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GOVERNMENT OF KERALA

REPORT ON CROP CUTTING SURVEY

ON

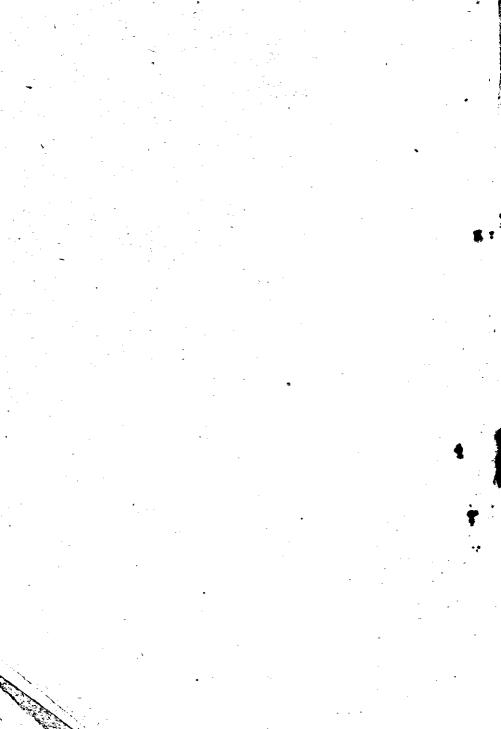
AUTUMN CROP OF PADDY, 1975

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GOVERNMENT OF KERALA 1976

BUREAU OF ECONOMICS AND STATISTICS TRIVANDRUM March 1976

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CONTENTS

- Introduction
- 2.1 Objectives of the Survey
- 2.2 Period of the Survey
- 2.3 Coverage and sample lize
- 2.4 Sampling design
- 2.5 Sample selection
- 2.6 Field work
- 2.7 Analysis
- 2.8 Procedure of Estimation
- 2.9 Results of the Survey.

APPENDICES

- 1. Table 1.1 Area, Mean Yield and production of Rice in each Taluk during Autumn 1975.
- 2. Table 1.2 Area, Mean Yield and production of rice in each District during Autumn 1974 and 1975.
- Table 1.3 Analysis of variance of plot yields for Autumn 1975.
- 4. Table 1.4 Frequency distribution of plot yields for Autumn 1975.
- 5. Table 1.5 Results of driage experiments for Autumn 1975.
- 6. Table 1.6 Independent estimate of Mean Yield of Paddy based on harvest stage inspection in Autumn 1975.
- 7. Table 1.7 Mean yield for Autumn season for each Taluk for 6 years from 1970 to 1975.
- 8. Table 1.8 Season-wise area, mean yield and production of rice in Kerala during the period from 1968-69 to 1975-76.
- Table 2.1 Area, Mean Yield and production of High Yielding and other varieties of Paddy in Autumn 1975.
- Table 2.2 Area, Mean Yield and production of High Yielding varieties of Paddy in each District during Autumn 1974 and 1975.
- 11. Table 2.3 Distribution of experimental plots with high yielding varieties of paddy according to varieties raised in Autumn 1975.

- 12. Table 2.4 Average yield of high yielding varieties -Autumn 1975
- 13. Table 2.5 Yield rate of high yielding and other varieties of paddy according to cultivation practices.
- 14. Table 3.1 Response percentage-Autumn 1975.
- 15. Table 3.2 Details of Non-response Autumn 1975.
- 16. Table 3.3 Workload of Primary Works—District wise allocation—Autumn 1975.
- 17. Table 3.4 Workload of Primary Workers according to performance-Autumn 1975.
- 18. Table 3.5 No. of experiments inspected Autumn 1975.

CROP CUTTING SURVEY ON AUTUMN CROP OF PADDY, 1975

1. Introduction:

The Bureau of Economics and Statistics is regularly conducting yield estimation surveys on two of the most important food crops viz. Paddy and Tapioca in the state every year. The main objective of these sample surveys is to estimate productivity as well as the total production in the state. As far as paddy is concerned the survey is conducted separately during each of the three seasons viz. Autumn (Virippu), Winter (Mundak n) and Summer (Punja) in an year.

Usually the results of the yield estimation surveys on paddy are published in two reports, one for Autumn crop and the other for winter and Summer crops together. As far as the agricultural year 1975-76 is concerned the present report deals with the survey on autumn crop of paddy.

2,1. Objectives of the survey:

The main objectives of the survey conducted during the Autumn 1975 were:

- (i) to estimate the average yield of paddy per hectare for each taluk,
- (ii) to estimate the average yield per hectare for each district and the state as a whole and
- · (iii) to estimate the total production of rice in the state during the season.

It was also intended to frame estimates of productivity of high yielding varieties of paddy as well as for diff rent cultivation practices like the application of chemical fertilisers, adoption of irrigation etc. at the district and the state level.

2 2 Period of the survey

The period of the survey was from August 1975 to October 1975. The field work for the survey was conducted during this period in all the taluks where the crop was raised during the season.

2.3. Coverage and sample size:

The survey was conducted in 53 out of 57 taluks in the state. The cultivation of Autumn paddy was reported to be negligible in Peermade, Udumbanchola, South Wynad and North Wynad taluks and as such no crop cutting experiment was planned in these 4 taluks in the state during the season.

The number of crop cutting experiments to be conducted in a taluk was fixed at 18.

2.4. Sampling design:

A stratified multi-stage random sampling design was adopted for the survey. Each taluk was treated as the stratum, census village as the first stage unit, a survey sub division number as the second stage unit, a kandom as the third stage unit and a square plot of side 5 metres as the ultimate sampling unit. From each of the talak, six census villages were selected, by simple rand m sampling method, from the list of paddy growing census villages. From each of these selected villages a systamatic sample of three survey sub-livision numbers were selected from the frame consisting of the list of wet land survey sub-divisions. In survey sub-divisions having more than one kandom, one kandom was randomly selected and a square plot of side 5 metres was located at random in the selected kandom. the square plot was harvested, threshed, winnowed and weighed.

A sample of grain weighing not less than 250 gms. was collected from every 5th experimental plot harvested and forwarded to the Statist cal Inspector for conducting driage experiments for estimating the loss due to driage of wet grain.

2.5. Sample selection:

The selection of census villages in each taluk for the conduct of the survey was done by the District Statistical Officers and the list of selected villages was forwarded to the concerned Statistical Inspectors with instructions to select the plots (survey sub-division numbers). The selection of kandom, if the number of kandoms in the selected survey sub-division was more than one, and location of the square plot of side 5 metres were done by the

The list of selected census villages was also forwarded to the Assistant Director N. S. S. (O), Trivandrum for facilitating inspection of the survey especially at harvest stage by the inspecting staff of N. S. S. Organisation.

Field work :

The field work of the survey was attended to by the Investigators under the immediate supervision of the statistical inspectors. The District Statistical Officers were also made responsible for the supervision of the field work of the survey.

During the season under reference 889 experiments out of 948 planned, were conducted. The percentage response came to 94. The percentage response of the experiment in each district was worked out separately and the same is given in Table 3.1. in the appendix. The reason-wise nonresponse of experiments is presented in Table 3.2 in the appendix. As in the previous seasons it was found that the reason for the loss of experiments in a very large number of cases was due to prior harvest in the experimental plots by the cultivators (ie. harvesting the crop in the experimental plots before the fixed date and time of harvest without informing the Investigator in advance).

According to the regular programme of work, only 102 Investigators were posted to attend to the field work of this survey. But as a result of introduction of the Timely Reporting Scheme in the State from 15th September 1975, the number of Investigators attending to the field work of crop cutting survey has again been reduced to 57, at the rate of one Investigator in each taluk. However, as in the past, the Investigators attached to other surveys were drafted to attend the crop cutting survey on paddy at the peak harvesting season. During Autumn 75, the field work of this survey was initially allotted to 133 Investigators in the state. But only 129 of them actually participated in the conduct of survey. The allocation of field work to the Investigators according to the number of experiments in the different districts are given in Table 3.3 in the appendix. The distribution of Investigators according to the number of experiments actually conducted by them in the various districts are presented in Table 3.4 in the appendix. It is seen from this table that about 61% of the Investigators had conducted 5 to 8 experiments per head during the season. More than 8 experiments per head were done by about 26% of them while 13% of the Investigators had done only 4 experiments or less per head. The average number of experiments conducted per Investigator came to 6.9 when the total number of experiments analysed during the season were taken into consideration.

Two schedules were prescribed for the field work, one preliminary schedule and the other final schedule. The Investigator was instructed to fill up the preliminary schedule at the time of his first visit to the selected plot while the final schedule at the time of conducting crop cutting experiment in the plot.

The field work of the survey was inspected at 3 stages viz. pre-harvest, harvest and post-harvest by the Statisticals Inspectors and District Statistical Officers. In the case of harvest stage inspection, targets have been fixed for these two categories of supervising officials. The Statistical Inspector will have to inspect the crop cutting experiment at harvest stage at the rate of one experiment in each village selected for the conduct of the survey in his taluk. The District Statistical Officer will have to inspect one experiment in each taluk besides inspecting pre-assigned sample of 3 experiments in his district. During the season under reference about 39% of the experiments included for analysis were inspected at harvest stage and nearly 82% of this supervision was exercised by the Statistical Inspectors. About 31% of the experiments were inspected at pre-harvest stage and the percentage of inspection conducted at post harvest stage came to about 7. The number of experiments inspected at the three stages together with their percentages in all the districts of the state during Autumn 75 are given in Table 3.5 in the appendix.

2.7 Analysis:

The analysis of the data collected through the survey was done at the headquarters of the Bureau by the Agricultural Statistics unit.

2.8 Procedure of Estimation:

(i) Mean yield:—The taluk wise mean yield of dry paddy and its standard error were estimated using the following formula.

Taluk mean yield
$$= \frac{k}{x} = \frac{k}{\sum} \sum_{i=1}^{n} x_{i} i$$
 $\begin{vmatrix} k \\ \sum n_{i} \\ i=1 \end{vmatrix}$

Where n i = Number of experiments conducted in the ith village (i = 1, 2, 3, ..., k)

xij = Weight of paddy obtained from the j th experiment in the ith village/kara (j = 1, 2, 3.....ni)

Each cut (experiment) is taken from 5 metre square (1/400th of a hectare).

I fean yield of dry paddy in kg. per hectare $= x \times 400 \times d$ where d is the driage ratio of dry paddy to wet paddy.

(ii) Standard Error (S. E.) of taluk mean yield: Variance of the taluk

mean yield =
$$\frac{A}{N} + \frac{B-A}{m} \times \frac{\sum_{i=1}^{k} n^{i}i}{N^{2}}$$

Where A = Mean square within karas.

B = Mean square between karas.

 $N = \text{Total number of experiments conducted in the taluk} \begin{pmatrix} k \\ \sum ni \\ i = 1 \end{pmatrix}$

ni = Number of experiments conducted in the ith village/kara

$$m = \frac{N^2 - \sum ni^2}{N(k-1)}$$
 and

k = Number of villages selected in the taluk.

The standard error (S. E.) is the square root of this variance. The standard error in Kg./Hectare is obtained by multiplying this root of variance with 400.

(iii) Standard Error of the State Mean Yield: The formula used for the purpose is indicated below.

The Standard Error of the State Mean Yield = $\sqrt{\frac{\ge (a \ i \ s \ i)^{2}}{(\ge a \ i \)^{2}}}$

Where a i = Area under the crop in the i th taluk and

s i = The Standard Error of the estimate of mean yield in the i th taluk.

The data on area under paddy in each taluk estimated from the Land Utilisation Survey of this department have been utilised to compute the production of rice.

The weight of cleaned rice is reckoned as 65.7% of dry paddy.

2.9 Results of the survey:

The total production of rice in the State during Autumn 75 was estimated to be 585,068 tonnes. The rice production in the State has gone up by about 50 thousand tonnes during the season compared to the Autumn season of 1974-75. This was mainly due to t e increase in productivity at the State level by about 9%.

The estimated area, mean yield and its standard error, production of rice together with the number of crop cutting experiments analyses in each taluk during Autumn 75 are given in Table 1.1 in the appendix.

For facilitating comparison the estimated area, mean yield and production of rice in all the di tricts of the State during the Autumn season of the last year as well as the Autumn season under report are presented in Table 1.2 in the appendix. This table revealed that the district level productivity has shown increase in 7 out of 11 districts from its position in Autumn 1974. The increase was conspecuous in Malappuram and Alleppey districts. The increase in the production also was found to be more in those two districts during Autumn 1975, compared to the Autumn's ason of the last agricultural year. The decrease in productivity of paddy and resultant fall in the out turn of rice was found in Kottayam, Trichur, Kozhikode an i Cannanore districts. It was reported that there was unrimely heavy rain and flood especially at the time of harvest which caused considerable damages to the crops in different paris of these districts. The crops in 7 experiment I plots were reported to be completely damaged, 3 in Crangannur taluk one each in Kottayam, Parur, Tirur and Etnad taluks due to heavy rain and flood. Besides, prolonged rains at the time of harvest has resulted in the loss of straw to a considerable extent in some parts of the State during the season.

Unlike in the last Winter and Summer seasons of 1974-75, crop cu ting experiments under I.A.D.P. series were done in both the I.A.D.P. districts of Alleppey and Palghat during the season under reference. But it was found impossible to pool the estimates of mean yield of dry paddy obtained from the State series and I. A. D. P. series of experiments conducted in both the districts as the Statistical test for non-significance turned out to be highly significant. The details of both series of experiments conducted at Alleppey and Palghat districts are given in the subjoined table.

TABLE-1

Details of Experiments Planned and conducted under IADP Series and State Series during Autumn 1975

the grown		, A	Alleppey			Palgha	at	
Series		o. of riments	yield paddy [a.)			o. of iments	eld addy	
	Plan- ned	Con- ducted	Mean yi of drv p (Kg./Ha	Standard Error	Plan- ned	Con- ducted	Mean yie of dry pi (Kg./Ha.	Standard Error
`(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
IADP series State series	150 126	113 112	1802 2304	61 126	250 90	206 80	3284 3095	70 161

The analysis of variance of plot yields pooled for the State is given in Table 1.3 in the appendix. As far as yield rates are concerned, significant variation was found between taluks as well as between karas within each taluk. In other wards yield rates were found to be significantly different from taluk to taluk. Besides, significant difference was also found in the yield rates from kara to kara even within a taluk.

In Table 1.4 in the appendix, the frequency distribution of plot yield obtained through the survey in each district is provided using the wet weight of paddy of the experimental plots. During the season the percentage of experimental plots from which zero or near zero yield less than 500 kg of wet paddy per hectare obtained was found to be reduced to 3.4 from 6 in Autumn 1974. Besides, the highest yield of over 4100 kg. of wet paddy per hectare was obtained from nearly 8.9% of the experimental plots during the season whereas this percentage was about 5 in the Autumn season of the last year.

With a view to find out the driage ratio of dry paddy to wet paddy, 136 driage experiments out of 155 planned, were conducted. The percentage response came to about 88%. The driage ratio for each district and the State are worked out and presented in Table 15 in the appendix. The lowest driage ratio of 85.1% was obtained for Trivandrum district closely followed by Kottayam and Trichur where it came to 85.2%. The percentage recovery of dry paddy from wet paddy was found to be the highest (91%) in Kozhikode district. The driage ratio for the State for Autumn 1975 was estimated to be 87.4%.

Independent estimates of mean yield of paddy (simple average) both wet and dry for the districts and the State were framed on the basis of the yield obtained from the experimental plots inspected by the Statistical Inspectors and the District Statistical Officers, at harvest stage. It was programmed to

conduct 401 harvest stage inspection during the season but could conduct only 347. Prior harvest of the experimental plots by cultivators was reported to be the main reason for the shortfall in achievement in this regard. The estimated average yield (simple average) for each district and the State based on harvest stage inspections are given in Table 1.6 in the appendix.

The estimated mean yield of paddy relating to Autumn seasons for taluks, districts and the State for the last 6 years are given in Table 1.7 in the appendix.

The season-wise estimates of area, mean yield and production of rice in the State together with their annual estimates for the last 8 years from 1968-69 are presented in Table 1.8 in the appendix.

High yielding varieties.—In Table 2 1 in the appendix, the estimates of area, mean yield and production of high yielding varieties, other varieties including traditional and improved varieties and all varieties of paddy taken together for each district and the State during Autumn 1975 are presented. About 25% of the total area under Autumn crop of paddy in the State was brought under high yielding varieties.

The average yield of high yielding varieties for the State showed an increase of about 32% over that of other varieties. It was estimated that 30% of the total out turn of rice in the State during Autumn 1975, was obtained from the cultivation of high yielding varieties of paddy.

It is seen from the comparative table (Table 2.2 in the appendix) of area, mean yield and production of rice during the two Autumn seasons of 1974 and 1975, that the area under high yielding varieties of paddy has increased by about 21 thousand hectares during 1975. The productivity of the high yielding varieties at the State level has also shown an increase of about 17 % during Autumn 1975. The mean yield of high yielding varieties has gone up in all the districts except in Idukki, Ernakulam, Trichur and Cannanore during the season compared to Autumn 1974. It was reported that excessive rain at the flowering stage had affected the crop adversely in these 4 districts. However, the production of rice from the high yielding varieties was estimated to be about 47 thousand tonnes more during the seasons compared to that of Autumn 1974.

The distribution of experimental plots with high yielding varieties of paddy according to the varieties raised during Autumn 1975 in the different districts and the State are given in Table 2.3 in the appendix. It was found that about 26% of the plots covered by the survey were brought under high yielding varieties. The cultivators' preference of high yielding varieties of paddy as revealed by this table in their order are Jaya, IR-8 and Thrivenia. During Autumn 1974 also the order of preference remained the same among the cultivators, though all of them were not raised in all the districts. But one important difference noticed during the season under report was that the above mentioned 3 varieties were found to have been cultivated in all the districts in the State. The other important high yielding strains cultivated during the season were culture 28 (Annapurna), Jyotoi, Aswathy, Bharathi,

Rohini, IR 20 etc. As these varieties are recently introduced adequate steps are to be taken or populari ing the same among the ryots in the different pa ts of our State for its immediate adoption.

The average yield (simple average) o different high yielding varieties obtained in the survey in the various districts of the State has been estimated and pre-ented in Table 2.4 in the appendix. From this table it is seen that the highest yield in each district was obtained from different high yielding strains. The n mes of high yielding varieties which correst onds to the highest average yield obtaine in each district together with the highest average yield and the number of experimental plots where the crop was raised nother district as is seen from the survey during Autumn 1975 are indicated below.

TABLE 2

Name of high yielding varieties corresponds to highest average yield

SI. No.	District	HYV corresponds to highest average yield	Highest average yield (dry paddy kg/ha)	No. of Experimental plots where HYV given in col. 3 raised
(1)	(2)	(3)	(4)	(5)
1.	Trivand um	Culture-28	3067	2
2.	Quilon .	2,	3401	1
3.	A ₁ l _c ppey	Jaya	3118	26
4.	Kot ayam	IR-5 (Pankaj)	4876	1
5.	Idukki	Jyothi	3344	1
6.	Ernakulam	Jaya	2594	12
7.	Trichur	Bharathi	2506	12
8.	P lgl at	Jaya	4309	10
9.	Malappuram	IR-8	3498	10
10.	Kozhikode	Padma	2075	3
11.	Cannanore	Jaya	285 3	1 1

It is evident from the tab'e given above that the high st average yield of 4876 kg. of dry paddy per hectare in the State during Autumn 1975 was obtained for 'Pankaj' (IR 5). But this variety was found to have been raised only none experimental plot covered by the survey in the State during the season. The second highest average yield in the State was produced by "Jaya" in Palghat district. Unlike any other variety this variety got the

highest average yield in 3 more districts viz. Alleppey, Ernakulam and Cannanore. The proved superiority of the yielding ability of "Jaya" fully justified the cultivators first preferences of this strain for cultivation during Autumn season.

Cultivation practices.—Autumn crop of paddy is considered to be mainly a rain fee crop. But irrigation is usually resorted to pre-sowing field operations of Autumn crop in certain parts of the S ate depending upon the availability of the rain. It was reported that about 11% of the experimental plot were irrigated during Autumn 1975. This percentage was 15 during Autumn 1974. Chemical fertilisers were applied to about 88% of the irrigated plots and the remaining irrigated plots were provided with other types of manures like farm yard manure, green manure, compost manure etc. No irrigated plots were found to have left unmanured during the season.

As far as the unirrigated plots were concerned, nearly 71% of them were found to have been applied with chemical fertilisers: green manure, compost manure, farm yard manure etc., were applied to about 23% of the plots and the remaining 6% of the plots received no manure of any sort.

It was reported that crops in about 41% of the experimental plots were treated with insecticides and pesticides though there was no report of severe attack of pests and diseases from any part of the State during the season under reference.

In the case of high yielding varieties plot, it was found that about 14% of them received irrigation during Autumn 1975. About 97% of these irrigated plots were found to have been brought under chemical fertilisers. About 90% of the unirrigated plots of high yielding varieties were also found to have received chemical fertilisers. Farm yard manures, green manures, compost manures etc. were applied to 8% of the unirrigated high yielding variety plots. However, about 2% of the unirrigated high yielding variety plots received no manure during Autumn 1975.

Though there was no report of disease or pest attack of considerable nature on the high yielding variety crops in the State, it was found that about 64% of the high yielding variety plots were treated with pesticides or insecticide: during the season under reference.

The estimated average yield of high yielding and that of other varieties of paddy in irrigated and unurrigated plots, manured and unmanured plots, and plots treated and untreated with insecticides and pesticides together with the number of experiments obtained in the survey under each of these, categories in respect of Autumn crop of paddy 1975 are given in Table 2.5 in the appendix.

APPENDIX

Table 1.1

Estimated Area, Mean yield and production of Rice Autumn crop of Paddy 1975

Taluk & District	ments	hectares	Mean y.e of dry paddy in kg./ hectare	ld Stand- ard error	- Pproduction of rice in tonnes
(1)	(2)	(3)	(4)	(5)	(6)
1. Neyyattinkara 2. Trivandrum 3. Nedumangad 4. Chirayinkil TRIVANDRUM DISTRICT 5. Quilon 6. Kottarakkara 7. Kunnathur 8. Pathanapuram 9. Pathanamthitta 10. Karungappally QUILON DISTRICT 11. Karthigappally 12. Mavelikkara 13. Che: gannur 14. Thiruvalla 15. Kuttanad 16. Ambalapuzha 17. Sherthallai ALLEPPEY DISTRICT 18. Changanacherry 19. Kanjirappally 20. Kottayam 21. Vaikom 22. Meenachil KOTTAYAM DISTRICT	18 17 18 18 18 71 18 18 18 18 17 17 106 14 18 16 15 16 15 18 112 18 12 15 16 17	6545 3973 5208 3593 19319 2802 6331 3972 4400 1096 2560 21161 5623 3736 2008 2002 8632 1972 6422 30395 1854 63 2683 1370 2038	2377 2271 2117 2575 2322 1920 1980 1980 21994 2618 2142 2233 2090 2154 1887 3348 2337 1253 2304 2253 2304 2253 2248 1521	207 140 303 62 113 106 109 124 320 292 295 88 293 125 130 390 354 175 175 126 40 242 80 375 295	(6) 10221 5928 72 4 6079 29472 3535 8186 4588 6915 2156 4403 29783 8249 5130 2842 2482 8987 3028 5287 6005 2744 93 2681 1568 3262
23. Peermade	78 Nil	8008	1967	_	348
24. Devikulam 25. Udumbanchola		2 68	2142	3 60	377
26. Thodupuzha IDUKKI DISTRICT	16			246 69	263
DISTRICT	33	4126			640

	(1)	(2)	(3)	(4)	(5)	(6)
27.	Kothamangalam	16	3728	2504	492	6133
2 8.	Muvattupuzha	14	4493	2162	$26\overline{4}$	6382
29.	Cochin	15	3134	1885	160	3881
3 0.	Kanayannur	16	8698	1844	245	10538
31.	Kunnathunad	15	7534	2367	207	11716
32.	Alwaye	16 :	6689	1748	201	76o2
3 3.	Parur	17	3820	1597	22 2	4008
ERN	AKULAM DISTRICT	109	38096	2011	100	5034υ
34.	Crangannore	18	52 0	1113	299	380
35.	Mukundapuram	18	7432	1565	. 184	7642
36.	Trichur	18	7 07 4	1882	211	8747
37.	Thalappilly	16	16012	1938	139	20388
38.	Chowghat	18	3528	1221	18	2830
	HUR DISTRICT	88	34 566	1761	88	3 998 7
3 9.	Chittur	15	19432	4224	313	53927
40.	Alathur	17	20289	35 89	404	47841
41.	Palghat	13	26463	3054	417	53 097
42.	Ottappalam	. 17	27641	2221	214	40334
43.	Mannarghat	18	7010	213 2	231	9819
	SHAT DISTRICT	80	100835	3095	161	205018
44.	Perinthalmanna	18	14219	2852	. 233	26643
45 .	Ponnani	18	6872	2542	230	11477
4 6.	Tirur	18	10512	1363	218	9413
47.	Ernad	18	1899 3	1824	204	2 ∠761
	APPURAM DISTRICT	72	50596	2115	177	70294
48.	Kozhikode	16	8134	1172	265	6 63
49.	Quilandy	18 -	10461	931	217	6399
50.	Badagara	16	6339	1334	131	5556
51.	South Wynad	Nil				
	HIKODE DISTRICT	50	24934	1112	130	18218
52.	North Wynad	Nil				
53.	Tellicherry	18	8426	1580	408	8747
54.	Cannanore	18	9175	1367	2.2	8240
55.	Taliparamba	18	10238	1749	246	11764
<u>56</u> .	Hosdurg	18	13095	20 90	228	17981
57.	Kasargode	18	- 24262	2022	312	32231
CAN	NANORE DISTRICT	90	65196	1843	144	78963
ł	State	889	397232	2242	55	585068

Estimated Area, Mean yield and production of Rice relating to Autumn crop of paddy 1974 and 1975

(3) (4) (5) (6) (3) (4) (5) (6) (3) (4) (5) (6) 18561 19319 1976 2322 21161 21161 2084 2142 130518 30395 1673 2304 8030 8008 2174 1967 4031 4126 2359 2449 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 50596 50596 1503 2115 21875 24934 1335 11112 64302 65196 1996 1843	SI. No.	District	. .	£.		Arc	Area in hectares	ctares	2 5	Mean yield of dry paddy	eld of		Producti (To	Production of Rice (Tonnes)
Trivandrum (3) (4) (5) (6) Trivandrum 18561 19319 1976 2322 Quilon 21161 2084 2142 Alleppey 130518 30395 1673 2304 Kottayam 8030 8008 2174 1967 Idukki 4031 4126 2359 2449 Ernakulam 37378 38096 1886 2011 Trichur 34569 34566 1923 1761 Palghat 10096 100835 2792 3095 Malappuram 50596 50596 1503 2115 Kozhikode 21875 24934 1335 1112 Cannanore 64302 65196 1996 1843						1974	287	1975	1974		1975		1974	1975
um 18561 19319 1976 2322 21161 21161 2084 2142 130518 30395 1673 2304 130518 30395 1673 2304 1031 4126 2359 2449 100 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 1c 21875 24934 1335 1112 1c 64302 65196 1996 1843	Ξ	(2)				3)		(4)	(2)	.	(9)		(2)	(8)
21161 2019 1970 2322 21161 2014 2142 130518 30395 1673 2304 8030 8008 2174 1967 4031 4126 2359 2449 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 ram 50596 50596 1503 2115 le 21875 24934 1335 11112 re 64302 65196 1996 1843	- 1	Trivandrum				1563	1 0 A 1 A A 1 A A 1 A A A	0310	1010					2
130518 30395 1673 2304 8030 8008 2174 1967 4031 4126 2359 2449 m 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 ram 50596 50596 1503 2115 le 24934 1335 1112 re 64302 65196 1996 1843	2	Quilon			21.	191		71161	2084		4322 9149	•	24097	29472
a 8030 8008 2174 1967 4031 4126 2359 2449 m 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 ram 50596 50596 1503 2115 le 21875 24934 1335 1112 re 64302 65196 1996 1843	ຕ່	Alleppey			130	218	ଲ	n395	1673	CA	304		33546	29763 46005
4031 4126 2359 2449 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 ram 50596 50596 1503 2115 le 21875 24934 1335 1112 re 64302 65196 1996 1843	4, 1	Kottayam		ev.	æ :	030	:	8008	2174			- ::	11470	10348
m 37378 38096 1886 2011 34569 34566 1923 1761 100906 100835 2792 3095 ram 50596 50596 1503 2115 le 24875 24934 1335 1112 re 64302 65196 1996 1843	2	Id ukki E			4	031	•	4126	2359		9449	:	6248	6640
34569 34566 1923 1761 100906 100835 2792 3095 50596 50596 1503 2115 le 21875 24934 1335 1112 re 64302 65196 1996 1843	ī	Ernakulam			37	378	w	9 608	1886		2011		46321	50340
100906 100835 2792 3095 ram 50596 50596 1503 2115 le 21875 24934 1335 1112 re 64302 65196 1996 1843	~ `	Trichur			34	F269	65	4566	1923		1921	_	43669	39987
ram 50596 50596 1503 2115 le 21875 24934 1335 1112 re 64302 65196 1996 1843	÷ 0	Falghat	÷.	`ul	<u>ŏ</u>	9060	10	0835	2792		3095		185094	205018
2 1875 24934 1335 1112 64302 65196 1996 1843	ָ ה	Malappuram	,		ŭ	9650	S.	0296	1503	-	2115		49969	70,04
64302 65196 1996 1843	≘:	Kozhikode				1875	2	4934	1335		1112	ets .	21817	18218
	11.	Cannanore			.	1302	9	2196	1996		1843		84337	78963
F. C.			Č	•				-			-			

TABLE No. 1.3

Autumn crop of paddy 1975 Analysis of variance of plot yield pooled for the state, in kg. plot of 1/400th of an hectare

Source of variation	Sum of squares		Mean sum of square (variance)	variance ratio (calculated)
(1)	(2)	(3)	(4)	(5)
Between Taluk	2638.41	52	50.739	1331**
Between karas within taluk	2414.10	262	9.214	2.058**
Within karas within taluk	2570.43	574	4.478	• •
	7622.94	888		••

^{**}Significant of 1% level.

Table No. 1.4
Autumn crop of paddy 1975
Frequency Distribution of plot wield (wet madd:)

	State	(14)	2	3 4	25	7 6	2	4. r	Š	3	7	2	84	7	3	84	Š	33	₽:	25	28	23	3	000
	Саг папоте	(13)	6	1 00		· 14	00			≘ '	ر د	٠	4, (ייכ	ဂ	ا م	ů,	ဂ	•	27	_	~	7	5
•	Kozhikode	(12)	ي ا	4	۰ ٥	0 <	+ 14	ດ (, D c	· C	-	4.0	٠.	٠.	-	:	:	: •	-	:	:	:	:	2
•,•	Malappuram	E	Cr.	, c	10	4	- c	ν, п	n u	O F	ဂ	4 ¢	N 1	- c	o -	۰ ۰	† ∙ •	٠ ر	† ••	→ -	- (ا د	ιĊ	ç
ddy)	Palghat	(10)	;		:	: -	- c<	o c	4 0		ე (0 0	о и) U	o -	⊣ ₹	+ c	40	0 0	ν.	۰,	ა ;	74	C
wet pa	Тиісһит	(6)	7	_	•	. cr	<u>~</u>	30	n r	۰ د	n c	ממ	٥	0	D 60	, c	۲	: `	+ -	-	:	:	:	ă
rield (1	Ernskulam	8)	က	_	· 64	ן וכ	۶ 4	+ α	۰ د	2	<u> </u>		00	0	α	9 (> <	א א	ם כ	ဂ င	۷.	⊣ !	•	100
plot ,	Idukki	3	$\Big :$:		: :	. 6	10	14	٠.	4 -	-i cr	2 4	• 6	1 4	н	:	: c	1	: 0	4 -	٠,	†	23
tion of	Kottayam	(9)	ເດ	87	2	100	4	٠,	1 C	¢	40) -		. rc) CC	o 60	4	۰ ر <u>۲</u>	, [- c	7 L	ဂ	78
stribu	Alleppey	(2)	4	67	Ŋ	4	, C	· =		- α	> ₹	۲ 4		٠.	4	1	ĸ	י ני	o c	Иц	7 •	+ 2	07	112
cy Die	nolinQ	(4)	:	;	-	ຕ	-	٠ 4	· cc	o	<u>.</u>	יר.	٠ ت	, LC		α	o-		r C	14	 	۲ <u>د</u>	71	,106
Frequency Distribution of plot yield (wet paddy)	murbasvirT	(3)	:	-	:	-	-	יפי	4	•	٠.	1 15	ی د	, ec	· =	<u>-</u>	u.	ی د) LC	> —	-	: <	۱	71 1
	Sl. Class Interval No. (kg./hect.)		1. Below 500		·	4. 900-1099	5. 1100—1299	6. 1300—1499	7. 1500—1699	8. 1700—1899	9. 1900—2099		1. 2300-2499				- 1		3500-	- 1	3900	4100,	-	All

TABLE 1.5

The Results of driage experiments—Autumn paddy 1975

S. N	l. o. District	experi	driage ments Analysed	Total yield collected for drage experim- ents (kg.)		Driage ratio (percen- tage)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ı.	Trivandrum	12	11	2.750	2.339	85.1
2.	Quilon	18	15	3.750	3,252	86.7
3.	Alleppey	20	19	4.750	4.153	87.4
4.	Kottayam	14	13	3.250	2.769	85.2
5.	Idukki	6	4	1.000	0.880	. 88.0
6.	Ernakulam	20	16	4.000	3.459	86.5
7.	Trichur	15 :	13	3.250	. 2.770 .	85.2
8.	Palghat	14	13	3.250	2.947	90.7
9.	Malappuram	12	12	3.000	2.652	88.4
10.	Kozhikode	9	8	2.000	1.819	91.0
11.	Cannanore	15	12	3.000	2.659	88.6
	State	155	136	34.000	29.699	87.4

TABLE No. 1.6

Independent estimate of mean yield of paddy based on harvest stage inspection during Autumn 1975

					ني	2.2
-		No. of experiments	ments	Mean yie	ld of paddy	Mean yield of paddy (kgms./hect.)
No.	District	Planned for In harvest stage Inspection	Inspected at harvest stage	Before driage	After driage	Driage ratio used for columns 5 & 6
\equiv	(2)	(3)	(4,	(5)	(9)	(7)
<u>.</u> ;	Trivandrum	31	34	2591	2205	0.851
.; ·	Quilon	45	39	2649	2297	0.867
ب ب	Alleppey	52	48	2580	2255	0.874
₹ .	Kottayam	38	32	2210	1883	0.852
آ	Idukki	17	12	2748	2418	0.880
	Ernakulam	52	36	2167	1874	0.865
۲.	Trichur	38	43	2082	1774	0.852
∞ .	Palghat	38	33	3410	3093	0.907
ი :	Malappuram	31	20	2695	2382	0.884
. 10.	Kozhikode	24	20	1254	1141	0.910
11.	Cannanore	388	30 30	2038	1806	0.886
	State	401.	347	2418	2113	0.874

TABLE 1.7 Estimated mean yield of dry paddy (kg/hect.) during Autumn Season from 1970 to 1975

	Autı	ımn Seas	son fron	1 1970 to	1975		
T	aluk and District	1970	1971	1972	1973	1974	1975
1.1.1	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Neyyattinkara.	2471	2769	27 97	227	2237	2377
2.	Trivandrum	1840	2474	26 33	2530	209 7	2271
3.	Nedumangad .	1721	1870	1633	1645	1578	2117
4.	Chirayinkil ,	∠608	2711	2178	2266	1941	2575
TRI	VANDRUM DISTRICT	2158	2457	2330	2164	1976	2322
5.	Quilon	2014	1632	1456	2276	1631	1920
6.	Kottarakkara	1952	1670	1130	2024	1579	1968
7.	Kunnathur	1527	2222	1628	1707	2 3 6 5	1758
8.	Pathanapu am	2017	226 5	2730	2537	2724	2392
9.	Pathanamthitta	2111	2638	1704	2068	2009	2994
10.	Karunagappally	1754	1760	1940	2404	2326	2618
Qu	LON DISTRICT	1878	1974	1724	2153	2084	2142
.11.	Karthigappally	.1775	2209	1336	2 382	2160	2233
12.	Mavelikkara	2079	1928	1512	2474	1780	2090
··13.	Chengannur	2563	2433	2882	2301	1396	2154
14.	Thiruvalla	2419	2985	2005	2562	1437	1887
15.	Kuttanad	2100	1643	2069	2907	1627	3348
16.	Ambalaruzha	1329	1267	1152	2379	1747	2337
17.	Sherthallai	956	932	1281		1386	1253
	EPPEY DISTRICT	1717	1824	1670	2304	1673	23 04
18.	Changanacherry	2232	2783	2893	2232	2233	2253
19.	Kanjirappally	1915	2333	2216	2093	2593	2248
20.	Kottayam	1908	1959	1876	1849	2137	1521
21.	Vaikom	1724	1610	1973 2679	2529 2670	1814	1742 2436
22.	Meenachil	1975	2902			2408	
	TAYAM DISTRICT	1967	2327	2327	2259	2174	1967
23.	Peermade		0005	0000	0040	1700	0:40
24.	Devikulam	2461	2235	2932	2948	1766	2142
25.	Udumbanchola	0040	0504	2032	2695	2404	2471
26.	Thodupuzha	2042	2524				
	kki District	2070	2 50 5	2092	2713	2359	2449
27.	Kothamangalam	} 1935	2015	2520	2048	2194	2504
28.	Muvattupuzha	• • •	0.00	1405	0110	2299	2162
29.	Cochin	2214	2102	1485	2112	1619	1885
30.	Kanayannur	1635	1949	1945	1836	1459	1844
31.	Kunnathunad	1697	1525	2969	2032	2367	2367
32.	Alwaye	2028	2031	2477 2626	1768 1788	1853 1427	1748
33.	Parur	2440	1415	2 686	1/00	1427	1597

_	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Eri	NAKULAM DISTRICT	1912	1851	2405	1927	1886	2011
34.		1236	1159	1188	1337	1131	1113
35.		2336	2085	1889	1962	1580	1565
36.		1788	1693	1944	2083	2370	1882
37.	111-11	2103	1776	1570	2061	1984	1938
38.	Chowghat	1712	1228	1068	1721	1553	1221
T_{RI}	CHUR DISTRICT	2036	1769	1661	2001	1923	1761
39.	Chittur	2397	2504	2804	3846	3396	4224
40.	Alathur	3232	3795	3631	3371	3232	3589
41.	Palghat	2267	3293	2935	2754	3372	3054
42.	Ottappalam	2429	1992	1809	2217	1580	2221
43.	Mannarghat	1667	1243	2045	2319	2437	2132
PALO	ghat District	2489	2740	2670	2904	2792	3095
44.	Perinthalmanna	2517	2023	2293	2613	1845	2852
45.	Роппапі	1698	2205	2200	2433	1295	2542
46.	Tirur	1698	2457	2505	2514	1161	1363
47.	Ernad	1856	2223	1946	1858	1512	1824
Mal	APURAM DISTRICT	1969	2217	2190	2276	1503	2115
48.	Kozhikode	1199	1331	812	1209	927	1172
49.	Quilandy	789	1041	1235	1121	1752	931
50.	Badagara	1044	1629	1367	1168	1134	1334
51.	South Wynad	• •	• •	••	0.00	••	1001
Kozh	HIKODE DISTRICT	984	1285	1140	1161	1335	1112
52.	North Wynad	••		••		••	
53.	Tellicherry	1001	953	1379	2079	1624	1580
54.	Cannanore	1948	2331	186 6	1630	1761	1367
55.	Taliparamba	2104	1573	2140	2138	2212	1749
56.	Hosdurg	2358	1167	1800	2246	2069	2090
57.	Kisargode	2304	1826	2136	2143	2093	2022
Cann.	ANORE DISTRICT	2045	1605	1924	2077	1996	1843
	State	2044	2088	2122	2271	2064	224

TABLE No. 1.8

Season-wise area, mean yield and production of rice in Kerala during the period from 1968-69 to 1975.76

Viripp	u (Aut	Virippu (Autumn crop)	Mundakan (Winter crop)	an (Wir	ater crop)		(Summ	Punja (Summer crop)		Total	17
Area in hect.	Mean yield of dry paddy (kg./heet.)	Production of rice in tonnes	Area in hect.	Mean yield of dry paddy (kg /hect.)	Production of rice in tonnes	Area in hect.	Mean yield of dry paddy (kg./hect.)	Production of	Area in hect.	Mean yield of dry paddy (kg./hect.)	Production of soin soin
(2)	(3)	(4)	(5)	(9)	E	(8)	6	(10)	(E)	(12)	(13)
394879	9 2009	9 521238	380620	2286	571748	98372	2450	158348	873871	2179	1251354*
393747	_	16 521443	382171	2097	526570	98141	2767	178400	874059	2136	1226413*
394798		7 538886	381971	2259	566934			192185	874830	2259	1298005*
395298	8 2126		381971	2378	596808	97888		202684	875157	2351	1351738*
391900				2426	609234			190941	873694	2527	1376367*
392765			380980	2028	507755	100930	2168	143719	874675	2187	1257069*
394927	7 2064	4 535545	384836	2382	602186	101703	2936	196200	881466	2303	1333931
397232	2 2242	12 585068	:	:	• :	:	:		i I		

*Pooled estimates of state series and I.A.D.P. series.

Estimated area, mean yield and production of High Vieldi TABLE No. 2.1

- 		Other varieties	ties	7	All varicties	
District	Area (hect.)	Mean yield of dry paddy (kg./heet.)	Production of rice (tonnes)	Area (hect.)	Mean yield of dry paddy (kg./hect.)	Production of rice (tonnes)
(2)	(6)	(10)	(11)	(12)	(13)	(14)
Trivandrum	16869	2297	25458	19319	2322	29472
Ouilon	16569	1963	21366	21161	2142	29783
Alleppey	18182	1932	23081	30395	2304	46005
Kottavam	5544	1595	5810	8008	1961	10348
Idukki	2501	2596	4266	4126	2449	6640
Emakulam	21319	1781	24944	38096	2011	50340
Trihcur	30639	1723	34677	34566	1921	39987
Palghat	69324	2962	134898	100835	3095	205018
Malappuram	40760	2014	53932	50596	2115	70294
Kozhikode	21942	1038	14961	24934	1112	18218
Cannanore	55052	1773	64134	65196	1843	78963
STATE	298701	2077	407527	397232	2242	585068

TABLE No. 2.2

Estimated Area Mean yield and production of high yielding varieties of paddy during Autumn 1974 and 1975

Si.	District	Area in hech	hect.	Mean yie	Mean yield of dry	Producti	Production of rice	
No.		1974	1975	1974	1975	1974	1975	
Ξ	(2)	(3)	(4)	(5)	(9)	(7)	(8)	
1	Trivandrum	962	2450	2376	2494	1243	4014	
87	Quilon	3420	4592	2398	2790	5388	8417	
60	Alleppey	7694	12213	1709	2857	8639	22924	2 2
4	Kottayam	1889	2464	2390	2803	2966	4538	
īΟ	Idukki	1099	1625	2743	2224	1981	2374	
9	Ernakulam	9083	16777	2618	2304	15593	25396	
7	Trichur	8836	3927	2072	2058	12028	5310	•
&	Palghat	28032	31511	3288	3387	60555	70120	
6	Malappuram	7230	9836	1876	2532	8911	16362	
10	Kozhikode	2488	2992	1307	1657	2136	3257	
==	Cannanore	. 0269	10144	2431	2225	11132	14829	
	STATE	77537	98531	2347	2742	130572	177541	

TABLE 2.3

化光 医脊髓韧带 法国

Distribution of fields with high yielding varieties of paddy according to the varieties raised during Autumn 1975

							•		•		•	•	1		
	No. of ex-	ž	.ov		٠. د ه	f ext	erir Serir	cnta	l plo	ts un	der	liffer	ent]	No. of experimental plots under different H.Y.V.	· •
District	conducted	cted	speri- otal]	<u> </u>	-	8						,			
	.V.Y.H	Total	Percentage H.Y.V. H. ments to t	Triveni	Jaka	Culture-28	1R.8	Jyothi	Aswathy	Bpsrsthy	iaidoA	Z.A.I	I.R.20	Padma	Sabari
(2)	(3)	(4)	(2)	9	(3)	⊛	ව	(6) (10)	(11)	(12)	(13)	(12) (13) (14)	(12)	(16)	13
Trivandrum	6	71	12.68	4	. 2	2	-	. :	:	• :	•	:	:	:	:
Quilon	23	106	21.70	7	12	-	1	_	=	:	:	:	:	:	:
Alleppey	45	112	40.18	11	26	:	7	9	:	:	:	:	:	;	:
Kottayam	24	78	30.77	2	7	_	Ŋ	9	:	_	-	-	:	:	:
Idukki	13	33	39.39		ಉ	 1	ις	-	:	:	:	:	:	:	:
Ernakulam	48	109	44.04	មា	12	Ŋ	23	:	:	:	:	:	တ	:	:
Trichur	10	88	11.36	4	7	:	7	:	-	-	:	:	:	:	:
Palghat	25	8	31.25	_	10	~	Ġ.	:	7	•	က	:	:	:	:
Malappuram	14	72	19.44	7	જ	:	ŝ	-	:	:	;	:	:	:	:
Kozhikode	9	2	12.00	-	-	:	7	:	:	_	:	:	:	-	:
Cannanore	14	8	15.56	63	_	:	6	•	i	:	:	:	:	:	-
STATE	231	88	25.98	48	5	Ξ	62	15	S	ഗ	4	-	ಣ	-	

TABLE 2.4 Lypnon wild of High Wishait

	٠.	irsds2
	gs/Ha.)	Padma
22	(Dry paddy in kgs/Ha.	inidoA
ot paddy 1975	ry pade	idistada
of pa	9	idswar
n crop		Jyothi
ra cama		I.R.20
ries— <i>f</i>		г.Я.1
Helding Varieties—Autumn		8.A.I
elding		Culture-28
		العلاط

irsds2	(13)
Radma	(12)
inidoA	(11) (12)
Bharathi	(10)
idsswaA	(6)
Jyothi	1
1.R.20	(7) (8)
c.A.I	(9)
8.A.I	(2)
Culture-28	(4)
Jaya	(3)
Triveni	(2) (3)
District	(1)
	Triveni Jaya Culture-28 I.R.8 I.R.5 I.R.5 Jyothi Aswathi Bharathi Bharathi

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2594

2032

Ernakulam

Trichur Palghat

Kottayam Alleppey Quilon

Idukki

Privandrum

<u> 66</u>

State average

Cannanore Kozhikode

Malappuram

2.5	
Š.	
TABLE	

District-wise yield rate for	rise yiel	d rate	_	Ligh Yielding	o. 2 Ading ar Hices du	ring A	rise yield rate for High Yielding and other varieties of paddy	ies of	paddy		
		0		4		0		Irrigated	ted		
		Irrigated	sted.	Un-Irrigated	igated	Chemically manured		ther m	Other manured	Not manured	g
District	Varicty	No. of experi-	Mean yield of dry paddy in kg./heet	No. of experi-	Mean yield of dry paddy in kg./heet.	No. of experi	Mean yield of dry paddy in kg./hect.	No. of experi- ments	Mean yield of dry paddy in kg./hect.	No. of experi- ments Mean yield of	dry paddy in kg./hect.
(1)	(2)	(3)	(4)	(2)	9	6	(8)	(6)	(10)	(11)	(12)
Trivandrum	H	-	1979	8	2559	_	1979	:	:	:	:
	0	<u>26</u>	2333	36	2298	25	2339	-	2210	:	:
	H	27	2320	44	2345	26	2325	_	2210	:	:
Ouilon	Ξ		1518	21	2911	2	1518	:	:	:	•
}	0	ιĊ	2013	78	2127	2	1561	က	2313	:	:
	[-	7	1872	66	2293	4	1540	က	2313	:	:
Alleppev	H	:	:		2857	:	:	:	:	:	. :
(J.J.)	0	_	1172		1713		1172	:	:	:	:
	[-	—	1172		2177	-	1172	:	:	•	:
Kottavam	H	5	3089	19	2727	5	3089	:	:	:	
	0	N	2063		1696	7	2063	:	:	:	:
	H	7	2796		1972	^	2796	:	:	:	:
Idniki	H	-	1781		2261	-	1781	:	:	:	•
	0	ເດ	3153		2085	4	3400	,4	2165	:	÷
	H	9	2924		2163	Ŋ	3076		2165	:	:

				Un-irrigated	gated						
	r-	chemically manured	hemically manured	other manured	rer ured	Not-m	Not-manured	treated with pesticides	l with cides	Not to with p	Not treated with pesticides
District	Varicty	No. of experi- ments	Mean yield of dry paddy in kg./heet.	No. of experi- ments	Mean yield of dry paddy in kg./heet.	No. of experi- ments	Mean yield of dry paddy in kg./heet.	No. of experi- ments	Mean yield of dry paddy in kg./hect	Mo. of experi-	Mean yield of dry paddy in kg./hect.
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(61)	(20)	(21)	(22)
Triwandem	# 	7	2565	;	:	1	2516	ဆ	2424	,,,	3057
	C	. KC	9226	-	3060	:	•	33	2318	24	2304
) [45	2324	. —	3060	-	2516	46	2336	25	2334
Onilon	1	17	9963	4	2689	:	:	2	1535	21	2909
Tours Y	C	70	2187	7	1529	_	2047	21	1997	62	2161
	, [→	87	2339	H	1951	-	2047	23	1957	&	2350
Allenner	Ξ	43	2949	-	577	_	1183	27	2992	23	2655
	C	2, 5	1862	<u></u> 0	1071	7	520	8	2017	49	1590
	H	86	2339	10	1022	es	741	45	260 2	42	1876
Kottavam	Ħ	16	2706	8	2805	.4	2916	18	2855	9	2648
	0	46	1792	-	491	ນ	1056	23	2225	29	1266
	H	425	2028	69	2034	9	1366	43	2489	8	1503
Idukki	Ξ		2364		1130	:	:	유	2500	60	1305
	0	9	2442	\$	1848	:	:	~	2818	13	2101
	H	17	2392	2	1776	:	:	17	2631	9[1952

(1)	(2)	<u>છ</u>	((2)	(9)	(3	8)	(6)	(10)	(11)	(12)	
Ernakulam	Н	15	2001	33	2442	14	1993	-	2111	:	:	
	0	7	1808	54	1768	7	1808	:	: :	: :	: :	
	[2	1940	87	2024	21	1931	-	2111	: :	: :	
Trichur	Ħ	, 	1927	6	2073	_	1927	:	. :	. :	;	
	0	2	1458	9/	1468	,	1228	-	1688		: :	
	H	က	1614	82	1532	7	1578	_	1688	: :	: :	
Palghat	·	က	2686	25	3482	ę	2686	;		:		
	0	4	4005	51	2736	4	4005	:		: :	: :	
	H	7	3438	73	2961	7	3438	:	:	:		
Malappuram	H	_	2043	13	2569		2043		;			
\ \	0	S	1638	53	2091	4	1742	-	1221	: :		
	H	မ	1705	99	2185	'n	1802	٠,	1221	: :	: :	2
Kozhikode	H	:	:	9	1657	:	:	•	:		: ;	27
	0	:	:	44	1067	:	:	•			: :	
	H	:	:	20	1138	:	:	:	:	: :	:	
Cannanore	Ħ	က	3346	7	1919	6.3	3346	;	. :	;	:	
	0	7	1814	69	1662	ങ	1535	4	2002	: :	:	
	Ħ	10	2274	8	1697	9	2440	4	2022	: :	: :	
State	H	35	2323	199	2660	31	2329	_	2111	,	. :	
	0	49	2254	594	1852	53	2301	=	2028	:		
	Ħ	96	2277	793	2055	84	2311	12	2035	: :	: :	
H—High	H-High Yielding Varieties	arieties										

TABLE 2.5 (Contd.)

O-Other varieties
T-All varieties

TABLE 2.5 (Contd.)

		Ś	65		15	(91)	60	(18)	(19	(30)	(21)	(22)
<u> </u>	Ξ	8	(13)	(14)	(2)	(10)						
		;		0504	c	1477	•	:	45	2306	9	2292
Ernakul a m	. ,	≒ (1007	1 C	9	Ş	1759	61	2025	42	1658
) E	7.7	1001	1 ₹	1046	30	1759	[9	2218	48	1737
		.		7477	۲.	0 1	3	-)	c	1074	6	9397
		Ή	œ	2185	- -4	1176	:	:	o	13/4	4 6	
Trichur		10	o c	1751	42	1390	'n	480	25	1641	55	1380
) F	, c	1845	4.55	1385	IJ	480	జ	1722	S	1423
-		→ ;	 5 8	200	•	· •			7	3572	01	3109
Palghat		Į.	33	3487	: "	1007	:	•	66	2683	32	2932
		0	જ	3031	<u>:</u>	1001	:	:	38	3034	42	2974
		H	22	3239	2	1884	:	•	3	1 0		000
		7	_	9849	07	1639	:	:	12	2850	7	023
Malappuram		40	2 2	0501	, [1677			20	2559	33	1785
		Ð	07	277	4 6	1672	:	•	32	2668	4	1727
		įΗ	30	2012	2	COT	:	:	•		Ç	1.557
		Ħ	ιζ	1821		837	:	:	:	•	O 9	/601
Kozhikode	-	; (;	1199	66	1034	_	66 9	7	672	47	C801
) F	11	1380	, 6c	1028	-	669	7	672	48	1156
		→ ;	2	6010	} ¢	008			ĸ	266 6	6	1980
Cannanore		≖ (ن	2017	7 6	1795	:	•	<u>«</u>	1680	28	1675
) I	. 5	0701	# 0 7	1660	:	•	23	1894	29	1716
		Ή	5. 4.	1/10	20	1000	:	•	1	1 0	7	1
į		Ħ	179	2756	17	1739	ഗ	2205	147	70/07	\$:	cocz
State		; C	38.	2067	169	1469	‡	1460	216	2156	447	70/1
		⊢	560	2287	186	1494	47	1508	363	2367	220	1330
1									,			

Table No. 3.1.

Response Percentage—Autumn Paddy 1975

		No. of	experime	nts
SI, No.	District	Planned	Analysed	%age res- ponse
(I)	(2)	(3)	(4)	(5)
1.	Trivandrum	. 72	71	99
2.	Quilon	108	106	98
3.	Alleppey	126	112	89
4.	Kottayam	84	78	93
5.	Idukki	36	33	92
6.	Ernakulam	126	109	87
7.	Trichur	90	88	98
8.	Palghat	90	80	89
9.	Malappuram	72	72	100
10.	Kozhikode	54	50	93
11.	Cannanore	90	90	100
	State	948	889	94

Table No. 3.2

Details of Non response—Autumn Paddy 1975

	ing in the state of the state			of iments	No.		perime due to	nts
SI No		District	Planned	Analysed	Primary worker's absence (leave transfer etc.)	Prior harvest by cultivators	Rejected at the analysis stage	Other reasons
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
1.	Trivandrum		72	71		1 .		•• ,
2	Quilon		108	106	• •	2	• • .	• •
3.	Alleppey		126	112	• •	14	••	• •
4,	Kottayam		84	78	• •	5		1
	Idukki		3 6	3 3		3	• •	
6.	Ernakulam		126	109	• •	17		• •
7.	Trichur		90	88	• •	2		• •
8.	Palghat		90	80	3	4	- 3	• •
	Malappurar	n,	72	. 72			• •,	
	Kozhikode		54	50	• •	4		
11.	Cannanore		90	90		• •	••	••
	State		948	889	3	52	3	1

Table 3:3

Workload of primary workers—District-wise allocation ...

during Autumn 1975

	-		- No.	of primary	workers	
Sl. No.	Name of District		4 experiments or less	5 to 8 experi- ments	More than 8 experi- ments	Total
(1)	(2)		(3)	(4)	(5)	(6)
_	Trivandrum			6	4	10
1.			2	14	2	18
2.	Quilon			13	5	18
3.	Alleppey	•	1	3	7	į1
4.	Kottayam	. 1	, •	ī	3	ំ4
5.	Idukki	÷.		6	10	16
6.	Ernakulam		••	1 .	9	11
7.	Trich ur		1	1		14
8	Palghat ;		•••	12	- v in 5 1	, 3
9.	Mala p puram	\ .	0.40	9 , .	. 2	ļl
0.	Kozhikode	•	2	2	4 m'5\ &	. 8
11	Cannanore	•	•	6	6	12
••	State	₹	6	73		133

Table 3.4.

Workload of primary workers according to performance during Autumn—1975

	11 11 11 10 10 10 10 10 10 10 10 10 10 1	No	o. of prima	aty workers	
Sl. No.	Name of District	4 experiments or less	5 to 8 experi- ments	More than 18 8 experiments	rotal :
(1)	(2)	(3)	(4)	(5)*******	(6)
1.	Trivandrum	::	7	3	10
2 .	Quilon	2	15	1 24 25	18
∓ ; 3.	Alleppey	ì	14		18
4.	Kottayam	2	8		12
5.	Idukki	·•·•	2	1	3. · · · · · · · · · · · · · · · · · · ·
6.	Ernakulam	. 1	12	2 4 4	15
7.	Trichur	2 .	2	7	11
8.	Palghat	4	7	3	!4
9.	Malappuram	1 .	· · 5	: 4	10
10.	Kozhikode	2	4	2	8
11.	Cannanore	1	3	6	10
	State	16	79	34	129

TABLE 3 5

No. of experiments inspected during Autumn -1975

			No.	of ex	No. of experiments inspected at	ts insp	ected a		Percen meni	Percentage of experi- ments inspected at	experi- d at	
S . S.	District	No. of experiments	Harvest stage by	t	Pre harvest Post harvest stage stage by by	\$ 00 p	Post harv stage by		Harvest Pre harstage vest	Pre harvest	Post harvest stage	
			OSO	SI	DSO	SI	DSO	SI			,	
=	(6)	(3)	(4)	(3)	9	3	(8)	6	(10)	(E)	(12)	٠.
Ξ	(*))					 		į	η 6	7 0	33
-	Trivandnim	71	6	22	ιĊ	33		4	47.9	00.00	0. 4	3
- c	Onilen	106	9	33	:	55		တ	36.8	0.02		
	morn)	119	و	42	ŝ	34	ଧ	4	42.9	33.0	o :	
ۍ	.Vileppey	112	5 15	. ¢		97	4	Φ	41.0	35.9	15.4	
4.	Kottayam	78	o .	7	-	; c	•	,	36.4	6.1	6.1	
10	ldukki	33	4	≈	:	۷ 8	1 п	: :	33.0	2	13.8	
ę	Ernakulam	109	4	35	: '	?; ;	י	≥ -	48.0	95.0		
7	Trichur	88	10	60 60		7.7	:	- 0	41.9	47.5	3.8	
ж Ж	Palghat	80	← :	32	:) 0	:	, c	27.8	25.0	2.8	
9.	Malappuram	72	iO .	<u> </u>	: -	0 5	:	. –	40.0	28 0	2.0	
10.	Kozhikode	, 50	က '	5	-	C 6		ع ب	60	36 7	7.8	
=	Cannanore	8	9	7 4	:	e i	٠,	,		808	4.0	
	State	688, 7	61	286	11	261	۾	₽	39.0	2.6	!	
	DSO-District Statistical Officer	stical Officer		SI-	SI—Taluk Statistical Inspector	statisti	cal Insp	ector				

