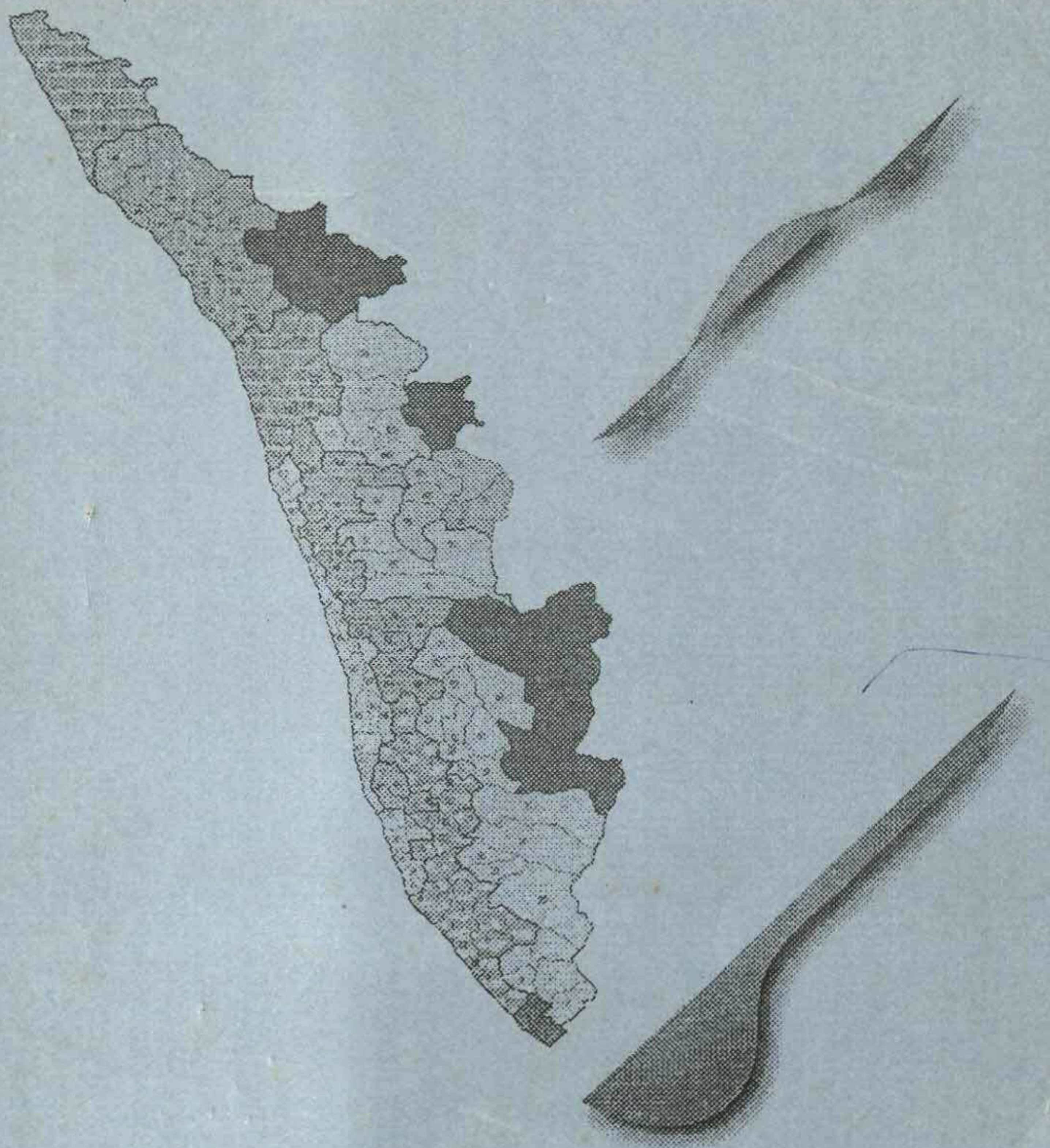


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# *Agro Climatic Zone wise Report on Important Crops in Kerala 2001-02*

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Department of Economics & Statistics  
Government of Kerala  
Thiruvananthapuram  
May 2003







## *Preface*

There is a great demand from various corners of data users for Agro Climatic Zone wise data on area, production and productivity of field crops in Kerala. This department has already published the Agricultural Statistics 2001-02 in which the district wise data on various parameters are included. Despite the technical limitation, we have attempted this exercise to prepare the estimates on area, production and productivity of the prominent crops at Agro Climatic Zones of Kerala. It is worth mentioning that 12 Agro Climatic Zones identified in the "Report of the Committee on Agro Climatic Zones and cropping pattern" Kerala 1974, is considered while preparing this report. However the Plantation crops like Tea, Rubber, Coffee, Cardamom, etc. governed by the commodity Boards are not covered due to limitation in identification of area under each Agro Climatic Zones. This is the 1<sup>st</sup> Report on the subject viz. **Agro Climatic Zone wise Report on Important crops in Kerala 2001-02**. It is hoped that as an indicator this would be useful to mitigate the problems of data users on data gap to a certain extent. Shri. S. Janardhanan Potti and Smt. C.S. Lathakumari, Assistant Directors of Agricultural Statistics Division of this Directorate have rendered very good service in completing this task. Shri. B. Mohanakumaran Nair, Joint Director initiated this project, guided the work and rendered excellent service to make this report a reality within stipulated time frame. Improvement on this report can be made in the next editions. Suggestions for improvement are welcome.

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20<sup>th</sup> May 2003



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## **Introduction**

At present the Department of Economics and Statistics is publishing Agricultural Statistics every year as per the results obtained through area enumeration survey and General Crop Estimation Survey under the 50 percent Centrally Sponsored Schemes (CSS) –EARAS in the state. The concept and methodology followed in the survey is governed by the Ministry of Statistics Planning and Programme Implementation, Ministry of Agriculture Government of India and the guidance issued by the Indian Agricultural Statistics Research Institute, Government of India. The Agricultural Statistics especially estimates on area under each crop, production, and productivity of each crop deserves more attention in the present context of WTO and global market. The change of policy that is from subsistence farming to commercial farming, increase in production and productivity, reduce the cost of production etc necessitate the realistic data base for valid assessments. As such by an area approach and Agro climatic zonation wise status of yield of field crop attains more importance. In Kerala with the introduction decentralized planning process and Local Level Development Plan Formulation importance for data at Panchayat/Block level is increased.

Despite the technical limitation that, inadequate sample size for valid estimates at Panchayat/Block level, the department considered the growing demand for Agro Climatic Zone wise data on of field crops, Department took up this exercise to prepare a zonation wise area, production and productivity of prominent crops by making use of the data of Agricultural Statistics 2001-2002 which is published at district level. The data of Agricultural Statistics 2001-2002 are suited to the Agro Climatic Zonation wise, identified 12-zone area. The agro climatic zones are identified by the Committee on Agro Climatic Zone and cropping patterns, of the Department of Agriculture, Government of Kerala. The data on 14 districts are accommodated in the 12 Agro Climatic Zones in the state.

A brief explanation on the concepts and parameters of distinguishing the Agro Climatic Zones are given in the following paragraphs.

## **Location**

In the Indian union, Kerala is one of the smallest states which is spread over in the area of 38.864 Km. The western side of state is blessed with a long coastal strip of Arabian

sea and East with westernghat. With regard to the location of the state it lies between 8° 18' and 12° 48' North latitude and 74° 52' and 77° 22" East longitude. The length of seacoast of the state is about 590 KM. The state is broader in the central area that not exceeding 120 Kms and narrows down to 30 Km at extremes of north and South.

### **Administration Division**

Development Division of the administration units of the state are 14 districts 152 community development Blocks 991 Panchayats 53 Municipalities and 5 Corporations. The administrative division consists of 63 taluks 1452 revenue villages in 14 districts.

### **Physiographic divisions**

The landmass of Kerala has been distinguished into three divisions such as Highlands Midlands and Lowlands. The following Table represents the phisiographic divisions of Kerala.

Table A

No	Division/Zones	Description	Area	
			KM	Percentage
1	Highlands	Revenue villages lying 250' (76.2M) and more above MSL	18653.50	48.00
2	Midlands	Revenue villages lying between 25' (7.62m) and 250' (76.2m) above MSL	16231.20	41.76
3	Lowland	Revenue villages lying below 25' (7.62m) above MSL	3979.30	10.24
Total			38864	100.00

The altitude of above MSL is the only criteria for natural physiographic divisions of Kerala. As such each of these three divisions that Highlands, Midlands and Low lands would comprise heterogeneous agro ecological entities and resultant land use patterns. Climate, soil, Rainfall etc are also to be taken into account for homogeneous Agro Climatic Regions.

### **Seasons**

In the broad sense, Autumn Winter and Summer are the three seasons in an agricultural year in Kerala. Strictly speaking there are no well-defined seasons in most parts

of the state. The summer and winter seasons are benefited with southwest and northeast monsoons. Autumn is hardly distinguishable in view of climatic conditions.

## Rainfall

According to the National Commission on Agriculture (NCA) there are three rain fall seasons in an year.in the nation. Each season consist of four months. The Rainfall season and the periods are given below.

No	Season	Period
1	Pro-Monsoon	February to May
2	Monsoon	June to September
3	Post Monsoon	October to January

Normal Rainfall in Kerala are given Table 1 and 2

## Agro Climatic Zones

Combination of parameters such as altitude, rainfall pattern, soil type and topography influences the configuration of typical agronomic environments where in a distinct cropping pattern flourishes.

In the State only two areas fall under high altitudes namely high ranges Idukki and Wayanad district besides westernghat areas. The low altitude region endowed with humid tropical climate is spread over the entire length of the state.

Rainfall characteristic is another important parameter. The state was divided into two i.e. the areas south and North of 11 N latitude (South and North of Trisur) with rainfall patterns 1 and 2 respectively. The southern region is having comparatively well rainfall and June maxima where as Northern Region has relatively ill rainfall and July maxima.

Soil type is another distinguishing factor of a zone. The soil types are laterite, Red loam, Alluvial peat soil (Kari) and sandy.

The parameters for identifying Agro Climatic Zones are given in the Table

### A. Altitude

- |    |           |                         |
|----|-----------|-------------------------|
| 1. | Type – I  | Sea level to 500 meters |
| 2. | Type – II | Above 1000 meters       |



## B. Rainfall

Pattern – I Both the South West and North East Monsoons are active and moderately distributed. South West Monsoon with June maximum

Pattern – II III – distributed rainfall South West Monsoon with July maximum and concentrated in 3-4 months. North East Monsoon relatively weak.

## C. Soil types

1. Alluvial soil
2. Sandy soil
3. Laterite with well defined B-horizon
4. Laterite soil (without B-horizon)
5. Red soil
6. Black soil
7. Peat (Kari) soil

## D. Topography

1. Model-I. Extensive valleys with level but raised garden lands
2. Model-II a. Valleys less extensive. Hills with moderate gradients and slopes having mild gradients.
3. Model-II b. Valleys less extensive, hills with moderate gradients and with egg shaped hump. Slopes are steep
4. Model-II c. Valleys less extensive. Hills with table tops. Slopes are steep.
5. Model-III Narrow valleys and hills with steep gradients.

## Cropping Pattern

According to the above mentioned parameters the entire state is classified in to 12. Agro Climatic Zones. The principal Crops according to the Agro Climatic Zones of Kerala along with soil type represents in the given below.



No	Zones	Altitude Type	Rainfall pattern	Topography Model	Soil type	Principal crops
I	Malappuram	I	II	IIc	Laterite	Rice, Coconut, Cashewnut, Arecanut
II	Northern Midlands	I	II	II b	Laterite	Rice, Coconut, Arecanut
III	High Ranges	II	I&II	III	Red loam	Tea, Coffee, Cardamom, Rice
IV	Malayoram	I	I	III	Laterite without B	Rubber, Coconut, Pepper, Rice
V	Central Midlands	I	I&II	II a	Laterite	Rice, Coconut, Tapioca, Arecanut, Banana
VI	Palakkad	I	II	II	Red loam	Rice, Cotton, Groundnut, Millets
VII	Chittoor Black soil	I	II	II a	Black soil	Rice, Sugarcane, Cotton, Groundnut, Millets
VIII	Coastal sandy	I	I	I	Sandy Loam	Rice, Coconut
IX	Kuttanad	I	I	I	Peat (Kari)	Rice, Coconut
X	Onattukara	I	I	I	Sandy loam	Rice, Coconut, Tapioca, Arecanut
XI	Southern Midlands	I	I	III	Laterite without B	Coconut, Rice, Tapioca, Arecanut
XII	Red loam	I	I	III	Red loam	Coconut, Tapioca, Rice

Source: Report on the Committee on Agro climatic zones and cropping patterns - April 1974

### Land use pattern

At present the land utilization are classified in to nine folds. The National Statistical Commission proposed to enhance the nine folds of classification by way of including under marshy land, under still water, social forestry etc. The land utilization pattern in this state of Kerala as per the Agricultural Statistics 2001-2002 reveals that 56% of the total geographical area (38.85 lakhs hectares) is under net sown area. The Forest land cultivation are not included. The forest area is accounted to 28% of the total geographical area. The total cultivable land in the state is accounted to 84% of the total geographical area, excluding the forest area. The current fallow is estimated to 2% during 2001-2002. The land put under nonagricultural use is worked to 10%. The gross cropped area is 2992252 hectares where as the Area sown, morethan once is worked to 21% of the total geographical area. Land use pattern in Kerala during 2001-02 and percentage of classification of land utilization are given in the table 3 & 4.

Zonation wise area under predominant crops, Production and productivity of each crops are given in table 5. Geographical Area of each Block- Municipality/Block/Corperation in the state under each zone in the state are based to allocate the data for respective Agro Climatic Zones. The data on area production and productivity of crop-as per Agricultural Statistics 01-02 at state level is spread over in the identified 12 Agro Climatic Zones.



## **The seasonal crops**

Paddy (Autumn, Winter and Summer), Tapioca

## **Annual crops**

Banana, Plantain and Pineapple

## **Perennial crops**

Coconut, Aeronaut, Cashew and Pepper

## **Analysis**

The analysis of Crop statistics in the state reveals the fluctuations in the productivity of each crop is varying in the different zones which indicates the influence of Agro Climatic parameters.

### **I Rice**

#### **Rice (Autumn)**

##### **a. Area**

During Autumn 2001-2002 of the total, 116540 hect. paddy cultivation area in zone 7 (Chittoor Black Soil) is having 24651 Hectare (21.15%) with rice production of 62271 MT and productivity, 2526 Kg/Hect. This is followed by Palakkad zone 21273 MT (18.25%) with production 46449 MT and productivity of 2183 Kg/Hect. The High ranges shows the lowest area of 33 Hect (0.03%) with production and productivity 94 MT and 2843 Kg/Hect. respectively.

##### **b. Production**

In production also Chittoor Black Soil zone comes with 62271MT (26.4%) followed by Palakkad and Malayoram 46449MT (19.7%) and 38645 MT (16.4%) respectively. The least production is in High ranges zone 94 MT (0.04%).

##### **c. Productivity**

High range zone and Chittoor Black soil zone comes first and second zones in productivity with 2848 Kg/Hect and 2526 Kg/Hect respectively. The least productivity zone is Kuttanad with 209 Kg/Hect during autumn 2001-02. It is not a normal rate but decrease is due to crop loss.



**Rice (Winter)**

(a) **Area:-** The central Midlands comes first with an area of 35446 Hect (21.9%) production 73056 (20.1%) and productivity 2061 Kg/Hect. This followed by Malayoram zone having an area of 24890 (15.37%), production and productivity recorded are 53559 (14.8%) and 2152 Kg/Hect respectively. Red loam soil least area of 367 Hect (0.23%) with 579 MT production and 1578 Kg/Hect as productivity.

(b) **Production:-** As in area in the case of production also central Midland comes first with 73056 MT (20.1%). Similarly Malayoram stands second with production 53559 MT (14.8%). The lowest production is seen in Red loam having a production of 579 MT(0.16%).

**(c) Productivity**

Against the lowest production and productivity in Kuttanad during autumn 2001-2002, the production and productivity during winter stands first in the state. The paddy area during winter is worked out to 13364 hect (8.25%) the production of rice is 38851 MT (10.7%), where as the productivity worked out to 2907 Kg/hect.

**(ii) Rice (Summer)**

(a) **Area:-** During the season also central Midland comes first in area 10719 Hect (24.44%) with production and productivity 22548 MT and 2104 Kg/Hect respectively. Southern Midland zone stand second behind with an Area 7128 Hect (16.26%) having production 15863 MT and productivity of 2225 Kg/Hect. In this season also Red loam stands at last with an area, of production and productivity of 4 Hect, 4MT and 1000 Kg/Hect respectively.

**(b) Production**

Central Midland comes first with production of 22548 MT (21.46%) and productivity 2104 Kg/Hect. Kuttanad zone stands next in production with 20178 (19.2%) having a productivity of 2911 Kg/Hect. The Red loam is lowest in area production as compared to other zones.

**(c) Productivity**

Chittoor Black Soil comes first in productivity 2956 Kg/Hect followed by Kuttanad zone having a productivity of 2911 Kg/Hect.

**II Coconut****(a) Area**

Northern Midlands and Malappuram zones ranks first and second with an area of 178548 (19.7%) and 174050 (19.2%) respectively. 38.93% of the area of the state included in the



above mentioned zones. Kuttanad zone comes the lowest in area of the coconut with 6262 Hect. It is to be mentioned that the Kuttanad zone includes the maximum wetland area where is under paddy cultivation is prominent.

#### **(b) Production**

Malappuram zone stands first in coconut production 1238 million nuts (22.6%) followed by Northern midlands 1098 Million nuts (20.0%). 42.6% of the total production is from these two zones. As in area, the coconut production in Kuttanad zone also ranks the lowest with 39 million nuts.

#### **(c) Productivity**

Regarding productivity of coconut, Red loam soil zone stands first with productivity of 7146 Nos /Hect. Where as Malappuram comes second with productivity of 7114 Nos of nuts/hect. The lowest productivity is in High ranges (3935 Nos/Hect).

### **III Arecanut**

**(a) Area** In respect of area of arecanut Malappuram zone occupies the first in position i.e. 30333 (32.5%) followed by Northern Midland with an area of 19718 (21.2%). Majority of the arecanut area in the state is spread over in these two zones. Red loam zones constitutes only 125 Hect (0.13%).

#### **(b) Production**

Just like in area, Malappuram and Northern Midlands stands as first and second respectively in production contributing 61.8% of total production. The least produced zone is Red loam with a production of 9.318 Million nuts.

#### **(c) Productivity**

Malappuram and central midlands stand as first and second with a productivity of 227.337 and 199.853 (Millions/Hect) respectively. The least productivity noted is in the Chittoor Black soil.

### **IV Cashew**

#### **(a) Area**

Estimated area under the crop cashew is high in the Northern midland zone, which is 29788 hectares (33.20%) and lowest in Kuttanad zone i.e., 51 hectares (0.06%). 63% of area under the crop is in Malappuram and Northern Midlands zones.



(b) **Production:-** Major production of cashew in the state is from northern midlands zone, which accounts to 25637.02 Tones (38.92%). Northern midlands and Malappuram contributes the major production of the crop (77%). The lowest production of cashew is in Kuttanad zone i.e., only 12.927 Tones (0.02%).

(c) **Productivity:-** The largest productivity is also in Malappuram zones (923 Kg/Hect). But the lowest productivity is marked in Red loam zone (231 kg/hect) which is comparatively very low with the state productivity.

## **V Pepper**

(a) **Area:-** As compared to other zones in the state area under pepper is highest in high ranges, 97731 hect (47.92%). About half of the area under pepper is in high range zones. Where as 187 hect (0.09%) area is in Kuttanad zone.

(b) **Production:-** The highest quantity ,about 61% of pepper is produced in High ranges (35811.24 Tones). The same is lowest in Kuttanad zone, which is only 19.041 Tones.

(c) **Productivity:-** Productivity is also comparatively high in High range zone (366.427 kg/hect) and lower in Costal Sandy soil zone (88.548kg/hect)

## **VI Tapioca**

(a) **Area:-** The highest area under Tapioca is in Southern midlands 36424 hect (32.76%) followed by Malayoram zone, 36405 hect (32.74%) together contributes about 65% of the total area under the crop. Where as the same is lowest in Kuttanad zone.

(b) **Production: -** The status of production of Tapioca is considered the highest in Malayoram, in 936422 Tones (38.13%) followed by Southern midland zones 691308 Tones (28.15%). Just as area, production, of tapioca from Malayoram and southern midland zones also accounts above 50%. Negligible quantity of Tapioca is produced in Kuttanad zone i.e. 3912 Tones.

(c) **Productivity:-** Higher productivity is another factor for increased production in Malayoram zone. Highest productivity is marked in High ranges as 30147 kg/hect followed by Malayoram 25722 kg/hect and lower in Onattukara as 12846 kgs/hect.



## **VII Banana**

(a) **Area:-** Malayoram zone stands first with an area of 18745 (3632%) followed by High ranges 13485 (26.50%). The two zones together contribute the major portion of the area. In Onattukara Banana cultivation is least as compared to other zones.

(b) **Production:-** As in the area, Malayoram and High ranges stands as first and second in the production having a production of 124019 (22.99%) and 116203 (30.91%) respectively. Onattukara zone holds back position in the production.

(c) **Productivity:-** In respect of productivity High Ranges stands first with 8617 kg/hect followed by Kuttanad with 8073 kg/hect. Lower rate of productivity noted is 5419 kg/hect in Onattukara zone.

## **VIII Plantain**

(a) **Area:-** Area under plantain is 12434 hect (22.5%) Hectare in Malayoram zone. Southern midland stands just behind Malayoram with an area of 8194 Hect (14.8%). Plantain area in Palakkad zone accounted to (623 hect) holds lowest position.

(b) **Production:-** The highest Production is Malayoram (93904MT). High ranges followed with a production of 69868 hect. The least produced zone is Palakkad.

(c) **Productivity:-** High ranges and Onattukara zones stands as first and second with productivity of 10741 kg/hect and 8850 kg/hect respectively. The rate of productivity is poor in the northern midlands (4810 kg/hect) as compared to other zones.

## **IX Pineapple**

(a) **Area:-** Malayoram and central midlands together contributing about 80% of area of the total area under pineapple in the state that stands first and second places with an area of 6432 hect and 2540 hect respectively. Kuttanad is the lowest in the pineapple cultivation.

(b) **Production:-** As area, Malayoram and central midlands strands in the first to second places in the production 48616 MT and 22693 MT respectively. Kuttanad in the lowest producing zone.

(c) **Productivity:-** While ranking productivity as compared, to other zones, central midlands and Chittoor Black soil occupies first and second position with 8934 kg/hect and 8429 kg/hect respectively. Red loam reveals the lowest productivity zone that accounts to 4016 kg/hect.

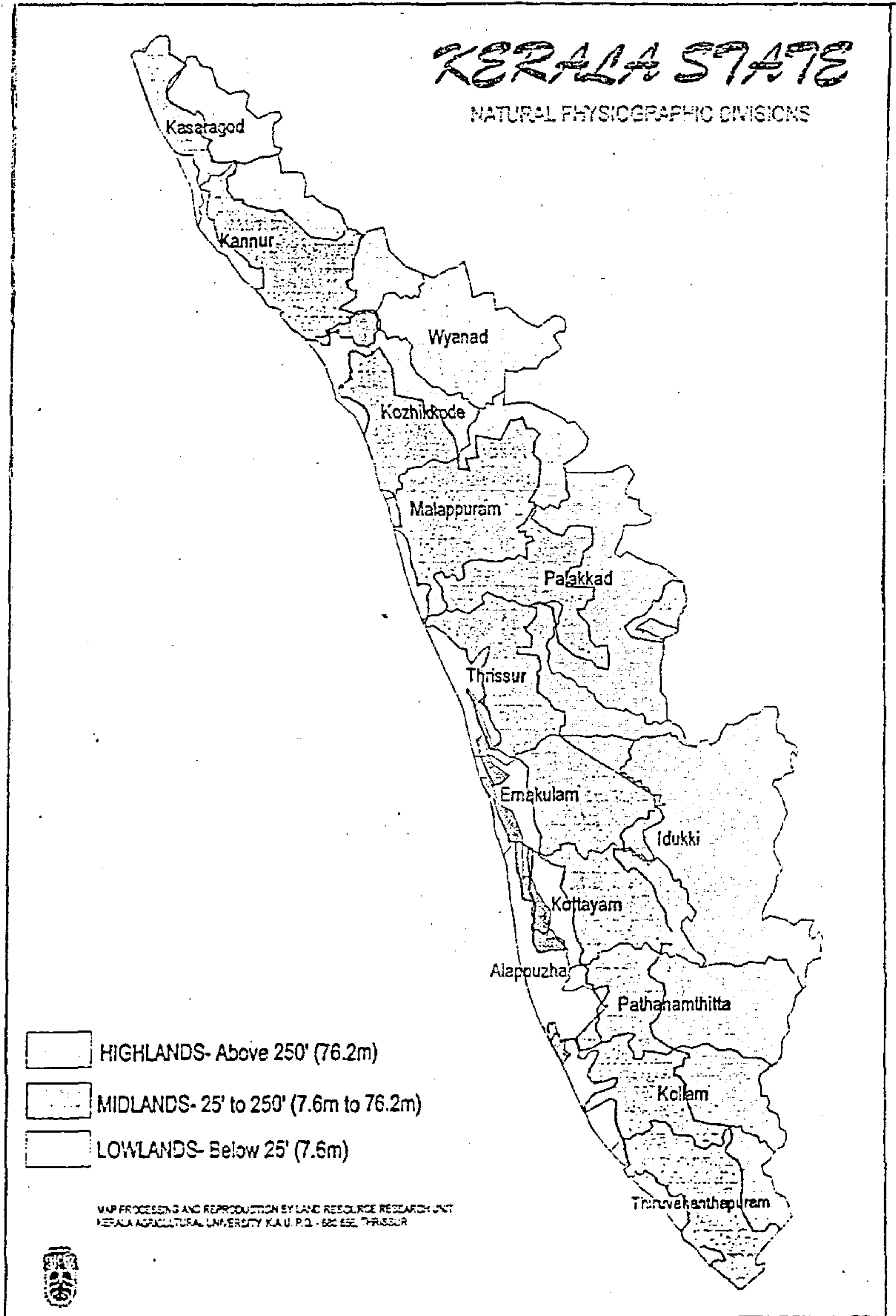


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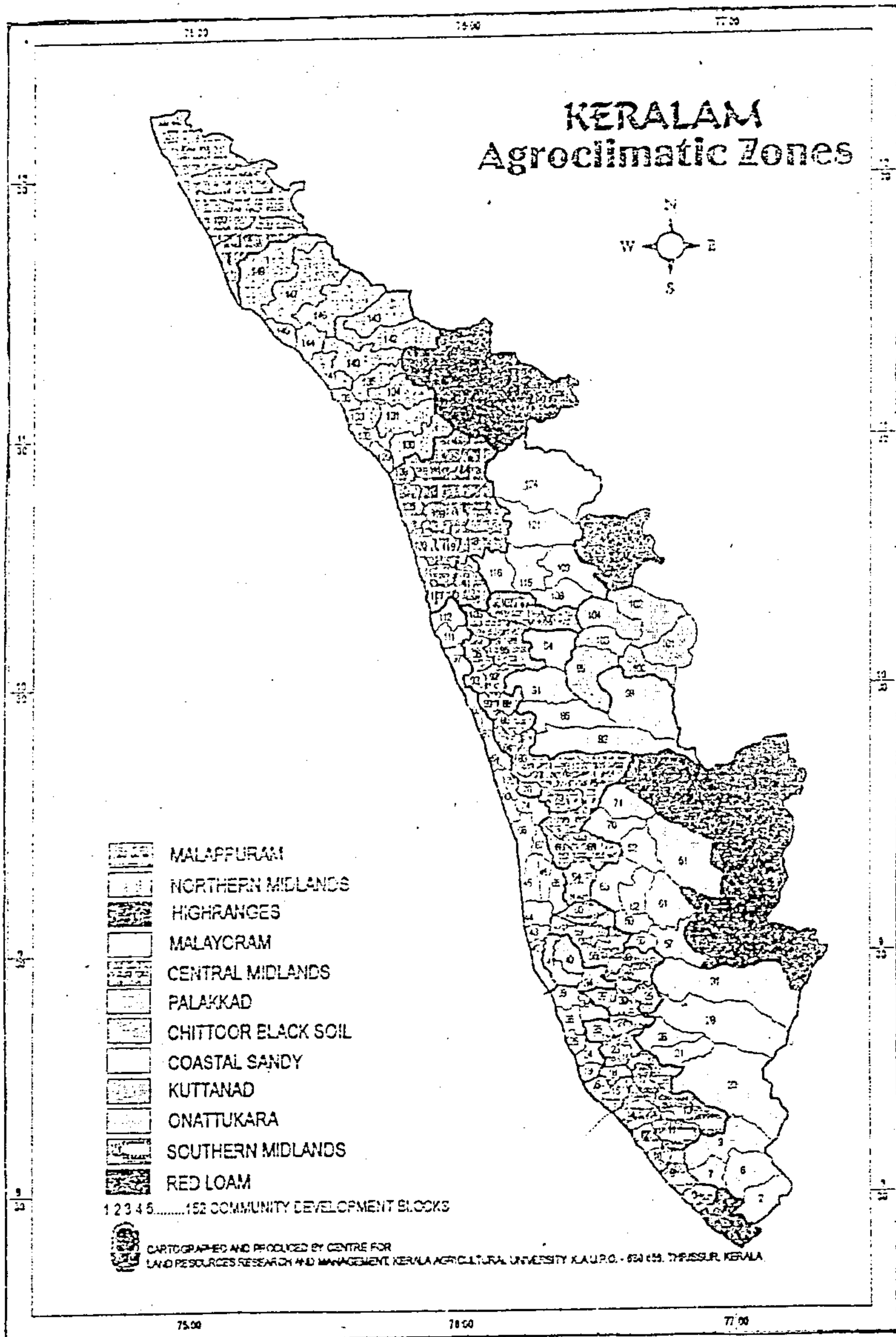
# Appendix

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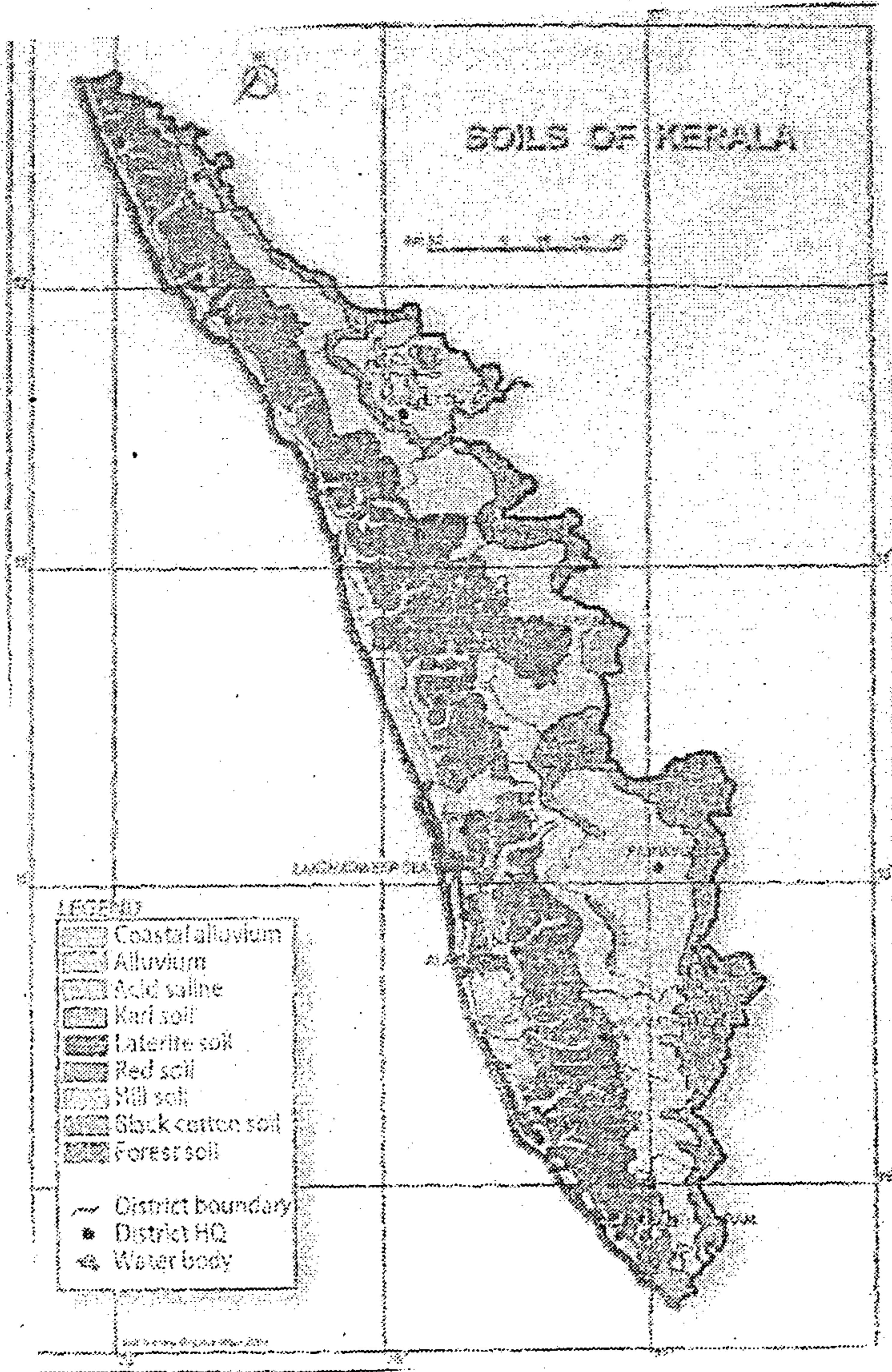














**TABLE - 1**  
**District wise actual and normal Rainfall (in mm) 1998, 1999 & 2000**

Sl. No.	Districts	1998			1999			2000		
		Actual	Normal	Percentage departure	Actual	Normal	Percentage departure	Actual	Normal	Percentage departure
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	2081	2204	-6	1927	1955	-1	1501	1955	-23
2	Kollam	2526	2555	-1	2886	2729	6	2353	2729	-14
3	Pathanamthitta	3097	2965	4	3380	3087	9	2638	3087	-15
4	Alappuzha	3150	3134	1	3104	3025	3	2685	3025	-11
5	Kottayam	3399	3130	9	2957	3047	-3	2412	3047	-21
6	Idukki	4249	3379	26	3833	3946	-3	3622	3946	8
7	Eranakulam	3318	3274	1	3053	3250	-6	2658	3250	-18
8	Thrissur	3338	3262	2	2767	3097	-11	2074	3097	-33
9	Palakkad	2417	2390	1	2122	2363	-10	1831	2363	-23
10	Kozhikode	3382	3668	-8	2819	3185	-11	2529	2560	-1
11	Malappuram	3032	2906	4	2852	2560	11	2191	3185	-31
12	Wayanad	2433	3591	-32	2231	3622	-38	2344	3622	-35
13	Kannur	3483	3465	1	3037	3375	-10	2918	3375	-14
14	Kasaragod	3770	3581	5	3235	3480	-7	3152	3480	-9
	State	3120	3108	0	2872	3052	-6	2493	3052	-18

**TABLE - 2**  
**Percentage Departure of Rainfall from Normal (1990 to 2002)**

Sl.No.	Year	Annual	South West Monsoon	North East Monsoon
(1)	(2)	(3)	(4)	(5)
1	1990	-28	-25	-4
2	1991	-39	18	-21
3	1992	-37	15	35
4	1993	-08	-12	32
5	1994	11	15	13
6	1995	-06	-6	-22
7	1996	-13	-8	2
8	1997	3	6	31
9	1998	0	2	30
10	1999	-8	-25	23
11	2000	-21	-18	-27
12	2001	-6	-13	0
13	2002	-14	-33	32

Source: Meteorological Centre, Triv. M.



**TABLE - 3**  
**Land Use Pattern in Kerala**

(in Hectares)						
Sl. No.	Classification of Land	1999-00	2000-01	2001-02	% to Geographical Area (2001-02)	Change in Area between 2000-01 & 2001-02
1	Total Geographical Area	3885497	3885497	3885497	100.00	0
2	Forest	1081509	1081509	1081509	27.83	0
3	Land put to non agricultural uses	354390	381873	392352	10.10	2.7
4	Barren and uncultivable land	28884	29318	29728	0.77	1.4
5	Permanent pastures & Grazing land	253	164	233	0.01	42.1
6	Land under miscellaneous tree crops	18515	15409	13613	0.35	-11.7
7	Cultivable waste	58297	59257	63771	1.64	7.6
8	Fallow other than current fallow	32138	33988	34331	0.88	1.0
9	Current fallow	72166	77853	79270	2.04	1.8
10	Net area sown	2239363	2206126	2190690	56.38	-0.7
11	Area sown more than once	762341	815556	801562		-1.7
12	Total cropped area	3001704	3021682	2992252		-1.0
13	Cropping intensity	134	137	137		

**TABLE - 4**  
**Land Utilization Pattern in Kerala (Percentage)**

Sl. No.	Head of Classification	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Total geographical area	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2	Forests	27.83	27.83	27.83	27.83	27.83	27.83	27.83	27.83	27.83	27.83	27.83	27.83
3	Land put in non agricultural use	7.65	7.76	7.79	7.94	8.31	8.06	8.18	8.24	8.59	9.12	9.83	10.10
4	Barren and uncultivated land	1.50	1.42	1.42	1.33	1.25	1.11	1.06	1.00	0.73	0.74	0.75	0.77
5	Permanent pastures & other Grazing land	0.05	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01
6	Land under miscellaneous tree crops (not included in net area sown)	0.89	0.88	0.88	0.94	0.83	0.69	0.60	0.57	0.52	0.48	0.40	0.35
7	Cultivable waste	2.43	2.39	2.35	2.31	2.12	1.92	1.73	1.68	1.62	1.50	1.53	1.64
8	Fallow land other than current fallow	0.68	0.69	0.71	0.74	0.75	0.75	0.76	0.71	0.81	0.83	0.87	0.88
9	Current fallow	1.14	1.13	1.08	1.27	1.23	1.32	1.43	1.51	1.75	1.86	2.00	2.04
10	Net area sown	57.83	57.86	57.90	57.60	57.64	58.29	58.39	58.44	58.13	57.63	56.78	56.38
11	Area sown more than once	19.90	19.90	20.51	20.71	20.82	20.65	19.37	17.97	16.93	19.52	20.99	20.63
12	Total cropped area	77.72	77.75	78.41	78.31	78.45	78.94	77.76	76.41	75.06	77.25	77.77	77.01



TABLE -5

ZONATION WISE AREA, PRODUCTION AND PRODUCTIVITY OF IMPORTANT CORPS IN KERALA FOR THE YEAR 2001-02

ZONE	District	Rice (Autumn)		Rice (Winter)		Rice (Summer)		Rice (Total)					
		Area	Production rice in MT	Productivity rice in kgs/hect	Area	Production rice in MT	Productivity rice in kgs/hect	Area	Production rice in MT	Productivity rice in kgs/hect			
ZONE1	MALAPPURAM	7875	16171	2053	12035	21642	1798	1774	4662	2628	21684	42475	1959
ZONE2	NORTHERN MIDLANDS	6293	10978	1744	7927	12172	1536	977	1569	1606	15197	24719	1627
ZONE3	HIGH RANGES	33	94	2848	10734	26689	2486	3552	8761	2466	14319	35544	2482
ZONE4	MALAYORAM	18730	38645	2063	24890	53559	2152	2052	4007	1953	45672	96211	2107
ZONE5	CENTRAL MIDLANDS	19946	36572	1834	35446	73056	2061	10719	22548	2104	66111	132176	1999
ZONE6	PALAKKAD	21273	46449	2183	18035	45425	2519	770	1452	1886	40078	93326	2329
ZONE7	CHITTOOR BLACK SOIL	24651	62271	2526	17948	43362	2416	6134	18133	2956	48733	123766	2540
ZONE8	COSTAL SANDY	6070	7806	1286	5025	10184	2027	1775	3578	2016	12870	21568	1676
ZONE9	KUTTANAD	3951	827	209	13364	38851	2907	6931	20178	2911	24246	59856	2469
ZONE10	ONATTUKARA	537	464	864	1362	1982	1455	2034	4277	2103	3933	6723	1709
ZONE11	SOUTHERN MIDLANDS	6773	14635	2161	14845	35133	2367	7128	15863	2225	28746	65631	2283
ZONE12	RED LOAM	408	926	2270	367	579	1578	4	4	1000	779	1509	1937
TOTAL		116540	235838	2024	161978	362634	2239	43850	105032	2395	322368	703504	2182

TABLE -5 Contd...

ZONE	District	Coconut		Arecanut			Cashew		Pepper				
		Area	Production in million nuts	Productivity in 1000 Nos/ hect	Area	Production	Productivity in 1000 Nos/ hect	Area	Production in MT	Productivity in kgs/hect	Area	Production in MT	Productivity in kgs/hect
ZONE1	MALAPPURAM	174050	1238.233	7.114	30333	6895.807	227.337	27153	25057	923	14913	2754	184.645
ZONE2	NORTHERN MIDLANDS	178548	1097.547	6.147	19718	3416.816	173.284	29789	25637	861	31727	6028	189.996
ZONE3	HIGHRANGES	33477	131.734	3.935	10838	2030.179	187.320	3101	1292	417	97731	35811	366.427
ZONE4	MALAYORAM	138128	782.324	5.664	15062	1777.919	118.040	10035	5189	517	29649	7612	256.726
ZONE5	CENTRAL MIDLANDS	82759	472.09	5.704	7357	1470.316	199.853	5382	2008	373	8307	1222	147.095
ZONE6	PALAKKAD	7075	46.333	6.549	345	49.152	142.470	705	245	348	382	57	148.542
ZONE7	CHITTOOR BLACK SOIL	16705	87.162	5.218	287	20.737	72.254	812	319	392	721	76	105.294
ZONE8	COSTAL SANDY	87111	482.409	5.538	4503	496.288	110.213	3992	1300	326	3251	288	88.548
ZONE9	KUTTANAD	6262	38.718	6.183	366	50.507	137.997	51	13	253	187	19	101.824
ZONE10	ONATTUKARA	33027	145.092	4.393	1644	143.900	87.530	1663	591	355	1565	227	145.198
ZONE11	SOUTHERN MIDLANDS	126834	800.718	6.313	2615	326.462	124.842	6751	4153	615	14758	4030	273.057
ZONE12	RED LOAM	21742	155.361	7.146	125	9.318	74.544	285	66	231	765	116	151.110
TOTAL		905718	5477.721	6.048	93193	16687.401	179.063	89718	65870	734	203956	58239	285.545



TABLE-5 Contd.....

ZONE	District	Tapioca		Banana		Plantain		Pineapple					
		Area	Production in MT	Productivity in kgs/hect	Area	Production in MT	Productivity in kgs/hect	Area	Production in MT	Productivity in kgs/hect			
ZONE1	MALAPPURAM	4939	93149	18860	4107	32028	7798	6994	47163	6743	371	2632	7094
ZONE2	NORTHERN MIDLANDS	5975	109004	18243	3242	23350	7202	5855	28165	4810	604	3042	5036
ZONE3	HIGHRANGES	8929	269180	30147	13485	116203	8617	6505	69368	10741	295	1656	5614
ZONE4	MALAYORAM	36405	936422	25722	18475	124019	6713	12434	93904	7552	6432	48616	7558
ZONE5	CENTRAL MIDLANDS	4892	114113	23326	5544	38133	6878	6239	36810	5900	2549	22693	8934
ZONE6	PALAKKAD	717	12569	17530	98	551	5622	623	3550	5698	12	52	4333
ZONE7	CHITTOOR BLACK SOIL	2019	50924	25222	442	2964	6706	1181	9913	8398	35	295	8429
ZONE8	COSTAL SANDY	404	8543	21146	250	1626	6504	4088	21738	5318	180	754	4189
ZONE9	KUTTANAD	234	3912	16718	124	1001	8073	879	5541	6304	6	28	4667
ZONE10	ONATTUKARA	3318	42622	12846	62	336	5419	587	8735	8850	56	339	6054
ZONE11	SOUTHERN MIDLANDS	36424	691308	18979	3638	27042	7433	8194	58614	7153	567	3521	6210
ZONE12	RED LOAM	6933	124134	17905	1404	8650	6161	1204	9176	7621	61	245	4016
	TOTAL	111189	2455880	22087	50871	375903	7389	55183	393182	7125	11159	83873	7516

**TABLE - 6**  
**ZONE WISE STATUS OF RICE(AUTUMN) ACCORDING TO AREA FOR THE YEAR 2001-02**

ZONE No.	Status	Description	% of area to Total	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE7	I	CHITTOOR BLACK SOIL	21.15	24651	62271	2526
ZONE6	II	PALAKKAD	18.25	21273	46449	2183
ZONE5	III	CENTRAL MIDLANDS	17.12	19946	36572	1834
ZONE4	IV	MALAYORAM	16.07	18730	38645	2063
ZONE1	V	MALAPPURAM	6.76	7875	16171	2053
ZONE11	VI	SOUTHERN MIDLANDS	5.81	6773	14635	2151
ZONE2	VII	NORTHERN MIDLANDS	5.40	6293	10978	1744
ZONE8	VIII	COSTAL SANDY	5.21	6070	7806	1286
ZONE9	IX	KUTTANAD	3.39	3951	827	209
ZONE10	X	ONATTUKARA	0.46	537	464	864
ZONE12	XI	RED LOAM	0.35	408	926	2270
ZONE3	XII	HIGHRANGES	0.03	33	94	2848
Total			100.00	116540	235838	2024

**ZONE WISE STATUS OF RICE(AUTUMN) ACCORDING TO PRODUCTION FOR THE YEAR 2001-02**

ZONE No.	Status	Description	% of Production to Total	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE7	I	CHITTOOR BLACK SOIL	26.40	24651	62271	2526
ZONE6	II	PALAKKAD	19.70	21273	46449	2183
ZONE4	III	MALAYORAM	16.39	18730	38645	2063
ZONE5	IV	CENTRAL MIDLANDS	15.51	19946	36572	1834
ZONE1	V	MALAPPURAM	6.86	7875	16171	2053
ZONE11	VI	SOUTHERN MIDLANDS	6.21	6773	14635	2151
ZONE2	VII	NORTHERN MIDLANDS	4.65	6293	10978	1744
ZONE8	VIII	COSTAL SANDY	3.31	6070	7806	1286
ZONE12	IX	RED LOAM	0.39	408	926	2270
ZONE9	X	KUTTANAD	0.35	3951	827	209
ZONE10	XI	ONATTUKARA	0.20	537	464	864
ZONE3	XII	HIGHRANGES	0.04	33	94	2848
Total			100.00	116540	235838	2024

**ZONE WISE STATUS OF RICE (AUTUMN) ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02**

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE3	I	HIGHRANGES	825	33	94	2848
ZONE7	II	CHITTOOR BLACK SOIL	502	24651	62271	2526
ZONE12	III	RED LOAM	246	408	926	2270
ZONE6	IV	PALAKKAD	160	21273	46449	2183
ZONE11	V	SOUTHERN MIDLANDS	137	6773	14635	2151
ZONE4	VI	MALAYORAM	40	18730	38645	2063
ZONE1	VII	MALAPPURAM	30	7875	16171	2053
ZONE5	VIII	CENTRAL MIDLANDS	-190	19946	36572	1834
ZONE2	IX	NORTHERN MIDLANDS	-279	6293	10978	1744
ZONE8	X	COSTAL SANDY	-738	6070	7806	1286
ZONE10	XI	ONATTUKARA	-1160	537	464	864
ZONE9	XII	KUTTANAD	-1814	3951	827	209
Total				116540	235838	2024



Table - 6 Contd...

ZONE WISE STATUS OF RICE(WINTER) ACCORDING TO AREA FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of area to Total	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE5	I	CENTRAL MIDLANDS	21.83	35446	73056	2061
ZONE4	II	MALAYORAM	15.37	24890	53559	2152
ZONE6	III	PALAKKAD	11.13	18035	45425	2519
ZONE7	IV	CHITTOOR BLACK SOIL	11.08	17948	43362	2416
ZONE11	V	SOUTHERN MIDLANDS	9.16	14845	35133	2367
ZONE9	VI	KUTTANAD	8.25	13364	38851	2907
ZONE1	VII	MALAPPURAM	7.43	12035	21642	1798
ZONE3	VIII	HIGHRANGES	6.63	10734	26689	2486
ZONE2	IX	NORTHERN MIDLANDS	4.89	7927	12172	1536
ZONE8	X	COSTAL SANDY	3.10	5025	10184	2027
ZONE10	XI	ONATTUKARA	0.84	1362	1982	1455
ZONE12	XII	RED LOAM	0.23	367	579	1578
Total			100.00	161978	362634	2239

ZONE WISE STATUS OF RICE(WINTER) ACCORDING TO PRODUCTION FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of Production to Total	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE5	I	CENTRAL MIDLANDS	20.15	35446	73056	2061
ZONE4	II	MALAYORAM	14.77	24890	53559	2152
ZONE6	III	PALAKKAD	12.53	18035	45425	2519
ZONE7	IV	CHITTOOR BLACK SOIL	11.96	17948	43362	2416
ZONE9	V	KUTTANAD	10.71	13364	38851	2907
ZONE11	VI	SOUTHERN MIDLANDS	9.69	14845	35133	2367
ZONE3	VII	HIGHRANGES	7.36	10734	26689	2486
ZONE1	VIII	MALAPPURAM	5.97	12035	21642	1798
ZONE2	IX	NORTHERN MIDLANDS	3.36	7927	12172	1536
ZONE8	X	COSTAL SANDY	2.81	5025	10184	2027
ZONE10	XI	ONATTUKARA	0.55	1362	1982	1455
ZONE12	XII	RED LOAM	0.16	367	579	1578
Total			100.00	161978	362634	2239

ZONE WISE STATUS OF RICE(WINTER) ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02						
ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE9	I	KUTTANAD	668	13364	38851	2907
ZONE6	II	PALAKKAD	280	18035	45425	2519
ZONE3	III	HIGHRANGES	248	10734	26689	2486
ZONE7	IV	CHITTOOR BLACK SOIL	177	17948	43362	2416
ZONE11	V	SOUTHERN MIDLANDS	128	14845	35133	2367
ZONE4	VI	MALAYORAM	-87	24890	53559	2152
ZONE5	VII	CENTRAL MIDLANDS	-178	35446	73056	2061
ZONE8	VIII	COSTAL SANDY	-212	5025	10184	2027
ZONE1	IX	MALAPPURAM	-441	12035	21642	1798
ZONE12	X	RED LOAM	-661	367	579	1578
ZONE2	XI	NORTHERN MIDLANDS	-703	7927	12172	1536
ZONE10	XII	ONATTUKARA	-784	1362	1982	1455
Total				161978	362634	2239

Table - 6 Contd...

ZONE WISE STATUS OF RICE (SUMMER) ACCORDING TO AREA FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of area to Total	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE5	I	CENTRAL MIDLANDS	24.44	10719	22548	2104
ZONE11	II	SOUTHERN MIDLANDS	16.26	7128	15863	2225
ZONE9	III	KUTTANAD	15.81	6931	20178	2911
ZONE7	IV	CHITTOOR BLACK SOIL	13.99	6134	18133	2956
ZONE3	V	HIGHRANGES	8.10	3552	8761	2466
ZONE4	VI	MALAYORAM	4.68	2052	4007	1953
ZONE10	VII	ONATTUKARA	4.64	2034	4277	2103
ZONE8	VIII	COSTAL SANDY	4.05	1775	3578	2016
ZONE1	IX	MALAPPURAM	4.05	1774	4662	2628
ZONE2	X	NORTHERN MIDLANDS	2.23	977	1569	1606
ZONE6	XI	PALAKKAD	1.76	770	1452	1886
ZONE12	XII	RED LOAM	0.01	4	4	1000
Total			100.00	43850	105032	2395

ZONE WISE STATUS OF RICE (SUMMER) ACCORDING TO PRODUCTION FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of Production to Total	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE5	I	CENTRAL MIDLANDS	21.47	10719	22548	2104
ZONE9	II	KUTTANAD	19.21	6931	20178	2911
ZONE7	III	CHITTOOR BLACK SOIL	17.26	6134	18133	2956
ZONE11	IV	SOUTHERN MIDLANDS	15.10	7128	15863	2225
ZONE3	V	HIGHRANGES	8.34	3552	8761	2466
ZONE1	VI	MALAPPURAM	4.44	1774	4662	2628
ZONE10	VII	ONATTUKARA	4.07	2034	4277	2103
ZONE4	VIII	MALAYORAM	3.82	2052	4007	1953
ZONE8	IX	COSTAL SANDY	3.41	1775	3578	2016
ZONE2	X	NORTHERN MIDLANDS	1.49	977	1569	1606
ZONE6	XI	PALAKKAD	1.38	770	1452	1886
ZONE12	XII	RED LOAM	0.00	4	4	1000
Total			100.00	43850	105032	2395

ZONE WISE STATUS OF RICE(SUMMER) ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02						
ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production rice in MT	Productivity rice in kgs/hect
ZONE7	I	CHITTOOR BLACK SOIL	561	6134	18133	2956
ZONE9	II	KUTTANAD	516	6931	20178	2911
ZONE1	III	MALAPPURAM	233	1774	4662	2628
ZONE3	IV	HIGHRANGES	71	3552	8761	2466
ZONE11	V	SOUTHERN MIDLANDS	-170	7128	15863	2225
ZONE5	VI	CENTRAL MIDLANDS	-292	10719	22548	2104
ZONE10	VII	ONATTUKARA	-293	2034	4277	2103
ZONE8	VIII	COSTAL SANDY	-379	1775	3578	2016
ZONE4	IX	MALAYORAM	-443	2052	4007	1953
ZONE6	X	PALAKKAD	-510	770	1452	1886
ZONE2	XI	NORTHERN MIDLANDS	-789	977	1569	1606
ZONE12	XII	RED LOAM	-1395	4	4	1000
Total				43850	105032	2395



TABLE - 7

ZONE WISE STATUS OF COCONUT ACCORDING TO AREA FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of area to Total	Area in hect	Production in M.nuts	Productivity in 1000 nos/hect
ZONE2	I	NORTHERN MIDLANDS	19.71	178548	1097.547	6.147
ZONE1	II	MALAPPURAM	19.22	174050	1238.233	7.114
ZONE4	III	MALAYORAM	15.25	138128	782.324	5.664
ZONE11	IV	SOUTHERN MIDLANDS	14.00	126834	800.718	6.313
ZONE8	V	COSTAL SANDY	9.62	87111	482.409	5.538
ZONE5	VI	CENTRAL MIDLANDS	9.14	82759	472.09	5.704
ZONE3	VII	HIGHRANGES	3.70	33477	131.734	3.935
ZONE10	VIII	ONATTUKARA	3.65	33027	145.092	4.393
ZONE12	IX	RED LOAM	2.40	21742	155.361	7.146
ZONE7	X	CHITTOOR BLACK SOIL	1.84	16705	87.162	5.218
ZONE6	XI	PALAKKAD	0.78	7075	46.333	6.549
ZONE9	XII	KUTTANAD	0.69	6262	38.718	6.183
TOTAL			100.00	905718	5477.721	6.048

ZONE WISE STATUS OF COCONUT ACCORDING TO PRODUCTION FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in M.nuts	Productivity in 1000 nos/hect
ZONE1	I	MALAPPURAM	22.60	174050	1238.233	7.114
ZONE2	II	NORTHERN MIDLANDS	20.04	178548	1097.547	6.147
ZONE11	III	SOUTHERN MIDLANDS	14.62	126834	800.718	6.313
ZONE4	IV	MALAYORAM	14.28	138128	782.324	5.664
ZONE8	V	COSTAL SANDY	8.81	87111	482.409	5.538
ZONE5	VI	CENTRAL MIDLANDS	8.62	82759	472.09	5.704
ZONE12	VII	RED LOAM	2.84	21742	155.361	7.146
ZONE10	VIII	ONATTUKARA	2.65	33027	145.092	4.393
ZONE3	IX	HIGHRANGES	2.40	33477	131.734	3.935
ZONE7	X	CHITTOOR BLACK SOIL	1.59	16705	87.162	5.218
ZONE6	XI	PALAKKAD	0.85	7075	46.333	6.549
ZONE9	XII	KUTTANAD	0.71	6262	38.718	6.183
Total			100.00	905718	5477.721	6.048

ZONE WISE STATUS OF COCONUT ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02						
ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in M.nuts	Productivity in 1000 nos/hect
ZONE12	I	RED LOAM	1.098	21742	155.361	7.146
ZONE1	II	MALAPPURAM	1.066	174050	1238.233	7.114
ZONE6	III	PALAKKAD	0.501	7075	46.333	6.549
ZONE11	IV	SOUTHERN MIDLANDS	0.265	126834	800.718	6.313
ZONE9	V	KUTTANAD	0.135	6262	38.718	6.183
ZONE2	VI	NORTHERN MIDLANDS	0.099	178548	1097.547	6.147
ZONE5	VII	CENTRAL MIDLANDS	-0.344	82759	472.09	5.704
ZONE4	VIII	MALAYORAM	-0.384	138128	782.324	5.664
ZONE8	IX	COSTAL SANDY	-0.510	87111	482.409	5.538
ZONE7	X	CHITTOOR BLACK SOIL	-0.830	16705	87.162	5.218
ZONE10	XI	ONATTUKARA	-1.655	33027	145.092	4.393
ZONE3	XII	HIGHRANGES	-2.113	33477	131.734	3.935
TOTAL				905718	5,477.721	6.048

TABLE - 8

ZONE WISE STATUS OF ARECANUT ACCORDING TO AREA FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in Million nuts	Productivity in 1000 nos/hect
ZONE1	I	MALAPPURAM	32.55	30333	6895.807	227.337
ZONE2	II	NORTHERN MIDLANDS	21.16	19718	3416.816	173.284
ZONE4	III	MALAYORAM	16.16	15062	1777.919	118.040
ZONE3	IV	HIGHRANGES	11.63	10838	2030.179	187.320
ZONE5	V	CENTRAL MIDLANDS	7.89	7357	1470.316	199.853
ZONE8	VI	COSTAL SANDY	4.83	4503	496.288	110.213
ZONE11	VII	SOUTHERN MIDLANDS	2.81	2615	326.462	124.842
ZONE10	VIII	ONATTUKARA	1.76	1644	143.900	87.530
ZONE9	IX	KUTTANAD	0.39	366	50.507	137.997
ZONE6	X	PALAKKAD	0.37	345	49.152	142.470
ZONE7	XI	CHITTOOR BLACK SOIL	0.31	287	20.737	72.254
ZONE12	XII	RED LOAM	0.13	125	9.318	74.544
TOTAL			100.00	93193	16687.401	179.063

ZONE WISE STATUS OF ARECANUT ACCORDING TO PRODUCTION FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in Million nuts	Productivity in 1000 nos/hect
ZONE1	I	MALAPPURAM	41.32	30333	6895.807	227.337
ZONE2	II	NORTHERN MIDLANDS	20.48	19718	3416.816	173.284
ZONE3	III	HIGHRANGES	12.17	10838	2030.179	187.320
ZONE4	IV	MALAYORAM	10.65	15062	1777.919	118.040
ZONE5	V	CENTRAL MIDLANDS	8.81	7357	1470.316	199.853
ZONE8	VI	COSTAL SANDY	2.97	4503	496.288	110.213
ZONE11	VII	SOUTHERN MIDLANDS	1.96	2615	326.462	124.842
ZONE10	VIII	ONATTUKARA	0.86	1644	143.900	87.530
ZONE9	IX	KUTTANAD	0.30	366	50.507	137.997
ZONE6	X	PALAKKAD	0.29	345	49.152	142.470
ZONE7	XI	CHITTOOR BLACK SOIL	0.12	287	20.737	72.254
ZONE12	XII	RED LOAM	0.06	125	9.318	74.544
TOTAL			100.00	93193	16687.401	179.063

ZONE WISE STATUS OF ARECANUT ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in Million nuts	Productivity in 1000 nos/hect
ZONE1	I	MALAPPURAM	48.274	30333	6895.807	227.337
ZONE5	II	CENTRAL MIDLANDS	20.790	7357	1470.316	199.853
ZONE3	III	HIGHRANGES	8.258	10838	2030.179	187.320
ZONE2	IV	NORTHERN MIDLANDS	-5.779	19718	3416.816	173.284
ZONE6	V	PALAKKAD	-36.593	345	49.152	142.470
ZONE9	VI	KUTTANAD	-41.066	366	50.507	137.997
ZONE11	VII	SOUTHERN MIDLANDS	-54.221	2615	326.462	124.842
ZONE4	VIII	MALAYORAM	-61.023	15062	1777.919	118.040
ZONE8	IX	COSTAL SANDY	-68.850	4503	496.288	110.213
ZONE10	X	ONATTUKARA	-91.532	1644	143.900	87.530
ZONE12	XI	RED LOAM	-104.519	125	9.318	74.544
ZONE7	XII	CHITTOOR BLACK SOIL	-106.808	287	20.737	72.254
TOTAL				93193	16,687.401	179.063



TABLE - 9

ZONE WISE STATUS OF CASHEW ACCORDING TO AREA FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of area to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE2	I	NORTHERN MIDLANDS	33.20	29788	25637.020	861
ZONE1	II	MALAPPURAM	30.26	27153	25056.825	923
ZONE4	III	MALAYORAM	11.19	10035	5188.548	517
ZONE11	IV	SOUTHERN MIDLANDS	7.52	6751	4153.463	615
ZONE5	V	CENTRAL MIDLANDS	6.00	5382	2007.720	373
ZONE8	VI	COSTAL SANDY	4.45	3992	1300.232	326
ZONE3	VII	HIGHRANGES	3.46	3101	1292.466	417
ZONE10	VIII	ONATTUKARA	1.85	1663	590.628	355
ZONE7	IX	CHITTOOR BLACK SOIL	0.91	812	318.504	392
ZONE6	X	PALAKKAD	0.79	705	245.461	348
ZONE12	XI	RED LOAM	0.32	285	65.926	231
ZONE9	XII	KUTTANAD	0.06	51	12.927	253
TOTAL			100.00	89718	65869.720	734
ZONE WISE STATUS OF CASHEW ACCORDING TO PRODUCTION FOR THE YEAR 2001-02						
ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE2	I	NORTHERN MIDLANDS	38.92	29788	25637.020	861
ZONE1	II	MALAPPURAM	38.04	27153	25056.825	923
ZONE4	III	MALAYORAM	7.88	10035	5188.548	517
ZONE11	IV	SOUTHERN MIDLANDS	6.31	6751	4153.463	615
ZONE5	V	CENTRAL MIDLANDS	3.05	5382	2007.720	373
ZONE8	VI	COSTAL SANDY	1.97	3992	1300.232	326
ZONE3	VII	HIGHRANGES	1.96	3101	1292.466	417
ZONE10	VIII	ONATTUKARA	0.90	1663	590.628	355
ZONE7	IX	CHITTOOR BLACK SOIL	0.48	812	318.504	392
ZONE6	X	PALAKKAD	0.37	705	245.461	348
ZONE12	XI	RED LOAM	0.10	285	65.926	231
ZONE9	XII	KUTTANAD	0.02	51	12.927	253
TOTAL			100.00	89718	65869.720	734
ZONE WISE STATUS OF CASHEW ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02						
ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in MT	Productivity in kg/hect
ZONE1	I	MALAPPURAM	188.615	27153	25,056.825	923
ZONE2	II	NORTHERN MIDLANDS	126.463	29788	25,637.020	861
ZONE11	III	SOUTHERN MIDLANDS	-118.950	6751	4,153.463	615
ZONE4	IV	MALAYORAM	-217.141	10035	5,188.548	517
ZONE3	V	HIGHRANGES	-317.396	3101	1,292.466	417
ZONE7	VI	CHITTOOR BLACK SOIL	-341.940	812	318.504	392
ZONE5	VII	CENTRAL MIDLANDS	-361.143	5382	2,007.720	373
ZONE10	VIII	ONATTUKARA	-379.028	1663	590.628	355
ZONE6	IX	PALAKKAD	-386.015	705	245.461	348
ZONE8	X	COSTAL SANDY	-408.477	3992	1,300.232	326
ZONE9	XI	KUTTANAD	-480.716	51	12.927	253
ZONE12	XII	RED LOAM	-502.867	285	65.926	231
TOTAL				89718	65,869.720	734

**TABLE - 10**  
**ZONE WISE STATUS OF PEPPER ACCORDING TO AREA FOR THE YEAR 2001-02**

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE3	I	HIGHRANGES	47.92	97731	35811.236	366.427
ZONE2	II	NORTHERN MIDLANDS	15.56	31727	6028.006	189.996
ZONE4	III	MALAYORAM	14.54	29649	7611.656	256.726
ZONE1	IV	MALAPPURAM	7.31	14913	2753.608	184.645
ZONE11	V	SOUTHERN MIDLANDS	7.24	14758	4029.782	273.057
ZONE5	VI	CENTRAL MIDLANDS	4.07	8307	1221.919	147.095
ZONE8	VII	COSTAL SANDY	1.59	3251	287.868	88.548
ZONE10	VIII	ONATTUKARA	0.77	1565	227.235	145.198
ZONE12	IX	RED LOAM	0.38	765	115.599	151.110
ZONE7	X	CHITTOOR BLACK SOIL	0.35	721	75.917	105.294
ZONE6	XI	PALAKKAD	0.19	382	56.743	148.542
ZONE9	XII	KUTTANAD	0.09	187	19.041	101.824
<b>TOTAL</b>			<b>100.00</b>	<b>203956</b>	<b>58238.610</b>	<b>285.545</b>

**ZONE WISE STATUS OF PEPPER ACCORDING TO PRODUCTION FOR THE YEAR 2001-02**

ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE3	I	HIGHRANGES	61.49	97731	35811.236	366.427
ZONE4	II	MALAYORAM	13.07	29649	7611.656	256.726
ZONE2	III	NORTHERN MIDLANDS	10.35	31727	6028.006	189.996
ZONE11	IV	SOUTHERN MIDLANDS	6.92	14758	4029.782	273.057
ZONE1	V	MALAPPURAM	4.73	14913	2753.608	184.645
ZONE5	VI	CENTRAL MIDLANDS	2.10	8307	1221.919	147.095
ZONE8	VII	COSTAL SANDY	0.49	3251	287.868	88.548
ZONE10	VIII	ONATTUKARA	0.39	1565	227.235	145.198
ZONE12	IX	RED LOAM	0.20	765	115.599	151.110
ZONE7	X	CHITTOOR BLACK SOIL	0.13	721	75.917	105.294
ZONE6	XI	PALAKKAD	0.10	382	56.743	148.542
ZONE9	XII	KUTTANAD	0.03	187	19.041	101.824
<b>TOTAL</b>				<b>203956</b>	<b>58238.610</b>	<b>285.545</b>

**ZONE WISE STATUS OF PEPPER ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02**

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in MT	Productivity in kg/hect
ZONE3	I	HIGHRANGES	80.882	97731	35,811.236	366.427
ZONE11	II	SOUTHERN MIDLANDS	-12.488	14758	4029.782	273.057
ZONE4	III	MALAYORAM	-28.819	29649	7611.656	256.726
ZONE2	IV	NORTHERN MIDLANDS	-95.549	31727	6028.006	189.996
ZONE1	V	MALAPPURAM	-100.900	14913	2753.608	184.645
ZONE12	VI	RED LOAM	-134.435	765	115.599	151.110
ZONE6	VII	PALAKKAD	-137.003	382	56.743	148.542
ZONE5	VIII	CENTRAL MIDLANDS	-138.450	8307	1221.919	147.095
ZONE10	IX	ONATTUKARA	-140.347	1565	227.235	145.198
ZONE7	X	CHITTOOR BLACK SOIL	-180.251	721	75.917	105.294
ZONE9	XI	KUTTANAD	-183.721	187	19.041	101.824
ZONE8	XII	COSTAL SANDY	-196.997	3251	287.868	88.548
<b>TOTAL</b>				<b>203956</b>	<b>58,238.610</b>	<b>285.545</b>



TABLE - 11

ZONE WISE STATUS OF TAPIOCA ACCORDING TO AREA FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE11	I	SOUTHERN MIDLANDS	32.76	36424	691308	18979
ZONE4	II	MALAYORAM	32.74	36405	936422	25722
ZONE3	III	HIGHRANGES	8.03	8929	269180	30147
ZONE12	IV	RED LOAM	6.24	6933	124134	17905
ZONE2	V	NORTHERN MIDLANDS	5.37	5975	109004	18243
ZONE1	VI	MALAPPURAM	4.44	4939	93149	18860
ZONE5	VII	CENTRAL MIDLANDS	4.40	4892	114113	23326
ZONE10	VIII	ONATTUKARA	2.98	3318	42622	12846
ZONE7	IX	CHITTOOR BLACK SOIL	1.82	2019	50,924	25222
ZONE6	X	PALAKKAD	0.64	717	12569	17530
ZONE8	XI	COSTAL SANDY	0.36	404	8543	21146
ZONE9	XII	KUTTANAD	0.21	234	3912	16718
TOTAL			100.00	111189	2455380	22087

ZONE WISE STATUS OF TAPIOCA ACCORDING TO PRODUCTION FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	38.13	36405	936422	25722
ZONE11	II	SOUTHERN MIDLANDS	28.15	36424	691308	18979
ZONE3	III	HIGHRANGES	10.96	8929	269180	30147
ZONE12	IV	RED LOAM	5.05	6933	124134	17905
ZONE5	V	CENTRAL MIDLANDS	4.65	4892	114113	23326
ZONE2	VI	NORTHERN MIDLANDS	4.44	5975	109004	18243
ZONE1	VII	MALAPPURAM	3.79	4939	93,149	18860
ZONE7	VIII	CHITTOOR BLACK SOIL	2.07	2019	50924	25222
ZONE10	IX	ONATTUKARA	1.74	3318	42622	12846
ZONE6	X	PALAKKAD	0.51	717	12569	17530
ZONE8	XI	COSTAL SANDY	0.35	404	8543	21146
ZONE9	XII	KUTTANAD	0.16	234	3912	16718
TOTAL			100.00	111189	2455880	22087

ZONE WISE STATUS OF TAPIOCA ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in MT	Productivity in kg/hect
ZONE3	I	HIGHRANGES	8059.276	8929	269,180	30147
ZONE4	II	MALAYORAM	3634.909	36405	936422	25722
ZONE7	III	CHITTOOR BLACK SOIL	3134.951	2019	50924	25222
ZONE5	IV	CENTRAL MIDLANDS	1239.015	4892	114113	23326
ZONE8	V	COSTAL SANDY	-941.397	404	8543	21146
ZONE11	VI	SOUTHERN MIDLANDS	-3107.973	36424	691308	18979
ZONE1	VII	MALAPPURAM	-3227.546	4939	93149	18860
ZONE2	VIII	NORTHERN MIDLANDS	-3844.089	5975	109004	18243
ZONE12	IX	RED LOAM	-4182.634	6933	124134	17905
ZONE6	X	PALAKKAD	-4557.451	717	12569	17530
ZONE9	XI	KUTTANAD	-5369.488	234	3912	16718
ZONE10	XII	ONATTUKARA	-9241.747	3318	42622	12846
TOTAL				111189	2,455,880	22087

**TABLE - 12**  
**ZONE WISE STATUS OF BANANA ACCORDING TO AREA FOR THE YEAR 2001-02**

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	36.32	18475	124019	6713
ZONE3	II	HIGHRANGES	26.51	13485	116203	8617
ZONE5	III	CENTRAL MIDLANDS	10.90	5544	38133	6878
ZONE1	IV	MALAPPURAM	8.07	4107	32028	7798
ZONE11	V	SOUTHERN MIDLANDS	7.15	3638	27042	7433
ZONE2	VI	NORTHERN MIDLANDS	6.37	3242	23350	7202
ZONE12	VII	RED LOAM	2.76	1404	8650	6161
ZONE7	VIII	CHITTOOR BLACK SOIL	0.87	442	2964	6706
ZONE8	IX	COSTAL SANDY	0.49	250	1626	6504
ZONE9	X	KUTTANAD	0.24	124	1001	8073
ZONE6	XI	PALAKKAD	0.19	98	551	5622
ZONE10	XII	ONATTUKARA	0.12	62	336	5419
TOTAL			100.00	50871	375903	7389

**ZONE WISE STATUS OF BANANA ACCORDING TO PRODUCTION FOR THE YEAR 2001-02**

ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	32.99	18475	124019	6713
ZONE3	II	HIGHRANGES	30.91	13485	116203	8617
ZONE5	III	CENTRAL MIDLANDS	10.14	5544	38133	6878
ZONE1	IV	MALAPPURAM	8.52	4107	32028	7798
ZONE11	V	SOUTHERN MIDLANDS	7.19	3638	27042	7433
ZONE2	VI	NORTHERN MIDLANDS	6.21	3242	23350	7202
ZONE12	VII	RED LOAM	2.30	1404	8650	6161
ZONE7	VIII	CHITTOOR BLACK SOIL	0.79	442	2964	6706
ZONE8	IX	COSTAL SANDY	0.43	250	1626	6504
ZONE9	X	KUTTANAD	0.27	124	1001	8073
ZONE6	XI	PALAKKAD	0.15	98	551	5622
ZONE10	XII	ONATTUKARA	0.09	62	336	5419
			100.00	50871	375903	7389

**ZONE WISE STATUS OF BANANA ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02**

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in MT	Productivity in kg/hect
ZONE3	I	HIGHRANGES	1228	13485	116203	8617
ZONE9	II	KUTTANAD	683	124	1001	8073
ZONE1	III	MALAPPURAM	409	4107	32028	7798
ZONE11	IV	SOUTHERN MIDLANDS	44	3638	27042	7433
ZONE2	V	NORTHERN MIDLANDS	-187	3242	23350	7202
ZONE5	VI	CENTRAL MIDLANDS	-511	5544	38133	6878
ZONE4	VII	MALAYORAM	-677	18475	124019	6713
ZONE7	VIII	CHITTOOR BLACK SOIL	-683	442	2964	6706
ZONE8	IX	COSTAL SANDY	-885	250	1626	6504
ZONE12	X	RED LOAM	-1228	1404	8650	6161
ZONE6	XI	PALAKKAD	-1767	98	551	5622
ZONE10	XII	ONATTUKARA	-1970	62	336	5419
TOTAL				50871	375903	7389



TABLE - 13

ZONE WISE STATUS OF PLANTAIN ACCORDING TO AREA FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	22.53	12434	93904	7552
ZONE11	II	SOUTHERN MIDLANDS	14.85	8194	58614	7153
ZONE1	III	MALAPPURAM	12.67	6994	47163	6743
ZONE3	IV	HIGHRANGES	11.79	6505	69868	10741
ZONE5	V	CENTRAL MIDLANDS	11.31	6239	36810	5900
ZONE2	VI	NORTHERN MIDLANDS	10.61	5855	28165	4810
ZONE8	VII	COSTAL SANDY	7.41	4088	21738	5318
ZONE12	VIII	RED LOAM	2.18	1204	9176	7621
ZONE7	IX	CHITTOOR BLACK SOIL	2.14	1181	9918	8398
ZONE10	X	ONATTUKARA	1.79	987	8735	8850
ZONE9	XI	KUTTANAD	1.59	879	5541	6304
ZONE6	XII	PALAKKAD	1.13	623	3550	5698
			100.00	55183	393182	7125

ZONE WISE STATUS OF PLANTAIN ACCORDING TO PRODUCTION FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	23.88	12434	93904	7552
ZONE3	II	HIGHRANGES	17.77	6505	69868	10741
ZONE11	III	SOUTHERN MIDLANDS	14.91	8194	58614	7153
ZONE1	IV	MALAPPURAM	12.00	6994	47163	6743
ZONE5	V	CENTRAL MIDLANDS	9.36	6239	36810	5900
ZONE2	VI	NORTHERN MIDLANDS	7.16	5855	28165	4810
ZONE8	VII	COSTAL SANDY	5.53	4088	21,738	5318
ZONE7	VIII	CHITTOOR BLACK SOIL	2.52	1181	9918	8398
ZONE12	IX	RED LOAM	2.33	1204	9176	7621
ZONE10	X	ONATTUKARA	2.22	987	8735	8850
ZONE9	XI	KUTTANAD	1.41	879	5541	6304
ZONE6	XII	PALAKKAD	0.90	623	3550	5698
	TOTAL		100.00	55183	393182	7125.057

ZONE WISE STATUS OF PLANTAIN ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in MT	Productivity in kg/hect
ZONE3	I	HIGHRANGES	3616	6505	69,868	10741
ZONE10	II	ONATTUKARA	1725	987	8735	8850
ZONE7	III	CHITTOOR BLACK SOIL	1273	1181	9918	8398
ZONE12	IV	RED LOAM	496	1204	9176	7621
ZONE4	V	MALAYORAM	427	12434	93904	7552
ZONE11	VI	SOUTHERN MIDLANDS	28	8194	58614	7153
ZONE1	VII	MALAPPURAM	-382	6994	47163	6743
ZONE9	VIII	KUTTANAD	-821	879	5541	6304
ZONE5	IX	CENTRAL MIDLANDS	-1225	6239	36810	5900
ZONE6	X	PALAKKAD	-1427	623	3550	5698
ZONE8	XI	COSTAL SANDY	-1808	4088	21738	5318
ZONE2	XII	NORTHERN MIDLANDS	-2315	5855	28165	4810
	TOTAL			55183	393.182	7125

TABLE - 14

ZONE WISE STATUS OF PINEAPPLE ACCORDING TO AREA FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of area to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	57.64	6432	48616	7558
ZONE5	II	CENTRAL MIDLANDS	22.76	2540	22693	8934
ZONE2	III	NORTHERN MIDLANDS	5.41	604	3042	5036
ZONE11	IV	SOUTHERN MIDLANDS	5.08	567	3521	6210
ZONE1	V	MALAPPURAM	3.32	371	2632	7094
ZONE3	VI	HIGHRANGES	2.64	295	1656	5614
ZONE8	VII	COSTAL SANDY	1.61	180	754	4189
ZONE12	VIII	RED LOAM	0.55	61	245	4016
ZONE10	IX	ONATTUKARA	0.50	56	339	6054
ZONE7	X	CHITTOOR BLACK SOIL	0.31	35	295	8429
ZONE6	XI	PALAKKAD	0.11	12	52	4333
ZONE9	XII	KUTTANAD	0.05	6	28	4667
TOTAL			100.00	11159	83873	7516

ZONE WISE STATUS OF PINEAPPLE ACCORDING TO PRODUCTION FOR THE YEAR 2001-02

ZONE No.	Status	Description	% of Production to Total	Area in hect	Production in MT	Productivity in kg/hect
ZONE4	I	MALAYORAM	57.96	6432	48616	7558
ZONE5	II	CENTRAL MIDLANDS	27.06	2540	22693	8934
ZONE11	III	SOUTHERN MIDLANDS	4.20	567	3521	6210
ZONE2	IV	NORTHERN MIDLANDS	3.63	604	3042	5036
ZONE1	V	MALAPPURAM	3.14	371	2632	7094
ZONE3	VI	HIGHRANGES	1.97	295	1656	5614
ZONE8	VII	COSTAL SANDY	0.90	180	754	4189
ZONE10	VIII	ONATTUKARA	0.40	56	339	6054
ZONE7	IX	CHITTOOR BLACK SOIL	0.35	35	295	8429
ZONE12	X	RED LOAM	0.29	61	245	4016
ZONE6	XI	PALAKKAD	0.06	12	52	4333
ZONE9	XII	KUTTANAD	0.03	6	28	4667
TOTAL			100.00	11159	83873	7516

ZONE WISE STATUS OF PINEAPPLE ACCORDING TO PRODUCTIVITY FOR THE YEAR 2001-02

ZONE No.	Status	Description	Deviation of productivity from state average	Area in hect	Production in MT	Productivity in kg/hect
ZONE5	I	CENTRAL MIDLANDS	1418	2540	22,693	8934
ZONE7	II	CHITTOOR BLACK SOIL	912	35	295	8429
ZONE4	III	MALAYORAM	42	6432	48616	7558
ZONE1	IV	MALAPPURAM	-422	371	2632	7094
ZONE11	V	SOUTHERN MIDLANDS	-1306	567	3521	6210
ZONE10	VI	ONATTUKARA	-1463	56	339	6054
ZONE3	VII	HIGHRANGES	-1903	295	1656	5614
ZONE2	VIII	NORTHERN MIDLANDS	-2480	604	3042	5036
ZONE9	IX	KUTTANAD	-2850	6	28	4667
ZONE6	X	PALAKKAD	-3183	12	52	4333
ZONE8	XI	COSTAL SANDY	-3327	180	754	4189
ZONE12	XII	RED LOAM	-3500	61	245	4016
TOTAL				11159	83,873	7516



**TABLE -15 - LIST OF BLOCKS/MUNICIPALITY/CORPORATION (ZONATION WISE)**

ZONE	District	BLOCK/MUNICIPALITY/ CORPORATION	
I MALAPPURAM	Malappuram	Areecode,	
	Malappuram	Kondotty	
	Malappuram	Kuttiapuram	
	Malappuram	Malappuram	
	Malappuram	Malappuram(M)	
	Malappuram	Manjeri(M)	
	Malappuram	Perumbadappu	
	Malappuram	Thanur	
	Malappuram	Thiroom	
	Malappuram	Thiroom(M)	
	Malappuram	Thiroomangadi	
	Malappuram	Vengara	
	Kozhikode	Chelannur	
	Kozhikode	Koduvally	
	Kozhikode	Kozhikode	
	Kozhikode	Kozhikode cor	
	Kozhikode	Kunnamangalam	
	Kozhikode	Kanhangad	
	Kozhikode	Kanhangad(M)	
	Kozhikode	Kasaragod	
	Kozhikode	Kasaragod(M)	
	Kozhikode	Manjeswaram	
	Kozhikode	Neeleswaram	
	II NORTHERN MIDLANDS	Kozhikode	Balussery
		Kozhikode	Kunnummel
		Kozhikode	Melady
		Kozhikode	Pandalayini
		Kozhikode	Perambra
Kozhikode		Quilandy(M)	
Kozhikode		Thodannur	
Kozhikode		Thuneri	
Kozhikode		Vadakara	
Kozhikode		Vadakara(M)	
Kannur		Edakkad	
Kannur		Irikkur	
Kannur		Iritty	
Kannur		Kannur	
Kannur		Kannur(M)	
Kannur		Koothuparambu	
Kannur		Koothuparambu(M)	
Kannur		Mattanur(M)	
Kannur		Payyanur	
Kannur		Payyanur(M)	
Kannur		Peravoor	
Kannur		Thalassery	
Kannur		Thalassery(M)	
Kannur		Thaliparambh	
Kannur		Thaliparambh(M)	

Table - 15 Contd....

III HIGHRANGES	Idukki	Adimali
	Idukki	Azhuthai
	Idukki	Idukki
	Idukki	Kattappana
	Idukki	Nedumgandam
	Palakkad	Attappady
	Wayanad	Kalpetta
	Wayanad	Kalpetta(M)
	Wayanad	Mananthavady
	Wayanad	Sulthanbattery
IV MALAYORAM	Thiruvananthapuram	Nedumangad
	Thiruvananthapuram	Nedumangad(M)
	Thiruvananthapuram	Perumkadavila
	Thiruvananthapuram	Vamanapuram
	Thiruvananthapuram	Veilanad
	Kollam	Anchal
	Kollam	Pathanapuram
	Kollam	Punalur(M)
	Pathanamthitta	Adoor(M)
	Pathanamthitta	Konni
	Pathanamthitta	Parakode
	Pathanamthitta	Pathanamthitta(M)
	Pathanamthitta	Ranni
	Kottayam	Erattupetta
	Kottayam	Kanjirappally
	Kottayam	Lalam
	Kottayam	Pala(M)
	Kottayam	Pampady
	Kottayam	Uzhavoor
	Kottayam	Vazhoor
	Idukki	Devikiulam
	Idukki	Elamdesam
	Idukki	Thodupuzha
	Idukki	Thodupuzha(M)
	Eranakulam	Kothamangalam
	Eranakulam	kothamangalam(M)
	Eranakulam	Moovattupuzha
	Eranakulam	Moovattupuzha(M)
	Thrissur	Chalakydy
	Thrissur	Chalakydy(M)
	Thrissur	Kodakara
	Thrissur	Ollukara
	Thrissur	Pazhayannur
	Palakkad	Mannarghat
	Palakkad	Sreekrishnanpuram
	Malappuram	Mankada
	Malappuram	Nilamboor
	Malappuram	Perinthalmanna
	Malappuram	Perinthalmanna(M)
	Malappuram	Wandoor



Table - 15 Contd. ....

<b>V CENTRAL MIDLANDS</b>	
Earanakulam	Alangad
Earanakulam	Aluva
Earanakulam	Angamaly
Earanakulam	Angamaly(M)
Earanakulam	Koovappady
Earanakulam	Padakadavu
Earanakulam	Pampakuda
Earanakulam	Perumbavvor(M)
Earanakulam	Thripunithura(M)
Earanakulam	Vaadavucode
Earanakulam	Vazhakulam
Thrissur	Anthikad
Thrissur	cherpu
Thrissur	Chowannur
Thrissur	Irinjalakuda
Thrissur	Irinjalakuda(M)
Thrissur	Mala
Thrissur	Mullassery
Thrissur	Puzhakkal
Thrissur	Thrissur(M)
Thrissur	Vellangallur
Thrissur	Wadakkancherry
Palakkad	Ottapalam
Palakkad	Ottapalam(M)
Palakkad	Pattambi
Palakkad	Shornur(M)
Palakkad	Thirthala
<b>VI PALAKKAD</b>	
Palakkad	Kuzhalmannam
Palakkad	Malampuzha
Palakkad	Nenmara
<b>VII CHITTOOR BLACK SIOL</b>	
Palakkad	Alathoor
Palakkad	Chittoor
Palakkad	Chittor-Thathamangalam
Palakkad	kollancode
Palakkad	Palakkad
Palakkad	Palakkad(M)
<b>VIII COSTAL SANDY</b>	
Alappuzha	Alappuzha(M)
Alappuzha	Ambalapuzha
Alappuzha	Aryad
Alappuzha	Cherthala(M)
Alappuzha	Kanjikkuzhy
Alappuzha	Pattanakadu
Alappuzha	Thycattussery
Kottayam	Vaikom
Kottayam	Vaikom(M)

Table - 15 Contd....

<b>VIII COSTAL SANDY</b>	Eranakulam	Cochin(Cor)
	Eranakulam	Edappally
	Eranakulam	Kalamasseri(M)
	Eranakulam	Mulamthuruthy
	Eranakulam	Palluruthy
	Eranakulam	Paravoor
	Eranakulam	Vypin
	Eranakulam	Vyttila
	Thrissur	Chavakad
	Thrissur	Chavakad(M)
	Thrissur	Kodungallur
	Thrissur	Kodungallur(M)
	Thrissur	Kunnamkulam(M)
	Thrissur	Mathilakam
	Thrissur	Thalikulam
	Malappuram	Ponnai
	Malappuram	Ponnai(M)
	<b>IX KUTTANAD</b>	
Pathanamthitta		Pulikeezhu
Alappuzha		Champakulam
	Alappuzha	Veliyanadu
<b>X ONATTUKARA</b>		
	Kollam	Chavara
	Kollam	Karunagappally
	Kollam	Kollam(M)
	Kollam	Ochira
	Alappuzha	Haripad
	Alappuzha	Kayamkulam(M)
	Alappuzha	Mavelikara
	Alappuzha	Mavelikara(M)
	Alappuzha	Muthukulam
<b>XI SOUTHERN MIDLANDS</b>	Thiruvananthapuram	Attingal(M)
	Thiruvananthapuram	Chirayinkeezh
	Thiruvananthapuram	Kazhakkuttam
	Thiruvananthapuram	Kilimanoor
	Thiruvananthapuram	Thiruvananthapuram(Cor)
	Thiruvananthapuram	Thiruvananthapuram®
	Thiruvananthapuram	Varkala
	Thiruvananthapuram	Varkala(M)
	Kollam	Anchalammoodu
	Kollam	Chadayamangalam
	Kollam	Chittumala
	Kollam	Ithikara
	Kollam	Kottarakara
	Kollam	Mukhathala
	Kollam	Paravoor(M)
	Kollam	Sasthamkotta
	Kollam	Vettikavala



Table - 15 Contd....

<b>XI SOUTHERN MIDLANDS</b>	Pathanamthitta	Elanthur
	Pathanamthitta	Koipuram
	Pathanamthitta	Kulianada
	Pathanamthitta	Mallappaly
	Pathanamthitta	Pandalam
	Pathanamthitta	Sasthamkotta
	Pathanamthitta	Thiruvalla(M)
	Alappuzha	Bharanikavu
	Alappuzha	Chengannur
	Alappuzha	Chengannur(M)
	Kottayam	Changanacherry(M)
	Kottayam	Ettumanoor
	Kottayam	Kaduthuruthy
	Kottayam	Kottayam(M)
	Kottayam	Madappally
Kottayam	Pallam	
<b>XII RED LOAM</b>		
	Thiruvananthapuram	Athiyanoor
	Thiruvananthapuram	Nemom
	Thiruvananthapuram	Neyyattinkara(M)
	Thiruvananthapuram	Parassala



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