	226	99	23	3467
Kasaragod	5	3	9	51	226	1004	1081	610	269	209	91	23	3581
State Average	**14**	**17**	**39**	**112**	**256**	**691**	**760**	**433**	**247**	**288**	**163**	**42**	**3062**

Source - Metrological Centre, Thiruvananthapuram.

Table - 3.2

Station-wise Average Monthly Rainfall (m.m) - Year 1991

District	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	026	034	045	118	114	869	315	150	008	304	132	22	2137
Kollam	097	005	085	139	118	1158	485	236	016	481	207	08	3036
Alappuzha	002	001	042	113	164	1087	495	445	028	236	064	04	2680
Pathanamthitta	039	020	118	179	165	1165	613	471	043	438	125	00	3374
Kottayam	000	012	049	086	164	1258	587	436	057	243	060	02	2954
Idukki	010	001	077	102	123	1380	1235	614	126	345	091	02	4104
Kochi	000	000	031	080	126	1321	649	566	028	401	122	04	3328
Thrissur	004	000	002	081	092	1087	953	630	061	316	166	00	3393
Palakkad	012	000	004	091	049	612	842	374	072	239	108	00	2402
Kozhikode	000	000	003	098	069	1169	995	602	016	257	056	00	3265
Malappuram	000	000	-	116	059	992	951	469	032	269	110	02	3000
Wayanad	000	011	012	109	125	796	1036	407	053	179	065	00	2792
Kannur	000	000	008	031	170	1052	1317	614	062	233	080	00	3569
Kasaragod	000	000	000	022	128	1232	1239	574	095	128	013	00	3430
State	**23.4**	**12.0**	**39.7**	**97.5**	**119.0**	**1084.1**	**836.6**	**470.6**	**49.8**	**290.6**	**99.9**	**6.3**	**3104.6**

Source - Metrological Centre, Thiruvananthapuram.

Table - 3.3

Station-wise Average Monthly Rainfall (m.m) - Year 1992

District	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	39	0	0	18	248	653	291	165	195	447	336	11	2403
Kollam	1	2	2	67	316	609	539	287	360	551	507	12	3253
Alappuzha	0	3	0	13	369	655	667	399	302	354	340	10	3112
Pathanamthitta	9	6	0	60	318	582	665	393	311	463	478	7	3292
Kottayam	0	0	0	47	361	829	776	482	262	313	294	17	3381
Idukki	0	1	0	121	254	935	1026	553	354	316	230	4	3794
Ernakulam	0	1	0	36	308	826	891	495	363	326	279	6	3531
Thrissur	0	2	0	44	207	927	925	567	395	414	387	0	3868
Palakkad	0	0	0	31	88	561	629	391	216	173	244	1	2334
Kozhikode	0	0	0	65	195	966	954	600	283	287	263	0	3613
Malappuram	0	0	0	61	121	803	772	538	256	257	259	0	3067
Wayanad	0	0	0	42	137	1065	814	521	256	148	207	0	3190
Kannur	0	0	0	14	143	1184	986	863	316	223	396	0	4088
Kasaragod	0	0	0	7	101	791	1297	824	280	186	522	0	4008
State	**16.3**	**2.5**	**2**	**44.7**	**226.1**	**813.3**	**802.3**	**503.6**	**296.4**	**318.4**	**331.6**	**8.5**	**3353.1**

Source - Metrological Centre, Thiruananthapuram.

Table - 3.3

AGRICULTURAL STATISTICS - 1990-91

Classification of Area Under Land Utilisation

DIST.	Total Geographical area	Forest	Land put to non-agri. uses	Barren & uncultivable land	Permanent pastures & other grazing land	Land under misc. tree crops	Cultivable waste	Fallow other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area
1	2	3	4	5	6	7	8	9	10	11	12	13
TVM	218600	49861	20785	1262	2	150	686	560	813	144481	62574	207055
KLM	251838	81438	23887	591	17	197	609	608	1310	143181	79911	223092
PTA	268750	155214	10884	701	6	99	380	371	970	100125	27294	127419
ALP	136058	-	23546	271	5	191	2049	1612	2706	105678	68090	173768
KTM	219550	8141	21441	2162	32	167	922	2261	3107	181317	60568	241885
IDK	514962	260907	16788	13058	755	11161	22543	737	1447	187566	7275	194841
EKM	235319	8123	34090	1781	92	762	3308	1956	2944	182263	64523	246786
TSR	299390	103619	27485	1448	76	971	3175	3352	5314	153950	60505	214455
PKD	438980	136257	31908	9883	103	6818	22759	5481	8739	217032	122025	339057
MLPM	363230	103417	20983	5048	178	2043	10470	3951	7099	210041	64724	274765
KKD	233330	41386	20949	1861	74	2063	1552	943	1750	162752	52779	215531
WYD	212560	78787	6968	1395	73	2293	3541	1597	2170	115736	42576	158312
KNR	296797	48734	22521	6858	202	5118	5330	1500	3438	203096	58188	261284
KSGD	196133	5625	15146	11989	297	2342	17284	1537	2357	139556	2174	141730
TOTAL	**3885497**	**1081509**	**297381**	**58308**	**1912**	**34375**	**94608**	**26466**	**44164**	**2246774**	**773206**	**3019980**

Table - 3.3

AGRICULTURAL STATISTICS - 1991-92

Classification of Area Under Land Utilisation

(In Hectares)

DIST.	Total Geographical Area	Forest	Land put to non-agricultural area	Barren & Uncultivable land	Permanent pastures and other grazing land	Land undermise tree crops	Cultivable Waste	Fallow other than current fallow	Current fallow	Net area Sown	Area sown more than once	Total cropped area
1	2	3	4	5	6	7	8	9	10	11	12	13
TVM	218600	49861	20764	1089	33	102	644	578	768	144761	57494	202255
KLM	251838	81438	23939	485	17	204	468	602	1347	143338	74929	218267
PTA	268750	155214	10963	645	7	98	434	551	1261	99577	27986	127563
ALP	136058	-	23777	288	5	199	2127	1438	2982	105242	60751	165993
KTM	219550	8141	21861	1818	29	188	962	2146	3126	181279	54462	235741
IDK	514962	260907	16927	12144	672	11276	22028	860	1041	189107	15892	204999
EKM	235319	8123	34386	1795	85	695	3169	2057	2792	182217	64503	246720
TSR	299390	103619	27534	1377	67	748	3096	3111	5064	154774	56872	211646
PKD	438980	136257	32865	9487	91	7037	22798	5190	8026	217229	126143	343372
MLPM	363230	103417	21890	4964	135	2007	10162	4346	7458	208851	60120	268971
KKD	233330	41386	21063	1711	64	2040	1531	982	1713	162840	50339	213179
WYD	212560	78787	7188	1291	102	2172	3341	1572	2151	115956	60139	176095
KNR	296797	48734	23083	6350	250	5159	4848	1274	3602	203497	62061	265558
KSGD	196133	5625	15131	11692	222	2369	17184	2021	2590	139299	1458	140757
TOTAL	**3885497**	**1081509**	**301371**	**55136**	**1779**	**34294**	**92792**	**26728**	**43921**	**2247967**	**773149**	**3021116**

Table - 3.4

Area under crops 1990-91

(In hectares)

DIST.	Cereals and millets								Pulses including Tur				Total food grains
	Paddy				Jower	Ragi	Other cereals	Total cereals & millets					
	Autumn	Winter	Summer	Total					Autumn	Winter	Summer	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	10757	10603	317	21677	-	-	1	21678	109	447	2290	2846	24524
KLM	14562	15897	54	30513	3	4	-	30520	565	142	740	1447	31967
PTA	4232	5561	4441	14234	-	-	-	14234	21	45	127	193	14427
ALP	24964	18148	17563	60675	-	-	-	60675	27	65	246	338	61013
KTM	9977	9144	7136	26257	-	-	-	26257	99	88	1617	1804	28061
IDK	2068	3010	-	5078	-	-	67	5145	75	95	933	1103	6248
EKM	24800	27076	11202	63078	-	8	2	63088	254	92	1886	2232	65320
TSR	26030	34492	13516	74038	-	7	2	74047	933	98	198	1229	75276
PKD	73872	70745	1070	145687	4524	1243	1369	152823	1646	4585	564	6795	159618
MLPM	21324	26939	3671	51934	-	8	4	51946	354	86	354	794	52740
KKD	2975	7406	1681	12062	-	1	-	12063	223	173	428	824	12887
WYD	-	17272	3071	20343	-	-	2	20345	8	12	276	296	20641
KNR	12011	7297	274	19582	-	-	8	19590	28	1180	1408	2616	22206
KSGD	8506	4974	812	14292	-	1	-	14293	29	419	420	868	15161
Total (Kerala)	**236078**	**258564**	**64808**	**559450**	**4527**	**1272**	**1455**	**566704**	**4371**	**7527**	**11487**	**23385**	**590089**

(Table 3.4 contd)

DIST.	Sugar crops			Spices and Condiments										
	Sugar cane	Palm-yrah	Total	Pepper	Chil-lies	Ginger	Tur-meric	Carda-mam*	Areca-nut	Tama-rind	Clo-ves	Nut-meg	Chinn-amon	Total
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
TVM	8	422	430	4154	-	107	18	174	1886	1464	100	56	9	7968
KLM	120	28	148	8101	-	475	110	-	2082	966	55	69	10	11868
PTA	963	46	1009	5409	-	522	41	913	1332	307	89	174	13	8800
ALP	564	20	584	2316	-	105	15	-	1653	377	20	68	16	4570
KTM	148	359	507	10912	-	854	337	205	1349	328	228	398	30	14641
IDK	2768	164	2932	34759	-	1551	192	32110	1558	168	88	160	21	70607
EKM	19	274	293	6977	5	1943	603	-	3836	643	99	1567	52	15725
TSR	3	649	652	5657	-	174	83	-	5476	1792	64	425	18	13689
PKD	2981	5932	8913	2754	193	602	279	3839	2789	4664	5	42	77	15244
MLPM	14	1665	1679	7593	2	178	98	71	12135	2025	7	73	28	22210
KKD	3	336	339	15319	-	502	357	1194	6011	1100	20	56	43	24602
WYD	8	250	258	26528	-	6397	204	4350	1556	129	7	9	17	39197
KNR	17	220	237	31225	57	567	240	130	10885	821	5	94	98	44122
KSGD	9	68	77	6803	294	166	92	840	12269	215	1	60	-	20740
TOTAL (Kerala)	**7625**	**10433**	**18058**	**168507**	**551**	**14143**	**2669**	**43826**	**64817**	**14999**	**788**	**3251**	**432**	**313983**

*Spices Board figures relates 1990-91

(Table 3.4 contd)

DIST.	Fresh Fruits								Dry Fruits	Total fruits
	Jack	Mango	Banana	Other plan-tain	Pine-apple	Pappaya	Other fresh fruits	Total	Cashew nut	
1	29	30	31	32	33	34	35	36	37	38
TVM	6488	5578	651	4790	256	698	657	19118	3895	23013
KLM	6235	5719	1094	3848	236	793	421	18346	6764	25110
PTA	3040	1959	1197	2527	184	471	394	9772	1997	11769
ALP	2704	4921	497	2432	116	865	680	12215	6020	18235
KTM	3498	2766	2187	3515	645	722	543	13876	1052	14928
IDK	3188	1426	411	1641	188	379	419	7652	848	8500
EKM	4079	4389	2991	3122	1108	1245	581	17515	2499	20014
TSR	3663	6049	1842	4442	174	1353	787	18310	5637	23947
PKD	4067	7509	2782	3974	110	801	1012	20255	9507	29762
MLPM	7223	9271	3302	3633	278	1939	528	26174	16182	42356
KKD	9835	10386	1277	2847	261	1829	427	26862	4008	30870
WYD	5806	2854	1274	1596	63	194	382	12169	748	12917
KNR	9275	10328	1771	3528	1047	1078	614	27641	31725	59366
KSGD	1901	2325	823	1643	58	318	311	7379	24739	32118
STATE	**71002**	**75480**	**22099**	**43538**	**4724**	**12685**	**7756**	**237284**	**115621**	**352905**

(Table 3.4 contd)

DIST.	Vegetables									Total food crops
	Drumstick	Tubers	Sweet Potato	Tapioca				Other Vegeta-bles	Total Vegeta-bles	
				Autumn	Winter	Summer	Total			
1	39	40	41	42	43	44	45	46	47	48
TVM	2518	1782	57	13228	14934	4991	33153	1088	38598	94533
KLM	1844	6766	11	7719	22535	482	30736	351	39708	108801
PTA	712	4607	2	1362	8495	780	10637	625	16583	52588
ALP	1040	4911	6	1384	5488	594	7466	961	14384	98786
KTM	980	1891	2	886	11286	392	12564	1847	17284	75421
IDK	350	826	5	760	5629	101	6490	924	8595	96882
EKM	880	1781	37	1682	4330	678	6690	1914	11302	112654
TSR	978	1468	36	1116	2233	407	3756	1069	7307	120871
PKD	1358	2773	1435	4160	4470	1294	9924	4233	19723	233260
MLPM	1744	2033	537	3949	5510	2124	11583	2885	18782	137767
KKD	3556	1793	31	1343	1445	355	3143	416	8939	77637
WYD	302	1754	3	541	677	585	1803	537	4399	77412
KNR	1087	1052	109	1272	4170	673	6115	2039	10402	136333
KSGD	436	313	332	273	1924	236	2433	1627	5141	73237
STATE	**17785**	**33750**	**2603**	**39675**	**93126**	**13692**	**146493**	**20516**	**221147**	**1496182**

(Table 3.4 contd)

DIST.	Non-food crops														
	Oil seeds					Fibre, Drugs & Narcotics					Plantation crops				
	Ground nut	Sesa-mum	Coco-nut	Oth-ers	Total	Cot-ton	Betel leaves	Tuba-cco	Lemon grass	Total	Tea*	Coffee **	Rubber	Cocoa	Total
1	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
TVM	5	33	85581	115	85734	-	83	-	28	111	1007	275	22657	550	24489
KLM	-	1509	77874	150	79533	-	67	-	10	77	1362	378	30076	489	32305
PTA	-	51	27505	38	27594	-	82	-	7	89	-	-	43715	834	44549
ALP	-	2885	66664	148	69697	-	53	-	1	54	-	23	2901	848	3772
KTM	-	96	47217	105	47418	-	34	-	20	54	2009	1385	107937	4166	115497
IDK	-	146	14864	32	15042	-	1	-	1476	1477	23557	10834	34595	1418	70404
EKM	-	1289	66264	118	67671	-	64	-	109	173	2	274	60913	1398	62587
TSR	-	682	80856	178	81716	-	48	-	15	63	466	32	6861	398	7757
PKD	12812	687	38153	676	52328	10731	7	-	39	46	681	2292	24045	119	27137
MLPM	2	1797	102245	30	104074	-	585	-	23	608	174	-	20455	284	20913
KKD	-	25	122062	38	122125	-	17	-	173	190	-	-	11342	582	11924
WYD	-	130	4510	63	4703	-	1	-	1085	1086	5358	59564	4712	254	69888
KNR	-	65	91893	77	92035	-	7	-	320	327	-	-	23098	275	23373
KSGD	-	38	44334	51	44423	-	25	252	110	387	-	-	18308	286	18594
STATE	**12819**	**9433**	**870022**	**1819**	**894093**	**10731**	**1074**	**252**	**3416**	**4742**	**34616**	**75057**	**411615**	**11901**	**533189**

* Tea Board figures relates 1990.
** Coffee Board figures relates 1988-89.

(Table 3.4 contd)

Name of District	Fodder grass	Green manure crops	Other non-food crops	Total non-food crops	Total cropped area
1	64	65	66	69	68
Thiruvananthapuram	163	337	1688	112522	207055
Kollam	260	448	1668	114291	223092
Pathanamthitta	156	722	1721	74831	127419
Alappuzha	158	145	1156	74982	173768
Kottayam	263	320	2912	166464	241885
Idukki	268	174	10594	97959	194841
Ernakulam	75	151	3475	134132	246786
Thrissur	25	659	3364	93584	214455
Palakkad	107	1219	14229	105797	339057
Malappuram	12	4300	7091	136998	274765
Kozhikode	24	1301	2330	137894	215531
Wayanad	51	623	4549	80900	158312
Kannur	117	1081	8018	124951	261284
Kasaragod	52	900	4137	68493	141730
STATE	**1731**	**12380**	**66932**	**1523798**	**3019980**

Table - 3.4

Area under crops - 1991-92

(In Hectares)

DIST.	Cereals and Millets								Pulses including Tur				Total Food Grains
	Paddy				Jower	Ragi	Other Cereals	Total Cereals millets					
	Autumn	Winter	Summer	Total					Autumn	Winter	Summer	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	9618	9716	270	19604	-	-	-	19604	94	342	2446	2882	22486
KLM	13088	14441	90	27619	-	1	-	27620	501	124	818	1443	29063
PTA	3424	5255	4474	13153	-	-	-	13153	25	34	104	163	13316
ALP	18644	23041	14187	55872	-	-	-	55872	20	61	213	294	56166
KTM	5301	11198	7356	23855	-	-	-	23855	81	56	1789	1926	25781
IDK	1847	3004	-	4851	-	-	54	4905	58	62	1024	1144	6049
EKM	23599	25382	16020	65001	-	6	2	65009	216	54	1977	2247	67256
TSR	21244	33908	13913	69065	7	6	13	69091	802	69	187	1058	70149
PKD	77354	68261	1451	147066	5142	1615	1863	155686	1621	4579	510	6710	162396
MLPM	20789	25748	3824	50361	-	6	1	50368	387	67	411	865	51233
KKD	2658	7182	1695	11535	-	1	-	11536	178	141	375	694	12230
WYD	-	15497	4085	19582	1	-	3	19586	5	6	341	352	19938
KNR	13148	6791	394	20333	2	-	-	20335	19	982	1285	2286	22621
KSGD	8053	4557	820	13430	-	-	-	13430	34	450	373	857	14287
TOTAL	218767	253981	68579	541327	5152	1635	1936	550050	4041	7027	11853	22921	572971

(Table 3.4 contd)

DIST.	Sugar crops			Spices and Condiments										
	Sugar-cane	Palmi-rah	Total	Pepper	Chil-lies	Ginger	Turm-eric	Carda-mom*	Areca-nut	Tama-rind	Clo-ves	Nut-mag	Chinn-amon	Total
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
TVM	5	363	368	4427	1	95	13	174	1674	1303	84	54	9	7834
KLM	94	30	124	7869	-	456	124	-	1929	905	47	62	8	11400
PTA	795	49	844	4884	-	580	36	913	1207	292	87	184	11	8194
ALP	388	20	408	2018	-	155	17	-	1704	371	23	73	13	4374
KTM	134	385	519	10546	-	600	297	205	1307	325	231	434	37	13982
IDK	2115	177	2292	38070	-	1402	240	32108	1695	176	91	180	17	73979
EKM	13	282	295	6725	-	1945	596	-	3475	643	88	1621	37	15130
TSR	4	605	609	5747	-	162	94	-	5421	1865	62	461	16	13828
PKD	2648	5593	8241	3024	199	711	366	3685	2578	4757	4	40	57	15421
MLPM	20	1601	1621	7934	2	200	120	71	12114	2142	12	96	25	22716
KKD	-	331	331	15638	-	351	346	1194	6156	987	18	52	32	24774
WYD	5	286	291	30543	1	8053	164	4350	1785	142	6	11	15	45070
KNR	11	238	249	33570	43	514	255	130	11252	853	5	82	72	46776
KSGD	5	84	89	7131	285	176	70	840	11140	237	3	51	-	19933
TOTAL	**6237**	**10044**	**16281**	**178126**	**531**	**15400**	**2738**	**43670**	**63437**	**14998**	**761**	**3401**	**349**	**323411**

* Spices Board figures relates 1991-92.

(Table 3.4 contd)

DIST.	Fresh Fruits								Dry Fruits	Total fruits
	Jack	Mango	Bananas	Other Plantain	Pineapple	Pappaya	Oth.Fresh Fruits	Total	Cashew-nut	
1	29	30	31	32	33	34	35	36	37	38
TVM	6012	5786	706	4345	217	639	555	18260	3658	21918
KLM	6129	5851	1030	3958	224	834	450	18476	6261	24737
PTA	2876	1869	1088	2406	177	502	395	9313	1818	11131
ALP	2624	5051	428	2231	99	865	569	11867	6396	18263
KTM	3640	2442	2370	3251	717	785	509	13714	1011	14725
IDK	3373	1603	462	1772	222	392	366	8190	764	8954
EKM	3751	4060	3276	2975	1443	1118	548	17171	2437	19608
TSR	3932	5670	1685	4402	164	1263	739	17855	5549	23404
PKD	4011	7380	3070	3854	92	828	783	20018	9096	29114
MLPM	7747	9880	3380	3166	303	1854	611	26941	15135	42076
KKD	9549	10088	1173	2625	215	1617	369	25636	4028	29664
WYD	6839	3263	1396	1625	52	231	333	13739	775	14514
KNR	9767	11382	1802	402	879	1181	496	29528	31241	60769
KSGD	1989	2350	736	1856	66	348	246	7571	23890	31461
TOTAL	**72239**	**76675**	**22602**	**42467**	**4870**	**12457**	**6969**	**238279**	**112059**	**350338**

(Table 3.4 contd)

DIST.	Drum-stick	Tubers	Sweet Potato	Vegitables Tapioca Autumn	Winter	Summer	Total	Other ve-gitables	Total ve-gitables	Total Food Crops
1	39	40	41	42	43	44	45	46	47	48
TVM	2391	1732	65	12849	13821	5270	31940	1168	37296	89902
KLM	1869	6343	5	7299	23932	528	31759	424	40400	105724
PTA	658	4858	1	1294	7697	636	9627	673	15817	49302
ALP	1075	4504	19	1311	5015	554	6880	1150	13628	92839
KTM	1023	1849	-	891	10304	425	11620	2151	16643	71650
IDK	383	876	16	808	4966	94	5868	1058	8201	99475
EKM	834	1542	28	1916	3789	681	6386	1725	10515	112804
TSR	1004	1291	18	1017	1907	436	3368	1174	6847	114837
PKD	1431	2922	1299	3785	5071	1396	10252	4669	20573	235745
MLPM	1875	2243	471	3543	5118	1974	10627	3148	18364	136010
KKD	3558	1642	26	1459	1537	392	3388	351	8965	75964
WYD	359	1854	6	489	616	520	1625	583	4427	84240
KNR	1191	1121	90	1139	4574	673	6386	1902	10690	141105
KSGD	459	289	413	244	1720	199	2163	1567	4891	70661
TOTAL	18110	33066	2457	38044	90059	13778	141881	21743	217257	1480258

(Table 3.4 contd)

DIST.	Non-Food Crops														
	Oil Seeds					Fibre	Drugs & Narcotics				Plantation Crops				
	Ground nut	Sesa mum	Coco nut	Oth-ers	Total	Cot-ton	Betal leaves	Toba cco	Lemon grass	Total	Tea *	Coffee **	Rubber	Cocoa	Total
1	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
TVM	1	20	82907	105	83033	-	71	-	23	94	1015	-	25420	472	26907
KLM	-	1382	75454	128	76964	-	67	-	7	74	1362	-	31146	372	32880
PTA	-	46	26850	36	26932	-	82	-	5	87	-	-	47705	833	48538
ALP	-	2709	65254	133	68096	-	53	-	1	54	-	-	2781	700	3481
KTM	-	100	46012	61	46173	-	28	-	15	43	2025	-	108851	3108	113984
IDK	-	142	16356	26	16524	-	2	-	1058	1060	23541	12588	36772	1459	74360
EKM	-	1268	64359	85	65712	-	48	-	79	127	2	-	63406	1206	64614
TSR	-	607	84789	182	85578	-	37	-	11	48	466	-	6753	326	7545
PKD	14040	589	37090	790	52509	11922	8	-	48	56	688	2290	24893	97	27968
MLPM	-	1896	99535	45	101476	-	616	-	15	631	174	-	19709	222	20105
KKD	-	19	122193	26	122238	-	20	-	123	143	-	-	11115	454	11569
WYD	-	145	5347	43	5535	-	1	-	824	825	5350	69138	5177	240	79905
KNR	-	53	90113	82	90248	-	9	-	182	191	-	-	24354	237	24591
KSGD	-	30	46802	42	46874	-	27	204	67	298	-	-	17686	230	17916
TOTAL	**14041**	**9006**	**863061**	**1784**	**887892**	**11922**	**1069**	**204**	**2458**	**3731**	**34623**	**84016**	**425768**	**9956**	**554363**

* Tea Board figures relates.
** Coffee Board figures relates 1991-92.

(Table 3.4 contd)

Name of District	Fodder grass	Green manure crops	Other non-food crops	Other non-food crops	Total cropped area
1	64	65	66	67	68
Thiruvananthapuram	124	358	1837	112353	202255
Kollam	325	524	1776	112543	218267
Pathanamthitta	121	724	1859	78261	127563
Alappuzha	142	113	1268	73154	165993
Kottayam	226	339	3326	164091	235741
Idukki	253	146	13181	105524	204999
Ernakulam	60	153	3250	133916	246720
Thrissur	17	522	3099	96809	211646
Palakkad	117	1254	13801	107627	343372
Malappuram	11	4207	6531	132961	268971
Kozhikode	20	1077	2168	137215	213179
Wayanad	37	608	4945	91855	176095
Kannur	123	996	8304	124453	265558
Kasaragod	60	758	4190	70096	140757
STATE	**1636**	**11779**	**69535**	**1540858**	**3021116**

Table - 3.5

Production of Important Crops - 1990-91

(In Tonnes)

DIST.	Rice				Jower	Ragi	Other cereals	Pulses	Sugar cane (Gur)	Black pepper	Dry chillies	Dry Ginger	Cured Turmeric
	Autumn	Winter	Summer	Total									
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	22038	15941	384	38363	2	-	1	653	42	1101	-	333	11
KLM	30732	27602	51	58385	-	3	-	1199	633	2912	-	1200	200
PTA	8006	10976	14244	33226	-	-	-	149	6594	1585	-	1819	108
ALP	51556	37539	42568	131663	-	-	-	294	2989	274	-	182	28
KTM	21303	21066	20350	62719	-	-	-	1581	846	2002	-	2384	908
IDK	4556	6397	-	10953	-	-	72	913	17964	14096	-	5734	454
EKM	43311	41841	17537	102689	-	8	1	1598	123	1276	5	5459	770
TSR	41746	60606	26935	129287	-	5	2	879	16	1070	-	375	139
PKD	170696	152559	1652	324907	2303	1021	1043	5119	22503	345	207	1236	515
MLPM	30904	41996	7930	80830	-	3	3	589	73	1415	2	921	168
KKD	3207	9187	2440	14834	-	1	-	626	16	3391	-	1366	546
WYD	-	34872	7102	41974	-	-	2	226	42	7577	-	23019	573
KNR	20224	11714	370	32308	-	-	7	2041	89	7897	54	1842	589
KSGD	14746	8359	1335	24440	-	1	-	677	47	1861	276	415	114
STATE	**463025**	**480655**	**142898**	**1086578**	**2305**	**1042**	**1131**	**16544**	**51977**	**46802**	**544**	**45685**	**5123**

(Table 3.5 contd)

DIST.	Ground nut	Betal nut (million nut)	Tama-rind	Mango	Jack ('000 nos.)	Banana	Other Plan-tain	Pine-apple	Tapioca	Sweet Potato	Pappaya	Drum-stick
1	15	16	17	18	19	20	21	22	23	24	25	26
TMV	4	276	4635	5052	18485	9055	23909	2323	554956	288	3938	3777
KLM	-	351	2894	17759	22272	13996	16006	3088	525798	53	689	3370
PTA	-	291	1053	5228	11689	15949	16732	2002	243211	12	3133	732
ALP	-	165	1147	11004	6551	6214	10642	1115	121342	37	4514	1160
KTM	-	202	909	3527	14632	28537	21466	5959	308319	16	4903	537
IDK	-	479	319	2354	15978	6483	14395	1932	185688	41	758	460
EKM	-	626	2451	11487	14331	41233	14557	9685	150091	290	5167	690
TSR	-	1204	3954	2668	14761	27132	15290	1680	71478	210	5807	1329
PKD	9522	392	10376	54698	11987	37158	12499	1185	187468	11487	5943	1806
MLPM	1	2265	4585	39834	23214	38466	13304	2808	217675	4590	11831	1824
KKD	-	861	951	33615	24162	16119	10648	3408	45882	173	898	1417
WYD	-	280	58	3344	18441	18010	7922	219	50553	15	1507	243
KNR	-	2811	2240	41207	59860	24971	12809	10179	115832	1086	5339	830
KSGD	-	2871	869	9277	9680	11822	6611	682	24708	3313	1572	653
STATE	**9527**	**13074**	**36441**	**241054**	**266043**	**295145**	**196790**	**46265**	**2803001**	**21611**	**55999**	**18828**

(Table 3.5 contd)

DIST.	Sesa-mum	Coconut (million nuts)	Cotton (Bale of 170 Kg)	Nutmeg	Toba-cco	Lemon Grass	Tea *	Coffee **	Rubber ***	Cocoa @	Processed Cardamom	Raw Cashew nuts
1	27	28	29	30	31	32	33	34	35	36	37	38
TVM	7	453	-	56	-	1	744	-	14652	247	4	3299
KLM	459	364	-	46	-	1	423	-	32092	179	-	6032
PTA	20	145	-	161	-	1	-	-	25681	533	20	1521
ALP	450	295	-	26	-	1	-	-	4370	688	-	2263
KTM	23	195	-	564	-	2	324	-	73854	2145	7	336
IDK	42	63	-	224	-	99	46697	3990	24479	619	2935	555
EKM	398	346	-	4141	-	13	-	-	34148	533	-	1117
TSR	135	465	-	241	-	1	1503	-	11001	109	-	2526
PKD	184	130	17320	26	-	7	1697	860	14660	58	230	3750
MLPM	293	456	-	123	-	1	-	-	19990	102	3	11408
KKD	5	644	-	18	-	3	-	-	19617	95	-	2254
WYD	31	6	-	15	-	18	9250	16060	2586	94	247	214
KNR	12	436	-	192	-	9	-	-	17474	115	2	43881
KSGD	4	234	-	86	472	3	-	-	12917	98	2	23615
STATE	**2063**	**4232**	**17320**	**5919**	**472**	**160**	**60638**	**20910**	**307521**	**5615**	**3450**	**102771**

* Tea Board figures relates 1990. ** Coffee Board figures. *** Rubber Board figures.
@ Spices Board figures.

Table - 3.5

Production of important crops 1991-92

(In tonnes)

DIST.	RICE				CEREALS			Pulses	Sugar cane (gur)	Black Pepper	Dry Chil-lies	Dry Ginger	Cured Tur-meric
	Autumn	Winter	Summer	Total	Jower	Ragi	Others						
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	16892	16279	382	33553	-	-	-	661	26	949	1	296	8
KLM	22536	23449	101	46086	-	1	-	1196	496	2388	-	1152	225
PTA	6168	10638	13711	30517	-	-	-	126	5444	1708	-	2021	95
ALP	21725	57879	36485	116089	-	-	-	256	2056	233	-	269	32
KTM	9024	26494	19648	55166	-	-	-	1688	766	1742	-	1675	800
IDK	3894	7038	-	10932	-	-	42	947	13726	14437	-	5183	567
EKM	38502	43871	27111	109484	-	5	2	1609	84	1264	-	5465	761
TSR	32115	59758	29850	121723	4	5	10	757	21	958	-	349	157
PKD	179871	162459	2408	344738	2617	1306	1448	5055	19989	382	213	1460	676
MLPM	32022	39734	8590	80346	-	5	1	642	104	1424	2	361	206
KKD	2498	8594	2689	13781	-	1	-	527	-	3501	-	955	529
WYD	-	34410	8393	42803	1	-	2	269	26	10954	1	28978	461
KNR	21169	9590	490	31249	1	-	-	1784	58	8839	41	1670	626
KSGD	15194	7332	1357	23883	-	-	-	668	26	1530	268	440	84
TOTAL	**401610**	**507525**	**151215**	**1060350**	**2623**	**1323**	**1505**	**16185**	**42822**	**50309**	**526**	**50274**	**5230**

(Table 3.5 contd)

DIST.	Ground nut	Betal nut (million nuts)	Tama-rind	Mango	Jack (000 nos.)	Banana	Other plantain	Pine-apple	Tapioca	Sweet Potato	Pappaya	Drum-stick
1	15	16	17	18	19	20	21	22	23	24	25	26
TVM	1	214	4242	5240	19635	10194	21952	1969	547827	450	3605	3587
KLM	-	339	2784	18169	25604	11519	17478	2931	578768	50	725	3416
PTA	-	332	897	4988	13327	14141	17314	1926	203553	3	3339	676
ALP	-	209	1138	11295	7367	5127	9444	952	111621	48	4514	1199
KTM	-	191	847	3114	18324	33472	20546	6624	275484	-	5331	561
IDK	-	498	360	2646	17938	7541	14970	2281	158312	155	784	503
EKM	-	603	2253	10626	17402	43849	14822	12613	134666	275	4640	654
TSR	-	1475	4205	2501	16554	25441	13631	1583	55844	166	5421	1364
PKD	10435	338	11074	53758	15399	38549	13215	991	198969	9540	6143	1903
MLPM	-	2341	5314	42451	27311	41559	12734	3061	175130	4083	11312	1961
KKD	-	1045	902	32650	23966	14434	8627	2807	40743	170	794	1418
WYD	-	343	67	3823	20680	21658	9200	181	43413	35	1794	289
KNR	-	2651	2312	45412	64754	24801	12497	8546	105284	873	5849	909
KSGD	-	2537	981	9377	11178	10805	6885	776	28251	4103	1720	687
STATE	**10436**	**13116**	**37376**	**246050**	**299439**	**303090**	**193315**	**47241**	**2657865**	**19951**	**55971**	**19127**

(Table 3.5 contd)

DIST.	Sesa-mum	Coconut (million nuts)	Cotton (Bale of 150 Kg)	Nut-meg	Toba-cco	Lemon grass	Tea *	Coffee **	Rubber ***	Cocoa	Processed Cardamom @	Raw Cashew-nuts
1	27	28	29	30	31	32	33	34	35	36	37	38
TVM	2	521	-	81	-	1	712	-	19782	246	7	3552
KLM	398	343	-	41	-	1	470	-	29623	186	-	5643
PTA	15	135	-	228	-	1	-	-	38691	518	20	1199
ALP	396	306	-	39	-	-	-	-	2470	622	-	2747
KTM	22	217	-	647	-	2	215	-	89895	1600	9	404
IDK	49	72	-	340	-	71	51125	2260	29248	945	3000	471
EKM	370	370	-	4435	-	9	-	-	43308	603	-	1369
TSR	162	546	-	361	-	1	1614	-	10152	102	-	3537
PKD	192	137	19242	38	-	9	1746	1050	15312	68	225	4032
MLPM	321	500	-	158	-	1	-	-	16266	67	3	9852
KKD	5	751	-	23	-	2	-	-	14031	154	-	3276
WYD	36	6	-	21	-	14	10198	16730	2426	73	183	372
KNR	15	499	-	141	-	5	-	-	18304	101	1	50232
KSGD	3	238	-	88	382	2	-	-	13601	66	2	17915
TOTAL	**1986**	**4641**	**19242**	**6641**	**382**	**119**	**66080**	**20040**	**343109**	**5351**	**3450**	**104601**

* Tea Board figures relates 1991. ** Coffee Board figures relates 91-92.
*** Rubber Board figures relates 91-92. @ Spices Board figures relates 91-92.
# Refers the travancore area.

Table - 3.6

Net area irrigated (Source-wise) 1990-91

(In Hectare)

Name of District	Govt. Canal	Private Canal	Govt. Tanks	Private Tanks	Govt. Wells	Private Wells	Minor & lift Irrigation	Other Sources	Total
1	2	3	4	5	6	7	8	9	10
Thiruvananthapuram	4383	242	653	214	15	571	672	1385	8135
Kollam	290	27	44	81	12	390	104	655	1603
Pathanakthitta	491	223	7	95	30	225	202	2802	4075
Alappuzha	1888	8	54	17049	16	1395	2572	3533	26515
Kottayam	3196	196	249	255	19	288	468	2621	7292
Idukki	612	27	46	146	8	29	330	1934	3132
Ernakulam	20920	106	342	1984	263	11402	8013	9505	52535
Thrissur	19197	803	595	10870	221	17625	4760	18599	72670
Palakkad	49885	212	240	5252	62	9368	1164	6778	72961
Malappuram	771	869	32	4624	23	9738	2976	12837	31870
Kozhikode	2023	56	118	287	17	817	760	856	4934
Wayanad	83	84	6	25	6	19	48	4050	4321
Kannur	220	474	59	492	27	4447	42	8013	13774
Kasaragod	306	364	69	5064	26	8619	292	14812	29552
State	**104265**	**3691**	**2514**	**46438**	**745**	**64933**	**22403**	**88380**	**333369**

Table - 3.6

Net area irrigated (source-wise) 1991-92

(In hectares)

Name of District	Govt. canal	Private canal	Govt. Tanks	Private Tanks	Govt. Wells	Private Wells	Minor & Lift irrigation	Other sources	Total
1	2	3	4	5	6	7	8	9	10
Thiruvananthapuram	4256	248	562	197	10	588	613	1228	7702
Kollam	212	30	59	57	16	359	134	423	1290
Pathanamthitta	521	142	7	109	31	266	209	2731	4016
Alappuzha	2178	14	52	17099	19	1155	2521	3460	26498
Kottayam	2918	273	240	277	20	327	1119	2696	7870
Idukki	590	24	42	227	7	29	214	2026	3159
Ernakulam	20187	95	313	1898	232	10406	9013	9848	51992
Thrissur	17805	749	591	10601	290	17306	4837	18543	70722
Palakkad	50180	259	257	4761	47	10393	1407	6814	74118
Malappuram	918	820	79	4538	20	9501	2759	13030	31665
Kozhikode	2362	68	120	257	13	936	721	956	5433
Wayanad	98	96	15	19	4	14	34	4131	4411
Kannur	213	415	78	550	35	4159	36	8376	13862
Kasaragod	310	352	63	5075	19	8445	279	15876	30419
TOTAL	**102748**	**3585**	**2478**	**45665**	**763**	**63884**	**23896**	**90138**	**333157**

Table - 3.7

Gross area under irrigation (crop-wise) 1990-91

(In hectares)

DIST.	Paddy	Tubers	Vegetables	Coconut	Arecanut	Cloves and Nutmeg	Other Spices & Condiments	Banana	Betal leaves	Sugar cane	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
TVM	6796	21	497	819	4	10	26	568	53	1	706	9501
KLM	300	13	218	337	5	2	20	138	54	-	602	1689
PTA	6575	10	186	179	7	9	2	145	62	70	61	7306
ALP	5675	596	497	21171	195	82	324	82	62	45	2638	31367
KTM	10368	6	431	171	1	96	17	281	20	2	560	11953
IDK	1959	2	3	43	1	14	137	5	-	748	369	3281
EKM	43623	8	262	12673	765	565	41	1729	6	-	649	60321
TSR	45227	59	211	31014	4072	13	236	1032	36	-	552	82452
PKD	67573	12	779	6483	1861	9	404	1407	24	1292	2349	82193
MLPM	19213	102	913	5956	3327	19	79	1696	549	10	715	32579
KKD	1652	9	303	1011	318	1	1	746	11	1	1012	5065
WYD	4148	2	68	38	4	-	-	32	-	-	139	4431
KNR	6078	33	609	6088	2228	8	-	1697	7	11	659	17418
KSGD	4627	12	789	18906	7420	-	74	999	24	-	905	33756
STATE	**223814**	**885**	**5766**	**104889**	**20208**	**828**	**1361**	**10557**	**908**	**2180**	**11916**	**383312**

Table - 3.7

Gross area under irrigation (crop-wise) 1991-92

(In hectares)

DIST.	Paddy	Tubers	Vegetables	Coconut	Arecanut	Cloves and Nutmeg	Other Spices & Condiments	Banana	Betal leaves	Sugar cane	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
TVM	5143	21	449	880	22	10	7	598	61	-	705	7896
KLM	567	16	308	355	64	8	9	72	45	-	520	1964
PTA	7634	3	190	118	3	13	-	147	57	38	40	8243
ALP	6121	508	593	20882	277	69	212	108	55	45	2338	31208
KTM	8409	4	452	225	7	104	44	109	19	7	590	9970
IDK	2131	2	1	24	1	16	178	-	-	789	478	3620.
EKM	47370	7	237	13103	753	573	38	1042	6	-	627	63756
TSR	44825	49	310	29015	3179	68	395	1076	17	-	738	79672
PKD	67505	9	677	6643	1982	18	273	1402	9	1254	2467	82239
MLPM	20804	95	771	6036	3717	4	64	1916	527	3	832	34769
KKD	1966	8	248	1106	271	-	-	1038	7	-	1020	5664
WYD	5275	2	80	20	7	-	-	35	-	-	117	5536
KNR	6654	27	634	6383	2843	7	-	1643	10	11	720	18932
KSGD	4332	18	849	18973	7761	-	174	941	19	-	875	33942
TOTAL	**228736**	**769**	**5799**	**103763**	**20887**	**890**	**1394**	**10127**	**832**	**2147**	**12067**	**387411**

Table - 3.8

District-wise distribution of operational holdings according to size 1985-86

DIST.	0.02 0.99	%	1.00 1.99	%	2.00 3.99	%	4.00 9.99	%	10.00 & above	%	Total	%
1	2	3	4	5	6	7	8	9	10	11	12	13
TVM	426193	10.67	11784	4.17	2844	2.73	558	2.27	104	2.56	441483	10.01
KLM	375926	9.41	11439	4.05	2209	2.12	274	1.10	103	2.54	389951	8.85
PTA	209112	5.24	14452	5.12	3363	3.23	487	1.98	66	1.62	227480	5.16
ALP	316648	7.93	12428	4.40	3530	3.39	854	3.47	122	3.00	333582	7.57
KTM	243377	6.09	26550	9.40	12441	11.94	2855	11.60	473	11.64	285696	6.48
IDK	131258	3.29	30549	10.82	8097	7.77	1915	7.78	1388	34.17	173207	3.93
EKM	371733	9.31	20803	7.37	7168	6.88	1413	5.76	84	2.07	401201	9.10
TSR	391965	9.82	21535	7.63	5926	5.69	990	4.02	162	3.99	420578	9.54
PKD	302793	7.58	30408	10.77	15349	14.72	4900	19.90	476	11.72	353926	8.03
MLPM	372870	9.34	21768	7.71	8861	8.50	2113	8.58	194	4.78	405806	9.21
KKD	373665	9.36	17982	6.37	5888	5.65	992	4.03	170	4.19	398697	9.04
WYD	74116	1.86	15072	5.34	8258	7.92	2173	8.83	460	11.32	100079	2.27
KNR	276419	6.92	30431	10.78	14093	13.51	3547	14.40	120	2.95	324610	7.36
KSGD	127164	3.18	17136	6.07	6200	5.95	1549	6.28	140	3.45	152189	3.45
STATE	**3993239**	**100.00**	**282337**	**100.00**	**104227**	**100.00**	**24620**	**100.00**	**4062**	**100.00**	**4408485**	**100.00**

Table - 3.9

Average Farm Prices of certain Commodities - 1990-91

Name of District	Paddy Qtl	Coconut 100 Nos	Arecanut 100 Nos	Tapioca Qtl	Cashew Qtl	Banana 100 Nos	Pepper Qtl	Ginger Qtl	Sugarcane MT
1	2	3	4	5	6	7	8	9	10
Thiruvananthapuram	331.69	275.58	25.35	132.50	1292.50	92.48	3109.38	2900.00	-
Kollam	301.26	297.17	28.41	131.77	1332.50	89.04	3124.93	2618.75	-
Pathanamthitta	296.53	305.15	27.55	151.08	1320.21	84.83	3230.28	2596.88	277.01
Alappuzha	296.60	306.20	27.23	134.34	1275.56	81.94	2933.33	-	275.00
Kottayam	282.31	315.33	25.01	166.04	1257.29	81.61	3233.06	2556.39	-
Idukki	332.40	337.29	26.74	174.64	1314.06	82.67	3282.87	2408.33	462.50
Ernakulam	311.21	333.72	26.16	151.27	1416.92	64.06	3253.90	2630.44	-
Thrissur	276.60	308.04	31.81	159.00	1458.33	77.81	3241.04	-	-
Palakkad	282.43	295.75	26.56	109.86	1362.50	66.69	3200.59	2520.63	300.00
Malappuram	269.74	286.93	29.90	144.33	1470.83	64.87	3229.69	-	-
Kozhikode	338.23	275.12	21.27	163.75	1420.00	76.60	3306.04	2595.83	-
Wayanad	276.32	287.85	20.63	139.79	1390.00	51.32	3260.38	2302.08	-
Kannur	313.33	295.00	18.80	165.38	1515.00	67.44	3293.89	2462.19	-
Kasaragod	285.83	298.02	34.21	185.83	1492.86	74.40	3279.17	2216.67	-
STATE	**299.61**	**301.23**	**26.40**	**150.68**	**1379.90**	**75.41**	**3212.75**	**2528.02**	**328.63**

Table - 3.9

Average Farm Prices of Important Commodities - 1991-92

Name of District	Paddy Qtl	Coconut 100 Nos	Arecanut 100 Nos	Tapioca Qtl	Cashew Qtl	Banana 100 Nos	Pepper Qtl	Ginger Qtl	Sugarcane MT
1	2	3	4	5	6	7	8	9	10
Thiruvananthapuram	386.60	358.44	32.74	157.24	2075.00	97.97	2881.25	-	-
Kollam	373.33	384.38	32.39	138.89	2069.40	91.50	2964.76	2169.64	-
Pathanamthitta	352.79	393.38	32.74	166.88	2092.78	86.46	2943.02	2281.25	295.63
Alapuzha	385.00	401.59	29.57	137.12	1975.50	84.83	2458.33	-	-
Kottayam	368.49	412.29	28.68	170.60	2072.00	91.89	2915.88	2172.08	-
Idukki	389.38	433.44	27.42	153.58	1873.96	79.23	2931.30	2112.15	405.00
Ernakulam	384.74	438.37	30.89	153.58	2012.50	76.12	2968.88	2208.84	-
Thrissur	366.76	380.25	38.16	161.54	2110.00	90.28	2957.54	-	-
Palakkad	359.38	360.83	30.25	125.85	2159.17	72.63	2974.83	2161.46	314.00
Malappuram	366.67	364.69	34.67	141.53	2194.45	72.40	2961.81	-	-
Kozhikode	393.29	375.10	28.31	171.95	2193.33	82.61	2994.97	2253.13	-
Wayanad	367.15	396.87	27.43	147.92	1980.00	57.21	2957.99	2109.38	-
Kannur	374.51	398.06	25.73	189.69	2316.67	71.04	2953.72	2090.64	-
Kasaragod	378.54	408.65	38.13	197.92	2183.33	76.56	2988.54	1878.57	-
STATE	**374.77**	**393.31**	**31.22**	**158.16**	**2093.44**	**80.77**	**2918.06**	**2143.71**	**338.21**

Table - 3.10

Other Agricultural Wages 1990-91

Skilled Labour

1) Carpenter (in Rupees)

DIST.	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	50.00	50.00	50.00	52.50	52.50	52.50	52.50	52.50	52.50	52.50	52.50	52.50	51.88
KLM	55.00	55.00	55.00	55.00	55.00	57.50	57.50	57.50	57.50	57.50	57.50	57.50	56.46
ALP	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
KTM	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00
EKM	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50
TSR	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
PKD	44.00	44.00	44.00	44.00	44.00	44.00	44.00	45.00	45.00	45.00	45.00	47.50	44.60
MLPM	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	55.00	50.42
KKD	57.50	57.50	57.50	57.50	59.00	59.00	59.00	59.00	60.00	60.00	60.00	60.00	58.83
KNR	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
STATE AVERAGE													**54.47**

2) Mason (in Rs.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	47.50	47.50	47.50	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	49.38
KLM	55.00	55.00	55.00	55.00	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	56.67
ALP	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
KTM	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00
EKM	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50	57.50
TSR	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
PKD	41.50	41.50	41.50	41.50	40.00	41.50	41.50	42.50	42.50	42.50	42.50	45.00	42.00
MLPM	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	55.00	50.42
KKD	57.50	57.50	57.50	57.50	59.00	59.00	59.00	59.00	60.00	60.00	60.00	60.00	58.83
KNR	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
STATE AVERAGE													**53.98**

(Table 3.10 contd)

Paddy Field Labour

1) Men

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	32.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.08
KLM	32.50	32.50	32.50	32.50	32.50	32.50	35.00	35.00	35.00	35.00	35.00	35.00	33.75
ALP	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	35.50	33.21
KTM	32.50	32.50	32.50	32.50	32.50	35.00	35.00	35.00	35.00	35.00	35.00	35.00	33.96
EKM	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
TSR	37.50	37.50	37.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	39.75
PKD	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	25.00	22.71
MLPM	35.00	37.50	37.50	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	37.50	35.63
KKD	37.00	37.00	37.00	39.50	39.50	39.50	39.50	42.50	42.50	42.50	42.50	42.50	40.13
KNR	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00
STATE AVERAGE													**35.77**

2) Women

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	27.50	27.50	27.50	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	28.63
KLM	20.00	20.00	20.00	20.00	20.00	20.00	20.00	21.00	21.00	21.00	21.00	22.50	20.54
ALP	16.00	16.00	16.00	16.00	16.00	16.00	16.00	17.00	17.00	17.00	17.00	17.00	16.42
KTM	16.75	16.75	16.75	16.75	16.75	16.75	16.75	18.50	18.50	18.50	18.50	21.00	17.69
EKM	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	24.00	22.63
TSR	20.50	20.50	20.50	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	23.50	21.75
PKD	12.50	12.50	12.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	14.00	13.29
MLPM	21.00	21.00	21.00	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	25.00	22.33
KKD	27.00	27.00	27.00	27.00	27.00	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.29
KNR	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50
STATE AVERAGE													**21.11**

(Table 3.10 contd)

Other Agricultural Labour 1990-91

1) Men

DIST.	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	35.00	35.00	35.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	38.75
KLM	32.50	32.50	32.50	32.50	32.50	32.50	35.00	35.00	35.00	35.00	35.00	35.00	33.75
ALP	35.00	35.00	35.00	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	36.88
KTM	30.00	30.00	30.00	30.00	32.50	32.50	32.50	32.50	32.50	32.50	32.50	35.00	31.88
EKM	40.00	40.00	40.00	40.00	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	41.67
TSR	38.00	38.00	38.00	40.50	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	40.21
PKD	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	25.00	22.71
MLPM	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	42.50	37.92
KKD	37.00	37.00	37.00	37.00	39.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	40.42
KNR	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00
STATE AVERAGE													**36.82**

2) Women

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	30.00	30.00	30.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	33.75
KLM	25.00	25.00	25.00	25.00	25.00	25.00	26.00	26.00	26.00	26.00	26.00	27.50	25.63
ALP	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
KTM	24.00	24.00	24.00	24.00	27.50	27.50	27.50	30.00	30.00	30.00	30.00	30.00	27.38
EKM	27.50	27.50	27.50	27.50	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	29.17
TSR	21.50	21.50	21.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.25
PKD	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	13.50	12.81
MLPM	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
KKD	27.00	27.00	27.00	27.00	27.00	27.50	27.50	27.50	27.50	27.50	27.50	30.00	27.50
KNR	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
STATE AVERAGE													**26.35**

(Table 3.10 contd)

Skilled Labour

1) Carpenter

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	52.50	55.00	55.00	55.00	55.00	55.00	57.50	57.50	57.50	57.50	57.50	57.50	56.04
KLM	57.50	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	62.50	62.50	60.21
ALP	55.00	57.50	60.00	60.00	60.00	60.00	60.00	62.50	62.50	62.50	67.50	67.50	61.25
KTM	60.00	60.00	60.00	60.00	60.00	60.00	67.50	70.00	70.00	70.00	70.00	70.00	64.79
EKM	57.50	57.50	57.50	57.50	57.50	57.50	60.00	60.00	62.50	62.50	62.50	62.50	59.58
TSR	55.00	55.00	55.00	55.00	55.00	55.00	55.00	62.50	62.50	62.50	62.50	62.50	58.13
PKD	47.50	47.50	47.50	47.50	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	49.17
MLPM	55.00	55.00	55.00	55.00	55.00	55.00	55.00	57.50	57.50	57.50	57.50	60.50	56.29
KKD	60.00	60.00	60.00	60.00	60.00	60.00	60.00	69.00	69.00	69.00	69.00	69.00	63.75
KNR	55.00	55.00	55.00	55.00	55.00	55.00	62.50	67.50	67.50	67.50	67.50	67.50	60.83
STATE AVERAGE													**59.00**

2) Mason

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	50.00	52.50	52.50	52.50	52.50	52.50	55.00	57.50	57.50	57.50	57.50	57.50	54.58
KLM	57.50	57.50	57.50	57.50	57.50	57.50	57.50	60.00	60.00	60.00	60.00	60.00	58.54
ALP	55.00	57.50	60.00	60.00	60.00	60.00	60.00	62.50	62.50	62.50	67.50	67.50	61.25
KTM	60.00	60.00	60.00	60.00	60.00	60.00	67.50	70.00	70.00	70.00	70.00	70.00	64.79
EKM	57.50	57.50	57.50	57.50	57.50	57.50	60.00	60.00	62.50	62.50	62.50	62.50	59.58
TSR	55.00	55.00	55.00	55.00	55.00	55.00	55.00	62.50	62.50	62.50	62.50	62.50	58.13
PKD	45.00	45.00	45.00	47.50	47.50	47.50	47.50	47.50	50.00	50.00	50.00	50.00	47.71
MLPM	55.00	55.00	55.00	55.00	55.00	55.00	55.00	57.50	57.50	57.50	57.50	60.50	56.29
KKD	60.00	60.00	60.00	60.00	60.00	60.00	60.00	69.00	69.00	69.00	69.00	69.00	63.75
KNR	55.00	55.00	55.00	55.00	55.00	55.00	62.50	67.50	67.50	67.50	67.50	67.50	60.83
STATE AVERAGE													**58.55**

(Table 3.10 contd)

Agricultural Wages 1991-92

Paddy Field Labour — 1) Men

DIST.	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	37.50	37.50	38.50	39.00	39.00	39.00	39.00	44.00	44.00	44.00	45.00	45.00	40.96
KLM	35.00	35.00	35.00	42.50	42.50	42.50	42.50	42.50	42.50	40.00	40.00	40.00	40.00
ALP	35.50	35.50	35.50	40.00	40.00	40.00	40.00	41.50	41.50	44.00	44.00	46.50	40.33
KTM	35.00	35.00	35.00	35.00	35.00	35.00	35.00	37.50	37.50	37.50	37.50	37.50	36.04
EKM	37.50	37.50	39.50	50.00	50.00	50.00	52.50	52.50	47.50	47.50	47.50	47.50	46.63
TSR	40.50	43.00	43.00	43.00	43.00	43.00	43.00	45.50	45.50	45.50	45.50	45.50	43.83
PKD	25.00	25.00	25.00	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	26.88
MLPM	37.50	37.50	42.50	42.50	42.50	42.50	42.50	42.50	45.00	45.00	45.00	48.00	42.75
KKD	42.50	42.50	42.50	42.50	42.50	42.50	42.50	46.50	46.50	46.50	46.50	51.50	44.58
KNR	44.00	44.00	44.00	50.00	50.00	50.00	55.00	57.00	57.00	57.00	57.00	57.00	51.83
STATE AVERAGE													**41.38**

2) Women

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	29.00	29.00	34.00	35.00	35.00	35.00	35.50	36.00	36.00	36.00	36.00	38.50	34.58
KLM	22.50	22.50	22.50	23.50	23.50	23.50	23.50	23.50	23.50	26.00	27.50	27.50	24.13
ALP	17.00	17.00	17.00	24.50	24.50	24.50	24.50	24.50	24.50	24.50	27.50	28.50	23.21
KTM	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	24.00	21.25
EKM	24.00	24.00	24.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	29.25
TSR	23.50	24.50	24.50	24.50	24.50	24.50	24.50	25.50	25.50	25.50	25.50	25.50	24.83
PKD	14.00	14.00	14.00	16.50	16.50	16.50	16.50	15.00	15.00	15.00	15.00	15.00	15.25
MLPM	25.00	25.00	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	28.00	27.13
KKD	27.50	27.50	27.50	27.50	28.50	28.50	28.50	28.50	28.50	28.50	30.50	33.00	28.71
KNR	20.50	20.50	20.50	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	32.88
STATE AVERAGE													**26.30**

(Table 3.10 contd)

Other Agricultural Labour

1) Men

DIST.	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	40.00	40.00	41.00	41.00	41.00	41.00	41.00	45.00	45.00	45.00	47.50	47.50	42.92
KLM	35.00	35.00	35.00	35.00	35.00	35.00	35.00	37.50	37.50	40.00	40.00	40.00	36.67
ALP	40.00	40.00	40.00	40.00	40.00	40.00	40.00	42.50	42.50	42.50	47.50	47.50	41.88
KTM	35.00	35.00	35.00	35.00	36.00	36.00	36.00	37.50	37.50	37.50	37.50	40.00	36.50
EKM	42.50	42.50	42.50	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	44.38
TSR	41.00	43.00	43.00	43.00	43.00	43.00	43.00	48.00	48.00	48.00	48.00	48.00	44.92
PKD	25.00	25.00	25.00	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	26.88
MLPM	42.50	42.50	42.50	42.50	42.50	42.50	42.50	45.00	45.00	45.00	45.00	48.00	43.79
KKD	42.50	42.50	42.50	42.50	42.50	42.50	42.50	46.50	46.50	46.50	46.50	51.50	44.58
KNR	44.00	44.00	44.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	53.75
STATE AVERAGE													**41.63**

2) Women

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TVM	35.00	35.00	37.50	37.50	37.50	37.50	37.50	42.50	42.50	42.50	42.50	42.50	39.17
KLM	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	30.00	30.00	30.00	28.13
ALP	25.00	25.00	25.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	28.75
KTM	30.00	30.00	30.00	30.00	31.00	31.00	31.00	32.50	32.50	32.50	32.50	35.00	31.50
EKM	30.00	30.00	30.00	30.00	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	31.67
TSR	22.50	23.50	23.50	23.50	23.50	23.50	23.50	25.00	25.00	25.00	25.00	25.00	24.04
PKD	13.50	13.50	14.00	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	15.79
MLPM	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
KKD	30.00	30.00	30.00	30.00	30.00	30.00	30.00	33.00	33.00	33.00	35.50	40.50	32.08
KNR	25.00	25.00	25.00	34.50	34.50	34.50	34.50	35.00	35.00	35.00	35.00	35.00	32.33
STATE AVERAGE													**29.85**

WORKING CLASS CONSUMER PRICE INDEX NUMBERS

The Consumer Price Index Numbers for the State are being compiled in respect of 15 selected centres with the base 1970 = 100. The indices for the various centres for the year 1990-91 and 1991-92 are furnished below.

Table - 4.1

Consumer Price Index Numbers for various Centres

Sl. No.	Centre	Yearly average consumer Price Index Numbers		Percentage change
		90-91	91-92	
1	2	3	4	5
1.	Thiruvananthapuram	439	552	25.74
2.	Kollam	459	571	24.40
3.	Punalur	427	544	27.40
4.	Alappuzha	429	552	28.67
5.	Kottayam	440	555	26.14
6.	Mundakkayam	434	552	27.19
7.	Munnar	420	541	28.80
8.	Ernakulam	420	540	28.57
9.	Chalakkudy	435	559	28.51
10.	Thrissur	423	539	27.42
11.	Palakkad	429	543	26.57
12.	Malappuram	451	572	26.83
13.	Kozhikode	441	553	25.40
14.	Meppadi	449	565	25.84
15.	Kannur	436	554	27.06

Table - 4.1

Monthly Statement showing the Consumer Price Index Numbers for the Agricultural year 1990-91

Base 1970 = 100

Sl. No.	Centre	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Thiruvananthapuram	443	445	445	447	459	464	474	477	477	478	484	496	466
2.	Kollam	466	467	466	465	475	479	488	491	491	492	500	514	483
3.	Punalur	433	434	434	434	446	450	460	463	464	465	473	486	454
4.	Alappuzha	432	434	434	435	449	455	467	470	470	471	479	492	457
5.	Kottayam	447	447	446	445	455	461	475	479	480	481	487	499	467
6.	Mundakkayam	441	441	441	441	455	461	471	475	476	478	485	497	464
7.	Munnar	425	427	427	428	442	448	462	466	467	468	473	485	452
8.	Ernakulam	426	427	426	426	437	441	453	456	456	459	464	477	446
9.	Chalakkudy	440	442	442	441	453	459	471	475	475	477	484	497	463
10.	Thrissur	429	430	429	428	442	446	456	459	459	460	468	481	449
11.	Palakkad	436	436	435	434	445	449	460	463	464	465	472	485	454
12.	Malappuram	458	459	459	459	471	476	488	492	493	494	502	516	481
13.	Kozhikode	448	449	448	448	459	463	475	478	479	481	486	499	468
14.	Meppady	455	457	457	458	470	475	485	489	490	491	500	512	478
15.	Kannur	442	444	444	443	453	458	470	474	475	476	484	498	463
	STATE AVERAGE	**441**	**443**	**442**	**442**	**454**	**459**	**470**	**474**	**474**	**476**	**483**	**496**	**463**

Table - 4.1

Monthly Statement showing the Consumer Price Index Numbers for the Agricultural year 1991-92

Base 1970 = 100

Sl. No.	Centre	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Thiruvananthapuram	506	508	511	514	525	531	538	539	539	542	546	551	529
2.	Kollam	526	527	530	533	543	550	558	558	557	558	563	568	547
3.	Punalur	497	499	502	505	515	522	529	531	530	531	535	540	520
4.	Alappuzha	503	504	507	511	521	526	534	536	536	539	544	549	526
5.	Kottayam	509	509	511	514	525	532	539	541	540	543	548	552	530
6.	Mundakkayam	507	507	509	512	521	528	536	538	537	540	543	548	527
7.	Munnar	495	497	500	502	509	516	524	527	527	527	531	536	516
8.	Ernakulam	490	492	496	500	508	515	522	524	524	527	532	537	514
9.	Chalakkudy	509	510	513	515	526	533	541	543	542	545	550	555	532
10.	Thrissur	492	494	496	498	508	514	522	523	523	526	531	536	514
11.	Palakkad	495	497	499	501	511	516	525	528	528	531	534	540	517
12.	Malappuram	527	527	529	532	543	549	556	558	557	560	564	569	548
13.	Kozhikode	509	511	515	518	526	531	538	540	539	542	546	551	531
14.	Meppady	522	523	526	529	539	545	552	553	552	553	558	562	543
15.	Kannur	509	511	514	517	526	532	540	541	540	543	546	551	531
	STATE AVERAGE	**506**	**508**	**511**	**513**	**523**	**529**	**537**	**539**	**538**	**540**	**545**	**550**	**528**

Table - 4.1

Monthly Statement showing the Consumer Price Index Numbers for the Agricultural year 1990-91 (Old series)

Base 1939 = 100

Sl. No.	Centre	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Thiruvananthapuram	3845	3863	3863	3880	3984	4028	4114	4140	4140	4149	4201	4305	4043
2.	Kollam	3980	3988	3980	3971	4057	4091	4268	4193	4193	4202	4270	4390	4132
3.	Punalur	3629	3637	3637	3637	3737	3771	3855	3880	3888	3897	3964	4073	3800
4.	Alappuzha	3685	3702	3702	3711	3830	3881	3984	4009	4009	4018	4086	4197	3901
5.	Kottayam	3911	3911	3903	3894	3981	4034	4156	4191	4200	4209	4261	4366	4085
6.	Munnar	3400	3416	3416	3424	3536	3584	3696	3728	3736	3744	3784	3880	3612
7.	Ernakulam	3762	3770	3762	3762	3859	3894	4000	4026	4026	4053	4097	4212	3935
8.	Chalakkudy	3863	3881	3881	3872	3977	4030	4135	4171	4171	4188	4250	4364	4065
9.	Thrissur	3758	3767	3758	3749	3872	3907	3995	4021	4021	4030	4100	4214	3933
10.	Kozhikode	4269	4279	4269	4269	4374	4412	4527	4555	4565	4584	4632	4755	4458
	STATE AVERAGE	**3810**	**3821**	**3817**	**3817**	**3921**	**3963**	**4073**	**4091**	**4095**	**4107**	**4165**	**4276**	**3996**

* For Kozhikode centre the base period is 1936 = 100.

Table - 4.1

Monthly Statement showing the Consumer Price Index Numbers for the Agricultural year 1991-92 (Old series)

Base 1939 = 100

Sl. No.	Centre	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Thiruvananthapuram	4392	4409	4435	4462	4557	4609	4670	4679	4679	4705	4739	4783	4593
2.	Kollam	4492	4501	4526	4552	4637	4697	4765	4765	4757	4765	4808	4851	4676
3.	Punalur	4165	4182	4207	4232	4316	4374	4433	4450	4441	4450	4483	4525	4355
4.	Alappuzha	4291	4299	4325	4359	4444	4487	4555	4572	4572	4598	4640	4683	4485
5.	Kottayam	4454	4454	4471	4498	4594	4655	4716	4734	4725	4751	4795	4830	4640
6.	Munnar	3960	3976	4000	4016	4072	4128	4192	4216	4216	4216	4248	4288	4127
7.	Ernakulam	4327	4344	4380	4415	4486	4547	4609	4627	4627	4653	4698	4742	4538
8.	Chalakkudy	4469	4478	4504	4522	4618	4680	4750	4768	4759	4785	4829	4873	4670
9.	Thrissur	4310	4327	4345	4362	4450	4503	4573	4581	4581	4608	4652	4695	4499
10.	Kozhikode	4851	4870	4908	4937	5013	5060	5127	5146	5137	5165	5203	5251	5056
	STATE AVERAGE	**4371**	**4384**	**4410**	**4436**	**4519**	**4574**	**4639**	**4654**	**4649**	**4670**	**4710**	**4752**	**4564**

The monthly consumer price index numbers for the year 90-91 and 91-92 for the 15 centres have been furnished in table 4.1. The index for the 10 centres of the old series using the linking factor have also been computed and furnished in table 4.1 for comparison.

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 cost 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 prices paid by farmers expressed as a percentage.

The index of prices received by farmers is a measure of relative changes in respect of a farmer from important agricultural products as a result of changes in farm prices. The changes are measured based in the prices prevailed in the base year 1952-53. The weighted average of the price relative of the current farm prices to those of the base year is defined as the index of prices received. For the construction of the index the following crops are considered.

(1) Paddy, (2) Coconut, (3) Arecanut, (4) Cashew nut, (5) Tapioca, (6) Ginger, (7) Pepper, (8) Banana, (9) Sugarcane.

The index number of the prices paid by the farmer is a measure of relative change in the expenditure incurred by the farmer for farm cultivation cost and domestic consumption as a result of changes in wage rates, cost of implements, cost of manure, cost of maintenance of the live stock and prices of consumer goods as compared to the situation in the base year.

The index of parity between prices received and prices paid by the farmer during each month of the years 90-91 and 91-92 are furnished in table 4.2i.

Table - 4.2i

Index Number of Parity (Base 1952-53 = 100)

Sl.No.	Month	1990-91	1991-92
1.	July	81	90
2.	August	83	91
3.	September	85	90
4.	October	88	90
5.	November	91	93
6.	December	89	95
7.	January	78	89
8.	February	81	92
9.	March	82	94
10.	April	83	93
11.	May	82	91
12.	January	82	90
	Average	**84**	**92**

The index of parity various from 1991 (November) to 1978 (January) during 1990-91 and from 1995 (December) to 1989 (January) during 1991-92. The average index for the State was 84 during 1990-91 and 92 during 1991-92. The price parity index in 1991-92 was relatively favourable to farmers compared to that in 199091 and showed on inverse of 8 point in 1991-92 over 1990-91.

Table - 4.3

Quarterly average Retail Prices of Essential Commodities of District Head Quarters 1990-91

Commodity/ Quantity		TVM	KLM	PTA	ALP	KTM	IDK	EKM	TSR	PKD	MLPM	KKD	WYD	KNR	KSGD
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	I	6.02	5.58	5.26	4.79	5.31	4.97	5.29	5.58	5.04	5.35	5.76	5.68	5.13	4.88
1. Rice FP	II	6.08	5.72	5.15	4.84	5.46	5.14	5.19	5.43	5.19	5.10	5.56	5.52	5.15	4.90
/Kg.	III	6.01	5.80	5.51	5.09	5.68	5.36	5.38	5.58	5.34	5.40	5.84	5.74	5.30	4.94
	IV	6.29	5.90	5.32	5.01	5.65	5.36	5.47	5.76	5.40	5.54	5.90	5.78	5.34	5.19
	I	2.00	2.00	2.00	2.00	2.25	2.00	1.82	1.83	1.34	1.86	2.00	2.06	2.50	2.50
2. Tapioca	II	2.00	2.00	2.00	1.94	2.37	2.00	1.91	2.22	1.50	2.00	2.00	2.46	2.23	3.00
/Kg.	III	2.00	2.00	2.00	2.00	2.47	2.00	2.03	2.11	1.63	2.12	2.20	2.50	2.53	2.79
	IV	1.90	2.00	2.00	2.00	2.31	2.00	2.08	1.81	1.50	2.11	2.02	1.94	2.50	2.50
	I	14.25	13.85	12.44	11.84	12.83	11.83	12.56	12.89	10.18	14.13	14.00	12.37	12.96	12.00
3. Black	II	14.40	14.00	12.58	12.38	13.00	12.13	12.70	13.16	11.26	12.18	14.50	12.50	13.64	12.00
gram/Kg	III	14.37	14.00	13.56	13.96	13.33	12.33	13.46	13.58	11.75	12.88	15.00	13.50	14.29	12.00
	IV	14.99	14.92	13.77	13.04	14.17	12.13	14.00	15.35	12.03	14.15	15.40	13.96	14.50	12.77
	I	33.12	31.67	31.45	30.78	31.93	30.97	30.44	30.02	30.25	29.87	31.48	29.99	30.18	32.32
4. Coconut	II	39.45	37.52	37.13	36.29	38.03	36.25	36.68	36.68	35.89	35.68	37.07	36.20	35.41	37.87
oil/Kg	III	41.67	28.00	41.46	40.13	42.92	42.25	39.46	38.75	40.15	39.09	40.42	42.15	36.34	42.75
	IV	38.50	37.98	38.85	38.30	39.75	38.00	37.09	36.87	38.06	36.66	38.09	40.79	36.81	41.47
	I	37.03	38.00	33.33	30.80	33.80	33.81	32.75	29.64	33.19	31.10	29.87	30.83	35.09	40.00
5. Gingily	II	39.74	39.27	35.33	34.22	37.20	35.77	32.63	34.12	34.92	34.00	33.07	33.74	34.17	40.00
oil/Ltr	III	44.37	46.08	44.38	41.17	43.67	44.33	42.52	42.25	42.63	41.25	41.12	45.73	43.82	46.67
	IV	41.17	47.00	43.60	39.70	42.25	41.68	38.63	38.03	40.65	38.58	37.63	41.76	40.79	47.20

(contd..)

(Table 4.3 contd)

1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
6. Chillies /Kg	I	16.75	13.68	16.82	13.94	15.71	16.36	16.05	15.36	15.64	15.22	15.08	17.62	16.16	19.26
	II	22.50	19.13	21.03	19.15	20.80	20.50	20.05	20.52	19.83	17.85	18.88	20.07	21.15	17.32
	III	25.42	23.65	26.58	24.33	25.50	23.58	25.17	25.00	22.50	21.75	23.00	23.08	25.42	19.61
	IV	30.25	30.30	33.87	32.02	32.42	31.25	33.02	32.62	30.33	29.49	30.68	30.75	37.42	28.57
7. Coconut/ 100 Nos.	I	236.83	277.53	248.67	269.33	275.33	336.67	304.33	263.53	261.33	293.61	262.92	272.08	260.44	262.67
	II	296.42	351.25	325.83	333.00	383.33	389.50	363.25	342.58	306.33	330.00	300.03	377.50	311.67	328.33
	III	312.92	355.00	360.00	352.08	382.50	441.67	369.17	365.83	329.00	374.17	392.02	373.33	348.33	400.00
	IV	275.75	337.00	369.00	339.75	378.67	420.83	380.08	354.58	313.50	348.17	340.00	397.00	356.67	354.17
8. Sugar FP /Kg	I	8.60	8.50	8.33	8.28	8.36	8.46	8.36	8.27	8.28	8.25	8.26	8.42	8.20	8.23
	II	8.55	8.40	8.22	8.17	8.27	8.40	8.23	8.24	8.15	8.05	8.20	8.29	8.09	8.08
	III	8.88	8.78	8.48	8.54	8.65	8.80	8.59	8.67	8.32	8.38	8.57	8.60	8.43	8.31
	IV	9.16	8.92	8.94	8.76	8.94	9.03	8.89	8.98	8.90	8.70	8.91	8.90	8.76	8.66
9. Tea/Kg	I	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
	II	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
	III	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
	IV	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
10. Coffee Powder/Kg	I	19.37	18.65	19.72	19.65	19.67	19.43	20.05	20.40	19.47	19.92	19.37	19.00	19.45	19.25
	II	22.51	21.69	21.71	29.63	22.18	22.20	22.39	22.71	22.16	22.39	21.62	21.05	21.53	20.15
	III	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	21.81	22.58	23.50	20.15
	IV	22.70	23.50	23.25	22.90	22.70	22.80	22.46	22.70	23.50	23.38	23.50	23.50	23.50	22.94
11. Tobacco /Kg	I	24.00	18.94	24.78	22.89	26.00	25.67	21.20	20.41	22.00	26.00	34.83	26.92	28.00	19.53
	II	24.00	17.00	23.07	20.00	24.13	26.00	22.00	19.60	23.15	26.00	33.93	28.00	28.00	20.00
	III	23.67	15.50	22.00	19.58	24.08	23.17	22.00	19.50	24.83	26.00	30.08	24.92	26.08	25.00
	IV	20.17	15.17	22.00	19.92	24.00	22.00	22.00	22.22	25.00	26.00	28.80	24.00	24.67	34.00

(Table 4.3 contd)

Quarterly average Retail Prices of Essential Commodities of District Head Quarters 1991-92

Commodity/ Quantity		TVM	KLM	PTA	ALP	KTM	IDK	EKM	TSR	PKD	MLPM	KKD	WYD	KNR	KSGD
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	I	6.63	6.26	5.94	5.56	6.26	5.65	5.79	6.27	5.91	5.86	6.43	6.02	5.60	5.62
1. Rice FP	II	7.56	6.91	6.44	6.09	6.91	6.30	6.59	6.86	6.61	6.63	6.74	6.96	6.20	6.16
/Kg	III	8.08	7.76	6.94	6.69	7.88	7.04	7.18	7.45	7.26	7.56	7.78	7.67	7.00	6.84
	IV	8.09	7.85	7.21	6.85	7.98	7.23	7.40	7.55	7.46	7.60	7.69	7.85	7.28	7.30
	I	1.92	2.00	1.83	2.00	2.31	2.00	1.92	1.82	1.92	2.00	1.82	2.06	2.50	3.00
2. Tapioca	II	1.89	2.08	2.00	2.00	2.33	2.00	2.15	1.75	2.00	2.00	2.00	2.36	2.56	2.50
/Kg	III	2.52	2.40	2.08	2.15	2.55	2.00	2.35	2.09	1.94	2.22	2.33	2.58	2.83	2.63
	IV	2.53	2.50	2.38	2.12	2.28	2.00	2.25	2.12	1.98	2.21	2.40	2.33	2.86	3.00
	I	15.96	15.92	14.27	14.04	14.62	13.33	14.67	15.67	12.46	14.53	16.75	14.75	15.38	14.42
3. Black	II	15.24	15.33	13.75	12.93	14.54	13.28	13.91	13.77	12.34	13.17	14.63	14.84	15.95	14.47
gram/Kg	III	14.10	14.17	13.15	12.42	13.70	13.13	13.50	13.23	12.98	13.55	15.00	14.50	14.50	13.67
	IV	14.08	14.15	13.40	12.54	14.63	13.14	13.67	14.17	12.58	14.55	15.17	14.53	14.33	13.69
	I	43.75	43.83	44.29	44.50	46.08	44.88	43.69	42.96	44.49	42.17	44.50	46.71	43.59	47.83
4. Coconut	II	55.54	54.58	54.49	54.83	56.07	55.53	53.35	52.84	54.60	52.08	53.16	56.81	50.80	55.27
oil/Kg	III	51.02	49.67	49.85	49.89	50.72	50.02	48.98	48.17	49.88	49.17	49.75	53.62	48.65	54.84
	IV	45.96	45.88	47.55	46.98	47.22	45.68	46.23	44.79	46.18	45.60	46.94	50.10	45.83	51.30
	I	41.25	47.50	40.00	37.17	40.00	37.96	36.33	35.00	38.92	36.67	35.04	40.00	39.42	46.00
5. Gingelly	II	45.74	48.00	43.20	41.43	43.89	43.18	42.12	39.44	41.63	40.73	40.63	44.68	43.20	47.93
oil/Kg	III	47.42	47.83	45.00	41.18	43.50	43.23	42.42	40.63	42.86	40.52	39.90	44.77	45.38	49.38
	IV	45.37	47.43	45.00	35.67	42.92	42.82	39.00	38.53	40.38	37.86	36.38	40.96	41.71	49.00

(contd)

(Table 4.3 contd)

1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	I	50.42	44.83	47.33	46.17	46.00	44.67	48.50	46.67	47.42	39.62	46.33	44.17	46.50	43.33
6. Chillies	II	66.75	59.66	62.33	55.89	55.44	56.60	58.26	60.52	56.09	51.93	54.64	56.67	52.28	58.60
/Kg	III	51.01	44.00	53.53	45.31	45.89	49.11	47.81	46.86	44.75	42.17	43.36	47.58	44.33	52.17
	IV	48.63	46.15	52.75	46.82	50.43	50.22	49.97	48.98	47.17	46.77	48.40	52.25	52.28	50.57
	I	317.50	388.75	361.67	387.92	412.50	478.33	421.67	374.17	338.33	349.58	358.33	405.00	362.50	407.50
7. Coconut	II	403.06	454.61	439.69	477.72	526.50	571.39	534.94	429.33	394.72	368.17	418.53	501.10	411.10	461.08
100 Nos.	III	387.00	448.83	452.50	436.67	436.77	559.50	494.00	416.83	428.63	423.33	415.50	527.50	424.17	446.17
	IV	364.67	438.50	380.42	440.08	425.25	496.67	450.00	423.00	431.00	451.75	431.50	502.50	400.00	450.00
	I	9.26	9.11	9.08	8.89	8.94	9.14	8.90	9.00	8.85	8.78	9.03	9.09	8.81	8.76
8. Sugar FP	II	8.63	8.43	8.37	8.25	8.33	8.44	8.33	8.40	8.30	8.19	8.42	8.49	8.25	8.24
/Kg	III	9.28	9.14	9.06	8.89	9.00	9.10	8.96	8.98	8.89	8.74	8.98	9.01	8.76	8.75
	IV	9.63	9.47	9.35	9.24	9.44	9.48	9.33	9.23	9.28	9.07	9.24	9.36	9.08	9.12
	I	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
9. Tea/Kg	II	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
	III	29.50	29.67	29.50	29.50	29.50	29.50	29.83	29.67	29.50	29.83	29.50	29.50	29.50	29.50
	IV	30.83	31.50	31.50	31.33	31.50	30.57	31.50	31.50	31.50	31.50	31.50	30.43	31.20	30.57
	I	22.25	22.25	22.00	22.00	21.63	22.00	22.13	22.38	22.42	22.12	22.50	22.25	23.50	23.50
10. Coffee	II	24.10	23.22	23.57	24.03	21.16	23.22	22.21	23.83	24.12	24.97	23.87	23.63	24.03	23.50
Powder/Kg	III	24.33	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.51	24.50	24.50	24.50	24.50	24.43
	IV	23.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.48
	I	20.00	15.58	22.17	20.00	21.50	24.00	22.00	24.45	25.25	25.42	28.33	26.26	26.10	37.83
11. Tobacco	II	24.80	16.03	19.50	20.00	18.00	21.67	22.00	20.51	25.00	25.00	29.78	25.00	26.00	40.34
/Kg	III	21.63	18.19	20.00	22.47	21.35	20.00	22.13	20.00	25.07	25.07	27.00	27.00	26.00	-
	IV	21.53	19.67	20.33	25.00	22.67	20.00	22.00	21.53	24.47	25.75	30.67	26.33	26.58	37.27

Table - 4.4

Export of Agricultural Commodities through Cochin Port 1990-91 & 1991-92

Sl. No.	Commodity	Unit	Quantity 90-91	Quantity 91-92	Value (increase) 90-91	Value (increase) 91-92
1	2		4	5	6	7
1.	Tea	MT	9530	17906	30.02	42.38
2.	Pepper	"	30443	21284	99.97	72.49
3.	Cardamom	"	79	145	2.18	4.00
4.	Cashew Kernal	"	49970	36630	391.88	432.82
5.	Coffee	"	35892	42008	79.70	118.60
6.	Ginger	"	2878	5601	7.85	12.69
7.	Coir Products	"	24198	21639	28.25	29.04
8.	Other Sprices	"	2576	2680	NA	NA
9.	Lemon grass Oil	"	19	136	NA	NA
10.	Sea Food	"	58598	65800	317.44	443.02
11.	Rubber & Rubber Products	"	5372	6468	NA	NA
12.	Wood &	"	2752	1935	NA	NA
13.	Cashew Shell Oil	"	2855	2756	2.01	NA

Table - 4.5

Classification of Soil

Sl. No.	District	Type of soil	Details of distribution
1	2	3	4
1.	Thiruvananthapuram	1. Fairly rich brown loam of lateric origin.	Loam of middle part of the district.
		2. Sandy loam	Western costal region.
		3. Riches dark brown loam of granite origin.	Eastern hilly part of the district.
2.	Kollam	1. Sandy loam	Karunagappally and part of Kollam taluk.
		2. Laterite soil	Kottarakara and part of Kunnathur and Pathanapuram taluk.
		3. Hill and forest soil	Part of Pathanapuram taluk.
3.	Pathanamthitta	1. Laterite soil	Pathanamthitta, Mallappally, Ranny and parts of Thiruvalla taluks.
		2. Hill and forest soil	Parts of Pathanamthitta and Ranny taluks.

(contd)

(Table 4.5 contd)

1	2	3	4
4.	Alappuzha	1. Sandy loam	Karthikappally and Mavelikara taluks.
		2. Sandy soil	Sherthalai and Ambalapuzha taluks.
		3. Clay and loam with much of acidity.	Kuttanad.
		4. Laterite soil	Chengannur and part of Mavelikara.
5.	Kottayam	1. Laterite soil	Part of Meenachil, Changanacherry and Kottayam taluks.
		2. Alluvial soil	Parts of Changanacherry and Kottayam taluks.
6.	Idukki	1. Laterite soil	Peerumadu and Thodupuzha taluks.
		2. Alluvial soil	Devikulam and Udumbanchola taluks.
7.	Ernakulam	1. Laterite	Moovattupuzha and part of Kunnathunadu.
		2. Sandy loam	Parur, Kochi and Kanayannur taluks.
		3. Alluvial	Part of Aluva and Kunnathunadu.
8.	Thrissur	1. Sandy loam	Part of Mukundapuram, Thrissur and Chavakkad taluks.
		2. Laterite	Western portion of Thalappilly and Eastern part of Thrissur taluks.
		3. Granite	Northern part of Thalappilly.
		4. Clay	Back water area in Chavakkad and part of Mukundapuram.
9.	Palakkad	1. Sandy soil	River side areas.
		2. Laterite	Ottapalam, Perinthalmanna, Mannarkkad and Palakkad taluks.
		3. Black soil	North eastern portion of Chittoor taluk.
10.	Malappuram	1. Sandy soil	Coastal areas of the district.
		2. Laterite	Major parts of the district barring coastal areas.
11.	Kozhikode	1. Laterite	Major parts of the district barring coastal areas.
		2. Sandy	Coastal areas.
12.	Wayanad	1. Laterite	Most parts of the district.
13.	Kannur	1. Laterite	Major parts of the district barring coastal areas.
		2. Sandy	Coastal areas.

Table - 4.6

Coversion ratio between the raw materials and the processed product

1	2	3	4
1.	Rice	Rice (cleaned) production 2/3 of paddy production.	
2.	Cotton	Cotton lint production 1/3 of Kapas production cotton seed production 2/3 of Kapas production 2 times of cotton lint production.	
3.	Ground nut	Kernels to nuts in shell	70 percent
		Oil to nuts in shell	28 "
		Oil to Kernels crushed	40 "
		Cake to Kernels crushed	60 "
4.	Sesamum	Oil to seeds crushed	40 "
		Cake to seeds crushed	60 "
5.	Caster seeds	Oil to seeds crushed	37 "
		Cake to seeds crushed	63 "
6.	Coconut	Copra to nuts one ten copra	6775 nuts
		Oil to copra crushed	62 percent
		Cake to copra crushed	38 "
7.	Neem seed	Oil to Kernel crushed	45 to 50 percent
		Cake to Kernels crushed	52 to 55 "
8.	Sugar	Gur from cane crushed	10 percent
		Crystal sugar from gur refined	60:40 "
		Crystal sugar from cane crushed	9:97 "
		Khandassari sugar from gur refined	37:5 "
		Molasses from cane crushed	3:5 "
9.	Cashew nuts	Cashew kernels	25 percent of cashew nut
		Butter from mixed milk	6:3 percent
		Ghee from mixed milk	5:3 "

Table - 4.7

Analysis of important fertilizers

Sl. No.	Name of fertilizer	Nitrogen (N.Percent)	Phosphate (P2 O5)	Potash (K2 O)
1	2	3	4	5
1.	Ammonium sulphate nitrate	26.00	-	-
2.	Ammonium sulphate	20.50	-	-
3.	Ammonium nitrate	33.50	-	-
4.	Ammonium phosphate	16.00	20.00	-

(Table 4.7 contd)

1	2	3	4	5
5.	Nitrate of soda	16.50	-	-
6.	Calcium nitrate	15.30	-	-
7.	Calcium ammonium nitrate	20.50	-	-
8.	Calcium cynamide	20.00	-	-
9.	Urea	46.00	-	-
10.	Superphosphate - Single	-	18.00	-
11.	Super phosphate - Double	-	35.00	-
12.	Super phosphate	-	45.00	-
13.	Rock phosphate	-	28.30	-
14.	Hyper phosphate	-	27.30	-
15.	Sulphate of potash	-	-	48.00
16.	Muriate of potash	-	-	50.00
17.	Groundnut cake	7.00	1.50	1.30
18.	Caster cake	4.30	2.00	1.00
19.	Mustard cake	4.50	1.50	-
20.	Muhua cake	2.50	0.80	1.80
21.	Neem cake	5.20	1.00	1.40
22.	Gingelly cake	6.20	2.00	1.20
23.	Coconut cake	3.00	1.90	1.80
24.	Poultry manure	1.2-1.5	-	-
25.	Sleep manure	0.86	-	-
26.	Horse manure	0.86	-	-
27.	Farm yard manure	0.40	0.30	0.20
28.	Fresh cow dung	1.57	0.25	0.18
29.	Compost	0.50	0.25	0.50
30.	Bone meal	3.50	21.00	-
31.	Fish meal	4.10	3.50	0.50
32.	Blood (dries)	11.50	1.50	0.60
33.	Meat meal	11.00	-	0.60
34.	White fish meal	10.00	10.00	1.00

Table - 4.8

Insect/Pests affecting paddy crops, their distribution and some practical methods of control

Sl. No.	Name of Pest	Nature of damage	Control Measure
1	2	3	4
1.	RICE SWARMING CATERPILLER (Spedoptera nayrutual)	Caterpillars appear in swarms and eat away leaves in the early vegetative phase. The presence of the caterpillars in the early stages can be ascertained by sweeping with hand net.	Spray the crop with BHC 50W.P (2.5 Kg/Ha) Methyl Parathion 50 EC (500 ml/ha)/Carbary 150W.P(2.5kg/ha)/Endosulfan/Trichloroform be Fenthion as soon as the caterpillars are noted.

(Table 4.8 contd)

1	2	3	4
2.	RICE STEM BORER (Seripophaga incertulas)	In the vegetative phase the central shoot is seen dead, turning yellow in colour (dead heart) in the ear-bearing stage, the earhead appears completely chaffy and white in colour (with earhead). Both come out easily when pulled out and show indication of caterpiller attack at the tips.	Fenthion 100 EC(500ml/ha) Quinalphos 75 EC(1000 ml/ha) Quinalphos 5G(20kg/ha) Fenitrothion 50 EC (1000ml/ha) Fenitrothion 100EC(500ml/ha), Carbofuran 3G(18kg/ha) Carbary 150WP(2.5kg/ha) Methyl Parathion 50EC(500ml/ha) Pgosphamidon 100EC(250ml/ha), Monocrophos 40EC(600 ml/ha).
3.	RICE BUG (Leptocorisacuta)	Look out for bug in the field during the early ear-bearing stage. When plants are disturbed, the bugs are seen flying away omitting a characteristic colour. Due to desapping grains show brownish patcheson the husk. Since the occurrence of rice bug coincides with the flowering stage of crop, application of insecticides may be done before 9 am or after 3 pm so that the fertilization of the flowers may not be adversely affected.	Carbary 150 W&P(2.5kg/ha) Formethion 25EC(1000 ml/ha) Methyl Parathion 50EC (500ml/ha) BHC 10 D.P(25 kg/ha), Malathion 50EC (1000 ml/ha).
4.	GALL MIDGS (Orscoliaoryzac)	Presence of yellowish or violet tubular out growth in the place of the central leaf is the symptom (silver sheet). The symptem appears from the nursery to the tillering phase.	Carbary 150 WP(2.5kg/ha), Quinalphes 25 EC (1000ml/ha) Bhorate 10G(12.5kg/ha) Carbofuran 3G(18kg/ha).Phosphamidon 100 EC (250ml/ha) Quinalphes 5G (20kg/ha).
5.	PADDY LEAF ROLLER (Cnaphalocressis medinalis)	The leaves are seen folded or wobbed together with white patches on them indicating the areas fed on by the caterpiller. When folded leaves are opened, green caterpillars are wriggle out and fall to the ground. Appearance of white patches in the field indicates the attack. All the stages of the crop are attacked.	Quinalphes 25EC (1000ml/ha) Carbary 150WP(2.5kg/ha), Monocrotophes 40 EC (600ml/ha) Fenitrothion 50EC(100ml/ha) Fenthion 100EC(500ml/ha) Phosalone 35EC(1000ml/ha), Methyl parathion 50EC(500ml/ha).
6.	BROWNPLANT HOPPER (Nilaparvata lugens)	Yellowish circular patches appear here and there in the field. The plants in these areas	Carbary 150WP(2.5kg/ha), Quinalphes 25EC(1000ml/ha), Fenthio 100EC(500ml/

(Table 4.8 contd)

1	2	3	4
		soon dry up (Hopper burn) and the yellowing and drying extend rapidly. Examine the plants as soon as the yellowing appears. Presence of the hoppers at the base of the plants confirms infestation. While spraying and dusting, care should be taken that the insecticides reach the base of the plants.	ha), B.H.C. 50WP(2.5kg/ ha) B.H.C. 10DP(25kg/ha), Phosphamidon 100EC(250ml/ ha), Carbofuran 3G(18kg/ ha), Monocrotophes 40EC (600ml/ha), Phosalone 35 EC(1000ml/ha).
7.	RICE HISPA (Dicladisparmigera)	In early states white patches with stunted growth are soon. Closer examination reveals the presence of small black spiny beetles. The adults feed on green tissues of leaves and scar appears as white lines. The grubs mine the leaves causing formation of white blotches.	Apply B.H.C. 10 DP(25kg/ ha) when infested.
8.	WHORL MAGGOTS (Hydrelliasp)	Common in nurseries and in main field upto 4-6 weeks after transplanting. Yellowish patches and streaks are seen along margin of leaves which may deform.	Apply Phorate 100(12.5kg/ ha) in estation is save.
9.	RICE JASSID (Cofanaspectra, Nipho-	General yellowing of leaves is seen in severe attack. When the plants are disturbed, jassids jump out.	Carbary 150 WP(2.5kg/ha), phosphamidon 100EC(250ml/ ha), Quinalphes 25EC(1000 ml/ha) Monocrotophes 40EC (600ml/ha) Fenitrothion 50EC(1000ml/ha).
10.	RICE THRIPS (Baliothrips biformis)	The crop is highly susceptible in the nursery stage and for the first 20-25 days after transplanting/sowing. The tips of leaves get folded longitudinally into needle-like out growths and turn whitish. In severe cases, the lower leaves also turn yellowish. The infestation may be rated as mild, if there are less than 3 dry needle-line leaves as severe, if there are more that 3 out growths with the lower leaves also sowing chlorosis and scorching.	In severe infestations apply Carbary 150WP(1.25 kg/ha) plus DDVP 100 EC (250ml/ha) Dimetheate 40 EC(1 Ltr/ha) or Quinalphes 25EC(1 ltr/ha).

Table 4.8 contd)

1	2	3	4
11.	RICE ROOTNEMATODE (Hirschmanniella orysac)	Attacks paddy roots and make them hollow. Affects absorption of water and nutrients. Plants show stunted growth in patches. Tiller production is affected.	Treat the nursery with Carbofuran 0.75kg/ai/ha and dipseedlings in 0.2% Dimetheate for six hours before transplanting.

Table - 4.9

List of Rainguage Stations in Kerala

1	2	1	2
	Thiruvananthapuram		**Idukki**
1.	Ponmudi	1.	Chinnar
2.	Varkala	2.	Marayur
3.	Attingal	3.	Munnar
4.	Nedumangad	4.	Devikulam
5.	Thiruvananthapuram (B)	5.	Kumily
6.	Neyyattinkara	6.	Peerumedu (Taluk)
7.	Parassala	7.	Peerumedu (Residency)
8.	Thiruvananthapuram (Aerodrome)	8.	Vandanmedu
9.	Vellayani (A.N.)	9.	Veloor
		10.	Karikode (Thodupuzha)
	Kollam		**Ernakulam**
1.	Kottarakara	1.	Malayattur
2.	Punalur	2.	Parur
3.	Karunagappally	3.	Perumbavoor
4.	Ariankavu	4.	Aluva
5.	Kollam	5	Neriyamangala
6.	Paravur	6.	Muvattupuzha
7.	Kulathupuzha	7.	Kochi (b)
8.	Nilamel	8.	Ernakulam
		9.	Piravam
	Pathanamthitta		**Thrissur**
1.	Konni	1.	Kodungallur
2.	Adoor	2.	Mukundapuram
3.	Thiruvalla	3.	Thrissur
4.	Pathanamthitta	4.	Thalappilly
		5.	Ollurkkara
	Alappuzha	6.	Peechi
1.	Arukutty	7.	Chalakkudy
2.	Cherthala	8.	Potta
3.	Alappuzha (b)	9.	Muttathur
4.	Ambalapuzha	10.	Thumburmoozhi
5.	Chengannur		
6.	Harippad		**Palakkad**
7.	Mavelikkara	1.	Alathur
8.	Kayamkulam	2.	Palakkad

(Table 4.10 contd)

1	2	3	4
9.	Carret	Carret	Dancus Carrot
10.	Red Pumpkin	Vellarimathan	Gucurnita Maxime
11.	Brinjal	Vazhuthana	Solanum Malengena
12.	Tomato	Thakkali	Lydcoperseum esculentum
13.	Amarantus	Cheera	Amaranthus Sapp
14.	Lady's ginger	Venda	Abelmoschus esaulenius
15.	Bitter gourd	Pavakka	Mamordica Charantia
16.	Bottle gourd	Churakka	Lagenaria Siceraraia
17.	Snake gourd	Padavalanga	Trichosanthese angunia
18.	Ridge gourd	Peechanga	Luffaacutangulata

Printed and Published by DES, Tvm.
Typed by mp/11/96

25

8