

87 W
24 66

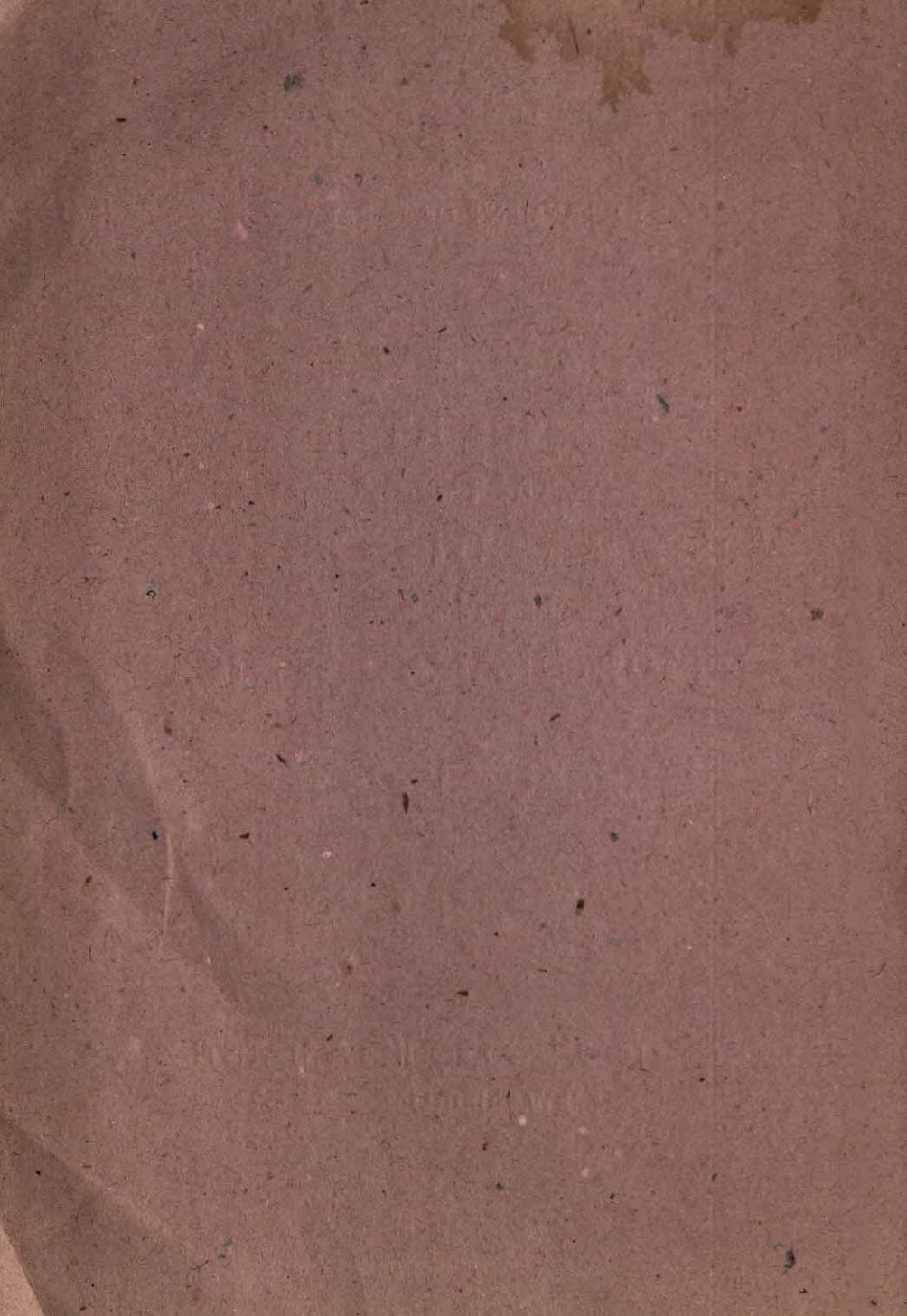


GOVERNMENT OF KERALA

REFER ERRATA ALBO

**REPORT
ON THE
TIMELY REPORTING SURVEY
ON
AGRICULTURAL STATISTICS
OF
KERALA 1982-83**

DEPARTMENT OF ECONOMICS & STATISTICS
TRIVANDRUM



**REPORT
ON THE
TIMELY REPORTING SURVEY
ON
AGRICULTURAL STATISTICS
OF
KERALA 1982-83**

**DEPARTMENT OF ECONOMICS & STATISTICS
TRIVANDRUM**

REPORT

ON THE

EMPIRICAL REPORTING SURVEY

ON

AGRICULTURAL STATISTICS

OF

KERALA

TRIVANDRUM

PREFACE

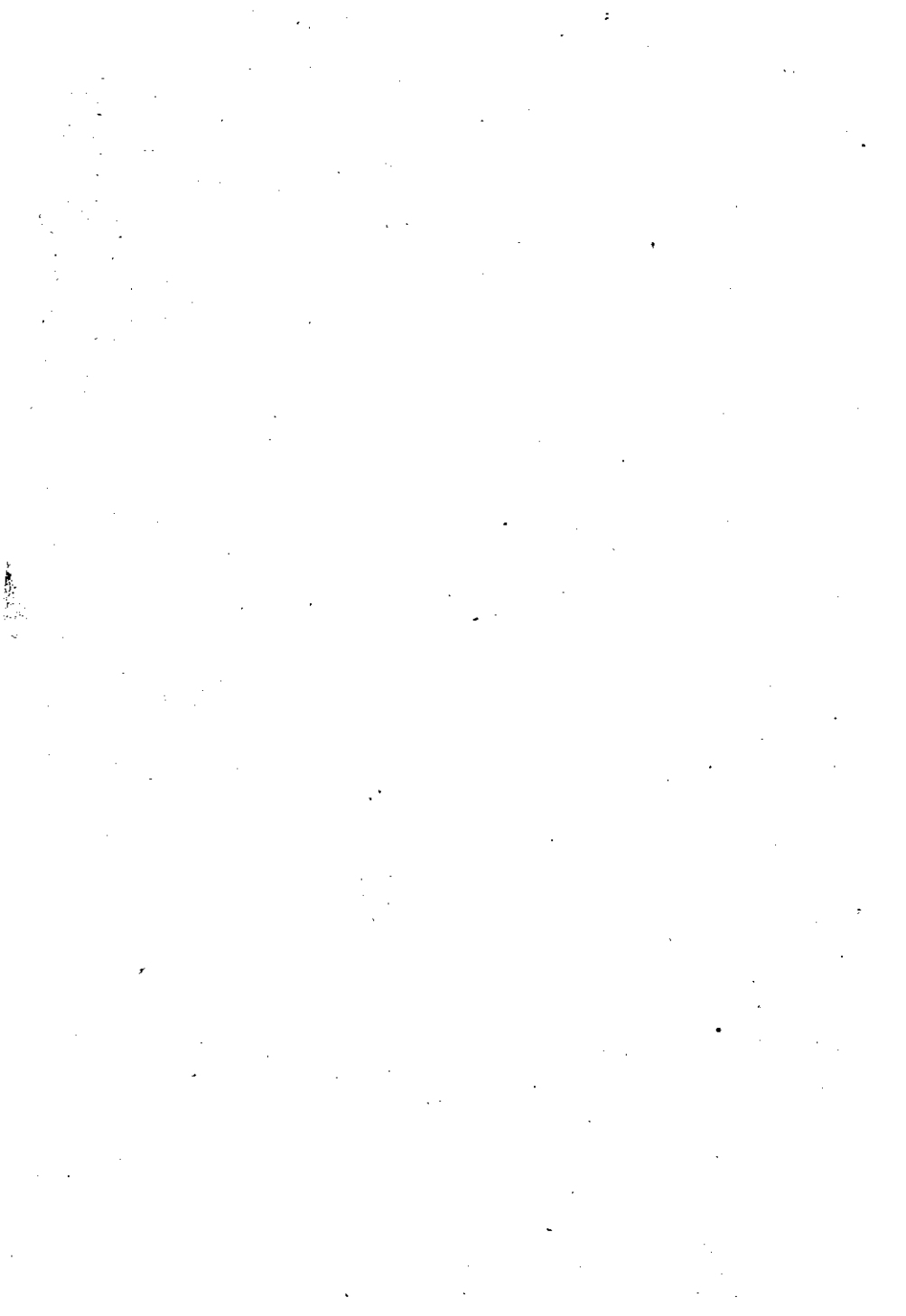
This is the 8th report published in the series which is based on the sample surveys conducted on area enumeration and crop cutting surveys under the scheme E.A.R.A.S. This report pertains to the surveys conducted during 1982-83. The scheme, E.A.R.A.S. was introduced in the state during 1975-76 as a variant of the All India Scheme, T.R.S. in the reporting states. The first phase of the survey was completed during the period from 1975-76 to 1980-81 and the entire area of the state was enumerated through annual surveys conducted regularly. Yearly reports were also published. The second phase of the survey commenced from 1981-82 taking a sample of 20% of the villages every year for enumeration and this report relates to the 2nd year of the survey.

The method adopted for the survey is a stratified random sampling one, where the taluk is taken as the stratum and the revenue village as the unit of sampling. Land use particulars, area under crops, irrigation particulars etc. were collected during enumeration in the 20% villages selected for the year and the estimates are prepared on the basis of these data. Production of crops is estimated by conducting yield estimation surveys. Crop cutting experiments were conducted on major crops viz. paddy, tapioca, coconut, arecanut, cashew and pepper and minor crops namely cocoa, betel leaves, sugar-cane, drum-stick and tubers during the year 1982-83. This report is prepared by 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 contents are welcome.

My sincere thanks are due to the Economic and Statistical Adviser and also to Mr. R. C. Arora, Deputy Economic and Statistical Adviser, Government of India for their timely advice and guidance for the successful conduct of the survey.

Trivandrum,
26-12-1985.

N. GEORGE JOHN,
Director,
Department of Economics and Statistics.



REPORT ON THE TIMELY REPORTING SURVEY ON AGRICULTURAL STATISTICS OF KERALA 1982-83

This report relates to the second year of the second cycle of the survey under the scheme of Establishment of an Agency for Reporting Agricultural Statistics in the State for the agricultural year 1982-83. As a variant of the All India Scheme of Timely Reporting Survey this scheme has been introduced in the non-reporting states from 1975-76 to improve the quality and coverage of agricultural statistics. The scheme was so designed to suit the conditions of collection of agricultural statistics and was envisaged to conduct the area enumeration of the whole state on a phased programme by complete enumeration of the selected villages each year and conduct crop cutting experiments for estimating the yield of specified crops. The scheme was implemented in the state since 1975-76 and is being continued with a view to collect the agricultural statistics on a continuing basis. The first cycle of the survey was completed in 1980-81 and the second cycle started from 1981-82 onwards.

The various parameters under area and yield statistics are estimated for each agricultural year on the basis of the data collected under this scheme. At the same time it is also intended to cover the entire area of the state at the end of fifth year by complete enumeration of the selected villages each year. The revenue village is taken as the last stage unit of sampling. Yield estimation surveys for a year is confined to the villages selected for area enumeration during the year.

Design of the Survey

Each of the 58 taluks of the state was taken as the stratum for the survey. The first and last stage unit of sampling is taken as the Revenue Village which is the smallest well defined unit of revenue administration in the State. The number of sampling

units in each of the districts and those selected for the year 1982-83 are presented in the table given below:

Sl. No.	Name of District	No. of revenue villages	
		Total	Selected and enumerated
(1)	(2)	(3)	(4)
1.	Trivandrum	94	19
2.	Quilon	99	20
3.	Alleppey	99	19
4.	Kottayam	74	15
5.	Idukki	42	8
6.	Ernakulam	100	20
7.	Trichur	234	47
8.	Palghat	152	31
9.	Malappuram	122	24
10.	Kozhikode	103	20
11.	Wynad	31	6
12.	Cannanore]	177	37
State		1327	266

Scheme of work

Eventhough the revenue villages were taken as the last stage unit for the survey, each of the selected revenue villages was further divided into a number of investigator units for the purpose of conducting the field work conveniently. The division is done on the basis of the number of Investigators available the area under wet and dry lands and the number of crop cutting experiments to be conducted in each of the selected villages. The work in each investigator unit was assigned to an investigator and the units were as far as possible equal in extent with well defined non-overlapping boundaries. Where clear demarcated natural or artificial boundaries were not possible the units were formed in terms of survey numbers.

The work in each of the investigator units formed as above was assigned to an investigator. He had to conduct the area enumeration survey in all plots in the unit and the crop cutting

experiments allotted to that unit. In Travancore-Cochin regions of the state where only Litho sub-divisions are marked in the village maps the area enumeration was conducted following these sub-divisions. While in Malabar region where the field measurement Book was available in sub-divisions, these books were followed in enumerating the details by the investigators.

The survey work starts with the preparation of a list of survey sub-division numbers 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 sub-division for the Travancore-Cochin area. However the litho maps give only litho sub-divisions which comprises of one or more sub-divisions of the basic tax register. In such cases the details were collected according to the litho sub-divisions only.

Next step of the survey is field visit. The Investigators visit the wet lands three times during the agriculture year and collect details of seasonal and annual crops corresponding to Autumn, Winter and Summer. During the last visit the data on land use, irrigation particulars, and details of perennial crops were collected. With regard to dry lands it was programmed to conduct two visits corresponding to kharif and rabi seasons, the first visit to collect data on seasonal and annual crops and the second to collect details on perennial crops.

The crop cutting experiments were also planned in all the taluks where the crops cover substantial area under them. 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. Cocoa
8. Betel leaves
9. Sugarcane
10. Drumstick
11. Tubers.

The number of experiments to be conducted in each taluk for each crop was planned at the headquarters and the number of experiments in each Investigator unit is decided by the District level officers. The crop cutting on the above crops were planned in all the taluks where the crops cover substantial area under them. But where the area under a crop did not cover a sizeable area experiments were not planned. Table I in the annexure gives the

number of taluks in each district and the number of experiments planned. Table 2 gives the details regarding the No. of experiments planned and analysed under each crop in each district. Table 3 gives the number of experiments missed and the reasons thereof, for paddy and tapioca. The No. of investigators according to No. of experiments conducted by them is given in Table 4.

The maximum number of experiments in a taluk was fixed as 30 for paddy during each season and 40 for tapioca during a year subject to a minimum of 2 experiments in a village. The Additional District Officers and the superintendent, National Sample Survey Organisation undertook sample check on area enumeration and crop cutting experiments according to pre-determined programme. Details are furnished in Table 5.

Staff position

The responsibility of conducting the field work on enumeration, crop cutting experiments and analysis of data and reporting is vested with the Department of Economics and Statistics. The personnel sanctioned for the EARAS scheme 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 and in the field are given below.

Staff Pattern for the Scheme

Sl. No.	Designation	Staff sanctioned under		
		L.U.S. by the State	E.A.R.A.S. by the Government of India	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

As in the previous years the Statistical Inspectors posted at the different taluks were primarily responsible for the supervision and the timely completion of field work in the taluks. In the case of certain taluks where the work of supervision of field work was heavy, additional Statistical Inspectors were posted and they also supervised the field work. The distribution of Statistical Inspectors in various taluks is given below:

<i>District</i>	<i>Taluk</i>	<i>No. of S. Is. posted</i>
Trivandrum	Neyyattinkara	2
	Nedumangad	2
	Trivandrum	2
	Chirayinkil	2
Quilon	Quilon	3
	Kottarakkara	3
	Pathanapuram	2
	Pathanamthitta	3
	Kunnathur	2
	Karunagappally	2
Alleppey	Karthikappally	2
	Mavelikara	2
	Chengannur	2
	Thiruvalla	3
	Kuttanad	1
	Ambalapuzha	3
	Sherthalai	2
Kottayam	Changanacherry	2
	Kanjirappally	2
	Kottayam	4
	Meenachil	4
	Vaikom	2
Idukki	Peermade	1
	Thodupuzha	3
	Udumbanchola	2
	Devicolam	1
Ernakulam	Cochin	1
	Kanayannur	3
	Parur	2
	Kunnathunad	3
	Moovattupuzha	3
	Kothamangalam	2
	Alwaye	2

<i>District</i>	<i>Taluk</i>	<i>No. of S. Is. posted</i>
Trichur	Kodungallur	1
	Mukundapuram	3
	Chavakkad	1
	Trichur	3
	Thalappally	3
Palghat	Chittur	2
	Alathur	2
	Palghat	2
	Ottappalam	3
	Mannarghat	2
Malappuram	Ponnani	1
	Tirur	2
	Perinthalmanna	2
	Ernad	3
Kozhikode	Badagara	2
	Kozhikode	3
	Quilandy	2
	South Wynad	2
Cannanore	Tellicherry	2
	Cannanore	1
	North Wynad	1
	Taliparamba	3
	Hosdurg	2
	Kasargode	2

Time Schedule

The time schedule for completing each item of work relating to the survey and the actual date of completion of these items is given below:

<i>Item</i>	<i>Schedule of completion of various items of Work</i>		
	<i>Due date</i>	<i>Date of Completion</i>	<i>Remarks</i>

A. Area enumeration

(i) *Wet land*

(a) Autumn season	August 1982	October 1982	
(b) Winter season	November 1982	January 1983	
(c) Summer season	March 1983	April 1983	

(ii) *Dry land*: Ist visit/2nd visit June 1983

B. Crop cutting**1. Paddy**

- | | |
|---------------------|---------------|
| (i) Autumn season | November 1982 |
| (ii) Winter season | February 1983 |
| (iii) Summer season | June 1983 |

- | | |
|------------------|-----------|
| 2. Tapioca | June 1983 |
| 3. Coconut | do. |
| 4. Arecanut | do. |
| 5. Cashew | do. |
| 6. Pepper | do. |
| 7. Mango | do. |
| 8. Ginger | do. |
| 9. Turmeric | do. |
| 10. Sweet potato | do. |

C. Sample check in Area and Yield estimation Surveys

- | | | | |
|---|-----------|----------|------|
| 1. Area check in wet land | June 1983 | | |
| 2. Area check in dry land | June 1983 | | |
| 3. Supervision of crop cutting experiments on paddy | Autumn | November | 1982 |
| | Winter | February | 1983 |
| | Summer | June | 1983 |
| 4. Supervision of Crop cutting experiments on Tapioca | | June | 1983 |

Training

Necessary Training was imparted to Officers at the Taluk and district levels. District level training programmes were organised for a total of 6 days in the State one day each devoted for 2 districts. The Officers from the National Sample Survey Organisation also participated in these conferences. Taluk level training programmes were also organised by the District level Officers.

Period of Survey

The reference period of the Survey was the agricultural year 1982-83 (July 1982 to June 1983).

Schedules and Instructions

No changes have been effected in the schedules for the Survey from those used in previous rounds.

Supervision

(a) Departmental Officers

The field work of the Survey was supervised by the Departmental Officers at taluk, District and State level. The taluk level supervision was conducted by Statistical Inspectors and Additional Statistical Inspectors. District Level supervision was done by Deputy Directors, District Officers and Additional District Officers and the State level inspection was carried out by the Joint Director, Additional Director and Director, frequently.

(b) Supervision by the Staff of Agriculture Department

The selection particulars for the Survey viz., list of villages, list of plots selected for the Crop cutting experiments etc., have been made available to the staff of Agricultural Department for associating them with the Inspection work. But their response was poor.

(c) Scheme for improvement of Crop-Statistics

The supervision work of area enumeration and Crop cutting Survey under the Scheme I.C.S. was conducted by this Department and National Sample Survey Organisation on 50:50 basis. The table No. 5 give the details of the work carried out by the Department.

Nature of Field difficulties in Area Enumeration

The intensity in the cropping pattern of the State makes the area enumeration a time consuming process. In wet lands, paddy is the main crop. Usually two crops of paddy are raised according to the availability of water resources. The area enumeration in wet lands does not present much difficulty as in the case of dry lands. However a few problems were present here also.

(i) The shifting of crop seasons

Wet lands are enumerated three times in a year corresponding to three crop seasons namely autumn, winter and summer. The investigator usually will visit a field for area enumeration only once in a season. During the early period of the crop season it may happen that the crop may not have been sown, but will; if the field is usually sown and harvested in that season as revealed by local enquiry; enumerate the area under the season but later due to unforeseen factors the sowing may be delayed resulting in a shift of the area under the crop to the next season. Similarly there are long duration and short duration paddy crops which the investigator may not be able to distinguish. The investigator on visiting the standing crop may be misled into entering a crop under a season but it may actually fall into the next season due to the long duration of the crop.

(ii) It has been instructed that a rough sketch may be drawn and area under season of visit marked. This is to identify the location of the patch in later visits and see whether the same patch remains uncultivated during the three seasons and in that case to record the area under current fallow. But in practice it has been found that the drawing of a sketch for the purpose is not easy as the investigator may not be able, in many cases, to find out the exact direction.

(iii) A lot of time is taken to identify the area in cases where conversion of wet land into dry land has taken place. The identification is difficult in cases where many contiguous Survey Nos. belonging to one cultivator lie in one stretch without any marking like Survey stones etc. The problem is made more difficult if conversion has also taken place.

(iv) Stretches of low lying wet lands where paddy is the only crop grown often get inundated by floods or breaches on bunds. The area enumeration has to be repeated to see whether the crop sown immediately preceding the floods or breach of bunds 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.

(v) In water logged area 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 crop grown is a time consuming process especially when these patches are not easily accessible. The area enumeration in dry lands poses many difficulties some of them are discussed below.

1. *Multiplicity of crops*

A garden land in Kerala often grows many crops, both seasonal and perennial.

2. In the Tranvanore-Cochin portion of Kerala, the area under crops, land utilisation etc., are recorded following the litho sub division which is the identification unit. The only 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, thereby 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 only the village maps are available. The primary

worker has therefore to go by the F.M.B. register with the village office. It has been reported that the primary reporter had to make repeated visits to the village offices to get the registers.

3. There are places where large areas are marked by minor circuit numbers in the land survey. This is found in the case of former unaccessible areas, but since then cultivated intensely. Since in these cases, the extent under a No. will be too large for identification, the area is divided according to the extent of land in the possession of different holders. In this case 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.

5. The number of palms/standards are converted into area by using norms of stand/hect. In plots where there are a number of crops grown and the population of trees/standards is intensive/scattered but spreadout the converted area may be larger/smaller than the physical area. This anomalous situation may lead to further contradiction in the gross and net area irrigated.

II. Crop Cutting

1. The harvesting date of paddy given by the cultivator is often not firm with the result that the investigator has to make repeated visits to conduct an experiment. In certain localities the farmer himself cannot fix a firm date as he has to harvest on a convenient date to avoid the over crowding of labourers. Sometimes harvesting is done very early in the morning and in rare cases even at night.

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

3. The labour charges allowed for one experiment on paddy namely Rs. 4 is inadequate. The cultivators cannot and usually do not provide labourer for harvesting as all labourers with him will be engaged in harvesting of the main field. In Kerala the labour charges are high and the investigators are finding it difficult to engage separate labour for harvesting with the charges now in vogue as per Government Orders.

4. The Land Reforms Act in Kerala vested with the Kudikidappukar, the right of ownership extending up to ten cents. Most of them are agricultural labourers and they leave 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 good nuts etc.

III. General

1. The work load of the primary reporter is very heavy. He has to cover about 2000 hectares, 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, arecanut, cashew, cocoa etc, and other minor crops. It was found impossible to cover completely the above items of work in any year. Even though two visits are conducted on dry lands the first visit to enumerate seasonal crops was uniformly the casualty in all the rounds including the round under report due to this shortage of primary workers.

2. Even though utmost vigilance has been exercised in keeping in position the sanctioned strength of primary reporters, rare instances to the contrary occurred due to certain administrative formalities which had to be observed. Any how the incidence of such cases were kept at a minimum.

3. It is feared that the heavy work load may adversely affect the equality of data collected. The quality of data collected at the fag end of the round when the balance quantity of work to be completed is disproportionately large leave much to be desired for. In spite of every attempt to keep the inflow of data uniform, lapses had occurred in many cases.

4. The absence of printing facilities with the Department has caused inconvenience in the conduct of the Surveys. The Government Presses or agencies over crowded with many items of urgent work usually is not able to deliver printed materials in time.

8. Estimation procedure

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

1. area under different utilisations.
2. Source wise area irrigated.
3. area under crops.

The estimates were prepared as follows:—

(a) Land utilisation and irrigation

The following notations are used.

N = No. of villages in the stratum (taluk)

n = No. of villages selected for area enumeration in the stratum

A = Area of stratum

a = area of selected village

a_j = area of j th selected village

y_{ij} = area under the i th utilisation in the j th selected village

y_i = estimate of the i th utilisation

$V(y_i)$ = estimate of the variance of y_i

Then y_i is given by

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

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

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

(b) *Area under crops*

The area under various crops are estimated as follows:—

- N :No. of villages in a stratum.
 n :no. of villages selected for area enumeration.
 w :Wet land area of the stratum.
 D :Dry land area of the stratum.
 w_j :Wet land area of the J th selected village.
 d_j :dry land area of the j th selected village.
 y_{ij} :area under i th crops in the wet land of j th selected village.
 x_{ij} :Area under i th crop in the dry land of j th selected village.
 y_i :estimate of the area under i th crop in wet land.
 x_i :estimate of the area under i th crop in dry land.
 z_i : $y_i + x_i$ —Total area under i th crop

$$y_i = \frac{\sum_{j=1}^n y_{ij} \times W}{\sum_{j=1}^n w_j}$$

$$x_i = \frac{\sum_{j=1}^n x_{ij} X D}{\sum_{j=1}^n d_j}$$

$$\begin{aligned} V(z_i) &= V(y_i) + V(x_i) \\ &= \frac{N(N-n)}{n(n-1)} \left\{ \sum_{j=1}^n (y_{ij} - R_{i_1} W_j)^2 + \sum_{j=1}^n (x_{ij} - R_{i_2} d_j)^2 \right\} \end{aligned}$$

$$\text{Where } R_{i_1} = \frac{\sum_{j=1}^n y_{ij}}{\sum_{j=1}^n w_j} \quad \Bigg/ \quad \frac{\sum_{j=1}^n w_j}{\sum_{j=1}^n w_j} \text{ and}$$

$$R_{i_2} = \frac{\sum_{j=1}^n x_{ij}}{\sum_{j=1}^n d_j} \quad \Bigg| \quad \frac{\sum_{j=1}^n d_j}{\sum_{j=1}^n d_j}$$

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

Analysis of Survey Results

During the period under report (1982-83) crop cutting experiments on paddy were conducted in all the taluks for autumn, 57 taluks for winter and 49 taluks for summer season. Besides, crop cutting experiments were conducted in 54 taluks for Tapioca 56 taluks for coconut, 45 taluks for arecaunt and 37 taluks each for cashew and pepper. Moreover crop cutting experiments were conducted on drumstick in all taluks and tubers in 57 taluks which are coming under minor crops. But in respect of sugarcane, crop cutting experiments were conducted only in 8 taluks and for betel-nut in 7 taluks of the State.

As far as the crop cutting experiments on paddy are concerned 96% each of the experiments planned for Autumn, and Winter and 99% for summer were conducted and analysed during the period under report. The percentage coverage of experiments in the case of Tapioca, coconut, arecanut, cashewnut and pepper was 99 each and that of Sugarcane, Betel leaves, Drumstick, Cocoa and Tubers was 88, 78, 95, 93 and 98 respectively.

Land Utilization

The estimated area under various land utilisations for the year under report together with the details from the year of starting of the survey 1975-76, 1980-81 and 1981-82 is given in table No. 6. The pattern has shown a declining trend in the net area sown to the extent of 0.29 per cent over 1981-82 and to 0.28 per cent with that of 1975-76 figures. In the case of land put under non agricultural uses there is an increase of 0.24 per cent over the last year but maintaining a higher trend recorded in 1975-76 to the extent of 0.42 per cent. The extent of current fallow remains same as that of 1981-82. In respect of other utilisations also the position remains same as that of 1981-82. The district-wise distribution of land utilisation is given in Table 7.

Area under different crops

The estimated area under important crops for the years 1975-76, 1980-81 to 1982-83 are given in Table No. 8. This shows that there is a decrease in the area under paddy, coconut, arecanut, tapioca and banana and plantain during the year under report to that of 1975-76. In respect of cashew, pepper and rubber it has registered an increase. The district-wise area under principal crops and percentage of sampling error are given in Table 9 to 14. The area under plantation crops and annual crops are given in Table 15 to 19. An analysis of the pattern of cultivation shows that there is a definite shift towards cash crops cultivation from that of food crops.

Area Irrigated

The estimates of area irrigated are given in Table 20. It is seen that the net area irrigated is 258744 hectares, which is about 11.87 per cent of the net area sown. The source-wise classification shows that the major source is Government canals which accounts for 22.05%. Area irrigated by other sources accounts for 19.94%. Palghat, Ernakulam and Trichur Districts share greater part of the irrigated area among the districts.

Production

The estimated production of important crops for the years 1975-76 to 1982-83 is given in Table 23. It is seen that the production of rubber, Banana and Plantation and autumn paddy has shown an increasing trend while other crops are concerned the production has shown declining trend when compared to 1975-76 figures. In respect of Tapioca and cashewnut the decrease is to the extent of 28 and 38 per cent to that of 1975-76. However the trend is reversed when compared to the production figures of previous year i. e., 1981-82. The decline noticed in cashewnut is lessened to 4% from 38%. In respect of Tapioca a production boost of plus 3% is registered from minus 29% in the previous year. Similarly the production of rubber has shown a 12% increase over the previous year.

DISTRIBUTION OF NUMBER OF TALUKS IN EACH DISTRICT AND NUMBER OF EXPERIMENT PLANNED

District	No. of Taluks where experiments were planned for each crop																						
	No. of Taluks	Paddy			Tapioca			Coconut			Arecanut			Cashew-nut			Pepper			Minor crops			
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
Trivandrum	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Quilon	6	6	6	5	6	6	6	6	3	5	1	..	..	6	2	6	2	6	6	6	6	6	6
Alleppey	7	7	7	6	6	7	4	3	3	3	3	..	..	7	7	7	7	7	7	7	7	7	7
Kottayam	5	5	5	4	5	5	4	1	5	..	..	..	..	5	4	5	4	5	5	5	5	5	5
Idukki	4	4	4	..	4	2	1	1	1	4	2	..	..	4	3	4	3	4	4	4	4	4	4
Ernakulam	7	7	6	6	5	7	6	3	5	5	..	..	..	7	5	7	5	6	7	7	7	7	6
Trichur	5	5	5	5	4	5	4	4	3	3	..	..	..	4	2	5	2	5	5	5	5	5	5
Palghat	5	5	5	4	5	5	2	3	2	2	2	..	..	5	3	5	3	5	5	5	5	5	5
Malappuram	4	4	4	4	4	4	3	4	3	3	..	..	..	4	3	4	3	4	4	4	4	4	4
Kozhikode	3	3	3	3	3	3	3	3	3	3	..	..	..	3	3	3	3	2	3	3	3	3	3
Wynad	3	3	3	3	3	3	3	3	3	3	..	..	..	3	3	3	3	3	3	3	3	3	3
Cannanore	5	5	5	5	5	5	5	5	4	4	..	..	..	5	4	5	4	5	5	5	5	5	5
State	58	58	57	49	54	56	45	37	44	8	7	58	39	57	57	57	57	57	57	57	57	57	57

TABLE 2

NUMBER OF EXPERIMENTS PLANNED IN EACH DISTRICT FOR EACH CROP AND NUMBER OF EXPERIMENTS ANALYSED (1982-83)

District	Number of experiments planned and Analysed under crop												
	Paddy						Other Crops						
	Autumn		Winter		Summer		Tapioca		Coconut		Areca nut		
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)	(13)
Trivandrum	120	119	120	117	46	42	126	124	50	50	25	25	25
Quilon	170	169	170	169	48	47	150	150	60	59	31	31	31
Alleppey	198	183	186	179	140	133	82	82	45	44	21	21	21
Kottayam	110	105	96	96	72	72	108	108	40	40	25	25	25
Idukki	36	29	48	47	..	..	56	56	20	20	10	10	10
Ernakulam	210	209	186	184	134	134	100	100	40	40	52	52	52
Trichur	142	137	140	138	114	109	106	106	45	45	50	49	49
Paigat	180	166	166	140	68	64	90	89	28	28	16	16	16
Malappuram	130	129	120	111	80	75	128	123	55	55	58	58	58
Kozhikode	84	76	84	84	62	61	90	90	75	75	40	40	40
Waynad	..	..	90	86	78	78	45	45	15	15	30	30	30
Cannanore	170	169	144	143	132	132	170	170	60	60	72	72	72
Slate	1550	1491	1550	1494	974	947	1251	1243	533	531	430	430	429

TABLE 2 (Contd.)

District	Minor Crops														Cocoa	
	Cashewnut		Pepper		Sugar Cane		Betel Leaves		Drumstick		Tubers		Cocoa			
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)		
Trivandrum	21	21	23	23	..	..	10	10	20	20	20	20	20	5	5	
Quilon-																
Pathanamthitta	25	25	30	30	5	5	..	..	30	30	30	30	28	20	20	
Alleppey	15	15	20	20	35	35	..	..	35	35	35	35	33	50	45	
Kottayam	5	5	35	35	..	..	..	..	25	25	25	25	25	20	20	
Idukki	5	5	65	62	20	10	..	..	20	10	10	20	20	20	10	
Ernakulam	18	18	27	27	..	..	10	9	35	35	30	30	30	40	35	
Trichur	21	21	18	18	..	..	5	5	25	23	25	25	24	20	17	
Palghat	41	41	10	10	25	25	..	..	25	25	25	25	25	30	30	
Malappuram	75	75	20	20	..	..	30	19	20	20	20	20	20	30	29	
Kozhikode	19	19	41	41	..	..	..	..	15	15	15	15	15	20	20	
Waynad	18	16	30	30	..	..	..	..	15	15	15	15	15	15	15	
Cannanore	135	135	70	70	..	..	..	..	25	25	25	25	25	30	30	
State:	398	396	389	386	85	75	55	43	290	278	285	280	300	272		

TABLE 3
 NUMBER OF EXPERIMENTS MISSED FOR PADDY AND TAPIOCA BY REASON (DISTRICTWISE) 1982-83

	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	..	1	..	..	..	..	..	3	..	..	..	4	..	..	..	2
Quilon	1	..	..	..	1	..	1	..	..	..	..	..	..
Alleppey	..	4	..	11	..	6	..	1	..	..	..	7	..	..	..	..
Kottayam	..	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Idukki	7	..	1	..	..	..	..	..	..	..	..	..	..
Ernakulam	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Trichur	..	5	..	..	..	1	..	1	..	..	..	5	..	..	..	..
Palghat	14	..	1	..	25	..	..	..	4	..	..	..	1
Malappuram	1	..	2	..	7	..	1	..	4	..	2	..	3
Kozhikode	8	..	..	..	..	..	..	..	1	..	..	..	..
Waynad	4	..	..	..	..	..	..	..	..
Cannanore	1	..	..	..	1	..	..	..	..	..	..	..	..
State	..	13	..	46	..	12	..	44	..	2	..	25	..	2	..	6

TABLE 4

NUMBER OF INVESTIGATORS ACCORDING TO NUMBER OF G. C. EXPERIMENTS ON PADDY
CONDUCTED BY THEM (1982-83)

<i>Number of experiments</i>	<i>Number of Investigators</i>		
	<i>Autumn</i>	<i>Winter</i>	<i>Summer</i>
4 experiments or less	658	700	639
5 to 8 experiments	50	50	38
More than 8 experiments	..	3	1
All	708	753	678

TABLE 5

OF VILLAGES EXPERIMENTS SUPERVISED BY ASSISTANT DIRECTOR, STATISTICAL OFFICERS
 UNDER THE SCHEME I.C.S. THE DUE DATE OF COMPLETION AND THE ACTUAL DATE
 OF COMPLETION (1982-83)

	Area enumeration		Crop cutting experiments on paddy				Remarks		
	No. of clusters for inspection	No. of clusters inspected	Due date of completion		Actual date of completion	No. of experiments allotted		No. of experiments supervised	Date of completion
			Wetland	Dry land						Wet land	Dry land
Autumn	2660	2660	30-10-1982	..	15-10-1982	160	154	14-11-1982	
Winter	2660	2660	30-1-1983	5-2-1983	15-1-1983	160	152	14-3-1983	
Summer	2660	2660	15-5-1983		30-4-1983	120	114	15-7-1983	
All	..	..	..	..	..	..	..	..

TABLE 6

LAND USE CLASSIFICATION 1975-76 to 1982-83

(1)	Area in Hectares (00')						Percentage		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	1975-76	1980-81	1981-82	1982-83	1975-76	1980-81	1981-82	1982-83	
Total Geographical area	38855	38855	38855	38855	100.00	100.00	100.00	100.00	
Forest	10815	10815	10815	10815	27.83	27.83	27.83	27.83	
Land under Non-agricultural uses	2592	2698	2664	2759	6.68	6.94	6.86	7.10	
Barren and uncultivable land	785	858	856	862	2.02	2.21	2.20	2.22	
Permanent pastures and Grazing Land	199	54	54	53	0.51	0.14	0.14	0.14	
Land under miscellaneous tree crops	842	639	552	547	2.18	1.64	1.42	1.41	
Cultivable waste land	1134	1290	1302	1302	2.92	3.32	3.35	3.35	
Fallow other than current fallow	230	269	268	274	0.59	0.69	0.69	0.71	
Current fallow	356	436	445	445	0.92	1.12	1.15	1.15	
Net area sown	21892	21796	21899	21798	56.35	56.11	56.36	56.07	

TABLE-7

TOTAL AREA AND CLASSIFICATION OF AREA IN EACH DISTRICT 1982-83 (AREA IN HECTARES)

District	Total geographical area according to village papers	Forest	Land put to Non-agricultural uses	Barren and uncultivable land	Permanent pastures and grazing lands	Land under miscellaneous tree crops
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Trivandrum	218600	49861	17555	2255	36	235
Quilon	474290	236048	24439	2181	37	465
Alleppey	182270	518	30800	576	15	153
Kottayam	219550	8141	18879	2112	66	346
Idukki	515048	260993	15445	17989	2215	15319
Ernakulam	235319	8123	33946	2662	166	1339
Trichur	299390	103619	22328	2443	157	1267
Palghat	438980	136257	32021	13888	300	9462
Malappuram	363230	103417	18773	7738	439	3725
Kozhikode	233330	41386	16030	1754	114	3003
Waynaad	212560	78787	5085	2675	84	4656
Cannanore	492930	54359	40607	30544	1682	14735
State	3885497	1081509	275908	86217	5311	54705

District	Cultivable waste land	Fallow other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area
(1)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	2284	1742	1162	143470	77813	221283
Quilon	1125	1209	1669	207117	84302	291419
Alleppey	2070	1192	2337	144609	67636	212245
Kottayam	1787	2263	2227	183279	41367	225096
Idukki	39374	1240	1919	161154	15023	176177
Ernakulam	5110	2675	3204	178094	76099	254193
Trichur	5473	2793	4561	156749	72106	228855
Palghat	25644	3108	6111	212189	115475	327664
Malappuram	14101	4029	9478	201530	48194	249724
Kozhikode	3132	1353	2364	164194	34161	198355
Waynad	6476	1449	1276	112072	19948	132020
Cannanore	23637	4372	8147	314847	30195	345042
State	130213	27425	444455	2179754	682319	2862073

TABLE 3

AREA UNDER IMPORTANT CROPS

	Area in Hectares				Percentage to total cropped area			
	1975-76	1980-81	1981-82	1982-83	1975-76	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Paddy	375043	349243	347098	342669	12.61	12.11	11.95	11.97
Autumn								
Winter	396392	354132	356073	352273	13.64	12.28	12.26	12.31
Summer	104587	98324	103700	83548	3.60	3.41	3.57	2.92
Total	876022	801699	806871	778490	30.15	27.79	27.77	27.20
Coconut	692945	651370	666618	674378	23.85	22.58	22.95	23.56
Areca nut	76618	61242	61251	60816	2.64	2.12	2.11	2.12
Cashew	109057	141277	139960	141307	3.75	4.90	4.82	4.94
Pepper	108251	108073	108242	107467	3.73	3.75	3.73	3.75
Tapioca	326865	244990	248069	227617	11.25	8.49	8.54	7.95
Rubber	206686	237769	237769	256283	7.11	8.24	8.18	8.95
Banana and Plantain	52280	49262	49989	48038	1.80	1.71	1.72	1.68

TABLE 9

AREA UNDER PRINCIPAL CROPS (DISTRICT-WISE) 1982-83 (PADDY)

District	Area under the crop (in Hect.)				Percentage sampling error			
	Autumn	Winter	Summer	Total	Autumn	Winter	Summer	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	14581	14375	435	29391	7.82	7.40	25.23	6.97
Quilon	24435	24458	708	49601	4.40	5.80	..	4.21
Alleppey	32545	26801	24516	83862	5.60	13.20	21.71	6.60
Kottayam	14181	13261	7154	34596	12.10	8.80	15.70	4.60
Idukki	3854	5236	159	9249	20.70	..	..	11.70
Ernakulam	40053	40877	15080	96010	3.40	6.20	7.10	3.40
Trichur	40661	49716	17334	107711	7.90	5.70	13.36	5.50
Palghat	89438	81044	2676	173158	3.80	3.40	30.44	3.00
Malappuram	36731	37450	4321	78502	6.00	7.40	18.62	4.29
Kozhikode	10086	14228	2174	26488	7.50	12.50	18.75	7.81
Wynad	71	24255	6156	30482	..	1.70	3.48	1.47
Cannaore	36033	20572	2335	59440	1.34	6.90	1.75	4.33
State	342669	352273	83548	778490	1.80	2.12	..	1.54

TABLE 10
AREA UNDER PRINCIPAL CROPS (DISTRICT-WISE) 1982-83 (TAPIOCA)

District	Area under crop (Hectare)				Percentage sampling error			
	Autumn	Winter	Summer	Total	Autumn	Winter	Summer	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	23781	23228	6724	53733	7.26	12.54	17.86	11.86
Quilon	15100	39483	842	55425	12.65	10.25	17.25	9.75
Alleppey	2115	11970	887	14972	3.26	8.93	3.07	8.90
Kottayam	1464	19575	429	21468	6.53	11.39	22.41	10.32
Idukki	1267	9683	48	10998	..	12.03	15.25	13.46
Ernakulam	2973	7121	688	10782	15.31	13.24	15.64	14.15
Trichur	934	4288	271	5493	10.26	9.78	8.78	9.02
Palghat	6902	5558	371	12831	11.40	9.12	8.52	6.75
Malappuram	6628	9628	1415	17671	10.81	12.44	16.41	11.31
Kozhikode	1747,	1163	244	3154	20.88	17.28	10.53	16.24
Wynad	844	1098	437	2379	..	..	..	..
Canmanore	1405	16598	768	18711	8.38	7.25	17.56	5.37
State	65160	149333	13124	227617	5.21	5.73	12.24	4.41

TABLE 11

AREA UNDER PRINCIPAL CROPS (DISTRICT-WISE) 1982-83 (COCONUT)

District	Number of Trees '000			Area (Hectare)	Percentage sampling error
	Bearing	Young	Total		
Trivandrum	10348	6388	16736	73727	1.00
Qilon	10630	7513	18143	85178	6.40
Alleppey	10189	4533	14722	62118	12.75
Kottayam	8697	2343	11040	50876	6.76
Idukki	1891	1149	3040	17371	27.72
Ernakulam	8761	5321	14282	62916	10.99
Trichur	8672	4911	13583	57312	5.75
Palghat	2741	2873	5614	23688	14.97
Malappuram	8401	5927	14328	60970	10.41
Kozhikode	15518	7801	23319	98392	9.16
Wynad	307	531	838	3535	..
Cannanore	10441	8115	18556	78295	12.22
State	96596	57605	154201	674378	3.12

TABLE IV

AREA UNDER PRINCIPAL CROPS (DISTRICT-WISE) 1982-83 (ARECANU I)

District	Number of Trees in '000		Total	Area (Hectares)	Percentage of sampling error
	Bearing	Young			
Trivandrum	5713	1345	7058	3306	5.59
Quilon	7690	1934	9624	4407	6.29
Alleppey	3851	2276	6127	2850	12.74
Kottayam	4024	1159	5183	2357	6.78
Idukki	3496	1752	5248	2387	9.91
Ernakulam	11304	2357	13661	6242	6.34
Trichur	11830	2394	14224	6468	9.07
Palghat	3612	1489	5101	2395	23.57
Malappuram	15825	3237	19062	8945	9.06
Kozhikode	9365	1870	11235	5270	16.29
Wynad	1970	932	2902	1361	1.79
Cannanore	20010	7016	27026	14858	1.27
State	98690	27761	126451	60816	

TABLE 13

AREA UNDER PRINCIPAL CROPS (DISTRICT-WISE) 1982-83 (CASHEW)

District	No. of Trees '000	Area in Hectares	Percentage of sampling error
Trivandrum	..	6693	25.37
Quilon	..	8750	14.80
Alleppey	..	3730	20.41
Kottayam	..	1613	8.84
Idukki	..	1227	12.92
Ernakulam	..	4107	17.00
Trichur	..	7667	10.40
Palghat	..	13190	12.05
Malappuram	..	21080	12.29
Kozhikode	..	4220	24.63
Wynaad	..	997	..
Cananore	..	68033	4.73
State	..	141307	3.72

TABLE 14

AREA UNDER PRINCIPAL CROPS (DISTRICT-WISE) 1982-83 (PEPPER)

<i>District</i>	<i>No. of Standards ('000)</i>	<i>Area in Hectares</i>	<i>Percentage sampling error</i>
Trivandrum	..	5436	37.36
Quilon	..	10196	8.80
Alleppey	..	4816	6.36
Kottayam	..	12286	23.39
Idukki	..	12182	13.88
Ernakulam	..	6532	4.61
Trichur	..	4173	28.17
Palghat	..	1546	7.74
Malappuram	..	4298	29.15
Kozhikode	..	12502	12.38
Wynad	..	7661	..
Cannanore	..	25839	12.53
State	..	107467	7.43

TABLE 15

AREA UNDER PLANTATION CROPS (DISTRICT-WISE) 1982-83

(Area in Hectares)

District	Rubber	Tea	Coffee	Cardamom
Trivandrum	10158	1011	48	164
Quilon	38666	1552	378	149
Alleppey	4814	..	21	..
Kottayam	62454	2137	958	22
Idukki	24285	23838	4783	45172
Ernakulam	25316	2	247	..
Trichur	9445	447	33	..
Palghat	13866	665	2351	3274
Malappuram	19330	174	..	184
Kozhikode	17822	..	..	412
Wynad	2945	5389	49086	4251
Cannanore	27182	..	..	760
State	256283	35205	57905	54388

TABLE 16

AREA UNDER ANNUAL CROPS (DISTRICT-WISE) 1982-83

(Area in hectares)

District	Banana	Plantain	Sugarcane	Pineapple	Betel leaves
(1)	(2)	(3)	(4)	(5)	(6)
Trivandrum	754	5196	31	402	150
Quilon	1647	3275	350	618	183
Alleppey	830	2529	3101	227	80
Kottayam	1245	3306	309	577	94
Idiuki	164	2018	1751	376	6
Ernakulam	2043	3773	41	568	98
Trichur	1228	3171	5	291	73
Pal hat	1467	2210	2175	266	4
Malappuram	2159	2095	9	144	295
Kozhikode	946	1992	3	105	38
Wynad	468	1347	15	160	2
Cannanore	1175	3000	24	732	26
State	14126	33912	7814	4466	1049

TABLE 17

AREA UNDER SEASONAL CROPS (DISTRICT-WISE) 1982-83

(Area in hectares)

District	Pulses		Total	Jowar	Ragi	Other cereals and millets	Chillies	Ginger	Turmeric
	Kharif pulses	Rabi pulses							
Trivandrum	191	2473	2664	..	19	29410	..	158	99
Quilon	958	983	1941	..	7	49608	..	1312	90
Alleppey	66	658	724	..	4	83866	..	187	22
Kottayam	308	1827	2135	..	4	34600	..	2988	552
Idukki	189	827	1016	25	212	9711	..	1054	192
Ernakulam	535	872	1407	5	7	96202	..	1945	104
Trichur	2101	674	2775	11	36	107862	..	78	186
Palghat	3874	6579	10453	1130	884	176885	274	340	286
Malappuram	230	527	757	..	15	78586	84	399	92
Kozhikode	222	1042	1264	..	28	26519	75	1600	179
Wynad	6	87	93	..	1	30483	..	1158	175
Cannanore	38	4788	4826	60	16	59583	817	1443	330
State	8718	21337	30055	1231	1233	783315	1250	12662	2847

TABLE 18

AREA UNDER OTHER SEASONAL CROPS

District	Sweet potatoes	Tubers	Lemon grass	Vegetables	Sesamum	Ground nut	Cotton	Tobacco
Trivandrum	158	1793	3	555	14	8	..	..
Quilon	64	6246	2	345	2226	..	..	..
Alleppey	51	6666	1	1003	4601	..	..	..
Kottayam	23	2535	4	963	49	..	..	..
Idukki	168	1492	160	1112	299	..	..	..
Ernakulam	54	2316	65	2559	2372	..	..	..
Trichur	135	2426	8	1074	982	1	..	..
Palghat	1723	1078	13	2022	945	10184	5900	..
Malappuram	1666	2007	2	1784	2215	3	..	..
Kozhikode	91	1939	13	287	26	..	..	..
Wynad	17	957	32	293	128	..	..	..
Cannanore	856	783	38	1891	305	80	..	536
STATE	5006	30238	341	13888	14153	10276	5900	596

TABLE 19

AREA OF OTHER PERENNIAL CROPS (DISTRICT-WISE) 1982-83

(Area in hectares)

District	Jack	Mango	Tamarind	Pappaya	Drumstick	Palmynash	Close	Nutmeg
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	7150	7487	1710	616	3160	460	130	90
Quilon	5347	6203	820	528	1543	36	80	113
Alleppey	3403	4730	228	644	853	470	27	180
Kottayam	4267	4071	482	640	1227	470	380	503
Idukki	2937	1743	190	758	447	220	47	147
Ernakulam	4410	4990	810	1064	1200	377	153	1333
Trichur	3873	4660	1533	1560	787	860	10	237
Palghat	4220	5413	2723	564	767	6747	10	100
Malappuram	5417	6109	1217	1368	1080	1278	3	119
Kozhikode	5930	5837	593	988	2195	303	13	438
Wynad	6347	2799	129	88	95	232	7	8
Cannanore	6689	6173	543	850	647	180	3	535
STATE	59990	60205	10978	9668	13901	11633	883	3408

TABLE 19 (Contd.)

District	Cinnamon	Cocoa	Other fruit crops	Other oil seed crops.	Fodder grass	Green mature crops	Other manfood crops
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Trivandrum	10	1060	1242	221	215	395	1690
Quilon	27	1162	456	60	287	693	1436
Alleppey	16	2430	691	97	161	268	942
Kottayam	56	5894	642	144	297	188	2242
Idukki	25	1960	956	121	279	160	2269
Ernakulam	34	2176	685	242	114	223	5632
Trichur	35	724	504	145	74	344	2094
Palghat	240	194	2300	606	30	950	12673
Malappuram	13	458	592	95	31	2229	4688
Kozhikode	120	705	824	116	17	912	2163
Wynad	7	331	936	58	76	454	5673
Cannanore	350	1160	1777	125	186	1571	12914
STATE	933	18254	11605	2030	1767	8387	54415

SOURCE WISE IRRIGATION (HECTARES) 1982-83

District	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Government Canal	Private Canal	Government Tanks & wells	Private Tanks & wells	Mixt & lift Irrigation	Other sources	Total
1. Trivandrum		6520	13	1214	1516	1519	1345	12127
2. Quilon		614	250	135	580	348	1897	3824
3. Alleppey		3886	6	213	13668	3927	3346	25046
4. Kottayam		418	20	553	868	637	2687	5183
5. Idukki		1467	84	207	108	108	1324	3298
6. Ernakulam		19424	100	1240	9297	14357	6570	50988
7. Trichur		18976	685	857	7942	4808	7133	40371
8. Palghat		48800	364	257	9439	1407	3487	63754
9. Malappuram		724	619	167	7594	6826	7598	23468
10. Kozhikode		3382	144	198	764	1733	1311	7472
11. Wynad		2	167	9	79	29	5502	5788
12. Cannanore		108	1904	281	5223	455	9454	17425
State		104321	4356	5271	57048	36154	51594	258744

TABLE 21

AREA UNDER IRRIGATION—CROP-WISE 1982-83

District	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Trivandrum	9313	37	286	963	4	11	6	329	97	2	1236	12284	
2. Quilon	5811	6	237	69	2	11	..	23	129	2	1466	7756	
3. Alleppey	12531	179	236	18930	49	70	118	228	31	161	1052	33585	
4. Kottayam	4150	10	240	23	..	161	37	..	32	..	1679	6432	
5. Idukki	3495	..	12	29	2	21	15	4	..	.84	29	3691	
6. Ernakulam	63775	..	53	8641	696	438	179	855	17	..	2581	77235	
7. Trichur	53093	43	257	27296	2451	85	431	646	26	..	1489	85817	
8. Palghat	80422	3	345	2018	1192	13	116	549	4	641	1021	86324	
9. Malappuram	18999	387	758	2970	2089	..	..	1116	274	4	1165	27162
10. Kozhikode	3761	29	160	168	44	3	4	721	22	..	2707	7619	
11. Wynad	7270	5	90	11	3	..	..	41	..	..	110	7530
12. Cannanore	17420	88	1202	6029	6451	20	385	1024	26	12	1086	33711	
State	279440	785	3876	67147	12983	833	1291	5636	658	906	15591	389146	

IRRIGATED AND UNIRRIGATED AREA UNDER HIGH YIELDING AND OTHER VARIETIES
(AUTUMN PADDY) (IN HECTARES) 1982-83

40

District	High Yielding		Other varieties		Total			
	Irrigated	Unirrigated	Total	Irrigated	Unirrigated	Total	Irrigated	Unirrigated
Trivandrum	854	1020	1874	10397	13561	23958	11251	14581
Quilon	14514	14870	29384	9495	9565	19060	24009	24435
Alleppey	9509	9509	19018	23036	23036	46702	32545	32545
Kottayam	7681	7839	15520	6152	6342	12494	13833	14181
Idukki	1405	2437	3842	1204	1417	2621	2609	3854
Ernakulam	9060	15750	24810	19987	24303	44290	29047	40053
Trichur	3293	3437	6730	34925	37224	72149	38218	40661
Palgnat	37767	48995	86762	38636	40443	79079	76403	89438
Malappuram	3547	3651	7198	32978	33080	66058	36525	36731
Kozhikode	893	893	1786	9193	18386	18386	10086	10086
Wynad	..	..	..	71	71	142	71	71
Cannanore	4653	4687	9340	31285	31346	62631	35938	36033
State	93176	113088	206234	217359	229581	446940	310535	342669

TABLE 22 (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
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	80	158	238	5868	8268	14137	5948	8427
Quilon	485	1122	1607	4396	18455	22851	4881	19577
Alleppey	1314	756	2070	1587	23144	24731	2901	23900
Kottayam	1640	5496	7136	1963	4762	6125	3003	10258
Idukki	1538	93	1631	2221	1384	3605	3759	1477
Ernakulam	1497	131	1628	30897	8352	39249	32394	8483
Trichur	2784	1066	3850	28464	17402	45866	31248	28468
Palghat	25149	684	25833	38905	16306	55221	64054	16990
Malappuram	1301	819	2120	13134	22196	35330	14435	23015
Kozhikode	133	369	502	1080	12646	13726	1213	13015
Wynad	717	1141	1858	4895	17502	22397	5612	18643
Cannanore	2097	1297	3394	12220	4958	17178	14317	6255
State	38735	13132	51867	145030	155376	300406	183765	168508

TABLE 22 (c)

IRRIGATED AND UNIRRIGATED AREA UNDER HIGH YIELDING AND OTHER VARIETIES
(SUMMER PADDY 1982-83 IN HECTARES)

District	High Yielding			Other varieties			Total	
	Irrigated	Unirrigated	Total	Irrigated	Unirrigated	Total	Irrigated	Unirrigated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	268	38	306	126	3	129	394	41
Quilon	199	63	262	340	206	446	539	169
Alleppey	7713	1064	8777	2495	13241	15739	10211	14305
Kottayam	1728	2000	3728	1673	1753	3426	3401	3753
Idukki	53	..	53	106	..	106	159	..
Ernakulam	1430	..	1430	13650	..	13650	15080	..
Trichur	8992	..	8992	8337	5	8342	17329	5
Palghat	1036	..	1036	1640	..	1640	2676	..
Malappuram	2559	26	2585	1695	41	1736	4254	67
Kozhikode	1186	31	1217	811	146	957	1997	177
Wynad	2393	12	2405	3742	9	3751	6135	21
Cannanore	576	73	649	2155	31	2186	2731	104
State	28133	3307	31440	96773	15335	52108	€4906	18642

TABLE 23

PRODUCTION OF IMPORTANT CROPS 1975-76 to 1982-83

	Production in Tonnes (00)			Percentage increase or decrease		
	1975-76	1981-82	1982-83	1975-76	1981-82	1982-83
Rice						
Autumn	5523	5569	5788	+4.80	+3.93	+3.93
Winter	5980	5892	5657	-5.57	-3.99	-3.99
Summer	1809	1933	1617	-10.61	-16.35	-16.35
• Total	13312	13394	13062	-1.88	-2.38	-2.38
Coconut (Million nuts)	3439	3006	3184	-7.41	+5.92	+5.92
• Arecanut (,)	11387	10702	11027	-3.16	+3.04	+3.04
Cashew	1224	789	755	-38.32	-4.31	-4.31
Pepper	246	275	245	-0.41	-10.91	-10.91
Tapioca	59502	37451	38487	-28.60	+2.77	+2.77
Rubber	1288	1395	1527	+18.56	+30.97	+30.97
Banana & Plantain	2510	3275	2894	+15.29	-11.63	-11.63
Cardamom	32	28	19	-40.63	-32.14	-32.14

TABLE 24

NET AREA IRRIGATED (SOURCE-WISE) 1982-83

District	Government Canal	Private Canal	Government Tanks & wells	Private Tanks & wells	Minor & Lift Irrigation	Other Sources	Total
Trivandrum	6520	13	2214	1516	1519	1345	12127
Quilon	614	250	135	580	348	1697	3824
Alleppey	3886	6	213	13668	3927	3346	25046
Kottayam	418	20	553	868	637	2687	5183
Idukki	1467	84	207	108	108	1324	3298
Ernakulam	19424	100	1240	9297	14357	6570	50988
Trichur	18976	685	857	7912	4808	7133	40371
Palghat	48800	364	257	9439	1407	3487	63754
Malappuram	724	619	167	7594	6826	7538	23468
Kozhikode	3382	144	138	764	1733	1311	7472
Wynad	2	167	9	79	29	5502	5788
Cannanore	108	1904	281	5223	455	9454	17425
State	104321	4856	5271	57048	36154	51594	258744

TABLE 25

District	Paddy	Tubers	Vege- tables	Coconut	Areca nut	Cloves, Nut- meg etc.	Other spices & condiments	Banana	Betel leaves	Sugar- cane	Others	Total
Trivandrum	9672	37	286	963	4	11	6	329	97	2	1236	12643
Quilon	5845	6	237	69	2	1	..	23	129	2	1466	7791
Alleppey	13112	179	236	18730	49	70	118	228	31	161	1052	33966
Kottayam	6752	10	240	23	..	161	37	100	32	..	1679	9034
Idukki	5163	..	12	29	2	21	15	4	..	84	29	5359
Ernakulam	58480	..	53	8641	696	438	179	855	17	..	2581	71940
Trichur	51020	43	257	27296	2451	85	431	646	26	..	1489	83744
Palghat	79765	3	345	2018	1192	13	116	549	4	641	1021	85667
Malappuram	18895	387	758	2970	2089	..	..	765	274	4	1165	27307
Kozhikode	3210	29	160	368	44	3	4	1072	22	..	2707	7619
Wynad	11747	5	90	11	3	..	..	41	..	..	110	12007
Cannanore	17143	86	1202	6029	6451	20	385	1024	26	12	1056	33434
State	280805	785	3876	67147	12983	833	1291	5636	658	906	15591	390511

TABLE 26

PRODUCTION OF IMPORTANT CROPS (IN TONNES) 1982-83

District	RICE											
	Autumn	Winter	Summer	Total	Jowar	Ragi	Oth or cereals	Pulses	Sugar-cane (gur)	Black pepper	Dry chillies	Dry ginger
Trivandrum	23174	22108	547	45829	..	16	..	637	142	1098	..	386
Quilon	43592	41288	966	85846	..	6	..	1527	2018	2712	..	3553
Alleppey	46026	43127	60615	149768	..	3	..	590	17880	535	..	461
Kottayam	30748	28647	24149	83544	..	3	..	1529	1782	2211	..	7966
Idukki	9124	11341	160	20625	11	182	144	825	9347	1888	..	2442
Ernakulam	65388	63216	21214	149818	2	6	115	1007	236	882	..	4876
Trichur	52509	68382	28502	149393	4	30	67	1981	29	826	..	81
Palghat	209159	151679	4373	365211	463	610	1096	6449	11610	240	243	568
Malappuram	40717	50260	7747	98724	..	13	44	562	48	1302	74	709
Kozhikode	9310	16758	2320	28388	..	26	2	962	16	3000	66	3850
Wynad	64	40406	7771	48241	..	1	..	71	80	2881	..	2786
Cannanore	49107	28492	3301	80810	27	24	43	3764	128	6951	760	3903
State	578928	565704	461665	1306197	507	920	1511	19904	43316	24526	1143	31581

TABLE 26 (Continued)

District	Cured turmeric	processed cardamom	Betel nuts (million nuts)	Tama-rind	Mango	Jack (no. in 000)	Banana	Other plantain	Raw cashewnut	Tapioca	Sweet Potato	
Trivandrum	76	3	343	4335	21525	23631	7431	24275	2918	859728	954	13756
Quilon	170	5	684	1697	27064	18859	14518	10811	5653	903428	386	4295
Alleppey	43	..	262	164	8496	20153	5743	6429	1360	251979	308	3330
Kottayam	979	1	358	543	24153	16791	17139	15148	118	445032	139	4345
Idukki	330	1560	290	236	2977	9011	1751	10413	639	286828	1082	1516
Ernakulam	1265	..	1074	1098	32365	21366	22448	14375	3318	207554	326	4414
Trichur	291	..	1573	3190	20010	15089	19062	8279	4455	102060	815	6904
Palghat	459	116	376	7102	14853	15800	18374	3960	2598	185151	11181	4185
Malappuram	139	6	1361	2165	52971	26207	26905	6048	9486	220534	11924	8694
Kozhikode	408	9	1583	1431	20406	27100	11903	6655	4963	38952	545	4940
Wynad	399	145	341	311	9785	29006	5889	4500	167	58761	108	685
Madhanore	633	55	2782	930	32884	31933	13750	13593	39800	288711	5910	4208
State	5192	1900	11027	23202	267489	254946	164913	124486	75495	3848718	39078	61272

TABLE 26 (Continued)

District	Ground-nut	Sesamum	Coconut (mill nuts)	Cotton (bales of 170 kg)	Tobacco	Lemon grass oil	Tea	Coffee	Rubber	cocoa	Pineapple	Drum-stick
Trivandrum	7	4	279	..	..	3	943	22	6319	20	5226	3795
Quilon	..	534	319	..	..	2	681	171	26812	41	7416	1534
Alleppey	..	828	367	..	..	1	..	10	2917	182	2270	541
Kottayam	..	9	226	..	..	4	289	433	39681	454	6347	475
Idukky	..	60	45	..	..	160	34413	2167	14543	339	4512	469
Ernakulam	..	688	332	..	..	65	..	112	15639	228	6248	948
Trichur	1	265	355	..	..	8	903	15	6283	53	2328	1399
Palghat	8992	265	80	9336	..	13	1349	1075	5435	4	2394	769
Malappuram	3	775	261	..	..	2	73	..	10522	22	1584	1134
Kozhikode	..	8	622	..	..	13	..	..	10683	41	1365	2070
Wynad	..	38	6	..	..	32	6788	17780	1279	33	2080	102
Cannanore	71	174	292	..	987	38	..	..	12549	44	12444	701
State	9074	3648	3184	9336	987	341	45439	21785	152662	1461	54214	13937

234.

Government of Kerala
1987

PRINTED BY THE S. G. P. AT THE GOVERNMENT PRESS,
TRIVANDRUM, 1987.