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TIMELY REPORTING SURVEY

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**AGRICULTURAL STATISTICS
KERALA**

1983-84

DEPARTMENT OF ECONOMICS AND STATISTICS
TRIVANDRUM, 1986

68/121—1

REPORT ON THE

AGRICULTURAL STATISTICS
Kerala

1987

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The Government of Kerala
1987

PREFACE

This is the 9th report published in the series on sample survey conducted in the State to estimate area under crops and their yield under the scheme of EARAS. The scheme was introduced in the State as a variant of the all India Scheme of T.R.S. existing in the reporting States. Under the scheme, entire area of the State was enumerated in the first phase of the survey within a period of 6 years from 1975-76 to 1980-81. In the second phase it was decided to cover the entire State within a period of 5 years taking 20 per cent of the villages each year for enumeration. The present report relates to the 3rd year of the second cycle of the survey in the agricultural year 1983-84.

This report is prepared in the Agricultural Statistics division of the Department. I hope that the information will be of much use to those who are interested in the field of agricultural development and for taking policy decisions. Suggestions for improvement of the content are welcome.

Trivandrum,
January 1987.

K. BALAKRISHNAN NAIR,
Director of Economics and Statistics.

PREFACE

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K. BALAKRISHNAN NAIR,
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Tiruvananthapuram,
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REPORT ON THE TIMELY REPORTING SURVEY ON AGRICULTURAL STATISTICS IN KERALA

1983-84

PART I

1. Introduction

This report deals with the third year of the second cycle of sample survey conducted under the scheme Establishment of an agency for reporting agricultural statistics in Kerala during the agricultural year 1983-84.

As a sequel to the introduction of the Timely Reporting Scheme in the reporting States, the Union Ministry of Agriculture sponsored a scheme for the establishment of an agency for reporting agricultural statistics (EARAS) in the States of Kerala, Orissa and West Bengal for improving the quality and coverage of agricultural statistics. In Kerala the scheme was started in 1975-76 and the enumeration of all villages of the State was completed in 1980-81, after six years. However with a view to collect the agricultural statistics on a continuing basis, the High Level Co-ordination Committee for Agricultural Statistics suggested in May 1980 to continue the scheme during the sixth plan also. Accepting the suggestion the Central/State Governments ordered to continue the work beyond 1980-81 and to complete it within a period of 5 years covering 20 per cent of the sample villages in each year. The results based on the third round of the second cycle of the survey are discussed in this report.

Object of the Scheme.—The main object of the scheme 'EARAS' is to collect data for estimating the various parameters under area and yield of crops for each agricultural year. The scheme further aims at enumerating all the revenue villages in the State covering 20 per cent of the revenue villages each year.

2. Design of the Survey

There are 61 taluks in the State and each taluk was taken as a stratum for the survey. Within the taluk revenue village is the smallest well defined unit of revenue administration in the State. Out of the total of 1327 revenue villages 266 villages were selected in 1983-84.

for the survey. The number of revenue villages in each district and those selected for the survey 1983-84 are presented in the table given below:

**Number of revenue villages existed in the District
and No. selected during 1983-84**

Sl. No.	Name of District	Number of revenue villages	
		Total	Selected and Surveyed
1.	Trivandrum	94	20
2.	Quilon	71	15
3.	*Pathanamthitta	54	10
4.	Alleppey	76	15
5.	Kottayam	74	15
6.	Idukki	42	9
7.	Ernakulam	100	21
8.	Trichur	234	41
9.	Palghat	152	31
10.	Malappuram	122	24
11.	Kozhikode	100	21
12.	Wayanad	31	6
13.	Cannanore	177	38
Total		1327	266

* The new District of Pathanamthitta was formed with 5 taluks vide G.O. (P) No. 652/83/RD., dated 9th June 1983 of the Government of Kerala

3. Scheme of work

For even distribution of workload among field workers, revenue villages selected for the survey were divided into a number of investigator units on the basis of the number of investigators available, area under wet and dry land, the terrain of the locality and the number of crop cutting experiments to be conducted in each of the selected villages. The investigator units were as far as possible equal in extent with non overlapping boundaries and wherever clear demarcated natural or artificial boundaries were not possible the units were formed in terms of survey numbers.

The area enumeration and crop cutting experiments in each unit were done by the investigators of the Department. Area enumeration in the T.C. region of the State was conducted on the basis of litho Subdivisions marked in village maps and in Malabar region on the basis of subdivisions marked in the field measurement book.

The preliminary work relating to the survey started with preparing a list of survey subdivision numbers classified as wet or dry according to the basic tax register available in the village offices. The details required for area enumeration were collected by the investigators following the above subdivision. For the Travancore-Cochin area, the litho maps give only litho subdivisions, which comprises of one or more subdivisions of the basic tax register. In such cases details were collected according to the litho subdivisions only.

The investigators visited the wet lands three times during an agricultural year to collect data on seasonal and annual crops corresponding to Autumn, Winter and Summer seasons. During the last visit data on land use, irrigation and perennial crops were collected. In dry land plots two visits were programmed corresponding to kharif and Rabi seasons, the first visit to collect data on seasonal and annual crops and the second visit to collect data on perennial crops.

Crop cutting experiments to estimate yield were confined to the villages selected for EARAS, so that the investigator posted in these villages could attend to this work also. During the year under report, experiments on the following crops were conducted:--

1. Paddy (Autumn, winter, summer)
2. Tapioca
3. Coconut
4. Arecanut
5. Cashew
6. Pepper
7. Jack
8. Mango
9. Banana
10. Plantain
11. Cocoa

The crop cutting experiments on the above crops were planned in all the taluks where the crops covered substantial area, but where the area under a crop did not cover a sizeable area experiments were not planned. The number of experiments to be conducted in each taluk for each crop was decided at the headquarters and the number of experiments in each investigator unit was decided by the Deputy Director in consultation with the District Officers and Statistical Inspectors. The maximum number of experiments in each taluk was fixed as 30 for paddy during the season and 30 for tapioca during a yearsubject to a minimum of 2 experiments in a village. Table 6 gives the number of taluks in each district and the number of experiments planned cropwise. Table 7 gives the number of experiments planned in each district for each crop and the number of experiments analysed. Table 8 gives the

number of experiments missed district-wise and the reason thereof. Table 4 gives the details of the number of experiments conducted by each investigator.

The Additional District Officer (T.R.S.) and the Superintendent of N.S.S.O. undertook sample check on area enumeration and on crop cutting experiment according to pre-determined programme. Details of the sample checks are furnished in Table 5.

4. Staff Position

The responsibility for conducting the field work on area enumeration, crop cutting experiments, analysis of data and preparation of report is vested with the Department of Economics and Statistics. The staff sanctioned for the EARAS by the Central Government and those sanctioned under the earlier land utilisation survey attended this work during the period under report. The details of staff position at headquarters as well as in the field are given below. The scheme is financed by the Central and State Governments on a matching basis.

Staff pattern of the scheme

Sl. No.	Designation	Staff sanctioned under		
		L.U.S.	EARAS	Total
A. HEADQUARTERS				
1.	Joint Director	..	1	1
2.	Assistant Director	1	3	4
3.	Research Officer	3	..	3
4.	Research Assistant	4	..	4
5.	Compilers	2	6	8
B. FIELD STAFF				
1.	Deputy Directors	..	3	3
2.	Additional District Officer	..	11	11
3.	Research Assistant	..	5	5
4.	Statistical Inspector	51	74	125
5.	Compilers	9	2	11
6.	Investigators	159	721	880

5. Supervision

(a) *Departmental Officers.*—The Statistical Inspectors in charge of the taluks were responsible for the taluk level supervision and timely completion of field work. Additional Statistical Inspectors were also posted in certain taluks where workload was heavy. The district level supervision of field work was done by Additional

District Officers District Officer and Deputy Director in-charge of the district. At the State level Joint Director in charge of the survey, the Additional Director and Director directed and supervised the work.

(b) *Supervision by the Department of Agriculture.*—As per the scheme of the survey 1 per cent of the crop cutting experiments are to be supervised by the Department of Agriculture. Though the department was supplied with selection particulars of the survey viz., list of villages, list of plots selected for the crop cutting experiments etc. for their association the response was poor.

(c) *Supervision under the scheme for improvement of crop statistics.*—Supervision work on area enumeration and crop cutting survey under the scheme I.C.S. was conducted by this Department and N.S.S.O. on 50:50 basis. The Table 5 gives the details of the work carried out by the department.

6. Training

Before the commencement of field work a one day Training was organised for District Level Officers. Taluk Level Officers and Investigators were given training for 2 to 3 days in each District.

The officers from the N.S.S.O. also participated in these training programmes.

7. Period of the Survey

The reference period of the survey was the agricultural year 1983-84. (July 1983 to June 1984.)

8. Time Schedule

Item	Scheduled date of completion of various items of work	
	Due date	Remarks
A. AREA ENUMERATION		
(i) <i>Wet land</i>		
(a) Autumn season	August 1983	
(b) Winter season	November 1983	
(c) Summer season	March 1984	
	June 1984	
(ii) <i>Dry land I/II visit</i>		
B. CROP CUTTING		
(i) <i>Paddy</i>		
(a) Autumn season	November 1983	
(b) Winter season	February 1984	
(c) Summer season	June 1984	

Item	Scheduled date of completion of various items of work	
	Due date	Remarks
(ii)(a) Tapioca	June 1984	
(b) Coconut	"	
(c) Arecanut	"	
(d) Cashew	"	
(e) Pepper	"	
(f) Cocoa	"	
(g) Jack	"	
(h) Mango	"	
(i) Banana	"	
(j) Plantain	"	

C. SAMPLE CHECK IN AREA AND YIELD ESTIMATION SURVEYS

- | | |
|---|--|
| (a) Area check in wet land | Autumn 15-10-1983 |
| " | Winter 15-1-1984 |
| " | Summer 30-4-1984 |
| (b) Area check in dry land | June 1984 |
| (c) Supervision of crop cutting experiments paddy | 1. Autumn October 1983
2. Winter February 1984
3. Summer June 1984 |
| (d) Supervision of c.c. experiments tapioca | June 1984 |

9. Schedules and instructions

Standard schedules and instructions were supplied to the field staff for the smooth running of the survey during the year 1983-84.

10. Nature of field difficulties in area enumeration

Due to the intensity of cropping pattern the area enumeration has become difficult in the State. Paddy is the main crop grown in wet land and 2 to 3 crops are raised according to the availability of water. area enumeration in wet land does not present much difficulty as in dry land. However a few problems which merit attention are enumerated below:

1. The investigator usually visits a field for area enumeration once in a season. During the early period of crop season it may happen that crop may not have been sown, but if the field is sown usually and harvested in that season as revealed by local enquiry, he has to enumerate the area under the season. But on later visits he may find that due to unforeseen factors sowing had been delayed resulting in a shift of the area under the crop to next season.

2. The identification of the converted wet land into dry land takes much time of primary worker due to continuous survey numbers belonging to one cultivator lying in one stretch without any marking like survey stones, etc.

3. Stretches of low lying wet lands where paddy is the only crop grown, often get inundated by floods or breaches of lands. The area enumeration has to be repeated to see whether the crop sown immediately preceeding the floods or breaches of lands have survived. If not the cultivators may sow a second time which naturally will be delayed thus extending the harvest and crop season to the next season.

4. In water logged areas where conversion of wet land to dry land has taken place in-isolated patches the identification and measurement of area to record the extent of crops grown is a time consuming process especially when these patches are not easily accessible.

The difficulties experienced in the area enumeration of dry land are given below:

1. Multiplicity of crops grown in the dry land makes area enumeration very difficult.

2. In the Travancore-Cochin portion of Kerala, area under crops, land utilisation, etc. are recorded following the litho subdivision which is the identification unit. The old survey maps available are often damaged and in certain cases they are not even available. Since the last survey and settlement arbitrary changes of boundaries have taken place there by making identification difficult. After identification if it is felt that the area under a unit is different from that recorded then physical measurement has to be done to record the change. In the Malabar region village maps are only available. The primary worker has therefore to go by the F.M.B. register with the village office and for that he has to make frequent visits to the village office.

3. It is found that large inaccessible areas put under minor circuit numbers are cultivated intensively. In such cases identification is too difficult because of the size and area is to be enumerated according to the extent of land in possession of different holders. All holders have to be contacted and enumeration done according to these holdings. The tallying of the total area according to records and the units of enumeration is often found difficult.

4. The plots have in many cases a multiplicity of crops both perennial and seasonal. The allocation of area if left to the discretion of the primary worker may lead to serious errors. So the old method of annavari allocation is not followed. Instead the number of palms standards under perennial crops are actually counted. This takes up too much time of the primary worker.

Crop cutting experiments

1. There is no fixity of date fixed by the cultivator for harvesting, with the result that the investigator has to make repeated visits to conduct an experiment.

2. In water logged areas the fixing of pegs to mark the experimental cut is difficult.

3. The labour charges allowed @ Rs. 4 per cut is too inadequate to conduct the experiment. The investigators are finding it difficult to get the labourers at this rate and as such they are forced to pay from their own pocket in the interest of work.

4. The Land Reforms Act in Kerala vested with the Kudikidappukar, the right of ownership extending up to ten cents. Since most of them are agricultural labourers they leave very early for work so that the harvesting of experimental trees falling in such lands entail repeated visits. Also the nuts are plucked by them in a haphazard way depending upon their necessities. It is often difficult to get correctly the details of the number of nuts plucked, the number plucked as tender, barren and ripe etc.

General

The workload of the primary reporter is very heavy. He has to cover about 2000 acres. The wet land area has to be enumerated three times and dry land area two times. Besides he has to attend to crop cutting work on paddy, coconut, tapioca, arecanut, cashew, pepper, cocoa etc. and other minor crops. It was found impossible to cover completely the above items of work in any year. Eventhough two visits were proposed on drylands, the first visit to enumerate seasonal crops was uniformly the casualty in all the rounds including the round under report due to the heavy work load coupled with shortage of primary workers in position due to administrative reasons. However, the shortage of primary workers in position was kept at minimum. It is feared that the heavy workload may adversely affect the quality of data collected. Over and above, the absence of printing facilities with the Department has caused inconvenience in the conduct of the survey since the Government Presses are over crowded with many items of urgent work.

11. Estimation procedure

The following estimates were prepared from the data collected in area enumeration:—

1. Area under different utilisation
2. Source-wise area irrigated
3. Area under different crops
4. Crop-wise area irrigated

The estimates were prepared as follows:—

(a) Land utilisation and irrigation

Notations used:—

- | | | |
|---|----|---|
| N | .. | Number of villages in the stratum (taluk) |
| n | .. | Number of villages selected in the stratum for area enumeration |

- A .. Area of stratum
 a .. Area of selected village
 a_j .. Area of jth selected villages in the stratum
 Y_{ij} .. Area under ith utilisation in the jth selected village
 Y_i .. Estimate of the ith utilisation
 V (Y_i) .. estimate of the variance of Y_i

Then Y_i is given by

$$Y_i = \frac{\sum_{j=1}^n y_{ij} \times A}{\sum_{j=1}^n a_j} = \frac{A}{a} \times \sum_{j=1}^n y_{ij}$$

$$V(y_i) = \frac{N(N-n)}{n(n-1)} \sum_{j=1}^n (Y_{ij} - R_{iaj})^2$$

$$\text{Where } R_i = \frac{\sum_{j=1}^n Y_{ij}}{\sum_{j=1}^n a_j}$$

(b) *Area under crops.*—The area under various crops are estimated as follows:—

- N .. Number of villages in a stratum (Taluk)
 n .. Number of villages selected for area enumeration in the stratum
 W .. Wet land area of the stratum
 D .. Dry land area of the stratum
 w_j .. Wet land area of the jth selected village
 d_j .. Dry land area of the jth selected village
 y_{ij} .. area under ith crop in the wet land of jth selected village
 x_{ij} .. Area under the ith crop in the dry land of the jth selected village
 y_i .. Estimate of area under ith crop in wet land
 x_i .. Estimate of the area under ith crop in dry land
 z_i .. y_i + x_i—Total area under ith crop

$$Y_i = \frac{\sum_{j=1}^n y_{ij}}{\sum_{j=1}^n w_j} \times W ; X_i = \frac{\sum_{j=1}^n x_{ij}}{\sum_{j=1}^n d_j} \times D$$

$$v(z_i) = V(y_i) \times v(x_i)$$

$$= \frac{N(N-n)}{n(n-1)} \left\{ \sum_{j=1}^n (y_{ij} - R_{i1} w_j)^2 + \sum_{j=1}^n (x_{ij} - R_{i2} d_j)^2 \right\}$$

$$\text{Where } R_{i1} = \frac{\sum_{j=1}^n y_{ij}}{\sum_{j=1}^n w_j} \text{ and}$$

$$R_{i2} = \frac{\sum_{j=1}^n x_{ij}}{\sum_{j=1}^n d_j}$$

(c) The estimate of average yield is obtained as the simple average of yield obtained from all the experiments.

12. Analysis of Survey results

Crop Cutting Experiments.—Under yield estimation surveys crop cutting experiments on paddy were planned in all the taluks for autumn season, in 57 taluks for winter season and in 49 taluks for summer season, during the year under report. In addition to this, crop cutting experiments were planned in 54 taluks for tapioca, 59 taluks for coconut, 48 taluks for arecanut, 46 taluks for pepper, 41 for cocoa. In respect of minor crops, crop cutting experiments were planned in 59 taluks for mango, 44 taluks for jack, 61 taluks for plantain and 41 taluks for banana in the State.

The percentage fulfillment of target of crop cutting experiments planned was cent per cent in respect of coconut, arecanut and cashew. It was above 99 per cent in the case of banana, tapioca and jack. In case of pepper, cocoa, mango and plantain the fulfilment of target was to the extent of 98.46, 92.67, 95.69 and 98.28 respectively.

Crop cutting experiments planned under paddy were conducted to the extent of 95.74 per cent for autumn, 95.96 per cent for winter and 93.51 per cent for summer during the year. The mean yield calculated for different crops under the yield estimation survey is given below:

<i>Crop</i>	<i>Mean yield per hect.</i>	
		(Kgs.)
Paddy	Autumn 1983	2417
	Winter 1984	2442
	Summer 1984	2894
Tapioca		16830
Coconut (Nos.)		3814
Arecanut (Nos.)		139554
Cashew		544
Pepper		231
Cocoa		218
Mango		3166
Jack (Nos.)		4118
Plantain		4030
Banana		11910

Land utilisation.—The estimated area under various utilisations for the year under report together with the details for the years between 1975-76, 1981-82 and 1983-84 is furnished in Table No. 1. The pattern of land utilisation has shown very little change over the years. The land put under miscellaneous tree crops and fallow other than current fallow had remained static during the year under report when compared with 1982-83. A slight upward trend to the extent of 0.05 per cent is indicated in respect of land put under non-agricultural uses. On the contrary the area under cultivable waste has been reduced

by 0.03 per cent. The net area sown has however increased to the extent by 0.05 per cent during the year. The district-wise distribution of land utilisation is given in Table 2.

Area under different crops.—The estimated area under important crops for the years 1975-76, 1981-82, 1983-84 is given in Table 3. The area under paddy has been showing a declining trend over the years, from 30.5 per cent of the total cropped area in 1975-76, it has come down to 27.77 per cent in 1981-82 and to 25.86 per cent in 1983-84. One reason for the sharp decline in area under paddy seems to be continuing conversion of paddy fields for perennial crops and for non-agricultural purposes. The area under tapioca and pepper had shown a decreasing trend while that of rubber and cashew recorded an increasing trend. It points to the facts that the cropping pattern is shifting in favour of non-food crops which is more attractive in respect of earnings.

Area irrigated.—The estimates of area irrigated are given in Table 2. During the year under report the net area irrigated source-wise was estimated to be 265,536 hectares which works out to 12.18 per cent of the net area sown.

Area irrigated by Government wells, private wells and other sources had shown an increase whereas Government canals and tanks, private canals recorded a decline compared to the previous year. The major source of irrigation was Government canal with 37.84 per cent of the total net area irrigated. Among districts Palghat, Ernakulam, Trichur and Malappuram top the list with a percentage share of 26.01, 18.12, 16.89, 9.18 respectively of total area irrigated through all sources together.

Crop-wise gross area irrigated works out to 13.82 per cent of gross cropped area of the State during the year. Among the crops, paddy tops the list with 72.55 per cent for all crops taken together. Next comes coconut with 17.16 per cent. Of all the districts Palghat claimed 24.17 percentage of total gross area irrigated in the state during 1983-84. In respect of Trichur and Ernakulam this percentage works out to 22.99 and 16.48 respectively. However the gross area irrigated during the year recorded an increase of 1.29 per cent during 1983-84 over the previous year.

Production.—The estimated production of important crops viz., rice, coconut, arecanut, cashew, pepper, tapioca, rubber, banana, plantain and cardamom for the years 1975-76, 1981-82 and 1983-84 are given in table 25. Production of cashew, pepper, tapioca, rubber, banana, plantain and cardamom have increased during the reporting period over the previous year. At the same time production of paddy, coconut and arecanut have declined. The percentage decline in production of these crops works out to 7.53, 18.28 and 24.53 respectively.

PART II
TABLE I
Land use classification 1975-76, 1981-82 and 1983-84
(Area in hectares)

Classification	Area in hectares				Percentage				Percentage increase or decrease over 1982-83
	1975-76	1981-82	1983-84		1975-76	1981-82	1982-83	1983-84	
I	2	3	4	5	6	7	8	9	
Total Geographical Area	3885497	3885497	3885497	100.00	100.00	100.00	100.00	100.00	..
Forest	1081509	1081509	1081509	27.83	27.83	27.83	27.83	27.83	..
Land under non-agricultural uses	259200	266451	277719	6.67	6.86	7.10	7.15	7.15	+0.05
Barren and uncultivable land	78500	85600	86590	2.02	2.27	2.22	2.23	2.23	+0.01
Permanent pastures and grazing land	19900	5382	5222	0.51	0.14	0.14	0.13	0.13	-0.01
Land under miscellaneous tree crops	84200	55187	54701	2.17	1.44	1.41	1.41	1.41	..
Cultivable waste	113400	130204	128924	2.92	3.35	3.35	3.32	3.32	-0.03
Fallow other than current fallow	23000	26827	27539	0.59	0.69	0.71	0.71	0.71	..
Current fallow	35600	44487	42938	0.93	1.14	1.15	1.10	1.10	-0.05
Net area sown	2189200	2189850	2180355	56.35	56.36	56.07	56.12	56.12	+0.05

TABLE 2

Total area and classification of area in each district (1983-84)

(Area in hectares)

District	1	2	3	4	5	6	7	8	9	10	11	12	13
		Total geographical area	Forest	Land put to non-agricultural uses	Barren and uncultivable land	Permanent pastures and grazing land	Land under miscellaneous tree crops	Cultivable waste	Fallow other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area
Trivandrum	..	218600	49861	17277	2255	25	242	2154	1696	1311	143769	79292	223061
Quilon	..	251898	81438	20696	1069	30	385	867	779	1117	145457	93208	238665
Pathanamthitta	..	268750	155214	8395	926	8	213	532	490	935	102037	4970	107007
Alleppey	..	136058	..	26148	576	14	150	1900	1038	1958	104274	64053	168327
Kottayam	..	219550	8141	19752	2175	52	304	1739	2237	2900	182250	55988	238238
Idukki	..	514962	260907	15566	17442	2216	15652	38776	1253	1794	161356	11493	172849
Ernakulam	..	235319	8123	34222	2649	166	1329	5010	2775	3563	177482	67960	245442
Trichur	..	299390	103619	22 26	2457	150	1333	5452	3087	4660	156606	70558	227164
Palghat	..	438980	136257	32100	13959	290	8651	24145	3114	6015	214449	105422	319871
Malappuram	..	563230	103417	18974	7706	400	2664	14134	4062	9066	201807	46120	247927
Kozhikode	..	23330	41386	18437	2412	166	3816	3717	1539	2480	159377	42771	202148
Wynad	..	212560	78787	5 70	2688	122	4077	5445	1620	1489	113052	20751	133803
Cannanore	..	492930	54359	38856	30276	1573	14885	25043	3849	5650	318439	18761	337200
State	..	3885497	1081509	277719	86590	5222	54701	128924	27539	42938	2180355	681347	2861702

TABLE 3

Area under important crops and the percentage to total cropped area (1975-76, 1981-82, 1983-84)
(Area in hectares)

Crop	1975-76		1981-82		1983-84	
	Area under crop	Percentage to total cropped area	Area under crop	Percentage to total cropped area	Area under crop	Percentage to total cropped area
1	2	3	4	5	6	7
Paddy	..	..	..	..	..	..
Autumn	375043	12.579	347098	11.947	327783	11.454
Winter	396392	13.296	356073	8.814	324560	11.342
Summer	104587	3.508	103700	3.569	87743	3.066
Total	876022	29.384	806871	27.773	740086	25.862
Coconut	692945	23.243	666618	22.945	682281	23.842
Arecanut	76618	2.569	61251	2.108	59604	2.083
Cashewnut	109057	3.658	139960	4.817	142339	4.974
Pepper	108251	3.631	108242	3.726	106143	2.696
Tapioca	326865	10.964	248069	8.539	233010	3.142
Rubber	206686	6.933	237769	8.184	271200	9.477
Banana and Plantain	52280	1.754	49989	1.721	49593	1.733

TABLE 4

Number of investigators according to number of crop cutting experiments on paddy conducted by them 1983-84

Number of experiments	No. of investigators					
	Autumn		Winter		Summer	
	Allocated	Per-formed	Allocated	Per-formed	Allocated	Per-formed
1	2	3	4	5	6	7
4 Experiments	641	632	713	662	615	611
5 to 8 Experiments	52	52	38	37	37	35
More than 8 experiments	8	8	9	9	8	10
All	701	692	760	708	660	656

TABLE 5

Number of villages/experiments supervised by Assistant Director, Statistical Officers under the Scheme I.C.S., the due date of completion and actual date of completion

Seasons	Number of villages for inspection	Number of villages inspected	Area enumeration				Crop cutting experiments				Remarks
			Due date of completion		Actual date of completion		Number of experiments allotted	Number of experiments supervised	Date of completion		
			Wet land	Dry land	Wet land	Dry land					
1	2	3	4	5	6	7	8	9	10	11	
Autumn	135	132	15-10-1983	30-6-1984	15-10-1983	30-6-1984	154	132	31-10-1983		
Winter	135	135	15-1-1984	..	15-1-1984	30-6-1984	150	127	28-2-1984		
Summer	135	134	30-4-1984	..	30-4-1984	..	116	96	30-6-1984		
(Wet)	135	118	..	..	..	..	..	..	..
Summer (Dry)	135	118	..	..	..	..	..	..	..

TABLE 6

Distribution of Taluks in each District and the number in which experiments were planned crop-wise 1983-84

District	Number of Taluks	Paddy			Number of experiments planned by each Taluk/District for each crop									
		Autumn	Winter	Summer	Tapioca	Coconut	Arecanut	Cashewnut	Pepper	Cocoa	Jack	Mango	Banana	Plantain
		3	4	5	6	7	8	9	10	11	12	13	14	15
1	2													
Trivandrum	4	120	120	48	126	50	25	21	23	20	20	20	10	20
Quilon	6	*170+5	170	48	144	60	31	25	30	20	20	30	25	30
Alleppey	7	198	185	140	102	45	21	15	20	50	10	28	10	35
Kottayam	5	*110+5	96+10	84+10	108	40	25	5	35	20	20	20	25	25
Idukki	4	*48+5	48+5	..+5	56	20	10	5	65	20	10	16	..	20
Ernakulam	7	*200+20	180+10	148+..	100	40	52	18	27	40	10	35	25	35
Trichur	5	*132+15	140+10	114+..	106	45	50	21	18	20	10	20	25	25
Palghat	5	*180+35	150+35	68	90	28	16	41	10	30	20	20	8	25
Malappuram	4	*120+20	120	80	128	55	58	75	20	30	20	16	25	20
Kozhikode	3	84	84	62	90	75	40	19	41	20	23	15	20	15
Wynad	3	18	90	78	45	15	30	18	30	15	13	15	15	15
Cannanore	5	150+25	144+10	132+10	170	60	72	155	70	30	24	25	25	25
State	58	1530+130	1528+80	1002+25	1265	533	430	418	389	295	200	260	213	290

+ * Shows the number of crop cutting experiments on paddy in dry land.

TABLE 7

Number of experiments planned in each crop and number of experiments analysed (1983-84)

District	Paddy										Other crops			
	Autumn		Winter		Summer		Tapioca		Coconut		Arecanut		Cashewnut	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Trivandrum	120	113	120	117	48	46	126	126	50	50	25	25	21	21
Quilon	175	170	170	167	38	37	107	107	60	51	23	23	25	25
Pathanamthitta	..	..	..	168	..	..	..	..	..	..	..	..	..	..
Alleppey	198	173	168	91	140	129	33	33	45	16	21	14	17	12
Kottayam	110	107	96	52	84	74	108	108	40	38	25	25	5	5
Idukki	36	36	53	195	..	..	46	46	20	20	10	10	5	5
Ernakulam	220	220	200	140	148	135	100	100	40	40	52	52	18	18
Trichur	137	137	145	149	114	110	106	104	45	45	50	50	21	21
Palghat	160	152	160	115	68	67	90	90	28	28	16	16	41	41
Malappuram	135	125	120	77	80	74	128	128	55	55	58	58	75	75
Kozhikode	84	82	84	88	62	54	90	90	75	75	40	40	19	19
Wynad	..	..	90	148	78	76	45	45	15	15	30	30	18	18
Cannanore	175	171	154	148	142	135	170	170	60	60	72	72	135	135
State	1550	1484	1560	1497	1002	937	1241	1239	533	533	430	430	400	400
A—Planned											B—Analysed			

TABLE 7—(cont.)

Other crops

District	Pepper		Cocoa		Jack		Mango		Banana		Plantain	
	A	B	A	B	A	B	A	B	A	B	A	B
1	2	3	4	5	6	7	8	9	10	11	12	13
Trivandrum	23	23	5	5	20	20	20	20	10	10	20	20
Quilon	30	22	20	10	20	20	30	25	25	25	30	30
Pathanamthitta	..	23	..	23	..	..	..	6	..	..	..	..
Alleppey	..	5	50	36	10	10	28	24	10	10	35	35
Kottayam	..	35	20	20	20	20	20	20	25	25	25	25
Idukki	..	60	20	10	10	10	16	10	..	20	20	20
Ernakulam	..	27	40	40	10	10	35	30	25	25	35	35
Trichur	..	17	20	20	10	10	20	20	25	25	25	25
Palghat	..	10	30	29	20	20	20	20	8	8	25	25
Malappuram	..	20	30	20	20	20	16	15	25	25	20	20
Kozhikode	..	41	20	20	23	23	15	15	20	20	15	15
Wynad	..	30	15	15	13	13	15	15	15	15	15	15
Cannanore	..	70	30	30	24	24	25	24	25	25	25	25
Total	389	383	295	278	200	200	260	244	213	213	290	290

TABLE 8

Number of experiments missed in paddy and tapioca by reason (1983-84)

District	Paddy (Autumn)				Paddy (Winter)				Paddy (Summer)				Tapioca			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Trivandrum	6	1	..	7	2	1	..	3	..	2	..	2	..	..	..	..
Quilon	..	5	..	5	..	3	..	3	..	1	..	1	..	..	..	..
Alleppey	4	21	..	25	2	8	..	10	..	11	..	11	..	..	..	..
Kottayam	..	3	..	3	..	5	..	5	..	10	..	10	..	..	..	..
Idukki	..	..	..	..	..	1	..	1	..	13	..	13	..	..	..	..
Ernakulam	..	..	..	..	..	5	..	5	..	4	..	4	..	..	..	..
Trichur	1	1	..	2	1	4	..	11	..	1	..	1	..	..	..	2
Palghat	5	3	..	8	6	5	..	5	..	6	..	6	..	..	..	..
Malappuram	10	..	..	10	4	1	..	5	..	8	..	8	..	..	..	..
Kozhikode	..	2	..	2	4	3	..	7	..	2	..	2	..	..	..	..
Wynad	..	..	..	..	..	2	..	2	..	6	..	7	..	..	..	..
Cannanore	4	..	..	4	..	6	..	6	1	..	..	..	..	..	..	..
State	30	36	..	66	19	44	..	63	1	64	..	65	..	2	..	2

1. Prior harvest by cultivator 2. Other reasons 3. Rejected at the analysis stage 4. Total

TABLE 9

Area under principal crops (district-wise) 1983-84 and the sampling error (Paddy)

District	Area under crop (in hectare)				Percentage of sampling error			
	Autumn	Winter	Summer	Total	Autumn	Winter	Summer	Total
1	2	3	4	5	6	7	8	9
Trivandrum	13165	13546	368	27079	8.37	11.04	15.37	9.79
Quilon	19477	20028	341	39846	5.49	6.05	..	4.33
Pathanamthitta	7988	6254	3641	17883	9.25	5.38	10.13	7.23
Alleppey	28532	15570	25099	69201	5.75	10.27	18.93	8.42
Kottayam	12906	14583	7312	34801	11.60	7.98	10.88	10.73
Idukki	3830	3955	267	8072	13.15	..	..	13.15
Ernakulam	35736	38994	14002	86732	4.43	6.22	7.65	5.45
Trichur	37920	48220	17251	103391	4.67	5.95	12.63	5.73
Palghat	87895	77692	2447	168034	3.40	4.31	15.42	4.01
Malappuram	33779	35303	5667	74749	7.29	7.56	9.31	7.63
Kozhikode	9677	11286	2192	23155	7.11	11.87	9.63	7.53
Wynad	..	23856	5715	30571	..	2.14	3.84	2.43
Cannanore	36878	17273	2421	56572	2.21	7.13	1.57	2.53
State	327783	324560	87743	740086	3.05	2.07	4.52	3.64

TABLE 10

Area under principal crops (district-wise) 1983-84 and the sampling error (Tapioca)

District	Area under crop (in hectares)				Percentage of sampling error			
	Autumn	Winter	Summer	Total	Autumn	Winter	Summer	Total
1	2	3	4	5	6	7	8	9
Trivandrum	24425	23486	7521	55432	12.53	14.41	14.02	13.37
Quilon	15338	25562	724	41624	33.90	30.41	35.65	33.32
Pathanamthitta	1633	15273	977	17883	16.82	15.65	12.18	15.55
Alleppey	1956	9053	891	11900	15.32	21.67	18.37	15.68
Kottayam	1454	21060	494	23008	15.25	17.16	20.91	17.62
Idukki	1353	9042	90	10485	12.05	15.52	25.73	22.68
Ernakulam	2793	8346	736	11874	13.15	12.34	17.12	16.44
Trichur	1396	4150	251	5797	10.62	7.98	8.87	9.60
Palghat	6445	6073	472	12990	11.34	9.12	8.25	7.52
Malappuram	7391	9151	1418	17960	10.95	12.22	15.41	12.75
Kozhikode	1647	1359	355	3361	19.13	15.34	11.71	15.42
Wynad	965	1200	407	2572	3.83	3.05	10.97	3.17
Cannanore	1682	15581	861	18124	9.53	15.27	6.76	12.23
State	68478	149335	15197	233010	10.45	11.01	17.93	6.32

TABLE 11

Area under principal crops (district-wise) 1983-84—(Coconut)

District	No. of trees ('000)			Area in hectares	Percentage of sampling error
	Bearing	Young	Total		
1	2	3	4	5	6
Trivandrum	10738	5961	16699	73568	17.30
Quilon	9657	6321	15979	75018	3.10
Pathanamthitta	4414	2066	6480	22807	3.77
Alleppey	6925	4192	11117	46907	5.47
Kottayam	8492	2556	11048	50914	8.11
Idukki	2107	784	2891	16523	9.91
Ernakulam	9459	4623	14082	62038	13.80
Trichur	8938	4528	13466	58929	8.67
Palghat	2737	2758	5495	23186	8.40
Malappuram	8096	6178	14274	60739	8.24
Kozhikode	16657	6581	23238	100164	1.53
Wynad	152	686	838	3612	7.22
Cannanore	11459	8764	20223	81876	8.98
State	99831	56502	156363	682281	5.32

TABLE 12

Area under principal crops (district-wise) 1983-84 (Areca nut)

District	(No. of trees in '000)			Area in hectares	Percentage of sampling error
	Bearing	Young	Total		
1	2	3	4	5	6
Trivandrum	5688	1360	7048	3301	25.31
Quilon	4659	2094	6753	3092	2.76
Pathanamthitta	2338	834	3172	1464	8.70
Alleppey	2923	1674	4597	2138	5.96
Kottayam	4318	1141	5459	2480	5.13
Idukki	3613	1718	5331	2424	9.34
Ernakulam	11233	2383	13616	6192	3.51
Trichur	12070	2371	14441	6567	11.15
Palghat	3611	1460	5071	2380	19.50
Malappuram	15017	3807	18824	8833	10.71
Kozhikode	10183	2254	12437	5834	8.57
Wynad	1208	932	2140	1131	41.07
Cannanore	19654	5390	25044	13768	3.38
State	96516	27412	123928	59604	4.15

TABLE 13

Area under principal crops (district-wise) 1983-84 (Cashew)

District	No. of trees ('000)	Area in hectares	Percentage of sampling error
1	2	3	4
Trivandrum	1946	6485	13.60
Quilon	2267	7558	10.30
Pathanamthitta	646	2154	7.10
Alleppey	999	3331	20.80
Kottayam	442	1472	13.70
Idukki	367	1222	6.00
Ernakulam	1210	4032	4.61
Trichur	2095	6983	14.69
Palghat	3467	13222	4.73
Malappuram	6584	21946	9.55
Kozhikode	1380	4599	18.76
Wynad	302	1007	38.13
Cannanore	20648	6828	4.68
State	42844	142339	6.73

TABLE 14
Area under principal crops (district-wise) 1983-84 (Pepper)

District	No. of stands	Area in hectares	Percentage of sampling error
1	2	3	4
Trivandrum	2913	5394	59.21
Quilon	4028	7457	6.70
Pathanamthitta	2109	3905	15.05
Alleppey	2084	3860	2.63
Kottayam	6829	12646	16.01
Idukki	6593	12209	48.47
Ernakulam	3599	6665	3.20
Trichur	2199	4073	6.40
Palghat	822	1523	16.26
Malappuram	2222	4114	28.17
Kozhikode	6887	12753	6.36
Wynad	4054	7508	8.70
Cannanore	12979	24036	11.66
State	57318	106143	5.76

TABLE 15

Area under plantation crops (In hectares)*

District	Rubber	Tea	Coffee	Cardamom
1	2	3	4	5
Trivandrum	11574	1072	51	164
Quilon	34253	687	264	104
Pathanamthitta	16674	740	122	45
Alleppey	3447	..	15	..
Kottayam	72396	2011	986	22
Idukki	21938	28884	4874	45189
Ernakulam	27580	2	247	..
Trichur	10760	447	33	..
Palghat	10800	665	2351	3274
Malappuram	18287	174	..	184
Kozhikode	18765	..	..	412
Wynad	2396	5339	53425	4270
Cannanore	28330	..	..	759
State	271200	35021	62368	54423

*Commodity board estimates.

TABLE 16
Area under annual crops (district-wise) 1983-84

District	(In hectares)					
	Banana	Plantain	Sugarcane	Pineapple	Betel leaves	
1	2	3	4	5	6	
Trivandrum	812	5458	25	393	163	
Quilon	1089	2760	228	476	119	
Pathanamthitta	668	1726	1433	241	73	
Alleppey	623	1571	1500	180	60	
Kottayam	1344	3238	274	588	80	
Idukki	175	2674	2145	366	6	
Ernakulam	1826	3059	59	422	94	
Trichur	1403	3056	5	321	81	
Palghat	1591	2192	2356	227	11	
Malappuram	2827	2125	10	220	387	
Kozhikode	1073	2029	3	319	45	
Wynad	526	1010	18	150	3	
Cannanore	1218	3510	28	800	27	
State	15185	34408	8084	4703	1149	

TABLE 17
Area under seasonal crops (district-wise) 1983-84

District	(In hectares)									
	Pulses		Total	Jowar	Ragi	Other cereals and millets	Chillies	Ginger	Turmeric	
	Kharif pulses	Rabi pulses								
1	2	3	4	5	6	7	8	9	10	
Trivandrum	..	3077	3264	..	19	..	..	230	30	
Quilon	925	726	1651	3	7	2	..	853	63	
Pathanamthitta	30	308	338	2	2	..	..	423	15	
Alleppey	76	689	765	..	7	4	..	229	28	
Kottayam	207	1777	1984	..	4	2	1	3206	654	
Idukki	192	1273	1465	117	305	233	..	1511	187	
Ernakulam	519	926	1445	5	4	183	..	2177	710	
Trichur	1811	808	2619	12	35	104	4	98	180	
Palghat	2548	6510	9058	1346	942	1962	219	371	316	
Malappuram	605	915	1520	20	11	61	84	447	101	
Kozhikode	293	1068	1361	10	10	14	75	1825	243	
Wynad	6	214	220	9	9	19	5	2207	218	
Cannanore	31	4547	4578	41	12	97	629	1306	416	
State	7430	22838	30268	1565	1367	2681	1017	14883	3161	

TABLE 18
Area under other seasonal crops 1983-84

District	(In hectares)								
	1	2	3	4	5	6	7	8	9
		Sweet Potatoes	Tubers	Lemon grass	Vegetables	Sesamum	Groundnut	Cotton	Tobacco
Trivandrum	..	133	2214	54	577	16	15	..	..
Quilon	..	48	3410	24	240	2301	..	..	..
Pathanamthitta	..	3	3560	18	397	216	..	..	..
Alleppey	..	64	5779	3	940	4910	..	..	..
Kottayam	..	24	3246	57	907	41	..	..	..
Idukki	..	169	1584	1831	1101	256	..	..	..
Ernakulam	..	60	2756	524	2508	2303	..	..	..
Trichur	..	137	2460	56	1221	1177	..	..	..
Palghat	..	1845	1701	107	2342	1388	9704	6300	..
Malappuram	..	1571	2380	99	1672	1912	11	..	..
Kozhikode	..	82	2327	820	323	64	..	..	..
Wynad	..	27	862	1901	315	128	..	..	..
Cannanore	..	922	754	1826	1849	333	80	..	552
State	..	5085	33033	7320	14392	15045	9810	6300	552

TABLE 19

Area under other perennial crops (district-wise) 1982-84

(In hectares)

District	1	Jack	2	Mango	3	Cocoa	4	Pappaya	5	Tamarind	6
Trivandrum	..	7016	7477	926	708	1707					
Quilon	..	4909	4695	994	506	676					
Pathanamthitta	..	2177	2100	1002	297	193					
Alleppey	..	2388	3529	1955	540	241					
Kottayam	..	4482	4237	5191	763	471					
Idukki	..	2282	1916	2014	755	160					
Ernakulam	..	4417	5148	2033	1050	814					
Trichur	..	3843	4258	724	1635	1492					
Palghat	..	4290	5304	245	517	2896					
Malappuram	..	5475	6143	488	1437	1182					
Kozhikode	..	5967	5878	989	1040	544					
Wynad	..	4338	2786	331	102	109					
Cannanore	..	7286	6730	1160	888	601					
State		58870	60201	18052	10238	11086					

TABLE 20
Area under miscellaneous crops

District	(In hectares)						
	Cinnamon	Other fruit crops	Other oil seed trees	Fodder grass	Green manure crops	Other non-food crops	
1	2	3	4	5	6	7	
Trivandrum	13	1255	205	282	295	1707	
Quilon	21	350	59	213	545	1143	
Pathanamthitta	6	407	19	127	993	986	
Alleppey	28	419	79	84	129	590	
Kottayam	61	858	148	330	214	2311	
Idukki	40	1065	56	370	237	2259	
Ernakulam	52	712	199	108	239	4114	
Trichur	35	516	158	95	423	2095	
Palghat	229	2341	599	60	1212	11305	
Malappuram	13	703	57	26	2872	4485	
Kozhikode	93	954	86	87	909	2903	
Wynad	26	967	66	85	410	4695	
Cannanore	231	1844	107	199	1523	10587	
State	818	12401	1832	2066	9401	49180	

TABLE 21

Area under irrigation (crop-wise) 1983-84

(In hectares)

District	1	2	3	4	5	6	7	8	9	10	11	12	13
		Paddy	Tubers	Vegetables	Coconut	Arecanut	Cloves and nutmeg	Other spices and condiments	Banana	Betel leaves	Sugarcane	Others	Total
Trivandrum	..	8357	32	212	875	4	15	3	250	96	2	1198	11044
Quilon	..	5434	10	195	57	2	8	..	20	114	2	976	6818
Pathanamthitta	..	4647	..	..	..	..	..	..	..	..	..	..	4647
Alleppey	..	8105	172	519	16709	43	64	82	191	25	120	807	26837
Kottayam	..	7714	..	161	19	..	108	18	95	24	..	1134	9273
Idukki	..	4695	12	16	16	2	16	7	3	..	42	43	4852
Ernakulam	..	53924	..	46	7926	432	411	70	503	18	..	1847	65177
Trichur	..	59314	17	237	27466	1791	77	347	623	21	..	1038	90931
Palghat	..	87660	7	405	2909	1719	18	102	673	16	513	1521	95543
Malappuram	..	19845	198	852	3489	2485	1	29	943	319	2	844	29007
Kozhikode	..	2603	20	142	216	31	3	3	891	23	..	2162	6094
Wynad	..	563	3	80	17	2	..	..	27	..	..	55	8747
Cannanore	..	16071	99	1648	8188	7146	35	452	1382	20	12	1521	36574
State	..	286932	570	4513	67887	13657	756	1113	5601	676	693	13146	395544

TABLE 22
Net area irrigated (source-wise) 1983-84

District	(In hectares)									
	1	2	3	4	5	6	7	8	9	10
		Government canal	Private canal	Government tanks	Private tanks	Government wells	Private wells	Minor and lift irrigation	Other sources	Total
Trivandrum	..	4953	10	1398	290	25	542	1221	1676	10115
Quilon	..	395	125	90	115	13	348	275	2254	3615
Pathanamthitta	..	78	..	9	38	37	97	584	1975	2818
Alleppey	..	2504	7	101	13322	41	1130	3598	3001	23704
Kottayam	..	276	61	344	353	24	342	819	2675	4894
Idukki	..	765	54	127	30	13	56	184	1709	2938
Ernakulam	..	18732	91	682	2325	288	5993	11454	8539	48104
Trichur	..	17717	499	780	2160	1271	7389	6689	8345	44850
Palghat	..	51418	404	200	5828	6	4488	1520	5203	69067
Malappuram	..	520	530	100	2789	21	4823	5720	9877	24380
Kozhikode	..	2952	103	78	149	13	425	1190	1152	6072
Wynad	116	6	62	10	44	49	5191	5478
Cannanore	..	125	1574	130	4100	138	3609	634	9191	19501
State	..	100445	3574	4045	31561	1900	19286	33937	60788	265536

TABLE 23 (a)
Irrigated and unirrigated area under high yielding and other varieties (Autumn Paddy) (In hectares)

District	High yielding				Other varieties				Total	
	Irrigated		Unirrigated		Irrigated		Unirrigated		Irrigated	Unirrigated
	2	3	4	5	6	7	8	9		
1	2	3	4	5	6	7	8	9	10	
Trivandrum	257	1041	1298	3530	8337	11867	3787	9378	13165	
Quilon	128	13907	14035	..	9369	9369	128	23276	23404	
Pathanamthitta	..	..	..	..	..	..	..	..	..
Alleppey	..	13429	13429	..	19164	19164	..	32593	32593	
Kottayam	6	10690	10696	..	2210	2210	6	12900	12906	
Idukki	122	342	464	1789	1577	3366	1911	1919	3830	
Ernakulam	5686	5040	10727	7252	17758	25010	12938	22798	35736	
Trichur	1787	5121	6908	1320	29692	31012	3107	34813	37920	
Palghat	10897	26539	37436	8499	41960	50459	19396	68499	87895	
Malappuram	6	2190	2196	7	31576	31583	13	33766	33779	
Kozhikode	..	1256	1256	..	8421	8421	..	9677	9677	
Wynad	..	..	..	..	..	..	..	..	..
Cannanore	84	3282	3366	225	33287	33512	309	36569	36878	
State	18973	82837	101810	22622	203351	225973	41595	286188	327783	

TABLE 23 (b)
Irrigated and unirrigated area under high yielding and other varieties (Winter Paddy) (In hectares)

District	High yielding			Other varieties				Total	
	Irrigated	Unirrigated	Total	Irrigated	Unirrigated	Total	Irrigated	Unirrigated	Total
1	2	3	4	5	6	7	8	9	10
Trivandrum	244	435	679	3983	8884	12867	4227	9319	13546
Quilon	776	795	1571	5549	16946	22495	6325	17741	24066
Pathanamthitta	..	..	..	..	..	..	..	..	..
Alleppey	3114	3608	6722	1021	10043	11064	4135	13651	17786
Kottayam	5703	6187	11890	1429	1264	2693	7132	7451	14583
Idukki	373	301	674	2277	1004	3281	2650	1305	3955
Ernakulam	957	355	1312	16186	9496	35682	27143	9851	36994
Trichur	5060	1077	6137	33989	8094	42083	39049	9171	48220
Palghat	22969	342	23311	43098	11283	54381	66067	11625	77692
Malappuram	405	2412	2817	16177	16309	32486	16582	18721	35303
Kozhikode	32	590	622	630	10034	10664	662	10624	11286
Wynad	308	4045	4353	2147	17356	19503	2455	21401	23856
Cannanore	1937	38	1975	11458	3840	15298	13395	3878	17273
State	41878	20185	62063	147944	114553	262497	189822	134738	324560

TABLE 23 (c)

Irrigated and unirrigated area under high yielding and other varieties (Summer Paddy) 1983-84 (In hectares)

District	High yielding			Other varieties			Total		
			Total			Total			Total
	Irrigated	Unirrigated		Irrigated	Unirrigated		Irrigated	Unirrigated	
1	2	3	4	5	6	7	8	9	10
Trivandrum	234	23	257	109	2	111	343	25	368
Quilon	178	53	231	3	176	179	181	229	410
Pathanamthitta	..	..	..	..	..	..	..	..	..
Alleppey	6282	16596	22878	1135	4658	5793	7417	21254	28671
Kottayam	575	6310	6885	1	426	427	576	6736	7312
Idukki	4	50	54	130	103	233	134	153	287
Ernakulam	1514	1	1515	12329	158	12487	13843	159	14002
Trichur	7873	14	7887	9285	79	9364	17158	93	17251
Palghat	744	55	799	1453	195	1648	2197	250	2447
Malappuram	1144	2158	3302	2106	259	2365	3250	2417	5667
Kozhikode	889	186	1075	1052	65	1117	1941	251	2192
Wynad	2980	183	3163	3128	424	3552	6108	607	6715
Cannanore	428	3	431	1939	51	1990	2367	54	2421
State	22845	25632	48477	32670	6596	39266	55515	32228	87743

TABLE 24

Production of important crops 1975-76, 1981-82 and 1983-84

1	Production in tonnes ('00)				Percentage increase and decrease during 1983-84 compared to			
	1975-76	1981-82	1982-83	1983-84	1982-83	1975-76	1981-82	
2	3	4	5	6	7	8		
Rice—Autumn	5523	5569	5788	5205	—	5.76	—	6.54
Winter	5980	5892	5657	5206	—	12.91	—	13.71
Summer	1809	1933	1617	1668	+	7.79	—	13.71
Total	13312	13394	13062	12079	—	9.26	—	9.82
Coconut (Million nuts)	3439	3006	3184	2602	—	24.34	—	13.44
Arecanut (Million nuts)	11387	10702	11027	8318	—	26.95	—	22.28
Cashew	1224	789	755	774	+	36.76	—	1.90
Pepper	246	275	245	245	+	0.41	—	10.91
Tapioca	53902	37451	38487	39032	—	27.59	—	4.22
Rubber	1288	1395	1527	1622	+	25.93	+	16.93
Banana and Plantain	2510	3275	2894	3167	+	21.34	+	3.30
Cardamom	21	28	19	20	+	4.76	—	8.57

TABLE 25

District-wise production of important crops

(in tonnes)

District	Rice					Jowar	Ragi	Other cereals and millets	Pulses	Sugarcane	Black pepper
	Autumn	Winter	Summer	Total	5	6	7	8	9	10	11
1	2	3	4	5	5	6	7	8	9	10	11
Trivandrum	20226	15864	372	36462	36462	..	15	..	749	184	620
Quilon	29998	27834	203	58035	58035	1	6	1	1286	246	1723
Pathanamthitta	12623	9254	8864	30741	30741	1	2	..	261	13315	738
Alleppey	46187	25586	61985	133758	133758	..	5	3	623	13938	513
Kottayam	28754	27632	13641	70027	70027	..	3	1	1406	2546	2390
Idukki	6364	7210	289	13863	13863	51	262	149	1190	30805	2234
Ernakulam	50995	47964	20095	119054	119054	2	3	117	1035	597	1560
Trichur	53404	71443	30274	155121	155121	4	29	67	1870	51	823
Palghat	175566	160779	3020	339365	339365	568	656	1367	5589	24796	174
Malappuram	38301	45805	9185	93291	93291	8	10	39	1128	101	716
Kozhikode	8938	10964	1951	21853	21853	4	10	9	1036	30	3953
Wynad	..	48084	13671	61755	61755	4	9	12	168	171	2928
Cannanore	49102	22203	3286	74591	74591	18	18	62	3571	282	6177
State	520458	520622	166836	1207916	1207916	661	1028	1829	19912	87062	24549

TABLE 25—(cont.)

District	12	13	14	15	16	17	18	19	20	21
	Dry chillies	Dry ginger	Cured turmeric	Betel nuts (numbers in million)	Banana	Other plantain	Processed cardamom	Jack (number in thousand)	Mango	Raw cashewnuts
Trivandrum	..	562	58	370	9971	20795	3	31488	7058	1459
Quilon	..	2310	119	289	10999	12613	4	54122	14578	3212
Pathanamthitta	..	1055	27	89	8671	7439	2	17346	7417	239
Alleppey	..	564	55	196	9843	4760	..	9800	7587	280
Kottayam	..	8555	1183	281	21235	16449	1	15006	5402	240
Idukki	..	3606	325	184	1869	10482	1629	7599	3165	858
Ernakulam	..	5403	1276	797	23354	15509	..	20407	10611	2064
Trichur	..	102	281	1122	15657	6784	..	14573	18782	6061
Palghat	196	626	533	278	11137	10631	115	17838	39426	4257
Malappuram	74	794	153	1246	28835	6545	6	10578	26399	11631
Kozhikode	66	4391	554	1141	13734	7345	9	16039	19962	3463
Wynad	4	5204	567	162	6827	5484	139	7730	3752	223
Cannanore	585	3533	710	2163	15785	13900	55	19891	26516	43388
Total	930	36705	5841	8318	177917	1387361	1963	242417	190655	77375

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TABLE 25—(cont.)

Sesamum	Coconut (Million nuts)	Cotton bales of 170 kg.	Tobacco	Tea	Coffee	Rubber
25	26	27	28	29	30	31
5	290	..	..	725	14	6922
47	223	..	..	215	70	20486
5	79	..	..	232	33	9973
	180	..	..	..	4	2062
	153	..	..	361	262	43299
	40	..	..	33360	1297	13121
	264	..	..	..	66	16498
	322	..	..	792	9	6437
	63	9969	..	1114	760	6463
	162	10937
	549	11223
	2	7515	6950	1434
	275	..	1016	13357
	92	9969	1016	44214	9465	162212

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