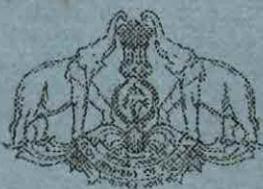


Library
DRS



Government of Kerala

Season and Crop Report 1998-99 & 1999-2000

**Department of Economics and Statistics
Thiruvananthapuram
2002**

Government of Kerala

Season and Crop Report

1998-98 & 1999-2000

Department of Economics and Statistics

Thiruvananthapuram

2002

PREFACE

This is the 32nd edition of "Season and Crop Report published in the series under the scheme of EARAS. In this report different aspects of the Agricultural Economy are covered and consolidated in a precise manner for the year 1998-99 and 1999-2000. Land utilisation Statistics, Area, Production Productivity, Irrigation particulars, price, wages, index, etc. are included in this report. The estimation has been made based on the sample survey conducted under the 50% centrally sponsored scheme EARAS during 1998-99 and 1999-2000.

The report has been prepared with the assistance of Sri. R. Bhaskaran Nair, Research Assistant, Smt. C. S. Lalithakumari, Research Officer of the division under the immediate guidance of Sri .S. Ramaswamy Iyer, Assistant Director on the over all guidance of Sri. Mohanakumaran Nair, Joint Director and Smt. S. Indira, Additional Director.

I hope this report will be useful to administrators, Government agencies and researchers and give a comprehensive picture of the Agricultural Economy of Kerala during 1998-99 and 1999-2000.

Suggestions for modifications and improvements of the report are hearty welcome.

**A. Meera Sahib
DIRECTOR**

Thiruvananthapuram,
15.01.2002.

CONTENTS

PART - I

		Page No.
1.1	Introduction	4
1.2	Topography	4
1.3	Administrative Region	4
1.4	Rural Development	5
1.5	Local Self Government	5
1.6	Climate	5
1.6A	Month wise Distribution of Average Rainfall during 1999 & 2000	6
1.7	Soil	6
1.8	Minerals	6
1.9	Crop and Crop Seasons	6
2.0	Land Utilisation	8
2.1	Forest	8
2.1A	District wise distribution of area under forest 1998-99 & 1999-2000	8
2.2	Land put to non-agricultural uses	8
2.2A	District wise distribution of area non-agricultural uses	9
2.3	Barren and Uncultivable Land	9
2.4	Permanent pastures and grazing	9
2.5	Land under miscellaneous tree crop	9
2.6	Cultivable waste Land	9
2.6A	District wise distribution of area under cultivable waste land 1998-99 & 1999-2000	9
2.7	Fallow other than current fallow	9
2.8	Current fallow	9
2.8A	District wise distribution of area under current fallow 1998-99 & 1999-2000	10
2.9	Net Area Sown	10
2.9A	District wise distribution of Net area sown 1998-99, 1999-2000	10
2.10	Area sown more than once	11
2.10A	District wise distribution of area sown more than once 1998-99 & 1999-2000	11
2.11	Total Cropped area	11
2.11A	District wise distribution of total cropped area in 1998-99 & 1999-2000	12
3.1	Classification of area under crops according to seasonal annual, perennial crops	12
3.1A	District wise distribution of area under seasonal Annual & perennial crops 1998-99	13
3.1B	District wise distribution of area under seasonal Annual & perennial crops 1999-2000	13
3.2	Classification of area under crops according to food and non-food crops	14
3.2A	District wise distribution of area under food crops 1998-99	14
3.2B	District wise distribution of area under food crops 1999-2000	14
4.0	Irrigation	15
4.1	Source wise area under irrigation 1998-99 & 1999-2000	15
4.2	Whether and Crop condition	15

PART - II		
2.1	Classification of area according to utilisation	16
2.2	Area under crops in Kerala 1998-99 & 1999-2000	16
2.3	Production of important crops of 1998-99 & 1999-2000	18
2.4	Average farm price for impartial agricultural commodities of 1998-99 & 1999-2000	18
2.5	Crop Calendar	19
PART - III		
3.0	District wise Actual & Normal rain fall (in mm) with percentage departure from Normal Rain fall for 1999 and 2000	20
3.1	District wise monthly Rain fall in mm for 1999 in Kerala	21
3.2	District wise monthly Rain fall in mm for 2000 in Kerala	22
3.3	Classification of area under land utilisation for 1998-99	23
3.4	Classification of area under land utilisation for 1999-2000	24
3.5	Area under crops for 1998-99	25
3.6	Area under crops for 1999-2000	31
3.7	Production of important crops for 1998-99	37
3.8	Production of important crops for 1999-2000	40
3.9	Estimated productivity of crops for 1998-99	43
3.10	Estimated productivity of crops for 1999-2000	44
3.11	Estimated Area and production of Rice Autumn 1998-99	45
3.12	Estimated Area and production of Rice Winter 1998-99	46
3.13	Estimated Area and production of Rice Summer 1998-99	47
3.14	Estimated Area and production of Rice Autumn 1999-2000	48
3.15	Estimated Area and production of Rice Winter 1999-2000	49
3.16	Estimated Area and production of Rice Summer 1999-2000	50
3.17	Net Area Irrigated (source wise) 1998-1999	51
3.18	Net Area Irrigated (source wise) 1999-2000	52
3.19	Gross area under Irrigation crops wise 1998-99	53
3.20	Gross area under Irrigation crops wise 1999-2000	54
3.21	Average farm price of Important Commodities for 1998-99	55
3.22	Average farm price of Important Commodities for 1999-2000	56
3.23	Other Agricultural Wages for 1998-99 – Carpenter, Mason, Paddy field labour Men & Women	57
3.24	Other Agricultural Labour Men & Women 1998-1999	59
3.25	Other Agricultural Wages for 1999-2000 – Carpenter, Mason, Paddy field labour Men & Women	60
3.26	Other Agricultural Labour Men & Women 1999-2000	61
PART - IV		
4.0	Consumer Price Index No. of vacancies centre for 1998 & 1999	63
4.1	General Index for 1998 (Centre wise & Month wise)	64
4.2	General Index for 1999 (Centre wise & Month wise)	65
4.3	Parity Index	66
4.4	Classification of soil	67
4.5	Conversion ratio between the raw materials to the processed product	69
4.6	Major Nutrients in Fertilizers and Manures (Percentage)	70
4.7	Insects/pests affecting paddy crops, their distribution and some practical method of control	71
4.8	List of Rainguage stations in Kerala	73
4.9	Glossary of English Botanical and Malayalam name of crops	75

Season and Crop Report of Kerala – 1998-99 and 1999-2000

1. Introduction

The Southern most State of Indian Union the "Kerala" has a geographical area of 38,863 Sq.Km. which accounts only 1.18% of the total area of the Country. The State lies of the Southern West corner of Department of Economics & Statistics, Kerala

Season and Crop Report of Kerala – 1998-99 and 1999-2000

1. Introduction

The Southern most State of Indian Union the “Kerala” has a geographical area of 38,863 Sq.Km. which accounts only 1.18% of the total area of the Country. The State lies of the Southern West corner of the Indian peninsula between $8^{\circ}18'$ and $12^{\circ}48'$, North latitudes 74.52 & 77.22 East longitude. The coastal lines of the State is 590 Kms long and its breadth varies from 130 Kms in the middle to 32 Kms in the extremities

1.2 Topography

The topography of the State is typical one. The eastern boundary of the State is the Western Ghat. From the Western Ghat the landmass undulates to the golden shores of the Arabian Sea, presenting a series of evergreen hills and valleys. Numerous rivers and streams flow westwards from the Western Ghat Criss – crossing the hills of valleys until they empty in to the Arabian Sea.

The land on the West coast is more or less flat and is adorned by lakes and lagoons. Due to there diverse characteristic of the land and consequent plant growth the state is classified in to 3 district regions viz. High Land, Middle Land and Low Land.

High Land Region

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

Middle Land Region

The middle land region 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 slipper of the hills. Thus major and minor crops are cultivated inter mixed with one another.

The Low Land Region

The low land region with an area of 2979 Sq.Kms. and is cultivated mainly by paddy and coconut, fishing is also are important source of livelihood of the people in this 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 requirement the state has to depend on other neighbouring state for its food needs. There are also seasonal floods and draughts to which cause damage to crops.

1.3 Administrative Regions

For administrative purpose the State is divided into 14 district viz. Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha, Kottayam, Idukki, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode., Wynad, Kannur and Kasaragod. Each district is divided into Taluks and Villages. There are 63 Taluks and 1452 Villages in the State at present.

District wise Distribution of area of the State

Sl. No.	District	Area in Hect.	% to the total
1	Thiruvananthapuram	218600	5.63
2	Kollam	251838	6.48
3	Pathanamthitta	268750	6.92
4	Alappuzha	136058	3.50
5	Kottayam	219550	5.65
6	Idukki	514962	13.25
7	Eranakulam	235319	6.06
8	Thrissur	299390	7.70
9	Palakkad	438980	11.30
10	Malappuram	363230	9.35
11	Kozhikode	233330	6.00
12	Wynad	212560	5.47
13	Kannur	296797	7.64
14	Kasaragod	196133	5.05
	STATE	3885497	100.00

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

1.4 Rural Development

The State is detailed in to 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 Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEG) and PMRY Programme. Besides those various scheme under the poverty amelioration programme better known as 20 point programme are also implemented in these blocks.

1.5 Local Self Government

Panchayat in rural areas and Municipalities and Corporation in urban area are the units of Local Self Government in the State. There are 991 Panchayat, 55 Municipalities and 3 Corporations, 1 township viz. Guruvayoor during the year under report. During 2000 – 2 Municipalities viz. Thrissur and Kollam has been upgraded in Corporation. These local bodies are administrated 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 climate are not experienced in this State.

Rain fall

The state receives copious rains from the South West and North East monsoon. The South West monsoon started from the beginning of June and extends up to September. The North East monsoon spell from October to December. Seasonal Showers do also occur during the remaining months of the year.

1.6 A - Month-wise distribution of average Rain fall during 1999 & 2000 (in mm)

Sl.No.	Month	Year	
		1999	2000
1	January	2.0	14.2
2	February	23.9	67.4
3	March	22.1	23.0
4	April	124.2	98.8
5	May	471.0	129.8
6	June	614.0	649.2
7	July	656.9	335.9
8	August	250.3	580.1
9	September	85.4	198.8
10	October	544.9	216.5
11	November	71.3	80.9
12	December	5.0	70.2
	Total	2871.0	2464.8
	Average	239.3	205.4

Source: Meteorological Division

Temperature

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

1.7 Soil

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

- (1) The hilly and forests soil seen all along the central part of the State.
- (2) The sandy soil is seen in the coastal belt
- (3) The laterite soil seen in the middle.
- (4) The black soil seen the 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 red soil found in the eastern tip of Thiruvananthapuram District.

1.8 Minerals

The state is not rich in minerals. But rare minerals like Iluminate, Rutile monosite, Zircon and Sillimanite are mined from the coastal lines. Minerals like white quartz sand, fire clay, ball clay, lime shell and chine clay are also mined in the State. Major minerals like coal, iron, etc. and petroleum are conspicuous by their absence. Consequently the State is industrially backward among other Indian States. The Kerala Mineral exploitation and Development of primary gold, gemstones, ornamental stones, placer 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, the seeds like coconut, groundnut and gingelly and plantations crops like tea, coffee, rubber and cocoa.

The period of sowing of various crops mainly ie. The rainy season. Autumn, Winter and Summer are the season for paddy – the staple food of the people of Kerala. But most of the seasonal crops are sown well before the South West monsoon gets 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 1998-99 and 1999-2000 are furnished in table Part II 2.1 of the summary table and 3.2, 3.3 of detailed table. The total area of the state referred to ie. Various tables in according to the village papers which slightly difference from that under professional survey.

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

2.1 Forest

Out of the total geographical area of the state forest area alone is accounted 1827.83% which is concentrated more in Idukki district and less in Kasaragod district. The only district with no forest area is Alappuzha in the State. The district wise distribution of area under forest is furnished below.

2.1A District wise distribution of area under forests 1998-99, 1999-2000

Sl. No.	Name of District	Area under forests (Ha)	Percentage to total	% to total area of the district
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	Eranakulam	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	48734	4.51	16.42
14	Kasaragod	5625	0.52	2.87
15	STATE	1081509	100	27.83

2.2 Land put to non-agricultural uses

About 8.59% of geographical area comes under land put to non-agricultural uses for 1998-99 and 9.12% form 1999-2000. Out of total Land put to non-agricultural uses in the entire state more accounts to Palakkad district and less to Wayanad district. More over it is found that about 6.16% of area more than 1998-99 comes under land put to non-agricultural uses for 1999-2000 which shows more area is used for other than agricultural purposes. As compared with the geographical area of the district, a less area is used for non-agricultural uses in Idukki district. The district wise distribution of area come under Land put to non-agricultural uses follows.

2.2A District wise distribution of area under non-agricultural uses (In hectares)

Sl.No	Districts	Area under uses	Non- Agricultural	% to total		% to total geographical Area of the district	
		1998-99	1999-00	1998-99	1999-00	1998-99	1999-00
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	20492	22564	6.14	6.37	9.37	10.32
2	Kollam	21060	21705	6.31	6.12	8.36	8.62
3	Pathanmathitta	14838	14986	4.45	4.23	5.52	5.58
4	Allappuzha	22606	22894	6.77	6.46	16.61	16.83
5	Kottayam	23077	24840	6.91	7.01	10.51	11.31
6	Idukki	14671	14982	4.39	4.23	2.85	2.91
7	Eranakulam	34510	39855	10.34	11.25	14.67	16.94
8	Thrissur	27377	32321	8.20	9.12	9.14	10.80
9	Palakkad	43704	43891	13.09	12.38	9.96	9.99
10	Malappuram	31613	32533	9.47	9.18	8.70	8.96
11	Kozhikode	22465	23436	6.73	6.61	9.63	10.04
12	Wayanad	10600	11647	3.18	3.29	4.99	5.48
13	Kannur	28553	28978	8.55	8.18	9.62	9.76
14	Kasaragod	18256	19758	5.47	5.57	9.31	10.07
	STATE	333822	354390	100	100	8.59	9.12

2.3 Barren and uncultivable land**District wise distribution of barren and uncultivable land 1998-99, 1999-2000**

(in hectares)

Sl. No	Districts	Barren and uncultivable land		% to total		% to geographical area of the district	
		1998-99	1999-2000	1998- 99	1999- 2000	1998-99	1999- 2000
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	433	502	1.53	1.74	0.20	0.23
2	Kollam	277	256	0.98	0.89	0.11	0.10
3	Pathanamthitta	429	446	1.51	1.54	0.16	0.17
4	Allappuzha	179	192	0.63	0.66	0.13	0.14
5	Kottayam	1376	1418	4.85	4.91	0.63	0.65
6	Idukki	4251	4136	15.00	14.32	0.83	0.80
7	Eranakulam	905	1120	3.19	3.88	0.38	0.48
8	Thrissur	296	494	1.04	1.71	0.10	0.17
9	Palakkad	3037	3402	10.72	11.78	0.69	0.77
10	Malappuraam	2541	2932	8.97	10.15	0.70	0.81
11	Kozhikode	1344	1393	4.74	4.82	0.58	0.60
12	Wayanad	356	338	1.26	1.17	0.17	0.16
13	Kannur	3798	3693	13.40	12.79	0.13	1.24
14	Kasaragod	9119	8562	32.18	29.64	4.65	4.37
	STATE	28341	28884	100	100	0.73	0.74

As per the above tables barren and uncultivable land is higher in Kasaragod district followed by Eranakulam district and the same is less in Alappuzha district. More than 5% of total geographical area of the Kasaragod district comes under Barren and uncultivable land during 1997-98 and 1998-99.

2.4 Permanent pastures and grazing land

The estimated area under permanent pastures and grazing land is 682 hectares and 253 hectares during 1998-99 and 1999-2000 respectively which is less than 1% of the total geographical area of the state.

2.5 Land under miscellaneous tree crops

20200 hectares of area during 1998-99 and 18515 hectares of area during 1999-2000 comes under miscellaneous tree crops, which comprises about 0.5% of the total geographical area of the district. Most of the area under miscellaneous tree crops is from Idukki district and lesser in Thiruvananthapuram district.

2.6 Cultivable Waste Land

Estimated area under cultivable waste is 62710 hectares during 1998-99 and 58279 hectares of area during 1999-2000. i.e., Among the total area under cultivable land during 1998-99, 23.74% of area is in Kasaragod district. During 1999-2000, 28.52% of the total cultivable waste land comes in Palakkad district. When compared to the geographical area of the district, greater percentage of cultivable wasteland area is in Kasaragod district and lesser in Pathanamthitta district. District wise distribution of Area under cultivable waste land is tabled below:

2.6A Districtwise distribution of area under cultivable waste land 1998-99 and 1999-2000 (in hectares)

Sl. No.	Districts	Area under cultivable waste		% to total 1998-99		% to total geographical area of the district 1999-2000	
		1998-99	1999-2000	1998-99	1999- 2000	1998- 99	1999- 2000
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	326	448	0.52	0.77	0.15	0.02
2	Kollam	652	698	1.04	1.20	0.26	0.28
3	Pathanamthitta	193	282	0.31	0.48	0.07	0.10
4	Allapuzha	3477	2513	5.54	4.31	2.56	1085
5	Kottayam	1874	1660	2.99	2.85	0.85	0.76
6	Idukki	7799	3132	12.44	5.37	1.51	0.61
7	Eranakulam	3506	4594	5.59	7.88	1.49	1.95
8	Thrissur	2807	3087	4.48	5.30	0.94	1.03
9	Palakkad	13602	16622	21.69	28.52	3.10	3.78
10	Malappuram	5672	4596	9.04	7.89	1.57	1.27
11	Kozhikode	709	863	1.13	1.48	0.30	0.37
12	Wayanad	1872	1735	2.98	2.98	0.88	0.82
13	Kannur	5335	4741	8.51	8.14	1.80	1.60
14	Kasaragod	14886	13308	23.74	22.83	7.59	6.79
	STATE	62710	58279	100	100	1.61	1.50

2.7 Fallow other than current fallow

Area under fallow other than current fallow during 1999-2000 is 32138 hectares over 31357 hectares during 1998-99. This forms only 0.8% of the total geographical area of the district. A greater portion of the area under fallow other than current fallow comes in the district Palakkad.

2.8 Current fallow

The area under current fallow is estimated as 68022 hectares and 72166 hectares during 1998-99 and 1999-2000 respectively. When area under current fallow is compared with the total geographical area of the district a larger percentage of area under current compared is in Alappuzha district followed by Malappuram district. Only below 0.5% of area under current fallow compared to geographical area of the district is in the districts Thiruvananthapuram and Idukki. The table of district wise distribution of area under current fallow during 1998-99 and 1999-2000 are given below:

2.8A District wise distribution of area under current fallow 1998-99, 1999-2000

(in hectares)

Sl. No.	Districts	Area under current fallow		% to total		% to total geographical area of the district	
		1998-99	1999-00	1998-99	1999-00	1998-99	1999-00
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	741	930	1.09	1.29	0.34	0.43
2	Kollam	2754	3384	4.05	4.69	1.09	1.34
3	Pathanamthitta	3591	3547	5.28	4.92	1.34	1.32
4	Allapuzha	5074	5835	7.46	8.09	3.73	4.29
5	Kottayam	4924	5271	7.24	7.30	2.24	2.40
6	Idukki	1828	1762	2.69	2.44	0.35	0.34
7	Eranakulam	4527	6752	6.65	9.35	1.92	2.87
8	Thrissur	7450	7936	10.95	11.00	2.49	2.65
9	Palakkad	10986	13267	16.15	18.38	2.50	3.02
10	Malappuram	12357	11368	18.17	15.75	3.40	3.13
11	Kozhikode	2557	2111	3.76	2.93	1.10	0.90
12	Wayanad	2564	2743	3.77	3.80	1.21	1.29
13	Kannur	3175	4032	4.67	5.59	1.07	1.36
14	Kasaragod	5494	3228	8.07	4.47	2.80	1.64
	STATE	68022	72166	100	100	1.75	1.86

2.9 Net Area Sown

225874 hectares and 2239363 hectares during 1998-99 and 1999-2000 respectively comes under estimated Net Area Sown, which is 58.13% and 57.63% respectively to the total geographical area of the district. Within the total Net area sown in the district is considered a greater area under this category comes in Idukki district followed by Palakkad district and the area under the same category is lesser in Pathanamthitta district.

2.9 A Districtwise distribution of Net area sown 1998-99, 1999-2000

(in hectares)

Sl No	Districts	Net area sown in hectares		1998-99	% to total geographical area of the district		
		1998-99	1999-2000		1999- 2000	1998-99	1999- 2000
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	146207	143786	6.47	6.42	66.88	65.77
2	Kollam	144451	143302	6.39	6.40	57.36	56.90
3	Pathanamthitta	94074	93717	4.17	4.18	35.00	34.87
4	Allapuzha	102126	100653	4.52	4.49	75.06	73.98
5	Kottayam	177402	174895	7.85	7.81	80.80	79.66
6	Idukki	218590	223000	9.68	9.96	42.45	43.30
7	Eranakulam	179572	171320	7.95	7.65	76.31	72.80
8	Thrissur	153964	147530	6.82	6.59	51.43	49.28
9	Palakkad	218336	217176	9.67	9.70	49.74	49.47
10	Malappuram	203997	203759	9.03	9.10	56.16	56.10
11	Kozhikode	163517	162588	7.24	7.26	70.08	69.68
12	Wayanad	116145	115293	5.14	5.15	54.64	54.24
13	Kannur	203680	202579	9.02	9.05	68.63	68.26
14	Kasaragod	136613	139765	6.05	6.24	69.65	71.26
	STATE	2258674	2239363	100	100	58.13	57.63

2.10 area Sown more than Once

65786 hectares of area and 762341 hectares of area were sown more than once during 1998-99 and 1999-2000 respectively. A larger area was sown in Palakkad district during 1998-99 and in Idukki district during 1999-2000 smaller area was sown more than once in Kasaragod district. Out of the net area sown in the district 29.12% of area in 1998-99 and 34.04% of area in 1999-2000 were sown more than once. District wise distribution of area sown more than once and % of area sown more than with respect to net area and total area sown more than once in the state were given below:

2.10A District wise distribution of area sown more than once 1998-99, 1999-2000 (in hectares)

Sl. No.	Districts	Area sown more than once		% to total		% to net area sown of the District	
		1998-99	1999- 2000	1998- 99	1999- 2000	1998-99	1999- 2000
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	50931	53705	7.74	7.04	34.83	37.35
2	Kollam	67927	69309	10.33	9.09	47.02	48.37
3	Pathanamthitta	15424	18564	2.34	2.44	16.40	19.81
4	Allapuzha	33269	38295	5.06	5.02	32.60	38.05
5	Kottayam	39382	45761	5.99	6.00	22.20	26.16
6	Idukki	28940	41726	4.40	5.47	13.24	18.71
7	Eranakulam	42887	56052	6.52	7.35	23.88	32.72
8	Thrissur	32448	50986	4.93	6.69	21.08	34.56
9	Palakkad	91701	87331	13.94	11.46	42.00	40.21
10	Malappuram	42333	60685	6.43	7.96	20.75	29.78
11	Kozhikode	64053	69719	9.74	9.15	39.17	42.88
12	Wayanad	78925	93768	12.00	12.30	67.95	81.33
13	Kannur	67307	67670	10.23	8.88	33.05	33.40
14	Kasaragod	2277	8770	0.35	1.15	1.67	6.27
	STATE	657831	762341	100	100	29.12	34.04

2.11 Total Cropped Area

Total cropped area comprises net area sown and area sown more than once. 29.15 lakh^s hectares of area is totally cropped in 1998-99 and 30.01 lakh^s heaters of area is totally cropped during 1999-2000 respectively in Kerala as per EARAS survey report. Out of the total area cropped in the state. Palakkad district comes first where Pathanamthitta district comes last. When intensity of cropping is considered Wayanad District comes first in 1998-99 and 1999-2000.

**2.11 A District wise distribution of total cropped area in 1998-99 and 1999-2000
(in hectares)**

Sl. No	Name of Districts	Total cropped Area in lakh hects.		% to total		% to geographical Area of District		% to net area sown (Intensity of cropping)	
		1998- 99	1999- 2000	1998- 99	1999- 2000	1998- 99	1999- 2000	1998- 99	1999- 2000
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	1.97	1.97	6.76	6.56	90.18	90.34	135	137
2	Kollam	2.12	2.12	7.27	7.06	84.33	84.42	147	148
3	Pathanamthitta	1.09	1.12	3.74	3.73	40.74	41.78	116	120
4	Allapuzha	1.35	1.39	4.63	4.64	99.53	102.12	133	138
5	Kottayam	2.17	2.21	7.44	7.36	98.74	100.50	122	126
6	Idukki	2.48	2.65	8.51	8.83	48.07	51.41	113	119
7	Eranakulam	2.22	2.27	7.61	7.57	94.54	96.62	124	133
8	Thrissur	1.86	1.99	6.38	6.63	62.26	66.31	121	135
9	Palakkad	3.10	3.05	10.63	10.16	70.63	69.37	142	140
10	Malappuram	2.46	2.64	8.44	8.80	67.82	72.80	121	130
11	Kozhikode	2.28	2.32	7.82	7.73	97.53	99.56	139	143
12	Wayanad	1.95	2.09	6.69	6.96	91.77	98.35	168	181
13	Kannur	2.71	2.70	9.30	9.00	91.30	91.06	133	133
14	Kasaragod	1.39	1.49	4.78	4.97	70.81	75.73	102	106
	STATE	29.15	30.01	100	100	75.06	77.25	129	134

3.1 Area under Crops

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

Crops are classified as seasonal, annual and perennial according to the duration of each crop – Crops which are harvested during the period of four months in the season are defined as seasonal crops of the respective season. The seasonal crops for which the major period of harvest in that village falls within July to October will be Autumn Crops, November to February winter crops and Maarch to June Summer Crops. The crops which have duration of more than one season and less than one year are called annual crops. Crops which are standing more than one year will be treated as perennial crops. The district wise distribution of area under crops classified as seasonal annual and perennial crops are given below:

3.1A District wise distribution of area under Seasonal, Annual and Perennial Crops 1998-99 (Area in hectares)

Sl. No	Name of District	Seasonal Crops			Annual Crops			Perennial Crops			Total Cro- pped 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	Thiruvanan- thapuram	40878	7.01	20.74	7043	6.77	3.57	149217	6.69	75.69	75.69
2	Kollam	55937	9.59	26.34	5990	5.76	2.82	150451	6.75	70.84	70.84
3	Pathanam- thitta	18622	3.20	17.00	3707	3.56	3.39	87169	3.91	79.61	79.61
4	Allapuzha	44897	7.70	33.15	3699	3.55	2.73	86826	3.89	64.12	64.12
5	Kottayam	25519	4.38	11.77	7182	6.90	3.31	184083	8.26	84.92	84.92
6	Idukki	19936	3.42	8.06	9341	8.98	3.77	218253	9.79	88.17	88.17
7	Eranakulam	61416	10.52	27.61	12331	11.85	5.54	148712	6.67	66.85	66.85
8	Thrissur	44264	7.59	23.75	7965	7.65	4.27	134183	6.02	71.98	71.98
9	Palakkad	156689	26.87	50.54	15844	15.23	5.11	137504	6.17	44.35	44.35
10	Malappuram	38391	6.59	15.59	10520	10.11	4.27	197419	8.86	80.14	80.14
11	Kozhikode	15350	2.63	6.75	5298	5.09	2.33	206922	9.28	90.92	90.92
12	Wayanad	26921	4.62	13.81	5646	5.43	2.89	162503	7.29	83.30	83.30
13	Kannur	23212	3.98	8.57	6448	6.20	2.38	241327	10.82	89.05	89.05
14	Kasaragod	11010	1.89	7.93	3039	2.92	2.19	124841	5.60	89.88	89.88
	STATE	583042	100	20.00	104053	100	3.56	2229410	100	76.44	76.44

3.1B District wise distribution of area under Seasonal, Annual and Perennial Crops 1999-2000(Area in hectares)

Sl. No	Name of District	Seasonal Crops			Annual Crops			Perennial Crops			Total Cro- pped 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 Distt	
1	2	3	4	5	6	7	8	9	10	11	12
1	Thiruvanan- thapuram	38001	6.65	19.24	7939	6.91	4.02	151551	6.55	76.74	197491
2	Kollam	52739	9.22	24.81	5874	5.11	2.76	153998	6.65	72.43	212611
3	Pathanam- thitta	18977	3.32	16.90	4279	3.72	3.81	89025	3.84	79.29	112281
4	Allapuzha	44758	7.83	32.21	4359	3.80	3.14	89831	3.88	64.65	138948
5	Kottayam	27880	4.88	12.63	7852	6.84	3.56	184924	7.99	83.81	220656
6	Idukki	21440	3.75	8.10	9026	7.86	3.41	234260	10.12	88.49	264726
7	Eranakulam	54035	9.45	23.77	13918	12.12	6.12	159419	6.89	70.11	227372
8	Thrissur	47657	8.83	24.01	8722	7.59	4.39	142137	6.14	71.60	198516
9	Palakkad	151267	26.46	49.68	15625	13.60	5.13	137615	5.94	45.19	304507
10	Malappu- ram	38899	6.80	14.71	12924	11.25	4.89	212621	9.18	80.40	264444
11	Kozhikode	15914	2.78	6.85	5638	4.91	2.43	210755	9.10	90.72	232307
12	Wayanad	28163	4.93	13.47	8497	7.40	4.06	172401	7.45	82.46	209061
13	Kannur	20214	3.54	7.48	6771	5.90	2.51	243264	10.51	90.01	270249
14	Kasaragod	11801	2.06	7.94	3434	2.99	2.31	133300	5.76	89.74	145835
	STATE	571745	100	19.05	114858	100	3.83	2315101	100	77.12	3001704

From the above tables it can be seen that out of the total cropped area of 2916505 hectares during 1998-99, 20% of area is under seasonal crops, 3.56% under Annual Crops and 76.44% of area is under perennial crops and during 1999-2000, out of 3001704 hectares of total cropped area 19.05% is under seasonal crops, 3.83% is under annual crops and 77.12% is under perennial crops respectively. A larger area under seasonal and Annual Crops during 1998-99 and 1999-2000 is in Palakkad district and lesser in Kasaragod district respectively. Area under perennial crops during the same period is more 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 crops classified into food and non-food crops are given in the following table.

3.2A District wise Distribution of Area under Food Crops 1998-99 (in hectares)

Sl. No	Name of District	Area under food crops 1998-99							
		Food grains	% to Cropped Area of the District	Fruits and Vege- tables	% to Cropped Area of the District	Sugar crops spices and condi- ments	% to Cropped Area of the District	Total Food Crops	% to Cropped Area of the District
1	2	3	4	5	6	7	8	9	10
1	Thiruvanan-thapuram	10757	5.46	55423	28.11	8477	4.30	74657	37.87
2	Kollam	18300	8.62	64346	30.30	12916	6.08	95562	45.00
3	Pathanam-thitta	7507	6.86	20479	18.70	6822	6.23	34808	31.79
4	Allapuzha	35257	26.03	28423	20.99	5151	3.80	68831	50.83
5	Kottayam	15490	7.15	26011	12.00	10938	5.05	52439	24.19
6	Idukki	4498	1.82	28630	11.57	92304	37.29	125432	50.67
7	Eranakulam	52277	23.50	31707	14.25	13924	6.26	97908	44.01
8	Thrissur	39858	21.38	30226	16.21	13910	7.46	83994	45.06
9	Palakkad	115626	37.29	52662	16.99	25359	8.18	193647	62.46
10	Malappuram	24329	9.88	55523	22.54	25878	10.51	105730	42.92
11	Kozhikode	7431	3.27	43276	19.02	23713	10.42	74420	32.70
12	Wayanad	16092	8.25	29087	14.91	55449	28.43	100628	51.59
13	Kannur	15096	5.57	73928	27.28	38354	14.15	127378	47.01
14	Kasaragod	8374	6.03	33369	24.03	18121	13.05	59864	43.10
	STATE	370892	12.72	573090	19.65	351316	12.05	1295298	44.41

3.2B District wise Distribution of Area under Food Crops 1999-2000 (in hectares)

Sl. No	Name of District	Area under food crops 1998-99							
		Food grains	% to Cropped Area of the District	Fruits and Vege- tables	% to Cropped Area of the District	Sugar crops spices condi- ments	% to Cropped Area of the District	Total Food Crops	% to Cropped Area of the District
1	2	3	4	5	6	7	8	9	10
1	Thiruvanan-thapuram	9019	4.57	56609	28.66	8556	4.33	74184	37.56
2	Kollam	18061	8.49	59444	27.96	14072	6.62	91577	43.07
3	Pathanam-thitta	6757	6.02	22680	20.20	7461	6.64	36898	32.86
4	Allapuzha	35445	25.51	29039	20.90	5225	3.76	69709	50.17
5	Kottayam	16750	7.59	28304	12.83	11730	5.32	56784	25.73
6	Idukki	4438	1.68	31386	11.86	100168	37.8	135992	51.37
7	Eranakulam	44915	19.75	35484	15.61	15864	6.98	96263	42.34
8	Thrissur	43419	21.87	32034	16.14	14688	7.40	90141	45.41
9	Palakkad	116667	38.31	51397	16.88	25962	8.53	194026	63.72
10	Malappuram	23894	9.04	61679	23.32	28739	10.87	114312	43.23
11	Kozhikode	7053	3.04	45152	19.44	24871	10.71	77076	33.18
12	Wayanad	17748	8.49	34927	16.71	60133	28.76	112808	53.96
13	Kannur	13048	4.83	72164	26.70	38424	14.22	123636	45.75
14	Kasaragod	8775	5.91	32778	22.07	21041	14.17	62594	42.14
	STATE	365989	12.19	593077	19.79	376934	12.56	1336000	44.51

As per the above tables food grains cultivation is mainly concentrated in the districts of Palakkad, Alappuzha, Ernakulam and Thrissur. Cultivation of sugar crops, spices and condiments is mostly concentrated in Idukki and Wayanad districts. Totals more are used for cultivation of food crops in the district Palakkad followed by Wayanad district when compared with the total cropped area of the district i.e., 62.46% and 63.72% of the gross cropped area of district is covered for cultivation of food crops in Palakkad district during 1998-99 and 1999-2000 respectively.

4.0 Irrigation

Irrigation and weather condition are the two factors that affect Agriculture. Kerala is blessed with 41 west flowing and 3 east flowing rivers which provides vast potential for irrigation. It is estimated that - 4.45 lakhs hectares (net) and 7.25 lakh hectares (gross) of area is brought under irrigation through major and minor projects during 1998-99. According to EARAS estimates 3.75 lakh (Net) hectares and 4.21 lakhs (Gross) hectares have been brought under irrigation during 1998-99.

Land and Water are the most important basic resources required for a vibrant agriculture. In Kerala, land is a scarce resource while in respect of water it is richly endowed. Being located in an intensive rainfall region, for the life style of the people, cropping pattern, intensity of cropping and livestock reared, etc. the demand for water is very high. Among various uses highest priority is for drinking water followed by irrigation. The strategy adopted for the development of water resources and its management during the IX plan period aims at conservation of natural resources including rain water through appropriate intervention and ensuring its optimal utilisation. Against 8 projects targeted for time bound completion, only 4 projects namely Chittumoni-Mupli, Kanakkankadavu, Kanhirappuzha and Paazhassi could be completed so far. The remaining 4 - Karappuzha, Kallada, Muvattupuzha and Idamalayar are to be carried forward to X five year plan.

The details of area irrigated under various sources are furnished in the table below.

4.1 Source wise Area under Irrigation

Sl. No	Source of Irrigation	Area Irrigated			
		1998-99		1999-2000	
		Total (Hectare)	% to Total	Total (Hectare)	% to Total
1	2	3	4	5	6
1	Government Canals	94643	25.27	81231	21.37
2	Private Canals	2482	0.66	4803	1.26
3	Government Tanks & Wells	1392	0.37	3179	0.84
4	Private Tanks & Wells	153353	40.95	171358	45.09
5	Minor and Lift Irrigation	11937	3.19	8805	2.32
6	Other sources	110702	29.56	110667	29.12
	Total		100	380043	100

4.2 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 Monsoon. In contrast to the comfortable weather conditions, which Kerala was experiencing during the last nine years in succession, rainfall was only 2464 mm during 2000 against the normal of 3107 mm. The rainfall was not only deficient by about 1/5th of the normal but also there was a very skewed pattern of temporal distribution. For the first time during the last decade, the rainfall was below normal in both seasons. The onset of South West Monsoon was delayed by around two weeks and remained very scanty during the initial period. The rainfall was near or above normal only in two months during 2000. This has adversely affected the crop production prospects of the State. The Kharif Crop was delayed, which in turn has prolonged the subsequent seasons. As a consequence, the sowing of the second crop of paddy was delayed in the major producing districts like Palakkad and Thrissur.

PART - II

Table 2.1. Classification of Area according to utilization

Sl. No.	Head of Classification	Area in Sq.Km.		% to total	
		1998-99	1999-2000	1998-99	1999-2000
1	2	3	4	5	6
1	Total area according to village papers	38855	38855	100	100
2	Forest	10815	10815	27.83	27.83
3	Land put to non-agricultural uses	3338	3544	8.60	9.12
4	Barron and uncultivable land	283	289	0.73	0.74
5	Permanent pastures and other grazing land	7	3	0.02	0.01
6	Land under Miscellaneous tree crops	202	185	0.52	0.48
7	Cultivable waste	627	583	1.61	1.50
8	Current fallow	680	722	1.75	1.86
9	Fallow other than current fallow	315	321	0.81	0.83
10	Net area of sown	22587	22394	58.13	57.63
11	Area Sown more than once	6578	7623	16.93	19.62
12	Total cropped area	29165	30017	75.06	77.25
13	Total cultivated area	23583	23436	60.69	60.32
14	Total cultivable area	24412	24204	62.83	62.29

Table 2.2 Area under Crops in Kerala 1998-99 and 1999-2000

Sl. No	Class		Name of Crop	Area in hectares		% of variation
				1998-99	1999-2000	
1	Cereals and Millets	1	Paddy	352631	349774	-0.81
		2	Jower	2177	2529	+16.17
		3	Ragi	1157	870	-24.81
		4	Other Cereals & Millets	2300	1831	-20.39
		5	Total cereals and Millets	358265	355004	-0.91
2	Pulses including Tur	6	Pulses	12627	10985	-13.00
3	Sugar Crops	7	Sugarcane	6160	5780	-6.17
		8	Palmyrah	6581	6272	-4.70
		9	Total Sugar Crops	12741	12052	-5.41
4	Spices and Condiments	10	Pepper	182384	198406	+8.78
		11	Chillies	297	312	+5.05
		12	Ginger	11107	11264	+1.41
		13	Turmeric	3706	3971	+7.15
		14	Cardamom	41449	41491	+0.10
		15	Arecanut	73639	81941	+11.27
		16	Tamarind	18305	18922	+3.37
		17	Cloves	874	926	+5.95
		18	Nutmeg	5811	6520	+12.20
		19	Cinnamon	261	280	+7.28
		20	Garlic	742	849	+14.42
5	Fresh Fruits	21	Total Spices & condiments	338575	364882	+.77
		22	Jack	85885	93244	+8.57
		23	Mango	87317	90470	+3.61
		24	Banana	30521	39046	+27.93
		25	Plantain	50947	53252	+4.52
		26	Pineapple	8963	9484	+5.81
		27	Pappaya	12526	13190	+5.30
		28	Other Fresh fruits	12858	12597	-2.03

Sl. No	Class	Name of Crop	Area in hectares		% of variation
6	Dry fruits	29 Total dry fruits	289017	311283	+7.70
7	Vegetables	30 Cashew	91268	89403	-2.04
		31 Total fruits	380285	400686	+5.36
		32 Drumstick	19622	19246	-1.92
		33 Tubers	28768	29992	+4.25
		34 Sweet Potato	1099	989	-10.01
		35 Tapioca	112774	111922	-0.76
		36 Bitter guard	1969	2132	+8.28
		37 Snake guard	1081	889	-17.76
		38 Ladies finger	983	847	-13.84
		39 Brinjal	676	476	-29.59
		40 Amaranths	1525	1406	-7.80
		41 Other Vegetables	18372	19524	+6.27
		42 Thuvara	4978	3900	-21.66
		43 Muthira	958	1068	+11.48
		44 Total Vegetables	192805	192391	-0.21
8	Oil seeds	45 Groundnut	7021	6921	-1.42
		46 Sesamum	3303	2612	-20.92
		47 Coconut	882288	925035	+4.85
		48 Others	1751	1866	+6.57
		49 Total Oil Seeds	894363	936434	+4.70
9	Fiber, drugs and Narcotics	50 Cotton	10999	4772	-56.61
		51 Betal leaves	881	1024	+16.23
		52 Tobacco	41	44	+7.32
		53 Lemongrass	1538	1601	+4.10
		54 Total fiber drugs and narcotics	13459	7441	-44.71
10	Plantation Crops	55 Tea	34690	34793	+0.30
		56 Coffee	83699	84139	+0.53
		57 Rubber	469924	472900	+0.63
		58 Cocoa	8909	8629	-3.14
		59 Total Plantation crops	597222	600461	+0.54
		60 Fodder grass	2578	2788	+8.15
		61 Green manure crops	15670	15741	+0.45
		62 Other non food crops	97882	102806	+5.03
		63 Kacholam	33	33	0
		64 Total Cropped area	2916505	3001704	+2.92

2.3 Production of Important Crops 1998-99 and 1999-2000

Sl.No.	Name of Crop	Unit	Quantity Produced		% of variation
			1998-99	1999-2000	
1	Paddy	Tonnes	726743	770686	+6.05
2	Jower	"	1108	1287	+16.16
3	Ragi	"	936	704	-24.79
4	Other Cereals	"	1788	1423	-20.41
5	Sugarcane	"	47216	57882	+22.59
6	Black Pepper	"	68510	47543	-30.60
7	Dry Chillies	"	288	310	+7.64
8	Pulses	"	9822	8571	-12.74
9	Cured Ginger	"	39362	41344	+5.04
10	Curd Turmeric	"	8034	8362	+4.08
11	Groundnut	"	5219	5144	-1.44
12	Aarecanut	"	68479	83337	+21.70
13	Tamarind	"	28939	29564	+2.16
14	Mango	"	253281	257761	+1.77
15	Jack	In million numbers	325	335	+3.08
16	Banana	Tonnes	386588	398145	+2.99
17	Other Plantain	"	397986	410566	+3.16
18	Pineapple	"	73707	68258	-7.39
19	Tapioca	"	2630155	2531752	-3.74
20	Sweet Potato	"	11924	10698	-10.28
21	Pappaya	"	56205	59324	+5.55
22	Drumstick	"	20934	20725	-0.99
23	Sesamum	"	1057	718	-32.07
24	Coconut	In million nuts	5132	5680	+10.68
25	Cotton	Bale of 170 Km.	17732	7702	-56.56
26	Nutmeg	Tonnes	1446	1625	+12.38
27	Tobacco	"	228	245	+7.46
28	Lemongrass	"	87	93	+6.90
29	Tea	"	58726	61955	+5.50
30	Coffee	"	49886	60470	+21.22
31	Rubber	"	559099	572820	+2.45
32	Cocoa	"	3686	3744	+1.57
33	Processed Cardamom	"	4990	6585	+31.96
34	Raw Cashew nuts	"	51336	65547	+27.68
35	Betal leaves	"	155600	183656	+18.03
36	Clove (dry)	"	57	63	+10.53
37	Garlic	"	12614	14433	+14.42

2.4 Average Farm Prices of important Agricultural Commodities

Slo. No	Commodity	Unit	Average Farm Price		% of change
			1998-99	1999-2000	
1	Paddy	Qtl.	626.64	684.43	+19.22
2	Coconut	100Nos.	452.80	476.12	+5.15
3	Areca nut	100Nos.	64.78	75.25	+16.62
4	Tapioca	Qtl.	312.89	368.09	+17.64
5	Cashew nut	Qtl.	3537.58	3638.50	+2.85
6	Banana	100Nos.	167.09	882.17*	
7	Black Pepper	Qtl.	18090.21	20506.16	+13.36
8	Ginger	Qtl.	5624.94	6393.68	+13.67
9	Sugarcane	MT	552.52	662.38	+19.88

*Average Farm Price of Banana for Qtl.

Table 2.5 Crop Calendar – Kerala**Period of Sowing, Harvesting and Probable Period of Marketing Principal Crops In Kerala**

Sl. No	Name of Crop as per Season	Sowing Period	Harvesting Period	Probable Period of Marketing
1	2	3	4	5
01	Kharif Rice (Aut)	April (B) – July (E)	Aug (B) – Sept (E)	Sept (B) – Nov (E)
02	Kharif Rice (Wint)	Aug (B) – Nov (E)	Nov (B) – Jan (E)	Dec (B) – Mar (E)
03	Summer Rice	Nov (B) – Feb (E)	Mar (B) – June (E)	Mar (B) – June (E)
04	Kharif Cotton	April (B) – May (E)	Dec (B) – Jan (E)	Feb (B) – Mar (E)
05	Kharif Sugarcane	Nov (B) – Mar (E)	Dec (B) – Feb (E)	Jan (B) – Feb (E)
06	Summer Sugarcane	June (B) – Oct (E)	Oct (B) – Jan (E)	Jan (B) – Jan (E)
07	Early Kharif small millets	April (B) – July (E)	Sept (B) – Nov (E)	Dec (B) – Jan (E)
08	Summer Small millets	Jan (B) – Feb (E)	April (B) – April (E)	April (B) – April (E)
09	Summer black grain	April (B) – May (E)	July (B) – Aug (E)	Dec (B) – Jan (E)
10	Early Kharif Green gram	June (B) – Aug (E)	Aug (B) – Dec (E)	Sept (B) – Dec (E)
11	Kharif horsegram	Sept (B) – Nov (E)	Nov (B) – Jan (E)	Nov (B) – Feb (E)
12	Summer horsegram – wetland	Dec (B) – Feb (E)	April (B) – April (E)	April (B) – April (E)
13	Early Kharif Ginger	Mar (B) – July (E)	Nov (B) – Feb (E)	Dec (B) – Feb (E)
14	Kharif Ginger	Mar (B) – June (E)	Dec (B) – Feb (E)	Dec (B) – Mar (E)
15	Kharif sesamum	Aug (B) – Oct (E)	Dec (B) – April (E)	Dec (B) – Feb (E)
16	Summer sesamum	Dec (B) – Feb (E)	Mar (B) – May (E)	Mar (B) – May (E)
17	Early Kharif sweet potato	April (B) – July (E)	Sept (B) – Nov (E)	Nov (B) – Feb (E)
18	Kharif sweet potato	Oct (B) – Nov (E)	Dec (B) – Feb (E)	Feb (B) – Mar (E)
19	Summer sweet potato	Dec (B) – March (E)	Mar (B) – June (E)	April (B) – June (E)
20	Early Kharif Banana	Aug (B) – Sept (E)	July (B) – Aug (E)	July (B) – Aug (E)
21	Kharif Banana	Dec (B) – Jan (E)	Nov (B) – Jan (E)	Dec (B) – Jan (E)
22	Kharif Tobacco	Nov (B) – Dec (E)	Mar (B) – April (E)	May (B) – June (E)
23	Early Kharif tubers	July (B) – Aug (E)	April (B) – May (E)	-
24	Kharif Tubers	Mar (B) – April (E)	Nov (B) – Jan (E)	Dec (B)
25	Early Kharif Tapioca (A)	July (B) – Oct (E)	July (B) – Aug (E)	July (B) – Sept (E)
26	Kharif Tapioca (dry land)	Mar (B) – May (E)	Nov (B) – Mar (E)	Dec (B) – Feb (E)
27	Summer Tapioca	July (B) – Aug (E)	April (B) – May (E)	-
28	Kharif Pepper	June (B) – Aug (E)	Nov (B) – Feb (E)	Nov (B) – Mar (E)
29	Groundnut	April (B) – June (E)	Sept (B) – Dec (E)	-
30	Carrot	April (B) – May (E)	Sept (B) – Oct (E)	-
31	Garlic	April (B) – May (E)	Aug (B) – Sept (E)	-
32	Wheat	April (B) – May (E)	Oct (B) – Nov (E)	-
33	Potato	April (B) – May (E)	Oct (B) – Nov (E)	-
34	Turmeric	Mar (B) – May (E)	Jan (B) – Mar (E)	-

(B) – Beginning of the month, (E) – End of the month

Table 3.0 District wise Actual and Normal Rainfall (in mm) with percentage departure from Normal Rainfall for 1999 and 2000

Sl. No	Name of District	Normal Rainfall	Actual Rainfall (mm)		Percentage Departure	
			1999	2000	1999	2000
1	Thiruvananthapuram	2203.8	1925.3	1502.5	-13	-32
2	Kollam	2555.1	2885.1	2352.0	+13	-8
3	Pathanamthitta	3133.8	3379.9	2682.8	+8	-14
4	Allappuzha	2965.4	3106.7	2638.3	+5	-11
5	Kottayam	3130.3	2957.1	2411.4	-6	-23
6	Idukki	3079.4	3832.5	3225.0	13	-5
7	Eranakulam	3274.3	3051.4	2657.3	-7	-19
8	Thrissur	3262.0	2764.9	2072.3	-15	-36
9	Palakkad	2389.8	2120.9	1831.3	-11	-23
10	Malappuram	2906.1	2851.3	2191.5	-2	-25
11	Kozhikode	3667.9	2817.7	2529.1	-23	-31
12	Wayanad	3590.8	2231.5	2343.7	-38	-35
13	Kannur	3465.0	3038.1	2917.3	-12	-16
14	Kasaragod	3581.3	3233.6	3152.2	-10	-12
	STATE	3107.5	2871.1	2464.8	-8	-21

Table 3.1 District wise monthly Rainfall in mm for 1999 in Kerala

Sl. No	Name of District	January	February	March	April	May	June	July	August	Septem- ber	October	Novem- ber	Decem- ber
1	Thiruvananthapuram	12.9	65.5	16.4	148.7	376.0	410.9	166.0	91.6	36.8	485.5	99.8	15.2
2	Kollam	1.7	61.6	17.2	245.7	487.5	485.0	333.3	138.0	72.9	926.8	112.2	3.2
3	Pathanamthitta	4.8	55.4	52.9	255.5	540.1	801.8	548.9	195.4	106.6	694.1	124.6	3.3
4	Allappuzha	6.9	13.3	62.4	261.5	533.1	673.4	432.8	228.3	117.4	651.8	117.6	10.3
5	Kottayam	-	5.7	50.3	183.0	532.0	620.6	503.0	233.4	105.3	615.9	92.2	8.8
6	Idukki	-	49.1	23.5	160.4	602.4	590.1	927.7	361.1	195.3	818.7	100.7	3.5
7	Eranakulam	-	18.1	20.7	125.8	605.9	648.5	645.4	170.6	81.9	643.0	76.0	15.5
8	Thrissur	-	15.6	6.4	80.7	430.7	571.8	838.9	210.6	47.5	498.8	39.9	-
9	Palakkad	-	17.2	2.1	40.4	283.7	437.1	619.1	169.8	44.5	445.9	59.5	1.6
10	Malappuram	-	22.4	30.8	97.0	451.0	694.0	735.6	251.1	54.0	465.7	47.2	2.5
11	Kozhikode	-	1.0	18.3	68.0	540.6	735.5	738.5	321.4	48.5	318.1	23.0	4.8
12	Wayanad	-	10.0	14.3	53.0	263.6	336.1	757.7	302.0	64.3	392.3	38.0	0.2
13	Kannur	-	-	-	11.8	431.4	754.4	972.4	414.9	66.0	348.9	38.3	-
14	Kasaragod	-	-	0.6	7.7	487.6	836.2	977.9	416.4	154.8	322.8	28.9	0.7
	STATE	27.6	334.9	309.9	1739.2	6595.6	8595.4	9197.2	3504.6	1195.8	7628.3	997.3	69.6

Table 3.2 District wise monthly Rainfall in mm for 2000 in Kerala

Sl No	Name of District	January	Febru- ary	March	April	May	June	July	August	Sep- tember	October	Novem- ber	Decem- ber
1	Thiruvananthapuram	9.2	69.3	37.8	135.1	11.2	271.1	89.0	352.1	139.1	189.4	131.3	67.9
2	Kollam	2.1	140.9	37.7	128.7	88.0	473.2	131.5	557.2	266.8	220.1	180.7	125.1
3	Pathanamthitta	16.5	235.5	75.7	167.4	125.4	594.7	231.6	562.8	297.0	195.6	93.1	87.5
4	Alappuzha	24.0	187.0	60.2	112.0	147.8	621.0	219.5	599.3	277.4	215.2	116.2	58.7
5	Kottayam	14.0	73.0	68.4	90.9	124.2	595.6	264.7	631.1	260.7	171.1	87.2	30.5
6	Idukki	9.2	95.5	7.6	115.5	189.8	898.9	407.1	1011.1	223.2	170.1	56.2	40.8
7	Eranakulam	18.2	77.7	22.5	86.2	159.2	667.8	365.3	699.1	202.2	222.9	86.5	49.7
8	Thrissur	-	15.8	2.2	65.8	98.2	589.5	333.6	565.7	131.9	203.2	41.3	25.6
9	Palakkad	0.1	29.3	2.5	85.3	43.1	508.2	290.6	464.3	160.1	130.7	82.7	34.4
10	Malappuram	13.2	4.1	0.7	76.0	81.3	591.9	319.3	442.6	247.9	275.3	58.8	80.4
11	Kozhikode	10.7	0.5	-	77.7	143.0	790.4	454.3	452.1	126.2	270.1	103.8	100.3
12	Wayanad	13.6	13.6	0.3	118.1	58.4	607.9	378.1	626.0	249.9	122.4	43.3	112.1
13	Kannur	37.5	1.3	6.0	86.5	207.2	822.3	542.8	604.9	126.8	338.1	23.8	120.1
14	Kasaragod	30.9	-	-	38.1	339.9	1056.5	675.4	553.0	74.2	306.3	28.1	49.8
STATE		199.2	943.5	321.6	1383.3	1816.7	9089.0	4702.8	8121.3	2783.4	3030.5	1133.0	982.9

Table 3.3 Classification of area under land utilization

Sl.No	District	Total Geogra- phical area	Forest	(Area in hectares)										Remarks
				Total put to agricul- tural use	and put on rural use	erma- ment and arren- tive cultivable area	as- ture and other land under tree rops	cul- tivable waste land other than allow- able	cul- tivation fallow	Net area sown	area sown thin	area re- se	rice area	Total cropped area
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Thiruvananthapuram	218600	49861	20492	433	8	60	326	472	741	146207	50931	197138	
2	Kollam	251838	81438	21060	277	8	241	652	957	2754	144451	67927	212378	
3	Pathanamthitta	268750	155214	14838	429	10	80	193	321	3591	94074	15424	109498	
4	Allappuzha	136058	-	22606	179	1	169	3477	2426	5074	102126	33296	135422	
5	Kottayam	219550	8141	23077	1376	2	129	1874	2625	4924	177402	39382	216784	
6	Idukki	514962	260907	14671	4251	257	6198	7799	461	1828	218590	28940	247530	
7	Eranakulam	235319	8123	34510	905	26	424	3506	3726	4527	179572	42887	222459	
8	Thrissur	299390	103619	27377	296	46	622	2807	3209	7450	153964	32448	186412	
9	Palakkad	438980	136257	43704	3037	72	3660	13602	9326	10986	218336	91701	310037	
10	Malappuram	363230	103417	31613	2541	14	1192	5672	2427	12357	203997	42333	246330	
11	Kozhikode	233330	41386	22465	1344	24	678	709	650	2557	163517	64053	277570	
12	Wayanad	212560	78787	10600	356	67	1033	1872	1136	2564	116145	78925	195070	
13	Kannur	296797	48734	28553	3798	83	1990	5335	1449	3175	203680	67307	270987	
14	Kasaragod	196133	5625	18256	9119	64	3724	14886	2352	5494	136613	2277	138890	
	STATE	3885497	1081509	333822	28341	682	20200	62710	31537	68022	2258674	657831	2916505	

The estimates are based on survey conducted in the Revenue land (as per Village Record). Therefore the area under cultivation in forest land is not included.

Table 3.4 Classification of area under land utilization

(Area in hectares)										
S.I.No	District	Total Geogra- phical area	Forest	Land put to non agricultural use	Aren't & cultivable arable	Cultivable waste and other grazing	Land under misc. Tree crops	Allow other than current allow	Current fallow	Net area sown
1	2	3	4	5	6	7	8	9	10	11
1	Tiruvananthapuram	218600	49861	22564	502	8	69	448	432	930
2	Kollam	251838	81438	21705	256	3	103	698	949	3384
3	Pathanamthitta	268750	155214	14986	446		90	282	468	3547
4	Allappuzha	136058	-	22894	192		175	2513	3796	5835
5	Kottayam	219550	8141	24840	1418		131	1660	3194	5271
6	Idukki	514962	260907	14982	4136	155	5888	3132	1000	1762
7	Eranakulam	235319	8123	39855	1120	16	281	4594	3258	6752
8	Thrissur	299390	103619	32321	494	27	821	3087	3555	7936
9	Palakkad	438980	136257	43891	3402	1	1794	16622	6570	13267
10	Malappuram	363230	103417	32533	2932		955	4596	3670	11368
11	Kozhikode	233330	41386	23436	1393	5	665	863	883	2111
12	Wayanad	212560	78787	11647	338	22	1046	1735	949	2743
13	Kannur	296797	48734	28978	3693	16	1929	4741	2095	4032
14	Kasaragod	196133	5625	19758	8562		4568	13308	1319	3228
	STATE	3885497	1081509	354390	28884	253	18515	58279	32138	72166
										2239363
										762341
										3001704

Table 3.5 – Area under Crops 1998-99

District	Paddy			Total	Jowar	Ragi	Other Cereals	Total Cereals/ Millets	Pulses including Tur			Total	Total Food grains	
	Autumn	Winter	Summer						Autumn	Winter	Summer			
1 Thiruvananthapuram	2	3	4	5	6	7	8	9	10	11	12	13	14	
2 Kollam	7549	10022		9598				9598	30	22	1107	1159	10757	
3 Pathanamthitta	1372	3165	2960	17571				17571	87	63	579	729	18300	
4 Alappuzha	8719	7348	19058	35125				35125	6	4		10	7507	
5 Kottayam	3277	7233	3883	14393				14393	4	96	997	1097	15490	
6 Idukki	1065	2452	329	3846	2	42	133	4023	42	3	430	475	35257	
7 Ernakulam	16822	20462	12446	49730				49730	59	34	2454	2547	52277	
8 Thrissur	100194	23000	6196	39215				39215	316	229	98	643	39858	
9 Palakkad	5915	55730	5822	107467	2175	1115	2165	112922	219	261	2224	2704	115626	
10 Malappuram	6289	15647	1882	23818				23818	102	2	407	511	24329	
11 Kozhikode	921	4969	953	6843				6843	283	31	274	588	7431	
12 Wayanad	12043	3599	15642					15642	5	21	424	450	16092	
13 Kannur	8665	4918	295	13878				13878	9	548	661	1218	15096	
14 Kasaragod	4806	2941	261	8008				2	8010	35	60	269	364	8374
STATE	120217	174714	57700	352631	2177	1157	2300	358265	1197	1386	10044	12627	370892	

Table 3.5 (contd.)

District	Sugar Crops						Species and condiments						Grand Total		
	Sugar cane	Palm myrah	Total	Pepper	Chili-llies	Ginger	Turmeric	Cardamom	Areca Nut	Tamarind	Cloves	Nutmeg	Cinnamon	Garlic	Total
1 Thiruvanan-thapuram	15	16	17	18	19	20	21	22	23	24	25	26	27	28	30
2 Kollam	2	165	167	5800	3	80	70	-	827	1414	75	41	-	-	8310
3 Pathanamthitta	227	40	267	3793	2	387	70	664	1146	212	88	180	13	-	6555
4 Alappuzha	192	41	233	2028		119	12	2067	523	36	109	24	-	4918	5151
5 Kottayam	137	309	446	7727	8	159	183	129	1130	503	114	513	26	-	10492
6 Idukki	2894	201	3095	49749	-	1561	626	32686	2899	304	185	423	34	742	89209
7 Ernakulam	12	228	240	6039	10	442	436	-	3604	819	93	2220	21	-	13684
8 Thrissur	318	318	4369	18	92	87	-	5450	1845	70	1651	10	-	13592	13910
9 Palakkad	2653	3508	6161	4733	100	940	598	2928	3767	6014	12	65	41	-	19198
10 Malappuram	6	1078	1084	7086	-	158	239	70	14190	2770	48	216	17	-	24794
11 Kozhikode	15	333	348	11976	-	238	682	221	8970	1060	51	150	17	-	23365
12 Wayanad	153	153	40210	-	6129	197	4108	4456	167	7	11	-	-	55296	55449
13 Kannur	20	124	144	23419	12	314	307	128	12360	1449	29	153	39	-	38210
14 Kasaragod	2	66	68	6199	138	46	39	515	10832	248	13	23	-	-	18053
15 STATE	6160	6581	12741	182384	297	11107	3706	41449	73639	18305	874	5811	261	742	338575
															351316

Districts	Fresh fruits						Dry fruits		
	Jack	Mango	Banana	Other plantain	Papaya	Other fresh fruits	Total	Cashew	Total fruits
1. Thiruvananthapuram	37	32	33	34	35	36	37	38	39 40
2. Kollam	6198	6212	1389	5235	215	785	554	20588	2466 23(054
3. Pathanamthitta	7193	6867	1390	4301	224	815	464	21254	5180 23464
4. Alappuzha	2425	1324	1213	1996	157	486	592	8193	1050 9243
5. Kottayam	3304	5813	324	3014	92	945	931	14423	4860 19283
6. Idukki	4107	2622	1813	4449	465	821	604	14881	619 15500
7. Ernakulam	4704	2311	1771	3364	1109	802	738	14499	1143 15642
8. Thrissur	3764	4113	3026	4102	4929	1055	967	21956	1374 23330
9. Palakkad	4445	6400	2475	4817	300	1044	1466	20947	4339 25286
10. Malappuram	4812	7905	4612	4966	99	1006	1040	24440	5998 30438
11. Kozhikode	7969	9888	5083	3433	405	1696	1412	29886	9950 39836
12. Wayanad	10500	11308	1519	3056	354	1440	1334	29511	3471 32982
13. Kannur	10725	5423	3726	1716	51	328	741	22530	1385 23915
14. Kasaragod	13468	14965	1453	4357	479	1195	1307	37224	27632 64856
State	85885	87317	30521	50947	8963	12526	12858	289017	91268 380285

Districts	Drum -stick	Tuber s	Swc et potat o	Tapioca			Vegetables						Total food crops				
				Aatu- mn	Winte- r	Sum- mer	Total	Bitte r gour d	Shak e gour d	Ladi es fing er	Brin jal	Amar -anths	Other vege- tables				
1.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
1. Thiruvanan- thapuram	2457	2182	40	5771	8153	12707	26631	103	108	24	28	89	707			32369	74657
2. Kollam	1619	6601		2971	12838	12196	28005	67	26	293	204	678	419			37912	95562
3. Pathanamthitta	623	3380		829	4453	794	6076	98	90	26	104	23	816			11236	34808
4. Alappuzha	932	1981	7	333	2398	2198	4929	153	94	24	29	262	729			9140	68831
5. Kottayam	889	1268	2	602	3272	3056	6930	260	157	21	13	13	958			10511	52439
6. Idukki	541	1549	22	429	3490	3108	7027	512	1	4	7	1	3317	7		12988	125432
7. Ernakulam	817	1100	4	1194	1282	2545	5021	142	89	51	24	83	1046			8377	97908
8. Thrissur	1051	726		526	317	966	1809	84	15	61	64	180	950			4940	83994
9. Palakkad	1661	2696	649	1035	3329	2451	6815	227	473	391	168	47	3182	4971	944	22224	193647
10. Malappuram	2669	1964	206	2525	1645	3873	8043	35	5	19	6	25	2715			15687	105730
11. Kozhikode	3325	1909	26	1080	1466	1636	4182	13	3	5	1	18	812			10294	74420
12. Wayanad	725	2092		188	574	719	1481	85	2	4	6	3	774			5172	100628
13. Kannur	1777	1106	27	494	2525	1714	4733	165	15	37	11	82	1106			13	9072
14. Kasaragod	536	214	116	176	650	266	1092	25	3	23	11	21	841			1	2883
State	19622	28768	1099	18153	46392	48229	112774	1969	1081	983	676	1525	18372	4978	958	192805	1295298

Table 3.5 (contd.)

District	Oil seeds					Fibre drugs and narcotics					Non food crops					Plantation crops		
	Groundnut	Sesame	Coconut	Other	Total	Cotton	Betel leaves	Tobacco	Lemongrass	Total	Tea	Coffee	Rubber	Cocoa	Total	TOTAL		
1. Thiruvananthapuram	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73		
2. Kollam	727	75614	9	91271	54	91327	37	2	39	965	27472	134	28571	119937				
3. Pathanamthitta	16	21994	27	22037		74		58	1257		36275	48	37580	113988				
4. Alappuzha	1150	58621	151	5922		36		36			3722	235	3957	63915				
5. Kottayam	36	42571	21	42628		9		9	1951	1800	110548	2492	116791	159428				
6. Idukki	21	21444	41	21506		2		1116	1118	23419	10064	38012	2820	74315	96939			
7. Ernakulam	589	61719	102	62410		34		5	39	2		56243	1225	57470	119919			
8. Thrissur	148	81171	172	81491		55		6	61	529		13290	184	14003	95555			
9. Palakkad	7019	78	45439	766	53302	10999	6	2	11007	829	4650	28550	32	34061	98370			
10. Malappuram	496	99276	151	9923		515		515	174		28544	45	28763	129201				
11. Kozhikode	129506	30	129536	21		1		22			17844	386	18230	147788				
12. Wayanad	28	9948	28	10004				332	332	5473	67185	6337	126	79121	89457			
13. Kannur	14	95118	174	95306		15		74	89		33554	284	33838	129233				
14. Kasaragod		48596	25	48621		19	41		60		21963	134	22097	70778				
State	7021	3303	882288	1751	894363	10999	881	41	1538	13459	34690	83699	469924	8909	59722	1505044		

Table 3.5 (contd.)

Districts	Fodder grass	Green manure crops	Other non food crops	Kacholam	Total	Total non food crops	Total cropped area
1.	74	75	76	77	78	79	80
1. Thiruvananthapuram	104	319	2121		2544	122481	197138
2. Kollam	134	613	2081		2828	116816	212378
3. Pathanamthitta	57	634	3463		4154	74690	109498
4. Alappuzha	99	233	2344		2676	66591	135422
5. Kottayam	111	325	4477	4	4917	164345	216784
6. Idukki	1272	462	23423	2	25159	122098	247530
7. Ernakulam	92	298	4221	21	4632	124551	222459
8. Thrissur	24	951	5888		6863	102418	186412
9. Palakkad	221	1865	15931	3	18020	116390	310037
10. Malappuram	20	4975	6404		11399	140600	246330
11. Kozhikode	56	1944	3359	3	5362	153150	227570
12. Wayanad	196	446	4343		4985	94442	195070
13. Kannur	181	1041	13154		14376	143609	270987
14. Kasaragod	11	1564	6673		8248	79026	138890
State	2578	15670	97882	33	116163	1621207	2916505

Table 3.6 – Area under Crops 1999-2000

District	Paddy			Total	Jowar	Ragi	Other cereals	Total cereals/ millets	Pulses including Tur			Total food grains	
	Autumn	Winter	Summer						Autumn	Winter	Summer		
1.	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Thiruvananthapuram	3705	4214	50	7969				7969	52	71	927	1050	9019
2. Kollam	7649	9767	10	17426				17426	66	16	553	635	18061
3. Pathanamthitta	1000	2680	3036	6716				6716	3	10	28	41	6757
4. Alappuzha	8233	10689	16404	35326				35326	1	25	93	119	35445
5. Kottayam	3405	5588	6829	15822				15822	3	7	918	928	16750
6. Idukki	866	2389	385	3640				33	90	3763	38	271	675
7. Ernakulam	15467	17690	9737	42894				42894	212	101	1708	2021	44915
8. Thrissur	11343	23622	7922	42887				42887	261	63	208	532	43419
9. Palakkad	51685	50730	7289	109704	2528	837	1736	114805	464	1208	190	1862	116667
10. Malappuram	5844	15440	2211	23495				23495	51	50	298	399	23894
11. Kozhikode	681	4897	917	6495				6495	282	46	230	558	7053
12. Wayanad	Nil	14554	2750	17304	1			5	17310	17	421	438	17748
13. Kannur	6898	4548	264	11710				11710	4	791	543	1338	13048
14. Kasaragod	4749	3420	217	8386				8386	20	196	173	389	8775
State	121525	170228	58021	349774	2529	870	1831	355004	1457	2872	6656	10985	365989

Table 3.6 (contd.)

District	Sugar crops							Spices and condiments							Grand Total		
	Sugar-cane	Palm-syrup	Total	Pepper	Chilli-ies	Gin-gers	Turmeric	Cardamom	Areca-nut	Tamarind	Cloves	Nut-meg	Cinna-mon	Garlic	Total		
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Thiruvananthapuram	0	168	168	5775	5	77	52	-	904	1432	93	50	0	-	8388	8556	
Kollam		19	19	10170		480	184			2235	879	48	50	7	14053	14072	
Pathanam-thitta	230	42	272	4224	3	442	103	664	1213	246	87	194	13		7189	7461	
Alappuzha	92	44	136	1943	0	125	11			2308	522	28	126	26	0	5089	5225
Kottayam	81	340	421	8499	3	163	196	200	1215	403	123	485	22		11309	11730	
Idukki	2624	244	2868	57211		1711	416	32667	3348	341	220	498	39	849	97300	100168	
Erana-kulam	15	255	270	7002		469	505		3964	899	101	2632	22		15594	15864	
Thrissur	1	260	261	3861		112	125		6355	2038	77	1847	12		14427	14688	
Palakkad	2713	3237	5950	4844	139	1191	771	2919	3786	6236	10	67	49		20012	25962	
Malappuram	4	1026	1030	7885		200	309	70	15894	3047	42	242	20		27709	28739	
Kozhi-kode	13	284	297	11869		287	747	220	10139	1078	51	164	19		24574	24871	
Wayahad	1	144	145	44771		5520	159	4108	5212	183	8	13	14		59988	60133	
Kannur	4	132	136	23301	13	358	323	128	12630	1348	25	126	36		38288	38424	
Kasara-god	2	77	79	7051	149	129	70	515	12738	270	13	26	1		20962	21041	
State	5780	6272	12052	198406	312	11264	3971	41491	81941	18922	926	6520	280	849	364882	376934	

Table 3.6 (contd.)

Districts	Fresh fruits`						Dry fruits			
	Jack	Mango	Banana	Other plantain	Pineapple	Papaya	Other fresh fruits	Total	Cashew	Total fruits
1.	31	32	33	34	35	36	37	38	39	40
1. Thiruvananthapuram	6464	6957	1599	5877	262	863	498	22520	2804	25324
2. Kollam	6611	6014	1489	4128	185	917	377	19721	4604	24325
3. Pathanamthitta	2834	1527	1669	2053	207	481	646	9417	1044	10461
4. Alappuzha	3191	5833	536	3544	101	978	920	15103	4909	20012
5. Kottayam	4308	2720	2655	4259	502	901	651	15996	701	16697
6. Idukki	5467	2630	1138	3736	1283	530	743	15527	1341	16868
7. Ernakulam	4413	4977	4200	4232	5174	1150	1092	25238	1576	26814
8. Thrissur	5175	6795	2791	5332	303	1112	1614	23122	4101	27223
9. Palakkad	4988	7535	5279	4268	124	1020	987	24201	5854	30055
10. Malappuram	8868	11426	7049	3828	353	1756	1149	34429	10982	45411
11. Kozhikode	11102	11307	1667	3259	390	1451	1203	30379	3863	34242
12. Wayanad	12477	5859	6342	1946	63	362	792	27841	1561	29402
13. Kannur	14740	14360	1840	4347	439	1223	1150	38099	26101	64200
14. Kasaragod	2606	2530	792	2443	98	446	775	9690	19962	29652
State	93244	90470	39046	53252	9484	13190	12597	311283	89403	400686

Table 3.6 (contd.)

Districts	Drum-stick	Tubers	Tapioca			Total	Bitter gourd	Snake gourd	Ladies finger	Brinjal	Amaranthus	Other vegetables	Thuvvara	Muthira	Total vegetables	Total food crops	
			Sweet potato	Autumn	Winter												
I	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
Thiruvananthapuram	2490	1841	47	5852	7272	12857	25981	112	150	28	6	78	552			31285	74184
Kollam	1696	6256	1	3165	10672	11841	25678	77	19	212	58	676	446			35119	91577
Pathanamthitta	577	3617		603	3028	3246	6877	107	109	25	56	40	811			12219	36898
Alappuzha	924	2402	2	232	2149	2143	4524	167	88	17	31	152	720			9027	69709
Kottayam	908	1229		417	4097	3231	7745	327	256	14	15	30	1083			11607	56784
Idukki	534	1834	17	361	3926	3488	7775	433	4	3	9	11	3892	6		14518	135992
Eranakulam	877	1310	8	688	1318	3125	5131	173	119	58	25	92	877			8670	96263
Thrissur	1106	895		274	339	914	1527	116	18	58	17	86	988			4811	90141
Palakkad	1528	3194	519	869	2532	2972	6373	260	105	331	212	51	3818	3894	1057	21342	194026
Malappuram	2462	2054	252	2177	1984	4330	8491	64	12	29	13	28	2862		1	16268	114312
Kozhikode	3109	1984	36	1062	1519	2343	4924	24	6	13	2	32	780			10910	77076
Wayanad	835	2170	3	140	345	1135	1620	115		3	9	11	759			5525	112808
Kannur	1654	938	26	342	1992	1662	3996	122		29	11	93	1088		7	7964	123636
Kasaragod	546	268	78	135	813	332	1280	35	3	27	12	26	848		3	3126	62594
State	19246	29992	989	16317	41986	53619	111922	2132	889	847	476	1406	19524	3900	1068	192391	1336000

Table 3.6 (contd.)

District	Oil seeds				Fibre drugs and narcotics				Non food crops				Plantation crops				
	Ground-nut	Sesamum	Coco-nut	Others	Total	Cotton	Betal leaves	Tobacco	Lemon-grass	Total	Tea	Coffee	Rubber	Cocoa	Total	TOTAL	
1	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	
Thiruvananthapuram		91362	53	91415		33				33	965		27954	113	29032	120480	
Kollam	581	7906	10	80497		53				53	1258		36452	38	37748	118298	
Pathanamthitta	8	22769	22	22799		78				78	90		47700	661	48451	71328	
Alappuzha	902	61270	172	62344		42				42			3747	175	3922	66308	
Kottayam	46	43272	23	43341		15				15	1951		110923	2243	115117	158473	
Idukki	9	23696	33	23738		1				1226	1227	23503	12075	38187	2860	76625	101590
Eranakulam	236	68110	117	68463		42				4	46	2	56383	1416	57801	126310	
Thrissur	1	111	88307	184	88603		35			5	40	530		13372	169	14071	102714
Palakkad	6920	115	45857	878	53770	4772	4		3	4779	840	4650	28781	29	34300	92849	
Malappuram	558	107142	132	107832		664				664	174		28920	40	29134	137630	
Kozhikode	131061	26	131087		25		2	27					18016	404	18420	149534	
Wayanad	20	10843	26	10889		1				300	301	5480	67414	6411	137	79442	90632
Kannur	95257	162	95419		9		61	70					33806	216	34022	129511	
Kasaragod	26	56183	28	56237		22	44			66			22248	128	22376	78679	
State	6921	2612	925035	1866	936434	4772	1024	44	1601	7441	34793	84139	472900	8629	600461	1544336	

Table 3.6 (contd.)

Districts	Fodder grass	Green manure crops	Other non food crops	Kacholam	Total	Total non food crops	Total cropped area
1	74	75	76	77	78	79	80
1. Thiruvananthapuram	93	313	2421		2827	123307	197491
2. Kollam	157	640	1939		2736	121034	212611
3. Pathanamthitta	62	700	3293		4055	75383	112281
4. Alappuzha	110	243	2578		2931	69239	138948
5. Kottayam	130	320	4949		5399	163872	220656
6. Idukki	1343	548	25248	5	27144	128734	264726
7. Ernakulam	102	317	4366	14	4799	131109	227372
8. Thrissur	32	1046	4583		5661	108375	198516
9. Palakkad	276	1807	15543	6	17632	110481	304507
10. Malappuram	35	4911	7556		12502	150132	264444
11. Kozhikode	49	2060	3581	7	5697	155231	232307
12. Wayanad	188	495	4938		5621	96253	209061
13. Kannur	191	937	15973	1	17102	146613	270249
14. Kasaragod	20	1404	5838		7262	85941	148535
State	2788	15741	102806	33	121368	1665704	3001704

Table 3.7 – Production of important crops 1998-99

Name of district	Rice					(Production in tonnes)								
	Autumn	Winter	Summer	Total	Jowar	Ragi	Other cereals	Sugar-cane	Black pepper	Dry chillies	Pulses	Cured ginger	Cured turmeric	Groundnut
1.	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Thiruvananthapuram	8892	8792	5	17689				15	1953	3	265	232	159	1
2. Kollam	14574	18737		33311					2828	6	1328	1331	238	
3. Pathanamthitta	2499	6544	10424	19467				1258	1097	2	8	997	115	
4. Alappuzha	17570	16098	58013	91681				419	256		115	224	14	
5. Kottayam	6580	18048	11030	35658				1203	1102	7	947	392	386	
6. Idukki	2314	5869	812	8995	1	34	104	20254	29372		392	6486	1505	
7. Eranakulam	28778	36613	19138	84529				84	1026	9	1823	1234	746	
8. Thrissur	17623	42334	14233	74190					919	15	459	176	123	
9. Palakkad	98955	123214	15619	237788	1107	902	1683	23677	826	107	2037	3329	1162	5218
10. Malappuram	13044	24600	4697	42341				46	1145		381	271	350	
11. Kozhikode	850	5819	1165	7834				115	3288		446	670	1496	
12. Wayanad		25666	9023	34689					18175		343	22717	553	
13. Kannur	14122	8071	347	22540				141	5236	10	995	1121	1120	
14. Kasaragod	10048	5617	366	16031				1	4	1287	129	283	182	67
State	235849	346022	144872	726743	1108	936	1788	47216	68510	288	9822	39362	8034	5219

Table 3.7 (contd.)

District	Arecanut betel nuts (Ton.)	Tama- rind	Mango	Jack (Nos./million nuts)	Banana	Other plantain	Pine- apple	Tapioca	Sweet potato	Pappaya	Drum- stick	Sesa- num	Coconut (million nuts)
1	16	17	18	19	20	21	22	23	24	25	26	27	28
1. Thiruvanantha- puram	455	4313	19824	32	15859	41992	1711	566484	454	5169	3963		555
2. Kollam	1593	1999	25336	32	17276	33140	1724	532109		758	2960	260	350
3. Pathanamthitta	923	404	9001	12	16980	17334	1017	165089		2685	640	12	118
4. Alappuzha	766	1000	17024	11	4493	24818	556	86808	81	4701	1040	140	288
5. Kottayam	816	961	10533	15	27845	41156	2761	196351	20	5914	488	20	171
6. Idukki	2792	226	9733	16	23692	39509	6084	241324	250	1271	710	1	87
7. Ernakulam	1941	874	10624	15	41314	36195	48329	140764	45	5108	640	311	345
8. Thrissur	5750	1723	15864	22	35071	35190	2650	38529		4566	1426	70	534
9. Palakkad	1921	7421	29301	16	54078	34063	637	156619	5986	6669	2209	39	194
10. Malappuram	9823	3592	25529	25	59389	22840	2024	205796	2371	7326	2792	182	600
11. Kozhikode	11528	2364	12840	31	16867	17191	2635	92145	295	936	1324		999
12. Wayanad	1478	328	12789	32	47663	15050	224	56023		2190	585	4	25
13. Kannur	10794	2765	44212	53	16634	24259	2631	124267	306	6401	1355	18	529
14. Kasaragod	17899	669	10671	13	9427	15249	724	27847	2116	2511	802		337
State	68479	28939	253281	325	386588	397986	73707	2630155	11924	56205	20934	1057	5132

Table 3.7 (contd.)

District	Cotton (Bale of 170Kg. each)	Nutmeg	Tobacco	Lemon- grass	Tca *	Coffec **	Rubber ***	Cocoa	Processed cardamom @	Raw cashew nuts	Betel leaves	Clove (dry)	Garlic
1.	29	30	31	32	33	34	35	36	37	38	39	40	41
1. Thiruvanantha- puram		11		595			31309	60		2417	6620		5
2. Kollam		15			367		44405	30		3032	2235		3
3. Pathanamthitta		46					60711	383	46	403	13241		6
4. Alappuzha		28					3868	193		792	6442		2
5. Kottayam		133			279	1035	137820	671	12	203	1610		8
6. Idukki		109			74	41358	7875	44005	1445	4556	536	358	12
7. Ernakulam		594		1			71593	372		517	6083		6
8. Thrissur		351		2	1648		18775	99		1796	9841		5
9. Palakkad	17752	17	1	2368	1850	30150	9	175		2612	1074		1
10. Malappuram		55				31740	4	Negligible	4169	98257			3
11. Kozhikode		38				21833	268	Negligible	1858	3757			3
12. Wayanad		3		6	12111	39126	3828	48	201	622			1
13. Kannur		40		3			36164	76	Negligible	25774	2683		1
14. Kasaragod		6	228				22898	28	Negligible	6605	3399		1
State	17752	1446	228	87	58726	49886	559099	3686	4990	51336	155600	57	12614

* Tea Board figures related 1998-99;
@ Spices Board figures related 1998-99;** Coffee Board figures related 1998-99;
*** Rubber Board figures related 1998-99

Table 3.8 – Production of important crops 1999-2000

(Production in tonnes)

Name of district	Rice				Jowar	Ragi	Other cereals	Sugar-cane	Black pepper	Dry chillies	Pulses	Cured ginger	Cured turmeric	Groundnut
	Autumn	Winter	Summer	Total										
1.	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Thiruvanantha-puram	8206	9259	85	17550						1377	5	240	254	118
2. Kollam	15737	19333	13	35083						3269			1157	1213
3. Pathanamthitta	1967	6005	10667	18639						1124	912	3	33	1295
4. Alappuzha	24776	27593	39718	92087						289	242		104	333
5. Kottayam	8984	13127	19320	41431						381	777	3	801	458
6. Idukki	2215	5719	1122	9056		27	70	22164	13629			557	7369	1000
7. Ernakulam	31401	33858	17067	82326						189	906		1447	1592
8. Thrissur	21488	51132	19589	92209						10	563		380	284
9. Palakkad	106137	123292	21482	250911	1287	677	1350	33473	818	149	1403	3433	1498	5144
10. Malappuram	10230	25677	6210	42117						40	914		297	509
11. Kozhikode	857	6323	1540	8720						130	1806		423	749
12. Wayanad		37783	6978	44761		3	10	17332					334	21965
13. Kannur	11598	7868	334	19800						65	3430	11	1093	1395
14. Kasaragod	9280	6290	426	15996						7	1568	139	302	495
State	252876	373259	144551	770686	1287	704	1423	57882	47543	310	8571	41344	8362	5144

Table 3.8 (contd.)

District	Arecanut betal nuts (Ton.)	Tama-rind	Mango	Jack (Nos.inmillion nuts)	Banana	Other plantain	Pine-apple	Tapioca	Sweet potato	Pappaya	Drum-stick	Sesame-mum	Coconut (million nuts)
1	16	17	18	19	20	21	22	23	24	25	26	27	28
2. Thiruvananthapuram	467	4368	22201	26	16134	41303	1472	530595	533	5683	4016		608
3. Kollam	1442	1798	22189	26	15742	29507	1582	470705	11	853	3101	166	399
4. Pathanamthitta	1105	469	10381	11	16865	19907	1474	157998		2657	593	3	131
5. Alappuzha	1043	998	17083	9	5418	29592	578	90552	23	4865	1031	126	333
6. Kottayam	671	770	10927	15	30012	44221	2885	202980		6490	498	33	201
7. Idukki	3312	590	11076	25	12190	34681	11941	251629	193	1342	701	2	92
8. Ernakulam	2661	959	12856	14	41312	29350	37497	154251	90	5568	687	131	406
9. Thrissur	6109	1903	16843	22	33729	29990	1635	34226		4863	1501	31	610
10. Palakkad	2320	7695	27930	19	52737	34591	1018	133282	4787	6762	2032	53	218
11. Malappuram	11934	3951	29500	27	65122	24391	2491	227107	2900	7585	2575	154	717
12. Kozhikode	13314	2404	12839	35	16329	21061	2281	108758	408	943	1238		1059
13. Wayanad	1736	359	10003	35	65753	26798	236	57449	35	2417	674	5	27
14. Kannur	12191	2572	42425	59	18024	26306	2134	86741	295	6551	1261		515
15. Kasaragod	25032	728	11508	12	8778	18868	1034	25479	1423	2745	817	14	364
State	83337	29564	257761	335	398145	410566	68258	2531752	10698	59324	20725	718	5680

Table 3.8 (contd.)

District	Cotton (No. of bales of 170Kg. Each)	Nut- meg	Toba- cco	Lemon- grass	Tea *	Coffee **	Rubber ***	Cocoa	Processed cardamom @	Raw cashew nuts	Betel leaves	Clove (dry)	Garlic
1.	29	30	31	32	33	34	35	36	37	38	39	40	41
1. Thiruvananthapuram		13			361			32913	49		1406	5904	6
2. Kollam		13				368		45727	30		2662	2042	3
3. Pathanamthitta		50						61664	369	61	419	13957	6
4. Alappuzha		32						3954	140		1326	7516	2
5. Kottayam		126			168			139550	1137	21	170	2683	9
6. Idukki		128		81	46456	10500	44853	1032	6077		395	179	14
7. Ernakulam		704			1			72663	564		549	7514	7
8. Thrissur		393		2	1888		19431	45			1216	6262	6
9. Palakkad		7702	18	2	2302	1790	31235	13	180		2258	716	1
10. Malappuram			62					32606	5		5669	126685	3
11. Kozhikode			42					22593	186		2049	4473	3
12. Wayanad		4		5.	10412	48180	3907	49	245		944	179	1
13. Kannur		32		2				37992	61		35954	1610	1
14. Kasaragod		7	245					23732	64	1	10530	3936	1
State	7702	1625	245	93	61955	60470	572820	3744	6585	65547	183656	63	14433

* Tea Board figures related 1999-2000. ** Coffee Board figures related 1999-2000. *** Rubber Board figures related 1999-2000.

@ Spices Board figures related 1999-2000.

Table 3.9 Estimated productivity of crops 1998-99

Sl. No	Name of District	Paddy				Coconut in Nos.	Areca- nut	Tapi- oca	Raw Cashewnut	Black Papper	Banana	Plain- tain	Jack in Nos.	Cocoon	Ses- imum	In Kg/hect.
		Autumn	Winter	Summer												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	-	
1	Thiruvanantha- puram	2821	2797	515	6081	550	21272	980	337	11418	8021	5163	448	-	-	
2	Kollam	2938	2846	-	4629	821	19000	585	306	12429	7705	4449	625	358	-	
3	Pathanamthitta	2772	3147	5360	5365	805	27171	384	289	13998	8684	4948	501	750	-	
4	Alappuzha	3067	3335	4633	4913	371	17612	163	126	13867	8234	3329	821	122	-	
5	Kottayam	3056	3798	4324	4017	722	28333	328	143	15359	9251	3652	269	556	-	
6	Idukki	3307	3643	3757	4057	963	34342	469	590	13378	11745	3401	512	48	-	
7	Eranakulam	2604	2723	2340	5590	539	28035	376	170	13653	8824	3985	304	528	-	
8	Thrissur	2677	2802	3496	6579	1055	21299	414	210	14170	7305	4949	538	473	-	
9	Palakkad	3280	3365	4083	4269	510	22982	435	175	11725	6859	3325	281	500	-	
10	Malappuram	3157	2393	3799	6044	692	25587	412	162	11684	6653	3137	889	367	-	
11	Kozhikode	1405	1782	1861	7714	1285	22034	535	275	11104	5625	2952	694	-	-	
12	Wayanad	-	3244	3816	2513	332	37828	* 449	452	12792	8770	2984	381	143	-	
13	Kannur	2481	2498	1790	5562	873	26255	933	224	11448	5568	3935	268	778	-	
14	Kasaragod	3182	2907	2134	6935	1652	25501	303	208	12981	7122	5724	209	-	-	
15	STATE	2986	3014	3822	5817	930	23322	562	376	12666	7812	3784	414	320	-	

Table 3.10 - Estimated Productivity of Crops – 1999-2000.

in Kg/hectare.

Name of District	Paddy			Cocunut in No.s	Arecanut	Tapioca	Raw Cashewnuts	Black Pepper	Banana	Plantain	Jack (in Nos)	Cocoa	Sesamum
	Autumn	Winter	Summer										
1.	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Thiruvananthapuram	3371	3344	2588	6655	517	20422	501	238	10090	7028	4022	433	
2. Kollam	3131	3013	1979	4993	645	18331	578	321	10572	7148	3933	789	286
3. Pathanamthitta	2994	3410	5348	5753	911	22975	402	216	10105	9697	3881	558	375
4. Alappuzha	4580	3929	3685	5435	452	20016	270	125	10108	8350	2820	800	140
5. Kottayam	4016	3576	4306	4645	552	26208	243	91	11304	10383	3482	507	717
6. Idukki	3893	3644	4436	3883	989	32364	295	238	10712	9283	4573	361	222
7. Ernakulam	3090	2913	2668	5961	671	30063	348	129	9836	6935	3172	398	555
8. Thrissur	2883	3295	3764	6908	961	22414	297	146	12085	5625	4251	266	279
9. Palakkad	3126	3699	4486	4754	613	20914	386	169	9990	8105	3809	448	461
10. Malappuram	2664	2531	4275	6692	751	26747	516	116	9238	6372	3045	125	276
11. Kozhikode	1915	1965	2556	8080	1313	22087	530	152	9795	6462	3153	460	
12. Wayanad	3951	3862	2490	333	35462	605	387	10368	13771	2805	358	250	
13. Kannur	2359	2633	1926	5406	965	21707	1377	147	9796	6052	4003	282	
14. Kasaragod	2974	2799	2988	6479	1965	19905	528	222	11083	7723	4605	500	538
State	3167	3337	3792	6140	1017	22621	733	240	10197	7710	3593	434	275

Table 3.11 Estimated area and production of Rice – autumn – 1998-99 – Area in hectares and Production in Tonnes

Sl.No.	Name of District	High Yielding						Local varieties					
		Irrigated		Un-Irrigated		Total		Irrigated		Un-Irrigated		Total	
		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	110	197	2854	5796	2964	5993	796	1251	1038	1648	1834	2899
2	Kollam	-	-	7297	14257	7297	14257	-	-	252	317	252	317
3	Pathanamthitta	-	-	733	1307	733	1307	-	-	639	1192	639	1192
4	Allappuzha	5763	14242	1763	2300	7526	16542	-	-	1193	1028	1193	1028
5	Kottayam	2578	5381	527	900	3105	6281	72	91	100	208	172	299
6	Idukki	-	-	136	329	136	329	-	-	929	1985	929	1985
7	Eranakulam	8123	14249	4891	8217	13014	22466	-	-	3808	6312	3808	6312
8	Thrissur	17	33	6751	71388	3774	7171	249	398	5996	10054	6245	10452
9	Palakkad	1333	3360	10380	23864	11713	27224	1842	4488	32360	67243	34202	71731
10	Malappuram	-	-	4602	10238	4602	40238	-	-	1687	2806	1687	2806
11	Kozhikode	-	-	422	511	422	511	-	-	499	339	499	339
12	Wayanad	-	-	-	-	-	-	-	-	-	-	-	-
13	Kannur	-	-	4679	8238	4679	8238	-	-	3986	5884	3986	5882
14	Kasaragod	82	178	2299	5340	2381	5518	68	170	2387	4360	2425	4530
15	STATE	18006	37640	44340	88435	62346	123075	3027	6398	54844	103376	57871	109774

Table 3.12 Estimated area and production of Rice – Winter – 1998-99 – Area in hectares and Production in Tonnes

Sl.No.	Name of District	High Yielding						Local varieties						
		Irrigated		Un-Irrigated		Total		Irrigated		Un-Irrigated		Total		
		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	Thiruvanan-thapuram	149	297	1652	3219	1801	3516	581	951	2402	4325	2983	5276	
2	Kollam	-	-	1831	3984	1831	3984	-	-	8191	14753	8191	14753	
3	Pathanamthitta	617	1393	819	1719	1436	3112	752	1462	977	1970	1729	3432	
4	Allappuzha	4926	13525	451	-	733	5377	14258	4	9	1967	1831	1971	1804
5	Kottayam	6483	16462	22	58	6505	16520	601	1225	127	303	728	1528	
6	Idukki	934	1938	162	417	1096	2355	1078	2875	278	639	1356	3514	
7	Eranakulam	17128	31019	81	64	17209	31083	3132	5351	121	179	3253	5530	
8	Thrissur	3741	8026	164	255	3905	8281	17185	31723	1910	2330	19095	34053	
9	Palakkad	12758	31945	1108	2151	13866	34096	31313	71962	10551	17156	41864	89118	
10	Malappuram	2635	5067	887	1303	3522	6370	7944	12488	4181	5742	12125	18230	
11	Kozhikode	173	316	733	1234	906	1550	286	436	3777	3833	4063	4269	
12	Wayanad	-	-	7583	17076	7583	17076	-	-	4160	8590	4460	8590	
13	Kannur	615	1086	16	7	631	1093	4193	6864	94	114	4287	6978	
14	Kasaragod	668	1495	2	4	670	1499	2000	3664	271	454	2271	4118	
15	STATE	50827	112569	15511	32224	66338	144793	69069	139010	39307	62219	108376	201229	

Table 3.13 Estimated area and production of Rice – summer – 1998-99 – Area in hectares and Production in Tonnes

Sl.No.	Name of District	High Yielding				Local varieties				Area	Production											
		Irrigated	Un-Irrigated	Total	Irrigated	Un-Irrigated	Total	Irrigated	Un-Irrigated													
1	2	3	4	5	6	7	8	9	10	11	12	13	14									
1	Thiruvananthapuram	-	-	-	-	-	-	16	5	-	-	16	5									
2	Kollam	-	-	-	-	-	-	-	-	-	-	-	-									
3	Pathanamthitta	2513	8956	93	340	2606	9296	354	1128	-	-	-	-									
4	Allappuzha	19046	57993	-	-	19046	57993	12	20	-	-	-	-									
5	Kottayam	3866	10996	-	-	3866	10996	17	34	-	-	-	-									
6	Idukki	216	561	101	226	317	787	-	-	12	25	12	25									
7	Eranakulam	11495	17655	-	-	11495	17655	950	1482	1	1	1	1									
8	Thrissur	3827	9145	458	1460	4285	10605	1176	1758	735	1870	1911	1911									
9	Palakkad	768	1850	16	21	784	1871	5013	13712	25	36	5038	5038									
10	Malappuram	1715	4375	34	90	1749	4465	126	213	7	19	133	133									
11	Kozhikode	682	885	28	50	710	935	217	206	26	24	243	243									
12	Wayanad	3264	8256	119	306	3383	8562	210	447	6	14	216	216									
13	Kannur	78	104	-	-	78	104	181	203	36	40	217	217									
14	Kasaragod	95	165	-	-	95	165	161	197	5	4	166	166									
	STATE	47565	120941	849	2493	48414	123434	8433	19405	8530	2033	9286	9286									

Table 3.14 - Estimated area and Production of Rice – Autumn 1999-2000.

Area in Hectares, Production in Tonnes.

Sl. No	Name of District	High Yielding				Local Varieties				Total Production	
		Irrigated Area	Unirrigated Production	Area	Total Production	Irrigated Area	Unirrigated Production	Area	Total Production		
1	2	3	4	5	6	7	8	9	10	11	
1	Thiruvananthapuram	239	502	2676	6102	2915	6604	482	1044	308	
2	Kollam			7462	15509	7462	15509			187	
3	Pathanamthitta	35	82	504	979	539	1061			461	
4	Alappuzha	7175	23687	725	819	7900	24506			333	
5	Kottayam	2818	7577	565	1361	3383	8938			22	
6	Idukki			866	2215	866	2215			46	
7	Eranakulam	5792	10852	6500	13451	12292	24303	352	606	2823	
8	Thrissur	12	20	3552	7099	3564	7119	1	3	7778	
9	Palakkad	7210	18524	12398	24377	19608	42901	6519	16322	25558	
10	Malappuram	8	12	4174	8035	4182	8047	13	19	1649	
11	Kozhikode			383	608	383	608			298	
12	Wayanad		No	Paddy						249	
13	Kannur		4745	8324	4745	8324			2153	3274	
14	Kasaragod	11	17	3098	6781	3109	6798			1640	
	State	23310	61273	47648	95660	70948	156933	7367	17994	43210	77949
										50577	95943

Table 3.15 - Estimated area and Production of Rice – Winter 1999-2000.

Sl. No	Name of District	High Yielding										Local Varieties					
		Irrigated				Unirrigated				Total		Irrigated				Unirrigated	
		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Thiruvananthapuram	407	911	1708	4008	2115	4919	342	709	1757	3631	2099	4340	105377	57851	84292	163228
2	Kollam			3302	7105	3302	7105					6465	12228	6465	12228		
3	Pathanamthitta	575	1489	612	1462	1187	2951	1289	2609	204	445	1493	3054				
4	Alappuzha	9173	25679	558	771	9731	26450					958	1143	958	1143		
5	Kottayam	5205	12325	10	19	5215	12344	366	776	7	7	7	7	7	7	7	783
6	Idukki	1312	3100	83	212	1395	3312	703	1687	291	720	994	2407				
7	Eranakulam	15565	30006	125	229	15690	30235	1783	3239	217	384	2000	3623				
8	Thrissur	7705	20376	206	415	7911	20791	14382	28077	1329	2264	15711	30341				
9	Palakkad	20690	58159	1704	3706	22394	61865	21474	47572	6862	13855	28336	61427				
10	Malappuram	3055	5884	1072	2060	4127	7944	6764	10903	4549	6830	11313	17733				
11	Kozhikode	218	366	537	834	755	1200	912	1266	3230	3857	4142	5123				
12	Wayanad	916	2254	8313	22922	9229	25176	301	638	5024	11969	5325	12607				
13	Kannur	1242	2583	237	380	1479	2963	2838	4636	231	269	3069	4905				
14	Kasaragod	1219	2478	187	298	1406	2776	1860	3265	154	249	2014	3514				
State		67282	165610	18654	44421	85936	210031	53014	105377	31278	57851	84292	163228				

Table 3.16 - Estimated area and Production of Rice – Summer 1999-2000.

Area in Hectares, Production in Tonnes.

Sl. No	Name of District	High Yielding						Local Varieties					
		Irrigated		Unirrigated		Total		Irrigated		Unirrigated		Total	
		Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	50	85		50	85							
2	Kollam	9	12	1	1	10	13						
3	Pathanamthitta	2983	10530	21	33	3004	10563	32	104			32	104
4	Alappuzha	16337	39557	21	33	16358	39590	46	128			46	128
5	Kottayam	6803	19267			6803	19267	26	53			26	53
6	Idukki	159	409			159	409	226	713			226	713
7	Eranakulam	9407	16592			9407	16592	330	475			330	475
8	Thrissur	6845	17756	74	160	6919	17916	1003	1673			1003	1673
9	Palakkad	5826	17230	2	1	5828	17231	1461	4251			1461	4251
10	Malappuram	2120	6090	4	5	2124	6095	87	115			87	115
11	Kozhikode	702	1266	5	6	707	1272	179	219	31	49	210	268
12	Wayanad	2576	6640	10	22	2586	6662	152	300	12	16	164	316
13	Kannur	69	121	3	5	72	126	182	194	10	14	192	208
14	Kasaragod	79	170			79	170	138	256			138	256
	State	53965	135725	141	266	54106	135991	3862	8481	53	79	3915	8560

Table 3.17— Net area irrigated (Source-wise) 1998-99

District	Government canal	Private canal	Government tanks	Private tanks	Government wells	Private wells	Minor lift irrigation	Other sources	{Area in Hectares}	
									Total	10
1.	2	3	4	5	6	7	8	9		
1. Thiruvananthapuram	2564	28	242	108		451			547	3946
2. Kollam	25	18		182		926			720	1871
3. Pathanamthitta	964	88		76	8	521	13		2936	4606
4. Alappuzha	3391	15	6	12245		4394	687		23754	44492
5. Kottayam	1330	4		289		415			8457	10495
6. Idukki	4085	1	73	3689		1102	2		9650	18602
7. Ernakulam	18793	241	200	910	253	8655	5729		6680	41461
8. Thrissur	17730	60	124	9963	9	36136	3304		16749	84075
9. Palakkad	43146	135	76	2666	40	12494	1093		5894	65544
10. Malappuram	455	218	40	4996		11525	634		10384	28252
11. Kozhikode	1664	367		392		1707	196		813	5139
12. Wayanad	397	428		3			187		3332	4347
13. Kannur	98	878	117	1933	29	10624	79		8002	21760
14. Kasaragod	1	1	112	9090	63	17861	13		12784	39925
State	94643	2482	990	46542	402	106311	11937		110702	374509

Table 3.18 – Net area irrigated (Source-wise) 1999-2000

District	Government canal	Private canal	Government tanks	Private tanks	Government wells	Private wells	Minor lift irrigation	Other sources	(Area in Hectares)	
									10	Total
1. Thiruvananthapuram	2565	421	192	52		6	7	8	205	3833
2. Kollam	49	6	4	146		904	21	220	1350	
3. Pathanamthitta	831		17	135	3	919	9	4935	6849	
4. Alappuzha	4415	19	24	11728		2374		23715	42275	
5. Kottayam	1113	7		251		441		13841	15653	
6. Idukki	298	27		2214		1381	463	8252	12635	
7. Ernakulam	10708	234	868	1834	624	10010	3583	6334	34195	
8. Thrissur	17409	107	569	10669	539	40570	2900	14565	86728	
9. Palakkad	39657	502	19	3719		12909	-	693	7558	65057
10. Malappuram	1013	521	37	5002	11	13403	905	12576	33468	
11. Kozhikode	1119	1118		419		2561	4	776	5997	
12. Wayanad	353	200		28		14	219	2826	3640	
13. Kannur	1701	1556	36	1737	156	13673		5691	24550	
14. Kasaragod		85	66	13766	14	20709		9173	43813	
State	81231	4803	1832	51100	1347	120258	8805	110667	380043	

Table 3.19 – Gross area under irrigation (crop-wise) 1998-99

Districts	Paddy	Tubers	Vege-tables	Coconut	Arecanut	Cloves & nutmeg	Other spices condiments	Banana	Betel leaves	Sugar cane	Other trees	Total	Remarks	
													[Area in Hectares]	14
12.	3	4	5	6	7	8	9	10	11	12	13	14	15	
1. Thiruvanan-thapram	1652	23	603	854	2	37	53	1152	37	2	1177	5592		
2. Kollam	16	945	1031	28	30	18	107	58			664	2897		
3. Pathanamthitta	4236	7	457	2	1	77	9	281	74	227	47	5418		
4. Alappuzha	29751	542	615	17563	68	89	573	89	36	192	640	50158		
5. Kottayam	13617	14	342	165	21	314	123	76	9	137	704	15522		
6. Idukki	2228	7	18	566	169	80	230	297	2	2894	531	7022		
7. Ernakulam	40828	9	407	15608	1282	849	117	1466	34	12	681	61293		
8. Thrissur	26195	39	765	45022	4926	159	673	1876	55		762	80472		
9. Palakkad	53027	16	1049	12694	1850	81	676	2278	6	2653	2215	76545		
10. Malappuram	12420	152	928	14033	5012	29	105	2124	515	6	954	36278		
11. Kozhikode	1358	9	430	5485	430	13	7	552	21	15	1116	9436		
12. Wayanad	3474	3	130	38	10	9	5	55			986	4710		
13. Kannur	5067	31	69	16703	3419	24	114	706	15	20	967	27135		
14. Kasaragod	3074	19	291	23153	9580	13	121	676	19	2	1418	38366		
State	196927	887	7049	152917	26798	1804	2824	11735	881	6160	12862	420844		

Table 3.20 – Gross area under irrigation (crop-wise) 1999-2000

Districts	Paddy	Tubers	Vege-tables	Coconut	Arecanut	Cloves & nutmeg	Other spices condiments	Banana	Betel leaves	Sugar cane	[Area in Hectares]	
											1	2
1. Thiruvanan-thapuram	1520	25	620	656	2	143	55	1412	33			1202
2. Kollam	9	18	960	672	26	98	21	87	53			738
3. Pathanamthitta	4914	8	470	346	10	81	12	821	78	230		152
4. Alappuzha	32731	546	635	18490	133	154	602	70	42	92		736
5. Kottayam	15218	15	350	259	22	410	135	234	15	81		789
6. Idukki	2400	8	22	98	25	118	243	636	1	2624		6589
7. Ernakulam	33229	11	420	16547	1527	933	124	2333	42	15		765
8. Thrissur	29948	46	951	53804	5649	192	707	2617	35	1		877
9. Palakkad	63180	21	1197	17047	2079	97	703	3619	4	2713		2547
10. Malappuram	12047	165	1185	16371	6515	48	112	4281	664	4		1050
11. Kozhikode	2011	12	470	2979	425	22	8	919	25	13		1225
12. Wayanad	3945	3	138	190	20	21	7	68	1	1		1010
13. Kannur	4331	32	80	16765	2686	51	115	1048	9	4		1005
14. Kasaragod	3307	21	315	25670	12996	39	123	647	22	2		1500
State	208790	931	7813	169894	32115	2407	2967	18792	1024	5780		20185

Table 3.21 Average Farm Price of Important Commodities 1998-99

Sl No	Name of District	Paddy Qtl.	Coconut 100 Nos.	Arecanut 100 Nos.	Tapioca Qtl	Cashew nut Qtl	Banana 100 Nos.	Black Pepper Qtl	Ginger Qtl	Sugar can MT
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	623.40	425.83	84.67	366.98	3428.33	191.75	18252.08	5980.00	
2	Kollam	580.80	493.25	63.70	296.03	3492.50	188.75	18038.68	4937.50	
3	Pathanamthitta	575.83	467.42	68.49	326.57	3284.00	180.24	18493.33	5765.80	470.00
4	Allappuzha	600.10	460.85	59.67	317.05	3162.50	162.99	15700.00	5650.00	
5	Kottayam	603.45	474.21	64.13	330.75	3860.00	170.01	18471.67	5520.83	
6	Idukki	681.18	484.06	59.47	310.28	3395.83	158.09	18548.44	5701.91	
7	Eranakulam	595.46	467.80	58.25	277.02	3598.67	161.45	17663.90	5470.14	
8	Thrissur	616.88	442.78	73.82	306.13	3697.92	177.93	18120.30	-	
9	Palakkad	633.96	424.21	50.35	270.54	3983.50	147.40	18029.03	5987.50	635.03
10	Malappuram	617.74	402.61	56.60	263.78	3351.66	153.11	18270.83	-	
11	Kozhikode	775.83	441.11	62.45	323.68	3479.08	160.27	18902.92	5695.42	
12	Wayanad	634.38	500.72	57.30	285.28	2931.25	140.62	18090.28	5302.72	
13	Kannur	612.39	404.31	66.58	359.13	4045.83	171.54	18296.53	5862.50	
14	Kasaragod	621.62	450.00	82.08	347.27	3815.00	175.15	18090.21	-	
	STATE	626.64	452.80	64.78	312.89	3537.58	167.09	5624.94	552.50	

Table 3.22 Average Farm Price of Important Commodities 1999-2000

Sl. No	Name of District	Paddy Qu.	Coconut 100 Nos.	Arecanut 100 Nos.	Tapioca Qu.	Cashew nut Qt.	Banana Qu.	Black Pepper Qt.	Ginger Dry Qt.	Sugar can MT
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvanantha-puram	661.56	442.19	92.78	392.87	3795.83	993.77	20061.29	-	-
2	Kollam	637.64	525.88	75.84	363.91	3747.00	976.25	19671.88	6358.33	-
3	Pathanamthitta	643.83	495.58	71.08	358.96	3292.50	960.67	20910.42	6979.17	-
4	Allappuzha	679.04	470.87	73.00	356.77	3314.58	854.24	19875.00	-	-
5	Kottayam	676.76	505.21	74.19	393.75	3234.72	968.40	20648.33	6400.00	-
6	Idukki	722.99	553.34	82.56	412.29	3225.00	850.78	21091.17	6699.31	-
7	Eranakulam	678.36	485.14	70.50	358.64	3588.12	857.12	20726.74	6486.50	-
8	Thrissur	678.09	446.79	98.83	365.96	3875.83	933.54	20492.08	-	-
9	Palakkad	681.08	431.88	69.00	298.75	3687.75	767.04	20042.68	6300.17	662.38
10	Malappuram	709.50	435.21	72.21	296.39	3966.83	846.32	20326.80	-	-
11	Kozhikode	795.45	449.79	65.24	397.53	3893.33	872.43	20470.48	6282.12	-
12	Wayanad	676.25	496.11	43.69	359.51	3360.00	675.07	21240.94	5672.77	-
13	Kannur	670.77	436.67	68.51	415.63	4122.50	868.68	20757.64	6364.79	-
14	Kasaragod	670.73	491.04	96.04	382.33	3835.00	926.04	20770.83	-	-
	STATE	684.43	476.12	75.25	368.09	3638.50	882.17	20506.16	6393.68	662.38

Table 3.23 Other Agricultural Wages 1998-99

Skilled Labour												Carpenter (Rupees)																																																																																																																																																																																														
District	July	August	Sept	October	Nov	Decr	January	Feb	March	April	May	June	Average	July	August	Sept	October	Nov	Decr	January	Feb	March	April	May	June	Average																																																																																																																																																																																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	13	14																																																																																																																																																																															
Thiruvananthapuram	140.00	140.00	140.00	140.00	140.00	150.00	155.00	160.00	160.00	160.00	160.00	160.00	160.00	Kollam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00																																																																																																																																																																													
Kollam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	Pathanamthitta	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00																																																																																																																																																																													
Pathanamthitta	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	Allappuzha	152.00	157.50	164.50	164.50	164.50	164.50	169.50	169.50	169.50	169.50	169.50	169.50	169.50	Kottayam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00																																																																																																																																																															
Kottayam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	Idukki	120.00	120.00	120.00	120.00	120.00	120.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	Eranakulam	162.50	162.50	162.50	162.50	162.50	162.50	150.00	150.00	150.00	150.00	150.00	150.00	150.00	Thrikkur	167.50	167.50	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00																																																																																																																																									
Eranakulam	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	Allappuzha	152.00	157.50	164.50	164.50	164.50	164.50	169.50	169.50	169.50	169.50	169.50	169.50	169.50	Kottayam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	Idukki	120.00	120.00	120.00	120.00	120.00	120.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	Malappuram	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	Kozhikode	150.00	150.00	157.00	157.00	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	Kannur	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	Kasaragod	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	Average	155.42	155.42	155.42	155.42	155.42	155.42	155.42	155.42	155.42	155.42	155.42	155.42	155.42	1	2	3	4	5	6	7	8	9	10	11	12	13	14																																																															
Thiruvananthapuram	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	Kollam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	Pathanamthitta	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	Allappuzha	152.00	152.00	159.50	164.50	164.50	164.50	169.50	169.50	169.50	169.50	169.50	169.50	169.50	Kottayam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	Idukki	120.00	120.00	120.00	120.00	120.00	120.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	Eranakulam	162.50	162.50	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	Thrikkur	160.00	165.00	172.50	172.50	172.50	172.50	172.50	172.50	172.50	172.50	172.50	172.50	172.50	172.50	Palakkad	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	117.50	Malappuram	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	163.50	Kozhikode	147.50	147.50	152.50	152.50	152.50	152.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	162.50	Kannur	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	Kasaragod	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	145.00	Average	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80	154.80

Paddy Field Labour (1) MEN

District	July	August	Sept.	October	Nov.	Decr.	January	Feb.	March	April	May	June	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	115.00	115.00	115.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	119.60
Kollam	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Pathanamthitta	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Allappuzha	100.00	100.00	112.50	112.50	112.50	112.50	122.50	125.00	125.00	125.00	125.00	125.00	116.25
Kottayam	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Idukki	60.00	60.00	60.00	70.00	70.00	70.00	70.90	70.90	70.90	70.90	70.90	70.90	66.70
Eranakulam	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Thriissur	125.00	125.00	127.50	127.50	127.50	127.50	130.00	130.00	130.00	130.00	130.00	130.00	136.70
Palakkad	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50
Malappuram	125.00	130.00	130.00	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	131.50
Kozhikode	112.50	112.50	117.50	117.50	117.50	117.50	117.50	120.00	120.00	120.00	120.00	120.00	117.50
Kannur	115.00	115.00	115.00	115.00	115.00	115.00	115.00	115.00	115.00	115.00	115.00	115.00	115.00
Kasaragod	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	76.70
Average													111.76

WOMEN

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	72.50	75.00	90.00	102.50	95.00	85.00	95.00	95.00	95.00	95.00	95.00	95.00	89.20
Kollam	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
Pathanamthitta	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
Allappuzha	55.00	55.00	65.00	65.00	65.00	65.00	70.00	70.00	70.00	70.00	70.00	70.00	65.80
Kottayam	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00
Idukki	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Eranakulam	90.00	90.00	97.50	105.00	105.00	97.50	85.00	105.00	105.00	105.00	105.00	97.50	97.10
Thriissur	72.50	72.50	72.50	72.50	72.50	72.50	75.50	97.50	97.50	102.50	102.50	102.50	81.90
Palakkad	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Malappuram	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
Kozhikode	85.00	85.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	89.20
Kannur	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00
Kasaragod													
Average													

Table 3.24 Other Agricultural Labour 1998-99 (MEN)

District	July	August	Sept	October	Nov	Dece	January	Feb	March	April	May	June	Average
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	130.00	127.50	127.50	127.50	127.50	137.50	132.50	132.50	132.50	132.50	132.50	132.50	131.04
Kollam	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Pathanamthitta	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Allappuzha	107.00	107.00	107.00	107.00	107.00	107.00	119.50	119.50	119.50	119.50	119.50	119.50	113.50
Kottayam	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Idukki	60.00	60.00	60.00	60.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	66.67
Eranakulam	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50
Thrissur	137.50	132.50	135.00	137.50	137.50	137.50	137.50	137.50	149.50	152.50	152.50	152.50	141.63
Palakkad	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50	77.50
Malappuram	125.00	130.00	140.00	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.29
Kozhikode	112.50	112.50	117.50	117.50	117.50	117.50	120.00	120.00	120.00	120.00	120.00	120.00	117.71
Kannur	75.00	80.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.42
Kasaragod	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00
Average													108.31

District	July	August	Sept	October	Nov	Dece	January	Feb	March	April	May	June	(WOMEN)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thiruvananthapuram	100.00	112.50	112.50	125.00	125.00	120.00	130.00	120.00	130.00	150.00	120.00	120.00	121.67
Kollam	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	150.00	150.00	150.00	131.25
Pathanamthitta	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Allappuzha	-	-	-	-	-	-	-	-	-	-	-	-	-
Kottayam	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Idukki	50.00	50.00	60.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Eranakulam	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00
Thrissur	95.00	95.00	95.00	95.00	95.00	87.50	95.00	120.00	122.50	110.00	110.00	101.25	-
Palakkad	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	-
Malappuram	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	-
Kozhikode	137.50	137.50	145.00	145.00	160.00	155.00	155.00	155.00	155.00	155.00	155.00	155.00	150.83
Kannur	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	-
Kasaragod	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	-
Average													93.00

Table 3.25 Other Agricultural Wages 1999-2000

(1) Carpenter (in Rupees)											
Skilled Labour											
District		July	August	September	October	November	December	January	February	March	April
1	2	3	4	5	6	7	8	9	10	11	12
Thiruvananthapuram	160.00	160.00	160.00	162.50	165.00	172.50	172.50	172.50	172.50	172.50	172.50
Kollam	170.00	170.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00
Pathanamthitta	175.00	175.00	175.00	175.00	175.00	200.00	200.00	200.00	200.00	200.00	200.00
Allappuzha	174.50	174.50	174.50	174.50	174.50	177.00	177.00	177.00	177.00	177.00	177.00
Kottayam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00
Idukki	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	150.00	150.00
Eranakulam	150.00	150.00	150.00	150.00	150.00	150.00	150.00	160.00	160.00	175.00	175.00
Thrissur	185.00	197.50	197.50	197.50	197.50	202.50	202.50	202.50	202.50	202.50	202.50
Palakkad	117.50	117.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	127.50	127.50
Malappuram	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	175.00	190.00
Kozhikode	162.50	170.00	170.00	170.00	170.00	172.50	172.50	172.50	172.50	172.50	172.50
Kannur	140.00	150.00	150.00	150.00	150.00	150.00	150.00	160.00	160.00	150.00	150.00
Kasaragod	145.00	150.00	150.00	150.00	150.00	150.00	150.00	160.00	160.00	160.00	170.00
Average											165.35

MASON											
District		1	2	3	4	5	6	7	8	9	10
Thiruvananthapuram	150.00	150.00	160.00	160.00	160.00	160.00	172.50	172.50	172.50	172.50	172.50
Kollam	170.00	170.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00
Pathanamthitta	175.00	175.00	175.00	175.00	175.00	200.00	200.00	200.00	200.00	200.00	200.00
Allappuzha	174.50	174.50	174.50	174.50	177.00	177.00	177.00	177.00	177.00	177.00	177.00
Kottayam	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00
Idukki	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	150.00	150.00
Eranakulam	150.00	150.00	150.00	150.00	150.00	150.00	150.00	160.00	160.00	162.50	162.50
Thrissur	185.00	197.50	197.50	197.50	197.50	202.50	202.50	202.50	202.50	202.50	202.50
Palakkad	117.50	117.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	127.50	127.50
Malappuram	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00
Kozhikode	162.50	170.00	170.00	170.00	170.00	172.50	172.50	172.50	172.50	172.50	172.50
Kannur	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Kasaragod	150.00	150.00	150.00	150.00	150.00	150.00	150.00	160.00	160.00	160.00	160.00
Average											164.70

MEN

WOMEN

Table 3.26 Other Agriculture Labour - MEN

District	July	August	September	October	November	December	January	February	March	April	May	June	MEN											
													2	3	4	5	6	7	8	9	10	11	12	13
1 Thiruvananthapuram	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	
Kollam	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	
Pathanamthitta	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	
Allappuzha	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	
Kottayam	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	
Idukki	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	
Eranakulam	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	
Thrissur	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	152.50	
Palakkad	77.50	77.50	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	
Malappuram	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	132.50	
Kozhikode	120.00	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	127.50	
Kannur	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	
Kasaragod	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	
Average																								115.40

District	July	August	September	October	November	December	January	February	March	April	May	June	WOMEN											
													2	3	4	5	6	7	8	9	10	11	12	13
1 Thiruvananthapuram	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	
Kollam	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	
Pathanamthitta	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Allappuzha	-	-	-	-	-	-	-	-	-	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	
Kottayam	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	
Idukki	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	
Eranakulam	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	
Thrissur	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	
Palakkad	40.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	
Malappuram	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Kozhikode	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	
Kannur	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	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	
Kasaragod	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	
Average																								101.25

PART - IV**Consumer Price Index No. of various centres**

Sl. No	Centre	Yearly average Consumer Price Index		Percentage change
		1998	1999	
1	Thiruvananthapuram	990	1046	5.66
2	Kollam	995	1044	4.92
3	Punalur	939	995	1.70
4	Alappuzha	975	1043	6.98
5	Kottayam	964	1034	7.26
6	Mundakkayam	940	1000	6.38
7	Munnar	926	999	7.88
8	Eranakulam	947	1003	5.91
9	Chalakkudy	988	1063	7.59
10	Thrissur	958	1024	6.89
11	Palakkad	973	1034	6.37
12	Malappuram	974	1031	5.85
13	Kozhikode	954	1018	6.71
14	Meppadi	1009	1080	7.03
15	Kannur	975	1023	4.92

Table 4.1 Centre wise – Month wise Index for the year 1998 in Base 1970 = 100

Centres	January	Feb- ruary	March	April	May	June	July
Thiruvananthapuram	969	973	975	978	982	987	992
Kollam	979	982	982	984	988	991	996
Punalur	918	922	925	929	934	938	942
Alappuzha	950	954	958	963	968	973	978
Kottayam	939	944	948	953	956	962	968
Mundakkayam	918	922	924	929	933	938	943
Munnar	903	907	910	913	917	922	928
Eranakulam	920	925	929	934	939	945	952
Chalakkudy	965	968	979	973	978	983	989
Thrissur	935	939	941	943	948	953	959
Palakkad	948	952	955	960	966	972	978
Malappuram	952	956	959	963	967	972	977
Kozhikode	928	931	933	938	944	951	958
Meppadi	984	989	993	998	1004	1010	1016
Kannur	956	960	962	965	968	973	978

Centres	August	Sep- tember	October	Novem- ber	Decem- ber	Average
Thiruvananthapuram	995	999	1004	1009	1013	990
Kollam	1000	1003	1006	1010	1013	995
Punalur	943	945	950	957	961	939
Alappuzha	982	987	992	998	1002	975
Kottayam	971	975	979	983	985	964
Mundakkayam	945	947	952	960	965	940
Munnar	931	935	941	949	955	926
Eranakulam	955	960	964	969	972	947
Chalakkudy	993	998	1005	1013	1021	988
Thrissur	964	970	976	982	987	958
Palakkad	979	982	987	995	999	973
Malappuram	980	983	987	991	995	974
Kozhikode	964	969	974	979	982	954
Meppadi	1018	1020	1022	1026	1031	1009
Kannur	982	984	986	990	992	975

Table 4.2 Centre wise – Month wise Index for the year 1999 in Base 1970 = 100

Centres	January	Feb- ruary	March	April	May	June	July
Thiruvananthapuram	1017	1025	1029	1036	1040	1046	1051
Kollam	1018	1022	1026	1034	1037	1041	1047
Punalur	965	970	975	983	987	992	998
Alappuzha	1006	1015	1021	1031	1036	1043	1051
Kottayam	992	1001	1010	1021	1027	1035	1043
Mundakkayam	969	977	984	996	1001	1007	1013
Munnar	960	968	974	985	990	998	1006
Eranakulam	976	982	987	995	999	1002	1008
Chalakkudy	1028	1035	1041	1053	1058	1064	1070
Thrissur	992	1000	1005	1015	1020	1025	1030
Palakkad	1003	1010	1014	1022	1027	1034	1040
Malappuram	999	1006	1013	1023	1029	1031	1038
Kozhikode	986	992	997	1008	1013	1018	1024
Meppadi	1040	1048	1057	1067	1073	1079	1086
Kannur	995	1002	1006	1015	1020	1024	1028

Centres	August	Sep- tember	October	Novem- ber	Decein- ber	Average
Thiruvananthapuram	1054	1054	1059	1064	1073	1046
Kollam	1051	1054	1059	1067	1073	1044
Punalur	1002	1006	1014	1020	1028	995
Alappuzha	1053	1055	1060	1067	1074	1043
Kottayam	1045	1047	1055	1061	1067	1034
Mundakkayam	1017	1019	1026	1034	1041	1007
Munnar	1010	1013	1019	1028	1034	999
Eranakulam	1012	1012	1018	1022	1026	1003
Chalakkudy	1073	1076	1018	1086	1091	1063
Thrissur	1032	1034	1040	1045	1050	1024
Palakkad	1043	1046	1051	1055	1060	1034
Malappuram	1040	1042	1046	1051	1054	1031
Kozhikode	1027	1029	1034	1040	1046	1018
Meppadi	1091	1094	1100	1107	1114	1080
Kannur	1030	1032	1036	1041	1045	1023
STATE						1030

4.3 Parity Index

Parity index is a relative measure of prices received and prices paid by farmers. The index is constructed to assess how the price situation in the state affects the farmers.

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 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) Areca nut (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 a result of changes in wage rates, cost of implements, cost of measure, cost of maintenance of the live stock and prices of consumer goods as compared to the situation in the base year.

The parity index of during 1999 and 2000 are furnished below

Index of parity (Base 1952-53 = 100)

Sl. No.	Month	1988	1999	2000
1	January	75	78	82
2	February	76	82	78
3	March	77	84	74
4	April	72	83	73
5	May	77	81	70
6	June	76	83	66
7	July	77	84	61
8	August	78	83	60
9	September	74	81	58
10	October	76	85	55
11	November	75	83	53
12	December	78	82	53
	Annual	76	82	66

The parity is decreased by 1.6 points from 82 points 1999 (December) to 66 points in 2000 (December) i.e., the price situation in the state was not favourable to the farming community during the years.

4.4 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 2. Sandy loam 3. Riches dark brown loam of granite origin	Loam of middle part of the District Western coastal region Eastern hilly part of the district
2	Kollam	1. Sandy loam 2. Laterite soil 3. Hill and forest soil	Karunagappally and part of Kollam Taluk Kottarakkara and part of Kunnathur and Pathanapuram taluk. Part of Pathanapuram tabluk
3	Pathanamthitta	1. Laterite soil 2. Hill and forest soil	Pathanmthitta, Mallappally, Ranny and parts of Thiruvalla taluks. Parts of Pathanamthittan and Ranny taluks
4	Alappuzha	1. Sandy loam 2. Sandy soil 3. Clay and loam with much of acidity 4. Latarite soil	Karthikappally and Mavelikara taluk Cherthalai and Ambalapuzha taluks Kuttanad Chenganur and part of Mavelikara
5	Kottayam	1. Laterite soil 2. Alluvial soil	Part of Meenachil, Changanacherry and Kottayam taluks Parts of Changanacherry and Kottayam taluks

4.5 Conversion ratio between the raw materials and the processed product

1	Rice	Rice (cleaned) production 2/3 of paddy processed
2	Cotton	Cotton lint production 1/3 of kapas processed
		Cotton seed production 2/3 of kapas processed
3	Ground nut	Kernel to nuts in shell 70 percent
		Oil to nuts in shell 28 percent
		Oil to kernels crushed 40 percent
		Cake to kernels crushed 60 percent
4	Seasamum	Oil to seed crushed 40 percent
		Cake to seeds crushed 60 percent
5	Caster seeds	Oil to seeds crushed 37 percent
		Cake to seeds crushed 63 percent
6	Coconuts	Copra to nuts one tonne copra 6775 nuts
		Oil to copra crushed 62 percent
		Cake to copra crushed 38 percent
7	Neem seed	Oil to kernel crushed 45 to 50 percent
		Cake to kernels crushed 50 to 55 percent
8	Sugar	Gur from cane crushed 10 percent
		Crystal sugar from gur refined 62.40 percent
		Crystal sugar from cane crushed 9.97 percent
		Khandassari sugar from gur refined 37.5 percent
		Molasses from cane crushed 3.5 percent
9	Cashew nuts	Cashew nuts kernels 25% of Cashew nuts
		Buttu from mixed milk 6.3 percent
		Ghee from mixed milk 5.3 percent

1	2	3	4
6	Indukki	1. Laterite soil 2. Alluvial soil	Peerumadu and Thodupuzha taluks Devikulam and Udambanchola taluks
7	Eranakulam	1. Laterite soil 2. Sandy loam 3. Alluvial	Moovattupuzha and part of Kunnathunadu Parur, Kochi and Kanayannur taluks Part of Aluva and Kunnathunadu
8	Thrissur	1. Sandy loam 2. Laterite 3. Granite 4. Clay	Part of Mukundapuram, Thrissur and Chavakkad taluks Western portion of Thalappilly and Eastern parts of Thrissur taluks Northern part of Thalappilly Back water are in Chavakkad and part of Mukundapuram
9	Palakkad	1. Sandy soil 2. Laterite 3. Black soil	River side areas Ottappalam, Mannarkkad and Palakkad taluks North eastern portion of Chittoor taluk
10	Malappuram	1. Sandy soil 2. Laterite	Coastal areas of district Major parts of the district barring coastal areas
11	Kozhikode	1. Laterite 2. Sandy	Major parts of the district barring coastal areas Coastal areas
12	Wayanad	Laterite	Most part of the district
13	Kannur	1. Laterite 2. Sandy	Major parts of the district barring coastal areas Coastal areas

4.6 Major Nutrients in Fertilizers and Manures (Percentage)

Sl. No		N ₃	P ₂ O ₅	K ₂ O
1	2	3	4	5
1	Ammonium Sulphate Nitrate	26.0		
2	Ammonium Sulphate	20.5		
3	Ammonium Nitrate	33.5		
4	Ammonium phosphate	16.0	20.0	
5	Diammonium phosphate	18.0	46.0	
6	Calcium ammonium nitrate	20.5		
7	Nitrate of soda	16.5		
8	Calcium nitrate	15.3		
9	Urea	46.0		
10	Super phosphate – Single		18.0	
11	Super phosphate – Double		35.0	
12	Super phosphate – Triple		45.0	
13	Rock phosphate		28.3	
14	Hyper phosphate		27.3	48
15	Sulphate of potash			50 or 60
16	Muriate of potash			
17	Ground nut cake	7.0	1.5	1.3
18	Caster cake	4.3	2.0	1.3
19	Mustard cake	4.5	1.5	
20	Mahua cake	2.5	0.8	1.8
21	Neem cake	5.2	1.0	1.4
22	Gingelly cake	6.2	2.0	1.2
23	Coconut cake	3.0	1.9	1.8
24	Poultry manure	1.2 – 1.5		
25	Deep litter poultry manure	3.0	2.78	2.0
26	Sheep manure	0.8 – 1.6		
27	Horse manure	0.6 – 1.6		
28	Farm yard manure	0.4	0.3	0.2
29	Fresh cow dung	1.57	0.25	0.18
30	Compost	0.5	1.26	0.5
31	Bone meal	3.5	21.0	
32	Fish meal	4.1	3.9	0.3
33	Blood (dried)	11.5	1.5	0.6
34	Meat meal	11.0		0.6
35	White fish meal	10.0	10	1.0
36	Mussori phos		20.24	

4.7 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 Caterpillar (<i>Spodoptera nayruvual</i>)	Caterpillar 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 50 wp (2.5 Kg/ha) Methyl Parathion 50 EC (500ml./ha)/ Carbary 15 W.p (2.5 Kg/ha)/Endosulfan/Truhloroform be Fentheon as soon as the Caterpillars are noted.
2	Rice Stem Bores (<i>Seriophaga incertulas</i>)	In the vegetative phase the central shoot is seen dead, turning yellow in colour (dead heart) in the ear-bearing stage, the ear head appears completely chaffy and white in colour (with ear head). Both come out easily when pulled out and show indication of Caterpillar attack at the tips.	Fenthuin 100Ec(500ml/ha) Quinalphos 75Ec(1000ml/ha) Quinalphose 5G(20 kg/ha) Fenitrothron 50Ec (1000 ml/ha) Fenitrothen 100Ec (500 ml/ha) Carbofuran 3G (18 kg/ha) Carbary 150Wp(2.5 kg/ha) Methyl parathion 50EC (500 ml/ha) Pgosphamedon 100EC (250 ml/ha) Monocropes 40Ec(600 ml/ha)
3	Rice Bug (<i>Leptocoris acutus</i>)	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 patches on 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 150Wp(2.5 kg/ha) Fermethin 25Ec (1000 ml/ha) Methyl Parathin 50Ec (500 ml/ha) BHC 10 D.P (25 kg/ha) Malathin 50Ec (1000 ml/ha)
4	Gall Midgs (<i>Orscolia oryzac</i>)	Presence of yellowish or violet tubular out growth in place of central leaf is the symptom (silver sheet). The symptom appears from the nursery to the billering phase	Carbary 150Wp (2.5 kg /ha) Quinalphes 25Ec (1000 ml/ha) Bhorate 10G (12.5 Kg/ha) Carbofuran 3G(18 kg/ha) Phoshamidon 100EC (250 ml/ha) Quinalphes 5G (20 Kg/ha)
5	Paddy leaf Roller (<i>Gaphalocressis medinalis</i>)	The leaves are seen folded or wobbed together with white patches on them indicating the areas fed on by the Caterpillar. When folded leaves 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 (1000 ml/ha) Carbary 150Wp (2.5 kg/ha) Monocrotophes 40Ec (600 ml/ha) Fenitrothion 50Ec (100 ml/ha) Fenthein 100Ec (500 ml/ha) Phosalone 35Ec (1000 ml/ha) Methyl parathion 50Ec (500 ml/ha)

1	2	3	4
6	Brown plants Hopper (Nilaparvata lugens)	<p>Yellowish circular patches appear here and there in the field. The plants in these areas 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.</p> <p>While spraying and dusting care should be taken that the insecticides reach the base of the plants.</p>	Carbary 150Wp (2.5 kg/ha) Quinalphes 25Ec (1000 ml/ha) Fenthio 100Ec (500 ml/ha) BHC 50wp (2.5 kg/ha) BHC 10 Dp (25 kg/ha) Phosphamidon 100Ec(250 ml/ha) Carbofuran 3G (18 kg/ha) Monocrotophes 40Ec (600 ml/ha) Phosaloue 35Ec(1000 ml/ha)
7	Rice Hispa (Dicladiisparmigera)	In early stages white patches with stunted growth are seen. 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 BHC 10 Dp (25 kg/ha) When infested.
8	Whorl Maggots (Hydrelliasp)	Common in nurseries and in main field up to 4-6 week after transplanting yellowish patches and streaks are seen along margin of leaves which may deform	Apply Phorate 100 (12.5 kg/ha) in egation 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 150Wp (2.5 kg/ha) Phosphamidon 100 Ec (250 ml/ha) Quinalphes 25Ec (1000 ml/ha) Monocuotophes 40Ec (600 ml/ha) Fenitrothion 50Ec (1000 ml/ha)
10	Rice thrips (Baliothrips bi formis)	The crop is highly suscceptible 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 than 3 out growths with the lower leaves also sowing chorosis and scorching.	In severe infertations apply carbary 150Wp (1.25 kg/ha) plus DDVP 100Ec (250 ml/ha) Dime theate 40Ec (1 Ltr/ha) or Quinal phes 25Ec (1 Hr/ha)
11	Rice rootnematode (Hirschmanniella Oryzac)	Attacks paddy roots and make them hollow affects absorption of water and nutrients plants show stunted growth in paties. Tiller production is afected.	Treat the nursery with Carbofuran 0.75 kg/ha and dipseedlings in 0.2% Dime theate for six hours before transplanting.

4.8 List of Rain gauge Station in Kerala

1. Thiruvanthapuram	5. Kottayam	1. Alathur
1. Ponmudi	1. Changanacherry	2. Plakkad
2. Varkala	2. Kottyam (Agronnet)	3. Parali
3. Attingal	3. Kumarakom	4. Ottapalam
4. Nedumangad	6. Idukki	5. Cherpulassery
5. Thiruvananthapuram(B)	1. Chinnar	6. Mannar kadu
6. Neyyattinkara	2. Marayur	7. Chittur
7. Parassala	5. Munnar	8. Pattambi
8. Thiruvananthapuram (Aerodrome)	6. Devikulam	10. Malappuram
9. Vellayani (A.N)	7. Kumily	1. Perinthalmanna
2. Kollam	8. Peerumedu (Taluk)	2. Ponnani
1. Kottarakkara	9. Peerumedu (Residency)	3. Manjeri
2. Punalur	10. Vandanmedu	4. Nilambur
3. Karunagappally	11. Velloor	5. Thirurangadi
4. Ariankavu	12. Karikode (Thodupuzha)	11. Kozhicode
5. Kollam	7. Eranakulam	1. Kozhicode
6. Paravur	1. Malayattur	2. Koilandy
7. Kulathupuzha	2. Parur	3. Vadakara
8. Nilamel	3. Perumbavoor	4. Muthunga
3. Pathanamthitta	4. Aluva	5. Kuppady
1. Konni	5. Neriyamangala	6. Kuttiyadi (Dam)
2. Adoor	6. Muvattupuzha	7. Kuttiyadi (P.H)
3. Thiruvalla	7. Kochi (b)	12. Wayanad
4. Pathanamthitta	8. Eranakulam	1. Vythiri
4. Alappuzha	9. Piravam	2. Manathavady
1. Arukutty	8. Thrissur	3. Peria
2. Cherthala	1. Kodungallur	4. Chedlath
3. Alappuzha (B)	2. Mukundapuram	13. Kannur
4. Ambalapuzha	3. Thrissur	1. Thaliparamba
5. Chenganur	1. Thalappilly	2. Kannur
6. Haipad	2. Ollurkara	3. Thalassery
7. Mevelikkara	4. Peechi	4. Irirkur
8. Kayamkulam	5. Chalakkudy	5. Payyannur
5. Kottayam	6. Potta	6. Mahe
1. Vaikom	7. Muttathur	14. Kasaragod
2. Palai	8. Thumburmoozhi	1. Hosdurg
3. Ettumanoor	9. Palakkad	2. Kasaragod
4. Kanjirappally		3. Kasaragod (Agromet)

4.9 Glossary of English, Botanical and Malayalam Names of Crops

Sl No.	English Name	Malayalam Name	Botanical Name
1	2	3	4
	Cearls		
1	Paddy	Nellu	Oryza Sathva
2	Ragi	Koovaraku	Eleusine Coracan
3	Jower	Cholam	Scirpus Valgare
4	Bajra	Kambu	Pennisetum Scrobiculatum
5	Marize	Mokke cholam	Zea Mays
6	Kodamillel	Varagu	Paspalum Scrobiculatum
7	Chama	Chama	Panicum sumatrense
8	Wheat	Gothambu	Triticum vulgare
9	Barley	Barley	Hordeum vulgare
	Pulses		
1	Black gram	Uzhunnu	Vigna mungo
2	Green gram	Cherupayar	Vigna radiata
3	Horse gram	Muthira	Macrotyloma uniflorum
4	Red gram	Thuvarappayar	Cajanus cajan
5	Cowpea Soyabean	Perum payar	Vigna unguiculata
	Suagar Crops		
1	Sugar cane	Karimbu	Sacharum officianarum
2	Palamirah	Karimpana	Boreassus flabellifar
	Tubers		
1	Tapioca	Marecheeni	Manihot esculenta
2	Colocasia	Chembu	Colocasia esculenta
3	Elephant foot	Chena	Amorphophallus
4	Yain	Kachil	Dioscorea alata
5	Turnip	Seemamullangi	Brassica rapa
6	Potato	Urula kizhangu	Solanum tuberosum
7	Sweet potato	Cheeni kizhangu	Ipomoea batatas
8	Radish	Mullangi	Raphanus sativus
9	Carrot	Carrot	Daucus carota

1	2	3	4
Vegetables			
1	Brinjal	Vashuthana	<i>Solanum melongena</i>
2	Tomato	Thakkali	<i>Lycopersicun esculentam</i>
3	Chilli	Mulaku	<i>Capsicum annuum</i>
4	Amaranthus	Cheera	Amaranthus
5	Okra	Venda	<i>Abel moschus esculentus</i>
6	Bitter gourd	Paval	<i>Momordia chasanslia</i>
7	Bottle gourd	Churakka	<i>Lagenaua siceraria</i>
8	Snake gourd	Padavalam	<i>Trich osanthus anguina</i>
9	Ridge gourd	Peechanga	<i>Luffa acutangula</i>
10	Ash gourd	Kumbalam	<i>Benincasa hispida</i>
11	Little gourd	Koval	<i>Coccina grandis</i>
12	Sword bean	Valariga	<i>Canavila gladiata</i>
13	French bean	Beans	<i>Phaseolus vulgaris</i>
14	Beet root	Beet root	<i>Beta vulgaus</i>
15	Cabbage	Muttakose	<i>Brassica oleracea var capitata</i>
16	Carrot	Carrot	<i>Daucus carota</i>
17	Cauliflower	Cauliflower	<i>Brassica oleracea</i>
18	Indian bean	Amara	<i>Lablab pupurcus</i>
19	Drumstrick	Muringa	<i>Moringa olerfera</i>
20	Musk melon	Thai kumbalam	<i>Cucumis melo</i>
21	Onion	Ulli	<i>Alleum cepa</i>
22	Pampkin	Mathan	<i>Cucurbita mosehata</i>
23	Red pumbkin	Vellarimathan	<i>Cucurbita maxima</i>
Fruits			
1	Banana	Etha vazha	<i>Musa spp</i>
2	Plantain	Vazha	<i>Musscpientium</i>
3	Bread fruit	Seemachakka	<i>Arto carpus altilis</i>
4	Bull ocks heart	Malamaunthiri	<i>Anno na reticulata</i>
5	Cashew	Kasuvandi	<i>Anacardiam Occidentale</i>
6	Sweet sop	Seethapazham	<i>Annona squamosa</i>
7	Grapes	Munthiringa	<i>Vitis vinifera</i>
8	Guava	Perakka	<i>Psidium guajava</i>
9	Jack	Chakka	<i>Artocarpus heterophylus</i>
10	Jujube	Elantha	<i>Zizyphus jujuba</i>
11	Lemon	Naranga	<i>Citurs limon</i>
12	Lime	Cherunaranga	<i>Citus aucian tifolia</i>
13	Mango	Manga	<i>Mangifera india</i>
14	Mangosteen	Mangosteen	<i>Garcinia mangostana</i>
15	Pappaya	Pappakka	<i>Carica papaya</i>
16	Pine apple	Kaithachakka	<i>Ananas comosus</i>
17	Pouegranate	Mathalanaranga	<i>Punica granatum</i>
18	Sapota	Sapota	<i>Achras zapota</i>
19	Mandarin	Orange	<i>Citrus reticulata</i>
20	Pomelo	Bamplimas	<i>Citrus decumana</i>

1	2	3	4
	Condiments and spices		
1	Chilli	Mulagu	<i>Capsicum annuum</i>
2	Turmeric	Manjal	<i>Curcuma domestica</i>
3	Coriander	Kothamalli	<i>Coreantheum sativum</i>
4	Indian mustard	Kaduku	<i>Brassica junica</i> spp. <i>Juncea</i>
5	Cumin	Jeerakam	<i>Cuminum cyminum</i>
6	Pepper	Kurumulaku	<i>Piper nigrum</i>
7	Garlic	Veluthulli	<i>Allium sativum</i>
8	Ginger	Inchi	<i>Zingiber officinale</i>
9	Cardamom	Elam	<i>Elettaria cardamomum</i>
10	Long pepper	Thippili	<i>Piper longum</i>
11	Nutmeg	Jathika	<i>Myristica fragrans</i>
12	Cinnamon	Karuvapatta	<i>Cinnamomum zelancium</i>
13	Clove	Grambu	<i>Syzygium aromaticum</i>
14	Fennel	Perinteerakam	<i>Foeniculum vulgare</i>
15	Cinchona	Cinchona	<i>Cinchona officinalis</i>
16	Allspice	Allspice	<i>Pimenta dioica</i>
	Oil Seeds		
1	Cocount	Thenga	<i>Cocos nucifera</i>
2	Seasmum	Ellu	<i>Sesamum indicum</i>
3	Groundnut	Nilakkadala	<i>Arachis hypogaea</i>
4	Indian mustard	Kaduku	<i>Brassica juncea</i> spp. <i>Juncea</i>
5	Cast	Avanakku	<i>Ricinus communis</i>
6	Oil palm	Ennappana	<i>Elaeis guineensis</i>
	Beverages		
1	Coffee	Kappi	<i>Coffea</i> spp
2	Tea	Theyila	<i>Camellia sinensis</i>
3	Cocoa	Cocoa	<i>Theobroma cacao</i>
	Green Manure crops		
1	Glyricida	Seemakonna	<i>Gliricidia maculata</i>
2	Gotalaua	Kilukki	<i>Crotalaria mucronata</i>
3	Sunnhemp	Kattuchanambu	<i>Crotalaria juncea</i>
4	Calapagonium	Calapagonium	<i>Calapagonium mucronoides</i>
5	Kudzuvine	Kudzu payar	<i>Pueraria javanica</i>
6	Wild indigo	Kozhinji	<i>Tephrosia purpurea</i>

1	2	3	4
	Folder crops		
1	Bermuda	Karuka	<i>Cynodon dactylon</i>
2	Napier	Napier	<i>Pennisetum purpureum</i>
3	Guinea	Kuthirappullu	<i>Panicum maximum</i>
4	Para	Parappullu	<i>Brachiaua mutica</i>
5	Tropical kudzu	Kudzu	<i>Pueraria phaseoloides</i>
	Other Crops		
1	Tobacco	Pukayila	<i>Nicotiana tabacum</i>
2	Betel vine	Vettilla	<i>Diper betle</i>
3	Arecanut	Kamuku	<i>Areca catechu</i>
4	Para rubber	Rubber	<i>Hevea brasiliensis</i>
5	Sugarcane	Karimbu	<i>Saccharum officinarum</i>
	Trees		
1	Teak	Thekku	<i>Teak grandis</i>
2	Ebony	Karimaram	<i>Diospyros ebenum</i>
3	Jungle Jack / Aini	Anjili	<i>Artocarpus heterophyllus</i>
4	Poon	Kattupunna	<i>Calophyllum polyanthum</i>
5	Tree of heaven	Perumaram	<i>Ailanthus excelsa</i>
6	Sain / haurel	Karimaruthu	<i>Terminalia eremita</i>
7	Kindal	Vellamaruthu	<i>T. Panicula</i>
8	Gurjin	Vella Ayani	<i>Dipterocarpus indius</i>
9	Mango	Mavu	<i>Mangifera indica</i>
10	Iron wood tree	Kadamaram	<i>Xylia zylocarpa</i>
11	Venteak	Venthekkku	<i>Lagerstroemia microcarpa</i>
12	Siris	Vaka	<i>Albizia lebbeck</i>
13	Yellow teak	Manja kadambu	<i>Haldina corifolia</i>
14	Dita dark	Yezhilam pala	<i>Alstonia scholaris</i>
15	Ekadnia	Mulluvenga	<i>Bridelia squamrosa</i>
16	Mahogany	Mahogany	<i>Swietenia mahogani</i>
17	Indian rose wood	Eetty	<i>Dalbergia latifolia</i>
18	Jack	Plavu	<i>Artocarpus heterophyllus</i>
19	Bead tree	Manjadi	<i>Adenanthera pavonina</i>

1	2	3	4
Folder crops			
1	Bermuda	Karuka	<i>Cynodon dactylon</i>
2	Napier	Napier	<i>Pennisetum purpureum</i>
3	Guinea	Kuthirappullu	<i>Panicum maximum</i>
4	Para	Parappullu	<i>Brachiaua mutica</i>
5	Tropical kudzu	Kudzu	<i>Pueraria phaseoloides</i>
Other Crops			
1	Tobacco	Pukayila	<i>Nicotiana tabacum</i>
2	Betel vine	Vettilla	<i>Diper betle</i>
3	Arecanut	Kamuku	<i>Areca catechu</i>
4	Para rubber	Rubber	<i>Hevea brasiliensis</i>
5	Sugarcane	Karimbu	<i>Saccharum officinarum</i>
Trees			
1	Teak	Thekku	<i>Tectona grandis</i>
2	Ebony	Karimaram	<i>Diospyros ebenum</i>
3	Jungle Jack / Aini	Anjili	<i>Artocarpus heterophyllus</i>
4	Poon	Kattupunna	<i>Calophyllum polyanthum</i>
5	Tree of heaven	Perumaram	<i>Ailanthus excelsa</i>
6	Sain / haurel	Karimaruthu	<i>Terminalia ererulta</i>
7	Kindal	Vellamaruthu	<i>T. paniculata</i>
8	Gurjin	Vella Ayani	<i>Dipterocarpus indicus</i>
9	Mango	Mavu	<i>Mangifera indica</i>
10	Iron wood tree	Kadamaram	<i>Xylia zylocarpa</i>
11	Venteak	Venthekku	<i>Lagerstroemia microcarpa</i>
12	Siris	Vaka	<i>Albizia lebbeck</i>
13	Yellow teak	Manja kadambu	<i>Haldina corifolia</i>
14	Dita dark	Yezhilam pala	<i>Alstonia scholaris</i>
15	Ekadnia	Mulluvenga	<i>Bridelia squamosa</i>
16	Mahogany	Mahogany	<i>Swietenia mahogani</i>
17	Indian rose wood	Eetty	<i>Dalbergia latifolia</i>
18	Jack	Plavu	<i>Artocarpus heterophyllus</i>
19	Bead tree	Manjadi	<i>Adenanthera pavonina</i>

671

