



GOVERNMENT OF KERALA

CROP STATISTICS SYSTEM IN KERALA



2021 -  
2022

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**ANNUAL REVIEW OF  
CROP STATISTICS SYSTEM IN KERALA**

**Directorate of Economics & Statistics**



**GOVERNMENT OF KERALA**

**ANNUAL REVIEW OF CROP STATISTICS  
SYSTEM IN KERALA  
THROUGH THE SCHEME FOR  
IMPROVEMENT OF CROP STATISTICS  
2021-22**

**DEPARTMENT OF ECONOMICS & STATISTICS  
KERALA**



## **PREFACE**

*Department of Economics & Statistics is the nodal agency for collecting agricultural statistics in the State and Director of Economics & Statistics is the State Agricultural Statistics Authority (SASA). “Establishment of an Agency for Reporting Agricultural Statistics” is a 100% Central sector scheme, implemented by the Ministry of Agriculture and Farmers Welfare, Government of India. Land utilization, area of crops, production, yield rate, irrigation details etc. are being collected through EARAS Scheme.*

*The National Statistical Office (NSO) under Ministry of Statistics & Programme Implementation, Government of India has the overall responsibility of providing technical guidance to the state for developing suitable survey techniques for obtaining timely and reliable estimates of crop area and yield and imparting training to the state government field personnel.*

*Sample check by the supervisory staff of NSO (FOD) and State Government on a matching basis in two-overlapping samples is a super check for rectifying the non-sampling error. For this purpose the Scheme “**Improvement of Crop Statistics (ICS)**” was taken up in the year 1975-76. The scheme aims to find out deficiencies in the system of crop statistics by exercising technical supervision over the primary field work and suggesting remedial measures for strengthening the system.*

*NSO (FOD) publishes findings of sample check every year highlighting issues in each and every State. The Department of Economics & Statistics, Kerala also publishes a report with analysis of results of the sample check every year titled “**Annual Review of Crop Statistics System in Kerala through the Scheme for Improvement of Crop Statistics**”.*

*This report is prepared by the EARAS Division of the Directorate of Economics and Statistics, Government of Kerala under the supervision of Smt. K. Haleema Beegum, Joint Director (EARAS) under the guidance of Sri.T.P. Vinodan, Additional Director (Prices). I would like to extend my sincere appreciation to all the staff engaged in the preparation of the report. I hope that this publication will help in improving the quality of Crop Statistics in Kerala.*

  
**SREEKUMAR B**  
**DIRECTOR**



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## **EXECUTIVE SUMMARY**

To improve the quality and reliability of area and yield statistics, the scheme for Improvement of Crop Statistics (ICS) was introduced in 1975-76. As a part of Improvement of Crop statistics, NSO and Department of Economics & Statistics are jointly conducting sample check study and preparing reports to find out the deficiencies and shortcomings in conducting area enumeration and crop estimation survey in the EARAS scheme and to give suggestions for solving them.

### **Area Enumeration**

1. During Autumn, Winter and Summer seasons, the Timeliness of completion of study in wet clusters are 95%, 97.5%, 100% for Central Sample and 86.25%, 90% & 90% for State Sample respectively. Whereas the same in the case of Summer Dry is 71.25% and 100% for Central & State sample.
2. The EARAS statements were submitted by due date after completing Girdawari in 82.5% cases during Autumn, 80% cases during Winter and 78.75% cases during Summer and 38.75% cases during Summer Dry for Central Sample and 65%, 87.5% , 86.25% and 86.25% respectively for state sample.
3. Date of submission of EARAS statements were not reported in 3.75% cases during Autumn, 2.5% cases during Winter, 5% cases during Summer and 58.75% cases during Summer Dry for Central Sample and 0%, 2.5%, 3.75% and 6.25% respectively for state sample.
4. Crop areas reported by primary workers did not tally with those observed by the ICS supervisors in some cases. Non reporting of crops actually grown in 0.73% of central samples in Winter, reporting of crops actually not grown in 0.95% of central samples in Summer and reporting incorrect area in 0.90% of central samples in Autumn and 1.09% of central samples in Winter. Reporting of incorrect area in 3.80% of state samples in Autumn, 3.22% of state samples in Winter and 2.3% of state samples in Summer. These errors should be avoided.

## **Crop cutting Experiments**

1. The participation by the supervisors in sample check on crop cutting experiments at harvest stage was 100% for Central sample and State Sample during Autumn, Winter, Summer and Summer dry seasons respectively for the year 2021-22.
2. For the year 2021-22, 99.10%, 98.18% and 99.05% experiments of Central Samples and 96.20%, 96.78% and 97.7% of State Sample were found to be free from procedural errors during Autumn, Winter and Summer respectively.
3. Standard equipments supplied by the department were used in crop cutting experiments for Central and State Samples.

## നിർവ്വാഹക സംക്ഷിപ്തം (Executive Summary)

വിസ്തൃതിയുടേയും വിളവിന്റേയും സ്ഥിതിവിവരക്കണക്കുകളുടെ ഗുണനിലവാരവും, വിശ്വാസ്യതയും മെച്ചപ്പെടുത്തുന്നതിന് ഇംപ്രൂവ്മെന്റ് ഓഫ് ക്രോപ്പ് സ്റ്റാറ്റിസ്റ്റിക്സ് (ഐസിഎസ്) എന്ന സ്കീം 1975-76 ൽ ആരംഭിച്ചു. വിള സ്ഥിതിവിവരക്കണക്കുകൾ മെച്ചപ്പെടുത്തുന്നതിന്റെ ഭാഗമായി, ഇഎആർഎഎസ് പദ്ധതിയിലെ ഏരിയ എന്യൂമറേഷൻ, ക്രോപ്പ് എസ്റ്റിമേഷൻ എന്നിവയിലെ പോരായ്മകൾ കണ്ടെത്തി പരിഹരിക്കുന്നതിനുള്ള നിർദ്ദേശങ്ങൾ നൽകുന്നതിന് എൻഎസ്ഒ-യും സാമ്പത്തിക സ്ഥിതിവിവരക്കണക്ക് വകുപ്പും സാമ്പിൾ ചെക്ക് പഠനം നടത്തി റിപ്പോർട്ടുകൾ തയ്യാറാക്കുന്നു.

### ഏരിയ എന്യൂമറേഷൻ

1. വിരിപ്പ്, മുണ്ടകൻ, പുഞ്ച സീസണുകളിൽ, നിലം ക്ലസ്റ്ററുകളിൽ പരിശോധന യഥാസമയം പൂർത്തിയാക്കിയത് സെൻട്രൽ സാമ്പിളിൽ യഥാക്രമം 95%, 97.5%, 100% എന്നിങ്ങനെയും, സ്റ്റേറ്റ് സാമ്പിളിൽ 86.25%, 90%, 90% എന്നിങ്ങനെയുമാണ്. പുഞ്ച സീസണിലെ കര ക്ലസ്റ്ററിൽ, ഇത് സെൻട്രൽ സാമ്പിളിന് 71.25% ഉം സ്റ്റേറ്റ് സാമ്പിളിന് 100% ഉം ആണ്.
2. എന്യൂമറേഷൻ പൂർത്തിയാക്കിയതിന് ശേഷം ഇഎആർഎഎസ് റിപ്പോർട്ടുകൾ യഥാസമയം സമർപ്പിച്ചത് സെൻട്രൽ സാമ്പിളിൽ- വിരിപ്പ് സീസണിൽ 82.5% ഉം, മുണ്ടകൻ സീസണിൽ 80% ഉം, പുഞ്ച (നിലം) സീസണിൽ 78.75% ഉം, പുഞ്ച (കര) സീസണിൽ 38.75% ഉം ആണ്. എന്നാൽ സ്റ്റേറ്റ് സാമ്പിളിൽ ഇവ യഥാക്രമം 65%, 87.5% , 86.25%, 86.25% എന്നിങ്ങനെയാണ്.
3. ഇഎആർഎഎസ് റിപ്പോർട്ടുകൾ സമർപ്പിച്ച തീയതി പല ഷെഡ്യൂളുകളിലും രേഖപ്പെടുത്തിയിട്ടില്ല. ആയത് സെൻട്രൽ സാമ്പിളിൽ - വിരിപ്പ് സീസണിൽ 3.75% ഉം, മുണ്ടകൻ സീസണിൽ 2.5%, പുഞ്ച (നിലം) സീസണിൽ 5% ഉം, പുഞ്ച (കര) സീസണിൽ 58.75% ഉം ആണ്. എന്നാൽ സ്റ്റേറ്റ് സാമ്പിളിൽ ഇവ യഥാക്രമം 0%, 2.5%, 3.75%, 6.25% എന്നിങ്ങനെയാണ്.
4. ഇൻവെസ്റ്റിഗേറ്റർമാർ റിപ്പോർട്ട് ചെയ്ത ക്രോപ്പ് ഏരിയ ചില സന്ദർഭങ്ങളിൽ ICS സൂപ്പർവൈസർമാർ നിരീക്ഷിച്ച ഏരിയയുമായി പൊരുത്തപ്പെടുന്നില്ല. സെൻട്രൽ സാമ്പിളുകളിൽ മുണ്ടകൻ സീസണിൽ യഥാർത്ഥത്തിൽ വളരുന്ന വിളകൾ റിപ്പോർട്ട് ചെയ്യാത്തത് 0.73% ഉം, പുഞ്ച സീസണിൽ യഥാർത്ഥത്തിൽ വളരാത്ത വിളകൾ റിപ്പോർട്ട് ചെയ്തത് 0.95% ഉം ആണ്. സെൻട്രൽ സാമ്പിളുകളിൽ വിരിപ്പ് , മുണ്ടകൻ, പുഞ്ച സീസണുകളിൽ തെറ്റായ ഏരിയ റിപ്പോർട്ട് ചെയ്തത് യഥാക്രമം 0.90%, 1.09%, 0% എന്നിങ്ങനെയും, സ്റ്റേറ്റ് സാമ്പിളുകളിൽ ഇവ യഥാക്രമം 3.80% , 3.22% , 2.3% ഉം ആണ്. ഈ തെറ്റുകൾ ഒഴിവാക്കേണ്ടതാണ്.



## വിളവെടുപ്പ് പരീക്ഷണങ്ങൾ

1. 2021-22 -ൽ വിരിപ്പ്, മുണ്ടകൻ, പുഞ്ച (നിലം), പുഞ്ച (കര) സീസണുകളിൽ വിളവെടുപ്പ് ഘട്ടത്തിലെ പരിശോധനയിൽ സെൻട്രൽ സാമ്പിളിലും സ്റ്റേറ്റ് സാമ്പിളിലും സൂപ്പർവൈസർമാരുടെ പങ്കാളിത്തം 100% ആയിരുന്നു.
2. 2021-22-ൽ വിരിപ്പ്, മുണ്ടകൻ, പുഞ്ച (നിലം) സീസണുകളിൽ സെൻട്രൽ സാമ്പിളുകളുടെ 99.10%, 98.18%, 99.05% പരീക്ഷണങ്ങളും സ്റ്റേറ്റ് സാമ്പിളുകളുടെ 96.20%, 96.78%, 97.7% പരീക്ഷണങ്ങളും നടപടിക്രമങ്ങളിൽ പിഴവുകളില്ലാത്തതായി കണ്ടെത്തിയിട്ടുണ്ട്.
3. സെൻട്രൽ, സ്റ്റേറ്റ് സാമ്പിളുകൾക്കായുള്ള വിളവെടുപ്പ് പരീക്ഷണങ്ങളിൽ വകുപ്പ് വിതരണം ചെയ്യുന്ന സ്റ്റാൻഡേർഡ് ഉപകരണങ്ങൾ ഉപയോഗിച്ചിട്ടുണ്ട്.

## **PART I**

### **INTRODUCTION**

#### **Scheme for Improvement of Crop Statistics (ICS)**

The scheme ICS which had a modest beginning in the year 1975-76 reached to the optimum coverage in the subsequent years. The scheme is closely related to the scheme TRS, EARAS & GCES and was initiated with the objective to point out the deficiencies in the system of collection of area and yield statistics through the joint efforts of NSO and DES and suggest remedial measures.

Land use statistics is collected by Area Enumeration Survey and the yield rate of principal crops are estimated through General Crop Estimation Survey (GCES).

The position of crop production and procedure taken for collecting data on Area enumeration and Yield rate are included in this report. Details of equipments supplied, adequacy of experiments planned under General Crop Estimation Survey (GCES), response rate etc. are included in this report. Besides, the findings of sample check under ICS scheme on working of the system are also brought out indicating the remedial measures to rectify the deficiencies observed.

#### **1. The Scheme for Improvement of Crop Statistics (ICS)**

The scheme accomplishes its objectives by conducting sample check study on the primary fieldwork through

- (1) Physical verification of the crop enumeration done by the investigator in a sample of 80 Investigator zones in each season.
- (2) Checking the aggregation of crop wise area in the Form I diary and
- (3) Inspection of crop cutting experiments at harvest stage in an agricultural year.

Sample check studies are undertaken by the supervisory staff of NSO (FOD) and the Supervisory staff of DES (ADOs) on matching basis in two non-overlapping samples.

The schedules viz, AS 1.0, AS 1.1 and AS 2.0 are used for recording the findings of sample check on (a) area enumeration (b) area aggregation and (c) crop cutting experiments respectively. The filled in schedules are sent to both agencies on reciprocal basis for tabulation and analysis.

The programme of sample check on area enumeration consists of selecting and locating 4 clusters in each selected Investigator zone. The supervisory officer from NSO or DES identifies the differences on reporting and recording crops in the concerned survey numbers during each season and the variation on reporting the land utilisation are identified by all means.

The concurrent inspection of crop cutting experiments at harvest stage consists of examining the conduct of the experiments by the investigator conforms to the procedures prescribed under GCES. The inspection covers aspects such as selection of field and random coordinates, marking of experimental plots of specified shape and size, harvesting, weighing of the produce etc. The supply and use of equipments for conducting the crop cutting experiments, training received by the primary workers, crop condition, use of inputs etc. are also ascertained.

The data collected through the sample check are analysed facilitating factual appraisal of the system with reference to the following.

- (1) Timeliness in completion of area enumeration and working of the EARAS Scheme
- (2) Discrepancies in recording crop area, their frequency and impact.
- (3) Discrepancies in recording ancillary information, their frequency and impact.
- (4) Discrepancies in crop abstract and their impact.
- (5) Departures from the prescribed procedure of conducting crop cutting experiments and their impact.

The yield data from the supervised experiments are also used for obtaining the average yield rates of specified crops and their standard errors. The calculation

of standard errors and their study is helpful in assessing the adequacy of the sample size, trend of changes in yield rates and in planning other allied studies.

## **2. General Crop Estimation Surveys (GCES)**

GCES consists of performing a specified number of crop cutting experiment in randomly selected fields. Crop cutting experiment, conducted under well designed estimation survey, is an effective technique for estimating the average yield; by selecting the field, randomly locating a plot of a specified size, harvesting, threshing, weighing and recording the weight of the produce from the plot.

## **3. Timely Reporting Scheme (TRS)**

The Ministry of Agriculture initiated TRS in 1968-69 in land record states in order to reduce the time lag between (a) completion of sowing and the availability of estimates of area sown and (b) the completion of harvesting and availability of estimates of production in respect of important crops. Being a non-land record state, in Kerala, Agriculture Statistics is being collected under EARAS Scheme since 1975-76.

## **4. Establishment of an Agency for Reporting Agricultural Statistics (EARAS)**

Under the scheme EARAS, collection of data for estimating area and yield statistics for every agricultural year by way of complete enumeration of the villages of the State in a phased manner powering 20% of the selected villages was done in each year. The first cycle of the survey was completed within a period of six years from 1975-76 to 1980-81 and the second cycle completed in 1985-86. During 1993-94 the Investigator Zones were recognized by suiting the villages to Panchayats. From 2000-01 onwards the part Panchayats was discontinued and each Investigator Zone was formed with full Panchayat/Panchayats. Cluster sampling method is followed in EARAS Scheme in order to obtain representation from the entire area of the Investigator Zone. The production of crops is estimated on the basis of scientifically designed crop cutting experiments conducted by the Investigators

under the supervision of Statistical Inspectors/Taluk Statistical Officers/ District Level Officers.

### **5. District Level Committee (DLC)**

The main objective in forming DLCs is to probe into the reasons for the wide difference or unusual similarity between the crop wise and non crop area figures recorded by the State primary worker during the crop enumeration and those observed by the Central/State Supervisor during sample check study on area enumeration under the scheme for Improvement of Crop Statistics (ICS). **District Level Committee would be formed in two districts** where the differences between the two sets of figures are quite large or negligible would be selected. The districts selected in the previous year may not be considered for the selection for the current year.

## **PART II**

### **Analysis of Data 2021-22**

#### **2.1 Check on Area Enumeration**

Every year 80 non-overlapping Investigator Zones each under Central and State Samples are selected for Sample Check on Area Enumeration. The sample checks are conducted immediately after the completion of area enumeration survey under EARAS scheme.

##### **1) Response in Sample Check on Area Enumeration during 2021-22**

The response in sample check on area enumeration ie; the number of Investigator zones for which filled in schedules were received during 2021-22 is given in Table-1&1(a). The response was 100% for all season for all districts for Central Sample & State Sample.

**Table -1**

**RESPONSE IN SAMPLE CHECK ON ENUMERATION OF AREA DURING 2021-22**

Sl.No.	District	Agency	Sample Size	Percentage of Response		
				Autumn	Winter	Summer
1	2	3	4	5	6	7
1	Thiruvananthapuram	C	5	100	100	100
		S	5	100	100	100
2	Kollam	C	5	100	100	100
		S	5	100	100	100
3	Pathanamthitta	C	3	100	100	100
		S	3	100	100	100
4	Alappuzha	C	3	100	100	100
		S	3	100	100	100
5	Kottayam	C	7	100	100	100
		S	7	100	100	100
6	Idukki	C	8	100	100	100
		S	8	100	100	100
7	Ernakulam	C	5	100	100	100
		S	5	100	100	100
8	Thrissur	C	5	100	100	100
		S	5	100	100	100
9	Palakkad	C	9	100	100	100
		S	9	100	100	100
10	Malappuram	C	7	100	100	100
		S	7	100	100	100
11	Kozhikkode	C	6	100	100	100
		S	6	100	100	100
12	Wayanad	C	5	100	100	100
		S	5	100	100	100
13	Kannur	C	7	100	100	100
		S	7	100	100	100
14	Kasaragod	C	5	100	100	100
		S	5	100	100	100
For District Covered		C	80	100	100	100
		S	80	100	100	100
C- Central Sample S-State Sample						

Table-1 (a)				
RESPONSE IN SAMPLECHECK ON ENUMERATION OF AREA DURING 2021-22 SUMMER DRY				
Sl.No.	District	Agency	Sample Size	Percentage of Response
1	2	3	4	5
1	Thiruvananthapuram	C	5	100
		S	5	100
2	Kollam	C	5	100
		S	5	100
3	Pathanamthitta	C	3	100
		S	3	100
4	Alappuzha	C	3	100
		S	3	100
5	Kottayam	C	7	100
		S	7	100
6	Idukki	C	8	100
		S	8	100
7	Ernakulam	C	5	100
		S	5	100
8	Thrissur	C	5	100
		S	5	100
9	Palakkad	C	9	100
		S	9	100
10	Malappuram	C	7	100
		S	7	100
11	Kozhikode	C	6	100
		S	6	100
12	Wayanad	C	5	100
		S	5	100
13	Kannur	C	7	100
		S	7	100
14	Kasaragod	C	5	100
		S	5	100
For District covered		C	80	100
		S	80	100



## **2) Completion of Area Enumeration under EARAS**

The Investigator is required to complete the EARAS survey according to prescribed time schedule and to submit the filled in schedules immediately after completion of the work. The sample checks are conducted after completion of area enumeration.

Timeliness in completion of area enumeration during 2021-22 is given in Table-2&2(a). During Autumn, Winter and Summer seasons, the Timeliness of completion is 95%, 97.5%, 100% for Central Sample and 86.25%, 90% & 90% for State Sample respectively. Whereas the same in the case of Summer Dry is 71.25% and 100% for Central & State sample. 5% and 2.5% enumeration work during Autumn and Winter season are completed after due date for Central Sample. Area Enumeration of 13.75% for Autumn, 10% for Winter and 10% for summer were completed after due date for State sample.

During Autumn season, 28.57% of samples in Kottayam, 16.67% in Kozhikkode and 20% in Wayanad for Central Sample and 100% samples in Kollam, Pathanamthitta and Alappuzha, for State Samples were completed by Girdawari after due date. During Winter season, 20% of samples in Thiruvananthapuram and 14.29% in Kottayam for Central Samples and 100% of samples in Pathanamthitta, 80% in Kollam and 11.11% in Palakkad for State Samples were completed by Girdawari after due date. During Summer season, all the State Samples in Pathanamthitta and Thrissur districts were completed by Girdawari after due date.

During Summer Dry, the date of completion by Girdawari was not recorded in the prescribed schedule of 57.14% of samples in Kottayam, 50% in Idukki, 11.11% in Palakkad, 85.71% in Malappuram, 83.33% in Kozhikkode and 60% in Wayanad for Central samples.

**CHART-1**  
**COMPLETION OF GIRDAWARI 2021-22 AUTUMN**

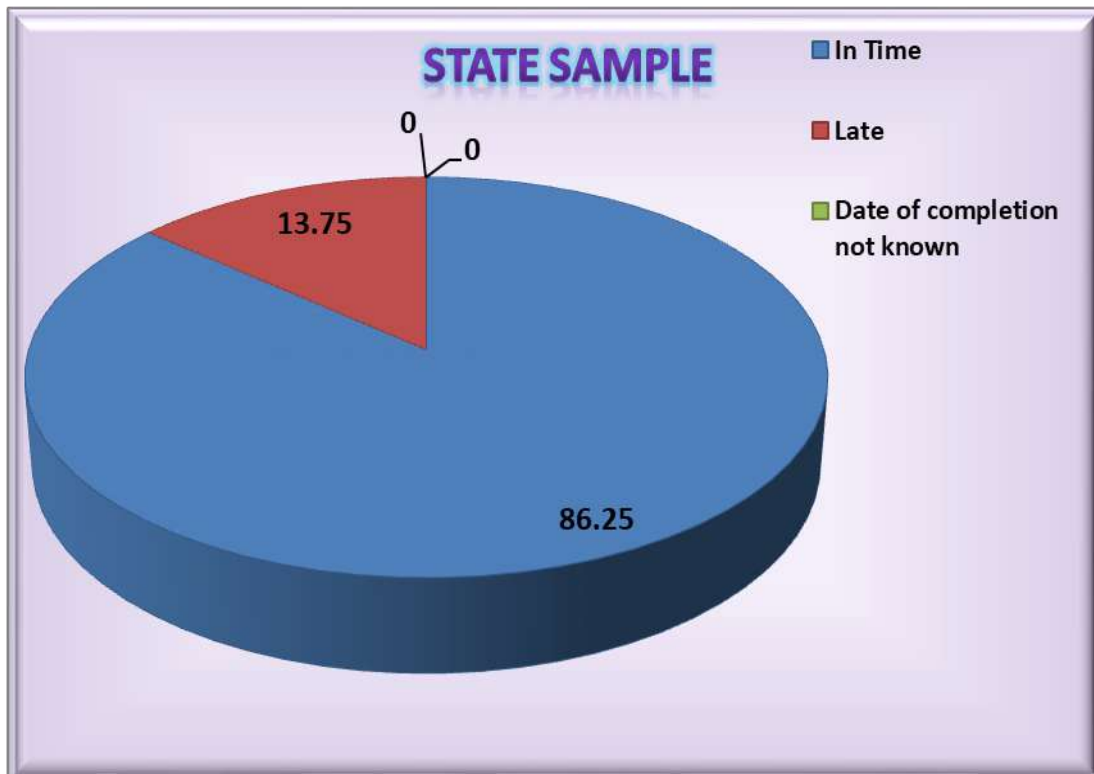
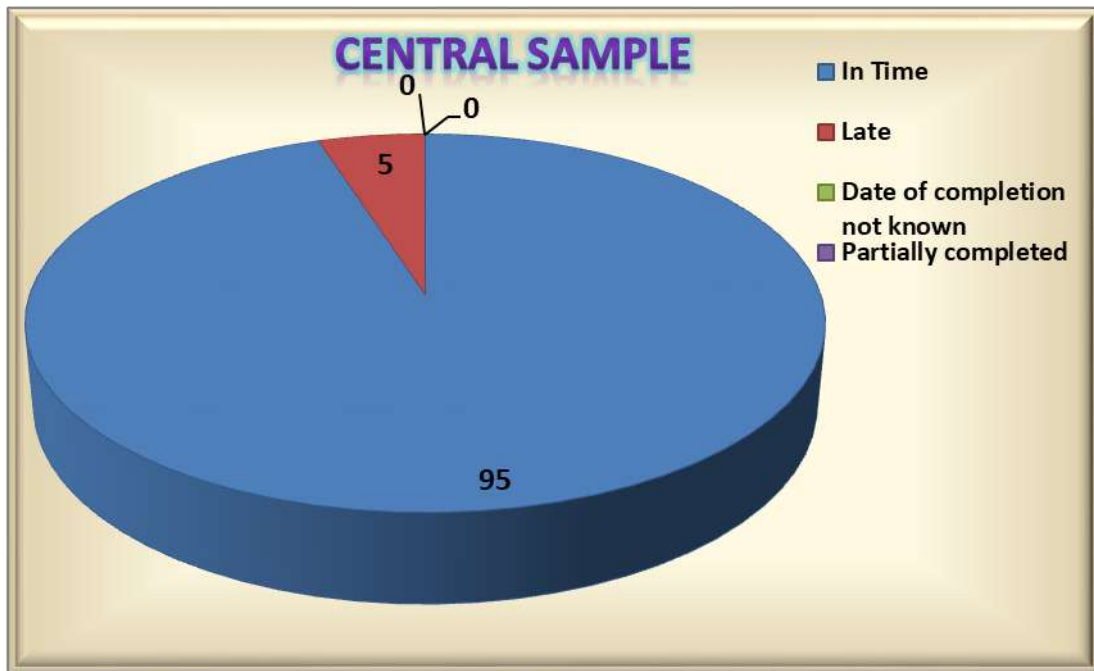


CHART-2  
COMPLETION OF GIRDAWARI 2021-22 WINTER

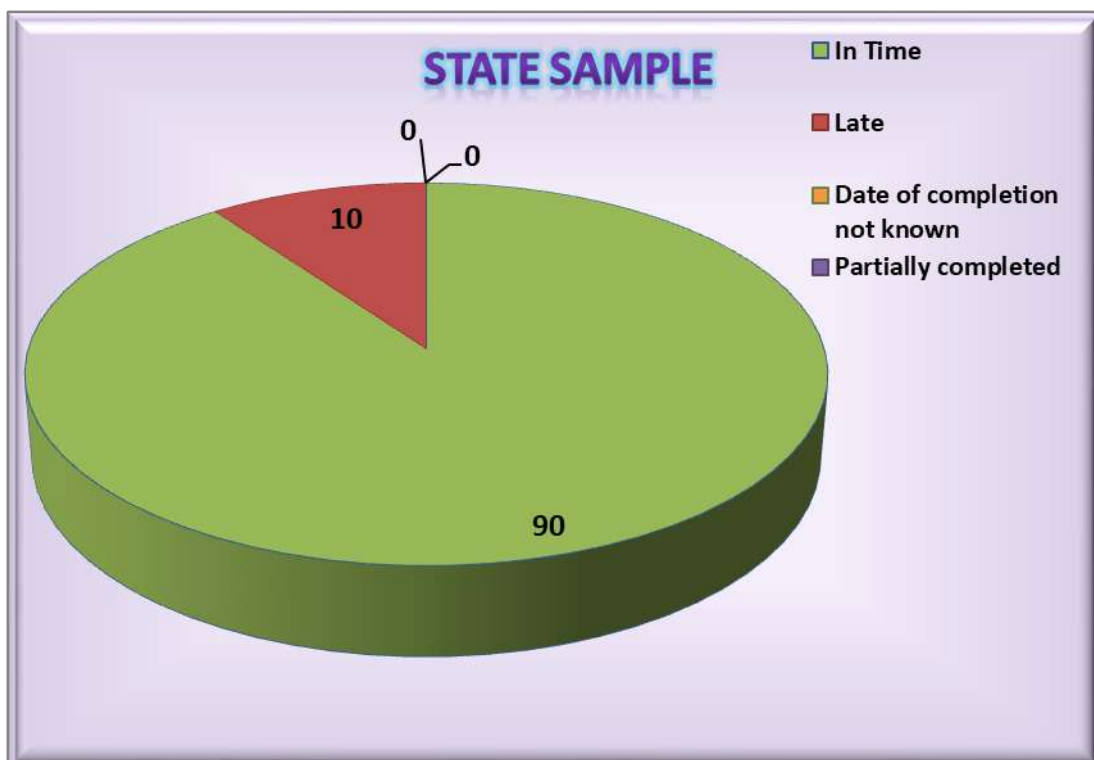
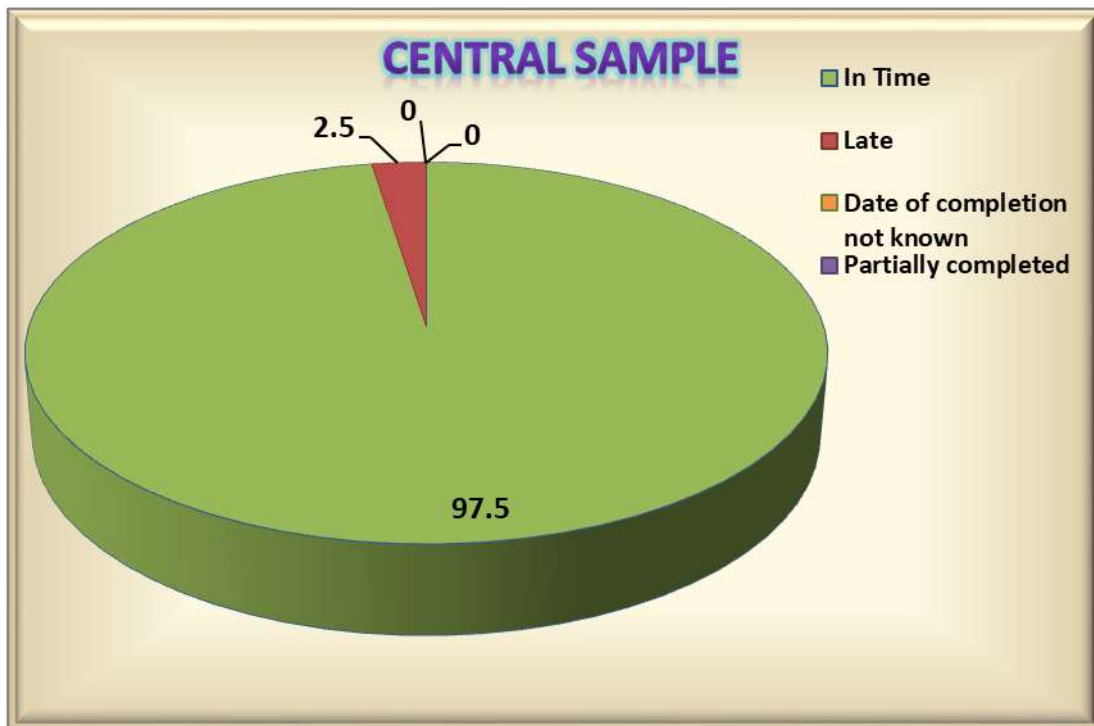
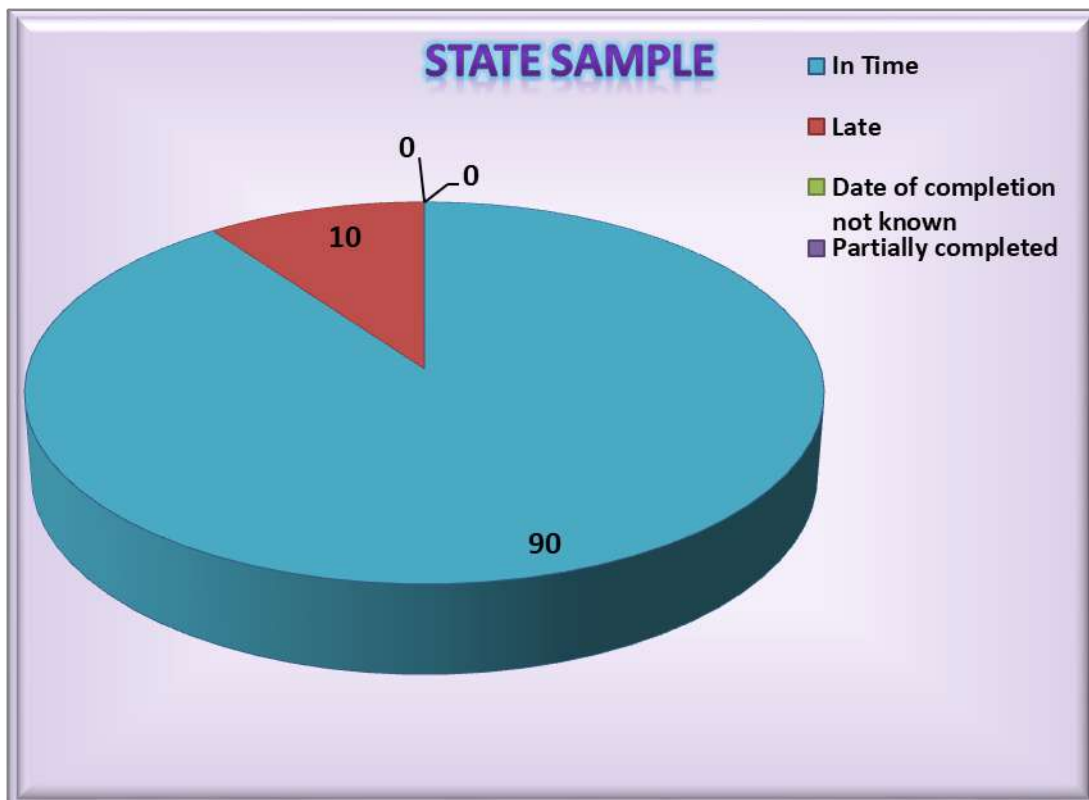
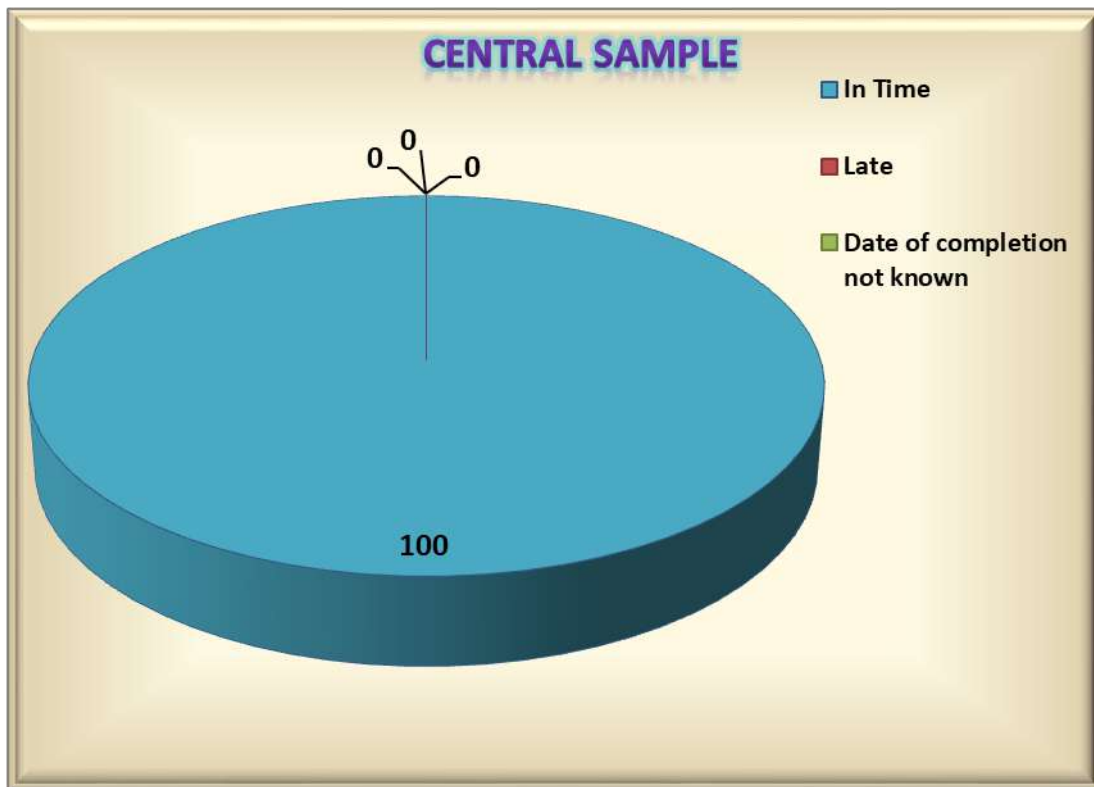


CHART-3  
COMPLETION OF GIRDAWARI 2021-22 SUMMER



**CHART-4**  
**COMPLETION OF GIRDAWARI 2021-22 SUMMER DRY**

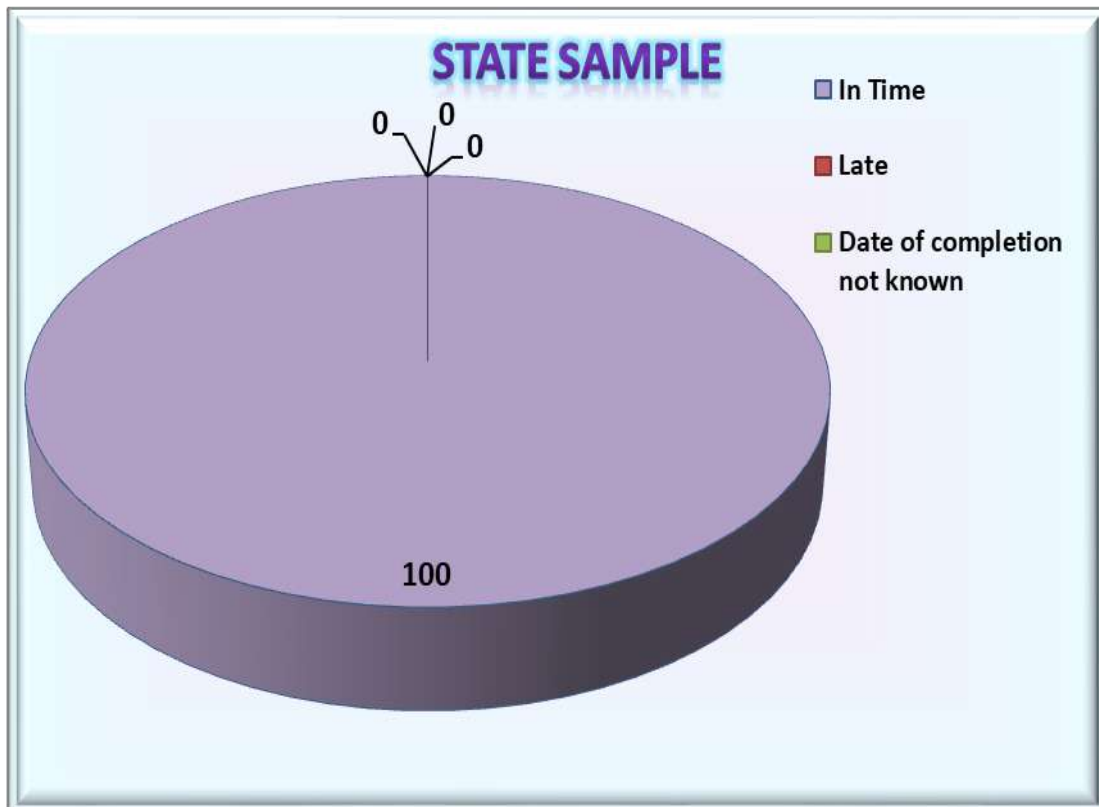
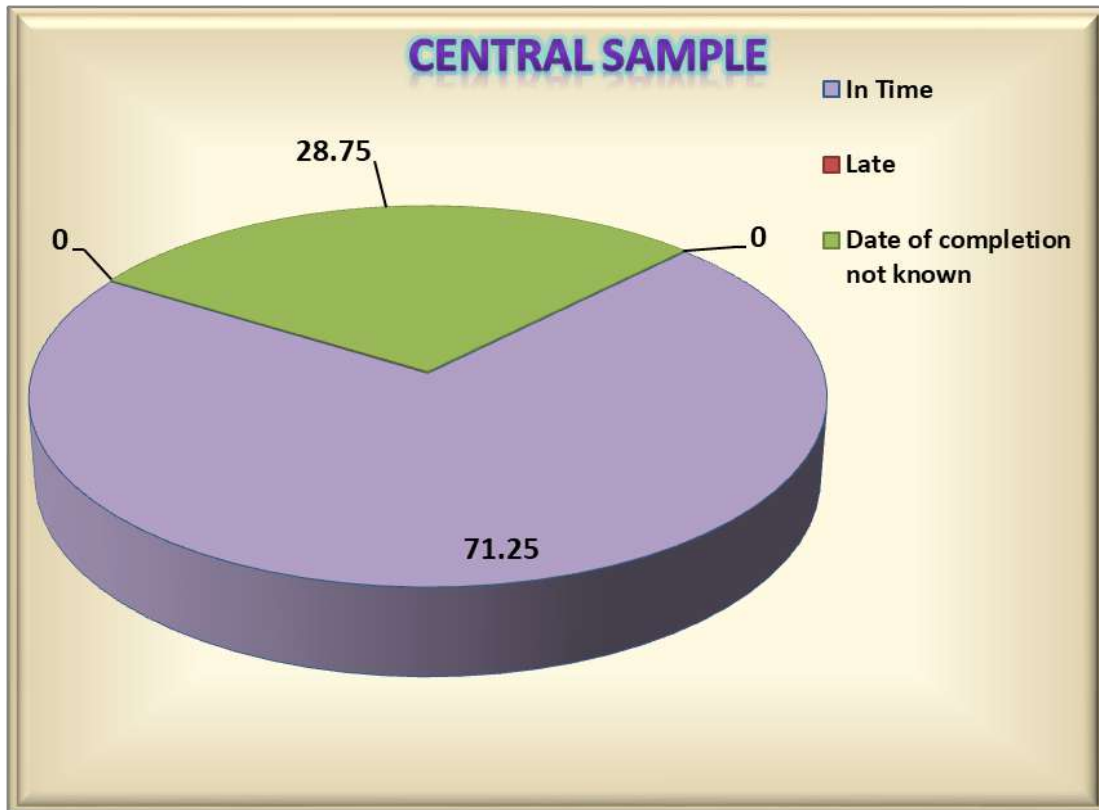


Table-2

**TIMELINESS IN COMPLETION OF GIRDAWARI DURING 2021-22**

Sl · No.	District	Agency	Percentage of villages where girdawari was completed during										
			Autumn				Winter				Summer		
			In Time	Late	But date of completion not known	Partially completed	In Time	Late	But date of completion not known	Partially completed	In Time	Late	But date of completion not known
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	C	100				80	20			100		
		S	100				100				100		
2	Kollam	C	100				100				100		
		S		100			20	80			100		
3	Pathanamthitta	C	100				100				100		
		S		100				100				100	
4	Alappuzha	C	100				100				100		
		S		100			100				100		
5	Kottayam	C	71.43	28.57			85.71	14.29			100		
		S	100				100				100		
6	Idukki	C	100				100				100		
		S	100				100				100		
7	Ernakulam	C	100				100				100		
		S	100				100				100		
8	Thrissur	C	100				100				100		
		S	100				100					100	
9	Palakkad	C	100				100				100		
		S	100				88.89	11.11			100		
10	Malappuram	C	100				100				100		
		S	100				100				100		
11	Kozhikode	C	83.33	16.67			100				100		
		S	100				100				100		
12	Wayanad	C	80	20			100				100		
		S	100				100				100		
13	Kannur	C	100				100				100		
		S	100				100				100		
14	Kasaragod	C	100				100				100		
		S	100				100				100		
For District covered		C	95	5			97.5	2.5			100		
		S	86.25	13.75			90	10			90	10	

<b>Table-2 (a)</b>						
<b>TIMELINESS IN COMPLETION OF GIRDAWARI DURING 2021-22</b>						
<b>SUMMER DRY</b>						
Sl.No.	District	Agency	Percentage of villages where girdawari was completed during			
			In Time	Late	But date of completion not known	Partially completed
1	2	3	4	5	6	7
1	Thiruvananthapuram	C	100			
		S	100			
2	Kollam	C	100			
		S	100			
3	Pathanamthitta	C	100			
		S	100			
4	Alappuzha	C	100			
		S	100			
5	Kottayam	C	42.86		57.14	
		S	100			
6	Idukki	C	50		50	
		S	100			
7	Ernakulam	C	100			
		S	100			
8	Thrissur	C	100			
		S	100			
9	Palakkad	C	88.89		11.11	
		S	100			
10	Malappuram	C	14.29		85.71	
		S	100			
11	Kozhikode	C	16.67		83.33	
		S	100			
12	Wayanad	C	40		60	
		S	100			
13	Kannur	C	100			
		S	100			
14	Kasaragod	C	100			
		S	100			
For District covered		C	71.25		28.75	
		S	100			

### 3) Submission of EARAS Statement

The details of season wise submission of EARAS statement during 2021-22 are indicated in Table-3&3(a). Timely submission of EARAS statements still needs considerable improvement in almost all districts. The EARAS statements were submitted before due date after completion by Girdawari in 82.5% cases during Autumn, 80% cases during Winter, 78.75% cases during Summer and 38.75% cases during Summer dry for Central Sample and 65%, 87.5%, 86.25% and 86.25% respectively for state sample.

The EARAS statements of all the State samples in Pathanamthitta were submitted by due date without completing Girdawari during all the three seasons. Similarly EARAS statements of 20% State samples from Kasaragod during summer dry season were submitted on due date without completion of Girdavari.

#### **3a) Percentage of samples from districts which submitted the EARAS statements after due date without completing Girdawari**

During Autumn season, all State Samples in Kollam, Alappuzha, Kannur and Kasaragod, the EARAS statements were submitted after due date without completing Girdawari. During Winter season, 60% of State Samples from Kollam and 11.11% of State Samples from Palakkad were submitted the EARAS statements after due date without completing Girdawari. During Summer season, 80% of State Samples from Thrissur submitted the EARAS statements after due date without completing Girdawari. No Central samples where the EARAS statements were submitted without completing Girdawari.

#### **3b) Percentage of samples from districts which submitted the EARAS statements after due dates after completing Girdawari**

SEASONS	CENTRAL	STATE
Autumn	Thiruvananthapuram 20% Kollam 20% Alappuzha 33.33% Kottayam 57.14% Idukki 12.5% Kozhikkode 16.67%. Wayanad 40%	Wayanad 100%



<b>Winter</b>	Thiruvananthapuram 80% Kollam 20% Kottayam 42.86% Idukki 25% Ernakulam 20% Kozhikkode 16.67% Wayanad 40%	Kollam 20%
<b>Summer</b>	Thiruvananthapuram 60% Kottayam 28.57% Idukki 37.5% Ernakulam 80% Malappuram 14.29%	Malappuram 14.29%
<b>Summer dry</b>	Palakkad 28.57%	Wayanad 100%

**3c) Percentage of samples from districts which submitted the EARAS statements but information regarding date of submission is not recorded**

<b>SEASONS</b>	<b>CENTRAL</b>	<b>STATE</b>
<b>Autumn</b>	Thiruvananthapuram-20% Pathanamthitta-33.33% Malappuram- 14.29%	
<b>Winter</b>	Kannur-14.29% Kasargod-20%	Ernakulam- 20% Palakkad-11.11%
<b>Summer</b>	Kannur-14.29% Kollam-20% Thrissur-20% Malappuram- 14.29%	Kottayam-14.29% Thrissur-20% Malappuram- 14.29%
<b>Summer dry</b>	Thiruvananthapuram-40% Kollam-40% Pathanamthitta-66.67% Kottayam-85.71% Idukki -87.5% Ernakulam- 20% Thrissur-60% Kozhikkode-100% Malappuram- 100% Wayanad- 100% Kannur-71.43% Kasargod-20%	Kollam-20% Pathanamthitta-100% Alappuzha -33.33%

**Table-3**  
**TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2021-22**

Sl. No	District	Season	Agency	Percentage of villages for which									
				EARAS Statement submitted				EARAS statement not submitted					
				Without completing girdawari		After completing girdawari		regarding date of submission not	Though girdawari completed	Girdawari not completed	Information regarding date of submission not known		
				By due date	After due date	By due date	After due date						
1	2	3	4	5	6	7	8	9	10	11	12		
1	Thiruvananthapuram	Autumn	C			60	20	20					
			S			100							
		Winter	C			20	80						
			S			100							
		Summer	C			40	60						
			S			100							
2	Kollam	Autumn	C			80	20						
			S		100								
		Winter	C			80	20						
			S		60	20	20						
		Summer	C			80		20					
			S			100							
3	Pathanamthitta	Autumn	C			66.67		33.33					
			S	100									
		Winter	C			100							
			S	100									
		Summer	C			100							
			S	100									
4	Alappuzha	Autumn	C			66.67	33.33						
			S		100								
		Winter	C			100							
			S			100							
		Summer	C			100							
			S			100							
5	Kottayam	Autumn	C			42.86	57.14						
			S			100							
		Winter	C			57.14	42.86						
			S			100							
		Summer	C			71.43	28.57						
			S			85.71		14.29					

Table 3 contd...

**Table-3**  
**TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2021-22**

Sl. No	District	Season	Agency	Percentage of villages for which									
				EARAS Statement submitted				EARAS statement not submitted					
				Without completing girdawari		After completing girdawari		Information regarding date of submission not known	Though girdawari completed	Girdawari not completed	Information regarding date of submission not known		
				By due date	After due date	By due date	After due date						
1	2	3	4	5	6	7	8	9	10	11	12		
6	Idukki	Autumn	C			87.5	12.5						
			S			100							
		Winter	C			75	25						
			S			100							
		Summer	C			62.5	37.5						
			S			100							
7	Ernakulam	Autumn	C			100							
			S			100							
		Winter	C			80	20						
			S			80		20					
		Summer	C			20	80						
			S			100							
8	Thrissur	Autumn	C			100							
			S			100							
		Winter	C			100							
			S			100							
		Summer	C			80		20					
			S			80		20					
9	Palakkad	Autumn	C			100							
			S			100							
		Winter	C			100							
			S		11.11	77.78		11.11					
		Summer	C			100							
			S			100							
10	Malappuram	Autumn	C			85.71		14.29					
			S			100							
		Winter	C			100							
			S			100							
		Summer	C			71.42	14.29	14.29					
			S			71.42	14.29	14.29					

Table 3 contd...

**Table-3**  
**TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2021-22**

Sl. No	District	Season	Agency	Percentage of villages for which									
				EARAS Statement submitted				EARAS statement not submitted					
				Without completing girdawari		After completing girdawari		Information regarding date of submission not known	Though girdawari completed	Girdawari not completed	Information regarding date of submission not known		
				By due date	After due date	By due date	After due date						
1	2	3	4	5	6	7	8	9	10	11	12		
11	Kozhikkode	Autumn	C			83.33	16.67						
			S			100							
		Winter	C			83.33	16.67						
			S			100							
		Summer	C			100							
			S			100							
12	Wayanad	Autumn	C			60	40						
			S				100						
		Winter	C			60	40						
			S			100							
		Summer	C			100							
			S			100							
13	Kannur	Autumn	C			100							
			S		100								
		Winter	C			85.71		14.29					
			S			100							
		Summer	C			85.71		14.29					
			S			100							
14	Kasaragod	Autumn	C			100							
			S		100								
		Winter	C			80		20					
			S			100							
		Summer	C			100							
			S			100							
For District covered		Autumn	C			82.5	13.75	3.75					
			S	3.75	25	65	6.25						
		Winter	C			80	17.5	2.5					
			S	3.75	5	87.5	1.25	2.5					
		Summer	C			78.75	16.25	5					
			S	3.75	5	86.25	1.25	3.75					

Sl. No.	District	Agency	Percentage of villages for which								
			EARAS Statement submitted					EARAS Statement not submitted			
			Without completing girdawari		After completing girdawari		Information regarding date of submission not known	Though girdawari completed	Girdawari not completed	Information regarding date of submission not known	
			By due date	After due date	By due date	After due date					
1	2	3	4	5	6	7	8	9	10	11	
1	Thiruvananthapuram	C			60		40				
		S			100						
2	Kollam	C			60		40				
		S			80		20				
3	Pathanamthitta	C			33.33		66.67				
		S					100				
4	Alappuzha	C			100						
		S			66.67		33.33				
5	Kottayam	C			14.29		85.71				
		S			100						
6	Idukki	C			12.5		87.5				
		S			100						
7	Ernakulam	C			80		20				
		S			100						
8	Thrissur	C			40		60				
		S			100						
9	Palakkad	C			77.78	28.57					
		S			100						
10	Malappuram	C					100				
		S			100						
11	Kozhikode	C					100				
		S			100						
12	Wayanad	C					100				
		S				100					
13	Kannur	C			28.57		71.43				
		S			100						
14	Kasaragod	C			80		20				
		S	20		80						
For District covered		C			38.75	2.5	58.75				
		S	1.25		86.25	6.25	6.25				

C-Central Sample

S-State Sample

#### 4) Discrepancies in recording crop and crop areas

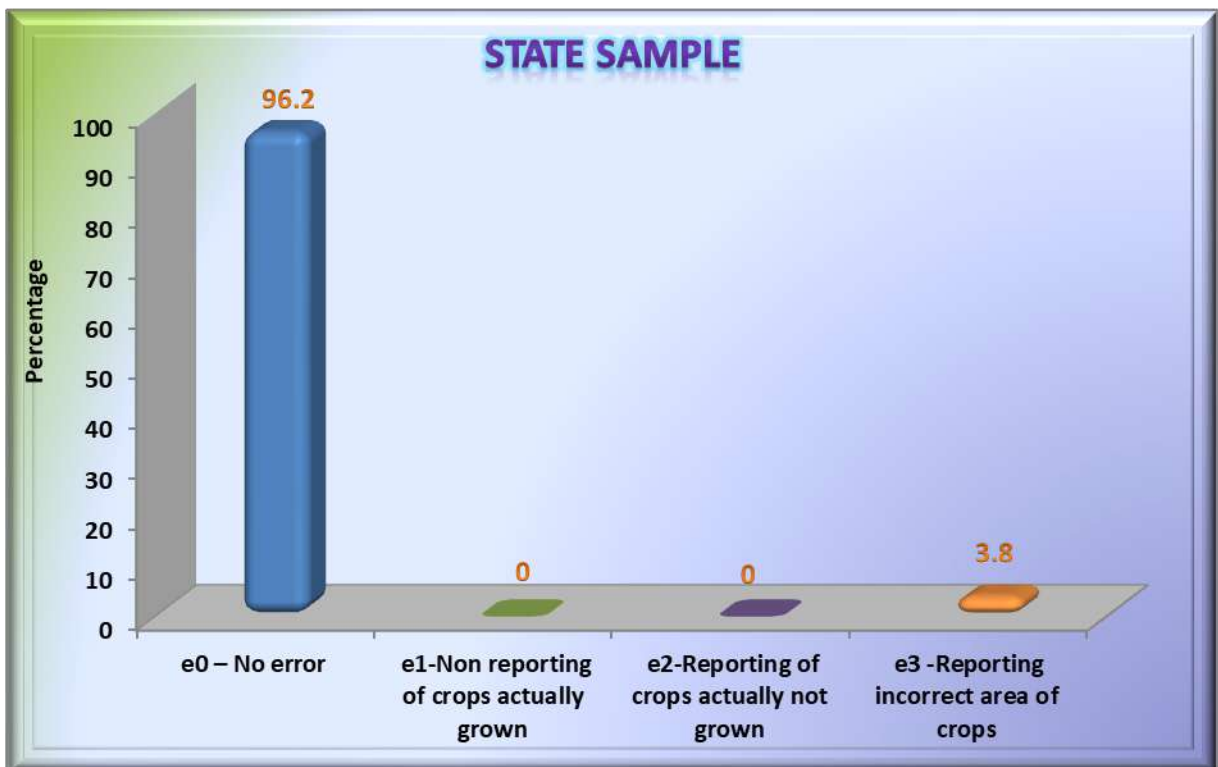
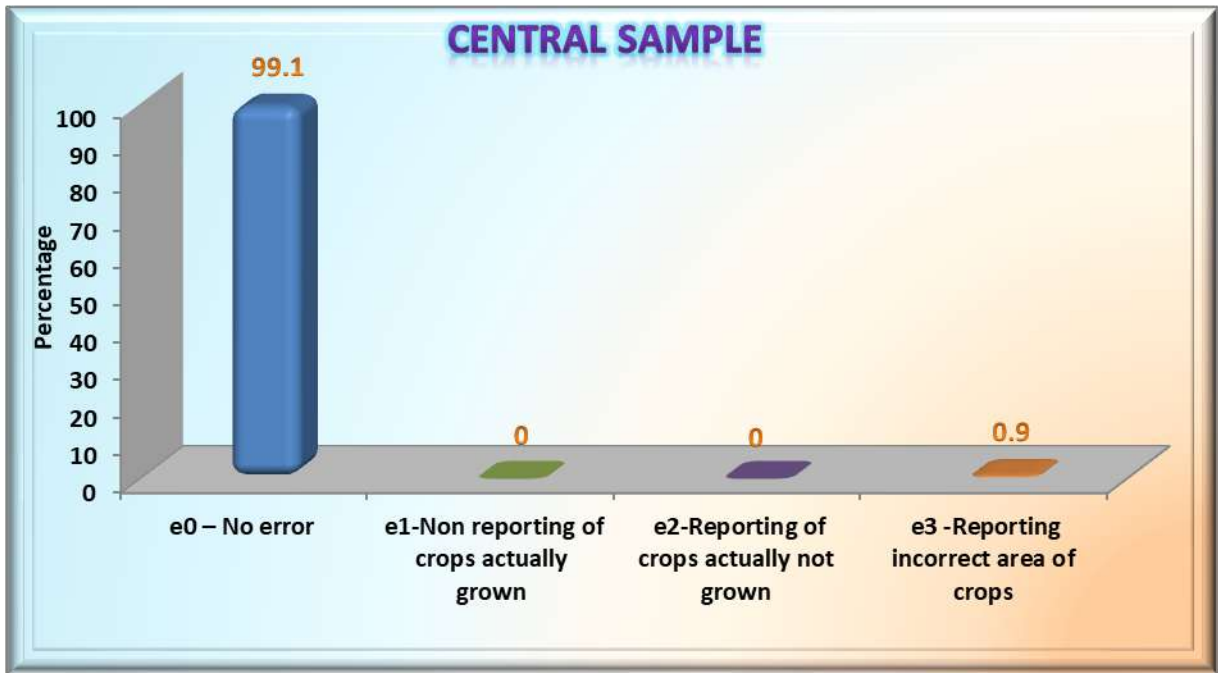
Details of crop and its area reported by the Investigator in the state system and with the corresponding entries made by the technical personnel associated with the ICS programme reveal the following type of discrepancies.

- 1) Non-reporting of crops actually grown (E1)
- 2) Reporting of crops actually not grown (E2)
- 3) Reporting of incorrect area of crops (E3)

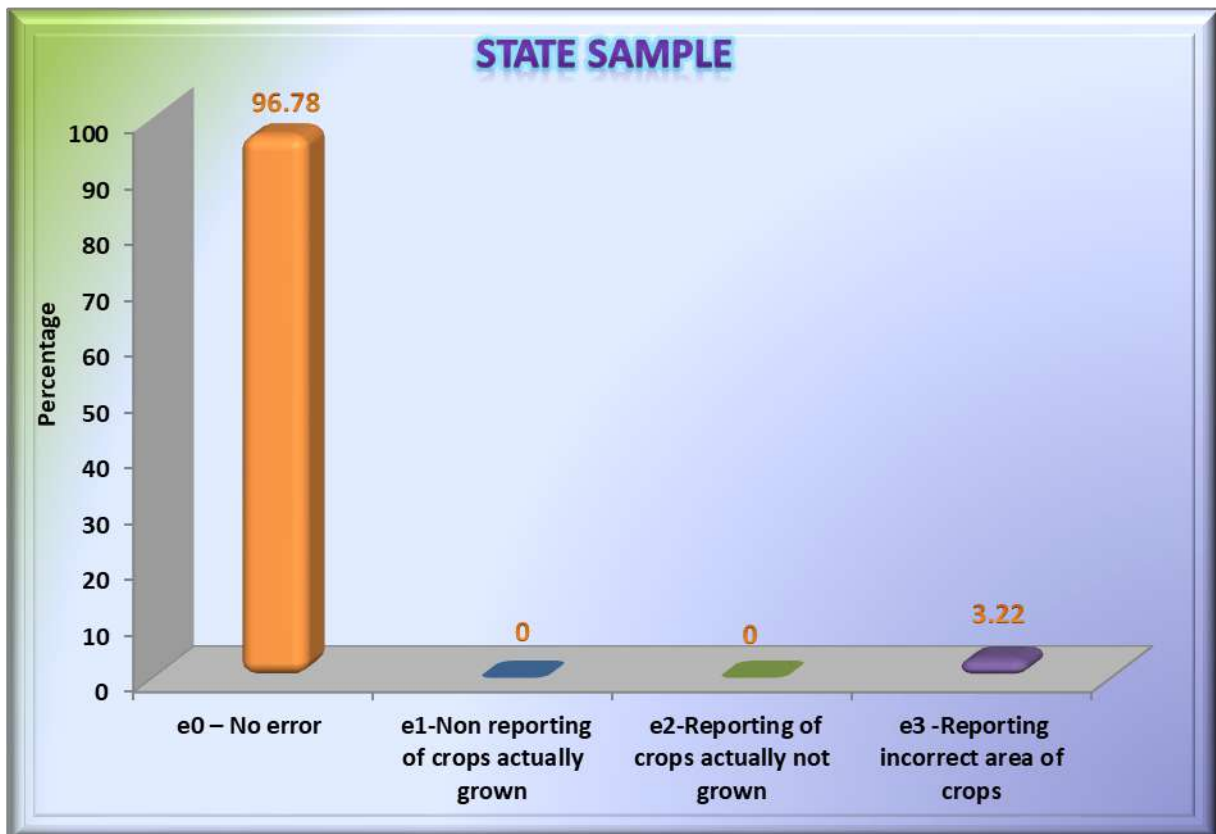
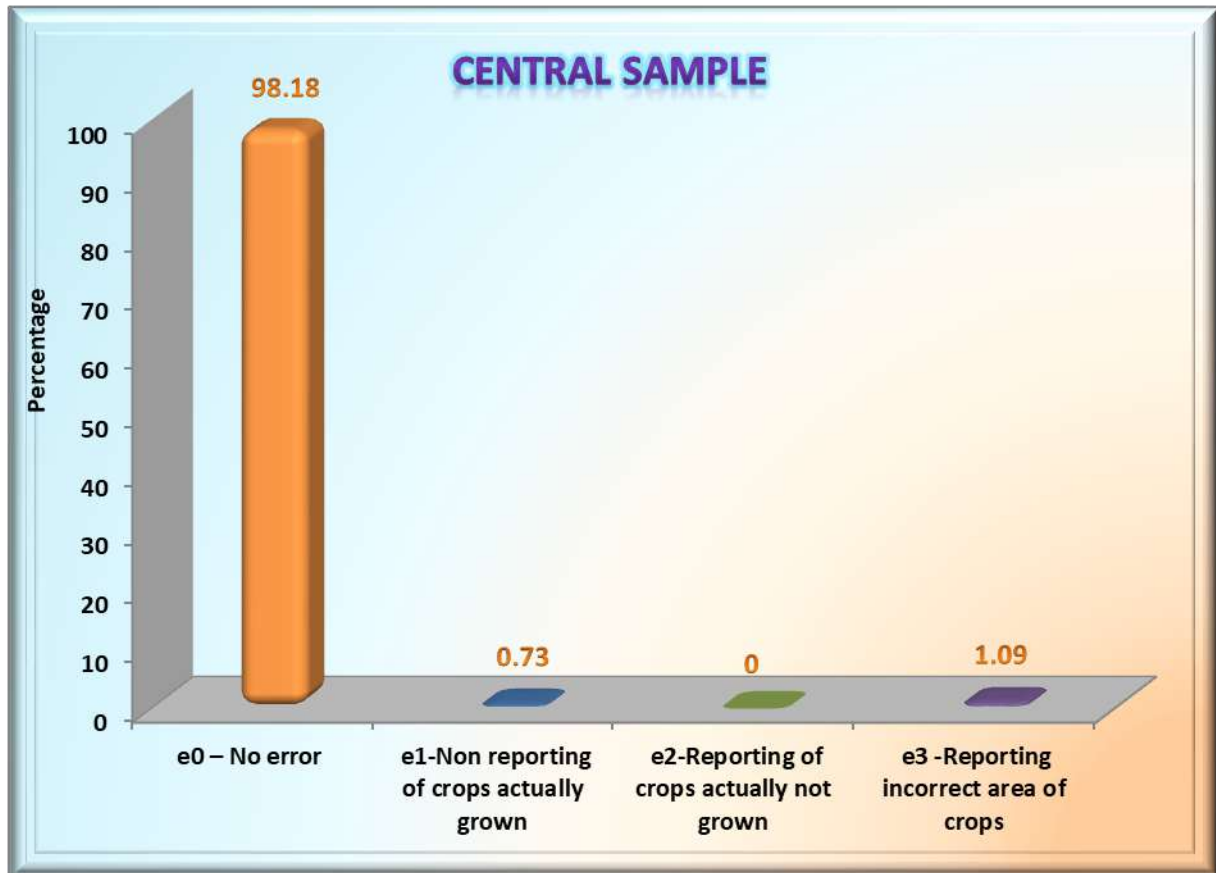
The percentage of survey numbers in which different types of discrepancies in recording paddy area by the Investigator during Autumn, Winter and Summer for the year 2021-22 are given in Table-4. The error, which non-reporting of the actual grown area of the crop (E1) is 0.73% (Wayanad -7.41%) in winter for Central Sample. Reporting of crops actually not grown (E2) is 0.95% (Kottayam-7.69%) in Summer for Central Sample. Reporting of incorrect area of crops (E3) is 0.90% (Idukki -50%) in autumn and 1.09% (Palakkad-4.41%) in winter for Central Sample.

Reporting of incorrect area of crops (E3) is 3.80% (Kannur-17.65%) in autumn and 3.22% (Kottayam-4%, Idukki-12.5%, Palakkad-2.56%, Kozhikkode-5.26%, Kannur-10.87%) in winter and 2.3%( Pathanamthitta-7.69%, Thrissur-4.35%) during summer for State Sample.

**CHART-5**  
**ERRORS IN RECORDING CROP AND CROP AREAS 2021-22 AUTUMN**

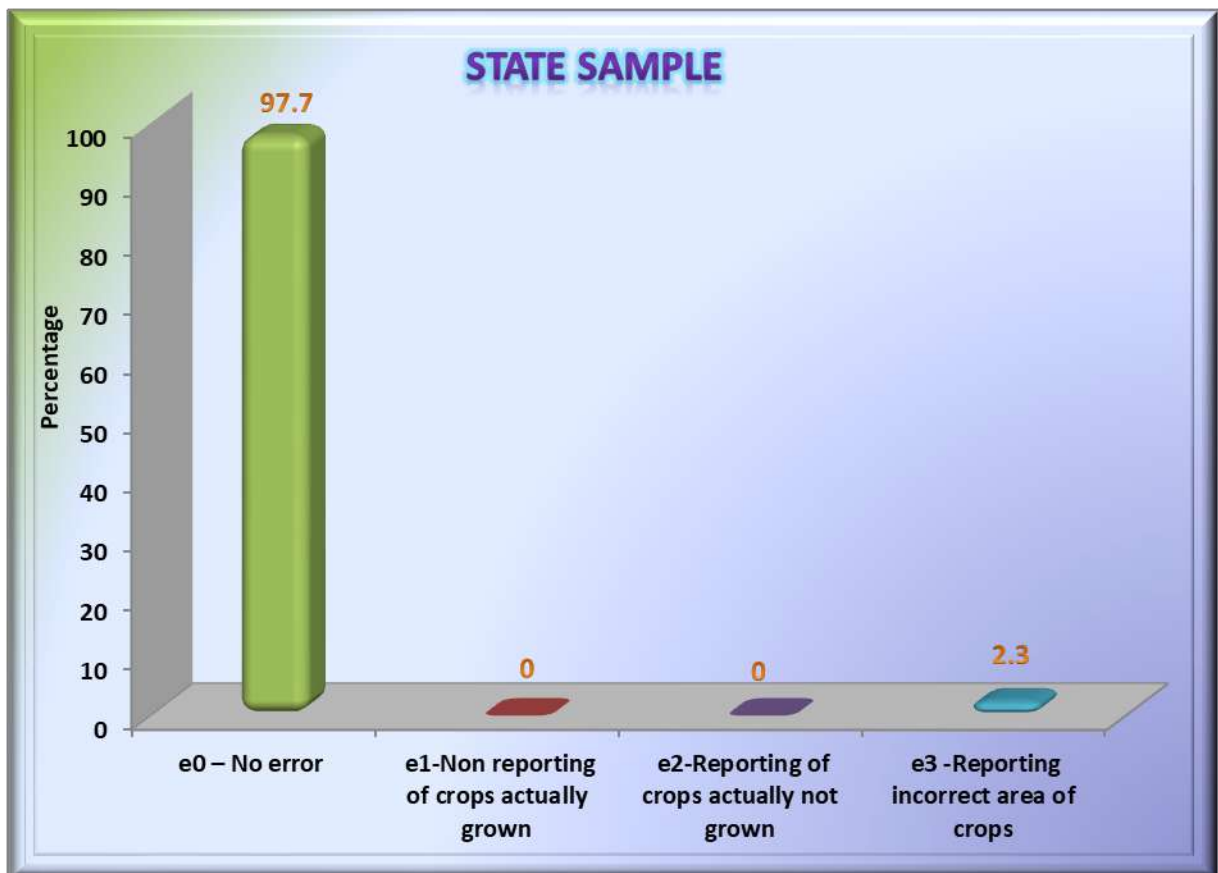
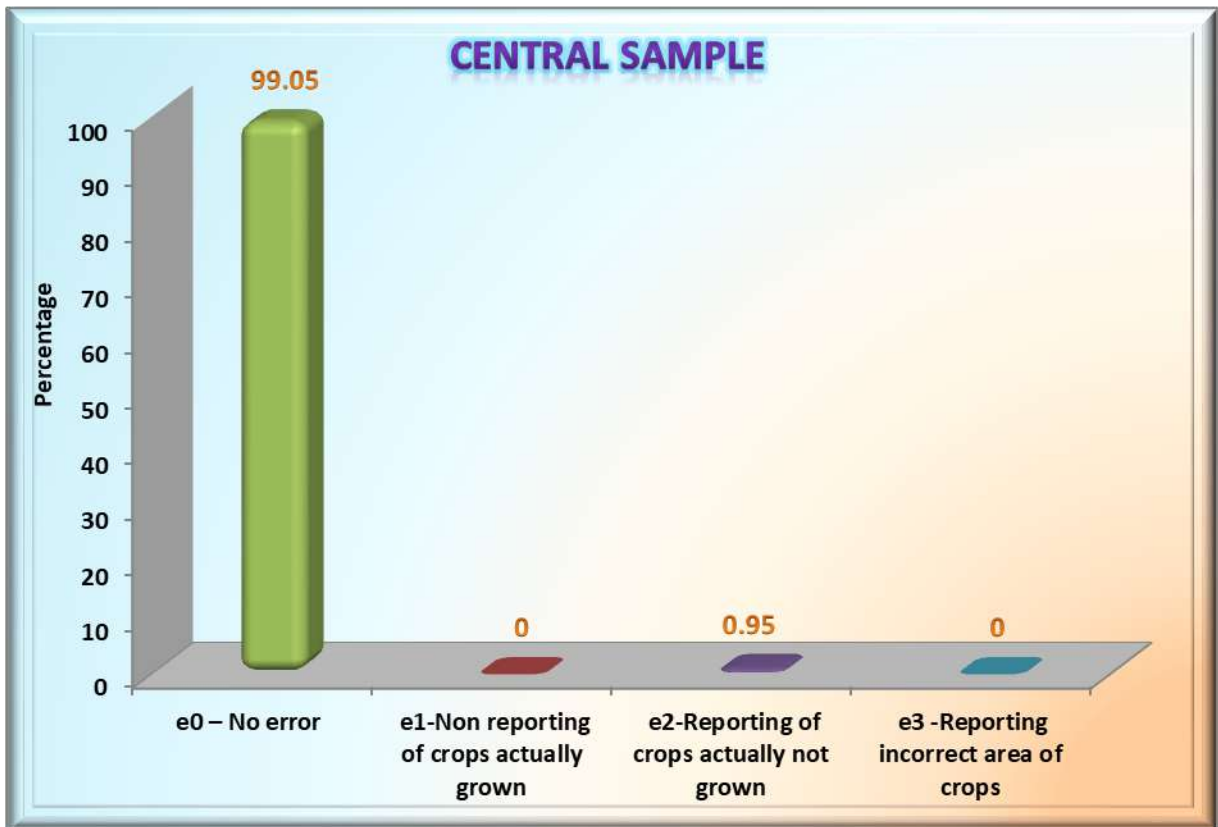


**CHART-6**  
**ERRORS IN RECORDING CROPS AND CROP AREAS 2021-22 WINTER**





**CHART-7**  
**ERRORS IN RECORDING CROPS AND CROP AREAS 2021-22 SUMMER**



**Table-4**  
**PERCENTAGE OF SURVEY NUMBERS IN WHICH ERRORS IN RECORDING CROP AREAS WERE OBSERVED: 2021-22**

Sl. No.	District	Agency	Percentage of survey numbers with different types of errors in enumeration of area during												
			AUTUMN				WINTER				SUMMER				
			e <sub>0</sub>	e <sub>1</sub>	e <sub>2</sub>	e <sub>3</sub>	e <sub>0</sub>	e <sub>1</sub>	e <sub>2</sub>	e <sub>3</sub>	e <sub>0</sub>	e <sub>1</sub>	e <sub>2</sub>	e <sub>3</sub>	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C	100					100							
		S	100					100				100			
2	Kollam	C						100							
		S						100							
3	Pathanamthitta	C						100							
		S										92.31			7.69
4	Alappuzha	C	100					100				100			
		S						100				100			
5	Kottayam	C						100				92.31		7.69	
		S	100					96			4	100			
6	Idukki	C	50			50		100							
		S						87.5			12.5	100			
7	Ernakulam	C	100					100				100			
		S	100									100			
8	Thrissur	C						100				100			
		S	100					100				95.65			4.35
9	Palakkad	C						95.59			4.41	100			
		S	100					97.44			2.56	100			
10	Malappuram	C	100					100				100			
		S	100					100				100			
11	Kozhikode	C						100				100			
		S						94.74			5.26	100			
12	Wayanad	C						92.59	7.41			100			
		S						100				100			
13	Kannur	C	100					100				100			
		S	82.35			17.65		89.13			10.87				
14	Kasaragod	C	100					100							
		S	100					100							
For District covered		C	99.10			0.90		98.18	0.73		1.09	99.05		0.95	
		S	96.20			3.80		96.78			3.22	97.7			2.3

C-Central Sample S-State Sample

e<sub>0</sub> - No error e<sub>1</sub>-Non reporting of crops actually grown e<sub>2</sub>-Reporting of crops actually not grown

e<sub>3</sub> -Reporting incorrect area of crops

**Table-4 (a)**  
**PERCENTAGE OF SURVEY NUMBERS IN WHICH ERRORS IN RECORDING CROP AREAS WERE OBSERVED: 2021-22**

Sl. No.	District	Agency	Percentage of survey numbers with different types of errors in enumeration of area during			
			SUMMER DRY			
			e <sub>0</sub>	e <sub>1</sub>	e <sub>2</sub>	e <sub>3</sub>
1	2	3	4	5	6	7
1	Thiruvananthapuram	C				
		S				
2	Kollam	C				
		S				
3	Pathanamthitta	C				
		S				
4	Alappuzha	C				
		S				
5	Kottayam	C				
		S				
6	Idukki	C				
		S				
7	Ernakulam	C				
		S				
8	Thrissur	C				
		S				
9	Palakkad	C	100			
		S				
10	Malappuram	C				
		S				
11	Kozhikode	C				
		S				
12	Wayanad	C				
		S				
13	Kannur	C				
		S				
14	Kasaragod	C				
		S				
For District covered		C	100			
		S				
C-Central Sample S-State Sample						
e <sub>0</sub> - No error e <sub>1</sub> -Non reporting of crops actually grown e <sub>2</sub> -Reporting of crops actually not grown						
e <sub>3</sub> -Reporting incorrect area of crops						

## **5) Discrepancies in recording Irrigation particulars of Paddy**

Information on distribution of survey numbers as per the Irrigation particulars for paddy during Autumn, Winter and Summer, Summer Dry is given in Table 5(a), 5(b) and 5 (c) and 5 (d) respectively. No discrepancy is recorded in Central or State samples in recording variety of paddy by Patwari and Supervisor.

**Table-5(a)**  
**DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS OF PADDY**  
**DURING 2021-22 - AUTUMN**

Sl. No	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
			I & UI	I	UI	Total	Supervisor				Patwari				
							I	UI	NR	Total	I	UI	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C		100											
		S		100											
2	Kollam	C													
		S													
3	Pathanamthitta	C													
		S													
4	Alappuzha	C		100											
		S													
5	Kottayam	C													
		S		100											
6	Idukki	C		100											
		S													
7	Ernakulam	C		100											
		S			100										
8	Thrissur	C			100										
		S			100										
9	Palakkad	C			100										
		S		22.54	77.46										
10	Malappuram	C			100										
		S			100										
11	Kozhikode	C													
		S													
12	Wayanad	C													
		S													
13	Kannur	C			100										
		S			100										
14	Kasaragod	C			100										
		S			100										
For District covered		C		32.43	67.57										
		S		24	76										
												C-Central Sample	S-State Sample		
			I-Irrigated	UI- Un Irrigated	NR-Non reporting										

<b>Table-5(b)</b>														
<b>DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS OF PADDY DURING 2021-22 - WINTER</b>														
Sl. No	District	Agency	Percentage of survey numbers in which particulars											
			Tallied				Not Tallied							
			I & UI	I	UI	Total	Supervisor				Patwari			
I	UI	NR					Total	I	UI	NR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Thiruvananthapuram	C		100										
		S		100										
2	Kollam	C			100									
		S			100									
3	Pathanamthitta	C		100										
		S												
4	Alappuzha	C		71.43	28.57									
		S		100										
5	Kottayam	C		100										
		S		100										
6	Idukki	C		33.33	66.67									
		S		81.25	18.75									
7	Ernakulam	C		100										
		S												
8	Thrissur	C		100										
		S		100										
9	Palakkad	C		100										
		S		75.64	24.36									
10	Malappuram	C		36.36	63.64									
		S		78.69	21.31									
11	Kozhikode	C		66.67	33.33									
		S			100									
12	Wayanad	C		100										
		S		100										
13	Kannur	C		93.75	6.25									
		S		100										
14	Kasaragod	C		100										
		S		75	25									
For District covered		C		<b>84.36</b>	<b>15.64</b>									
		S		<b>82.16</b>	<b>17.84</b>									
C-Central Sample												S-State Sample		
			I-Irrigated	UI- Un Irrigated	NR-Non reporting									

**Table-5(c)**  
**DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS OF PADDY**  
**DURING 2021-22 - SUMMER**

Sl. No	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
			I & UI	I	UI	Total	Supervisor				Patwari				
							I	UI	NR	Total	I	UI	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C													
		S		100											
2	Kollam	C													
		S													
3	Pathanamthitta	C													
		S		100											
4	Alappuzha	C		100											
		S		100											
5	Kottayam	C		100											
		S		100											
6	Idukki	C													
		S		100											
7	Ernakulam	C		100											
		S		100											
8	Thrissur	C		100											
		S		100											
9	Palakkad	C		100											
		S		100											
10	Malappuram	C		81.82	18.18										
		S		100											
11	Kozhikode	C		100											
		S		100											
12	Wayanad	C		100											
		S		100											
13	Kannur	C		100											
		S													
14	Kasaragod	C													
		S													
For District covered		C		98.1	1.9										
		S		100											
C-Central Sample      S-State Sample															
			I-Irrigated	UI- Un Irrigated	NR-Non reporting										

**Table-5(d)**  
**DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS OF PADDY**  
**DURING 2021-22 - SUMMER DRY**

Sl. No	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
							Supervisor				Patwari				
			I & UI	I	UI	Total	I	UI	NR	Total	I	UI	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C													
		S													
2	Kollam	C													
		S													
3	Pathanamthitta	C													
		S													
4	Alappuzha	C													
		S													
5	Kottayam	C													
		S													
6	Idukki	C													
		S													
7	Ernakulam	C													
		S													
8	Thrissur	C													
		S													
9	Palakkad	C			100										
		S													
10	Malappuram	C													
		S													
11	Kozhikode	C													
		S													
12	Wayanad	C													
		S													
13	Kannur	C													
		S													
14	Kasaragod	C													
		S													
For District covered		C			100										
		S													
												C-Central Sample		S-State Sample	
			I-Irrigated	UI- Un Irrigated	NR-Non reporting										



## **6) Discrepancies in recording variety particulars of seed used**

Information on distribution of survey numbers as per the type of seed used for paddy during Autumn, Winter and Summer, Summer Dry is given in Table 6(a), 6(b) and 6 (c) and 6(d) respectively. No discrepancy is recorded in Central or State samples in recording variety of paddy by Patwari and Supervisor.

**Table-6(a)**  
**DISCREPANCIES IN RECORDING SEED VARIETY PARTICULARS OF PADDY**  
**DURING 2021-22 - AUTUMN**

Sl. No	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
			Hy & L	Hy	L	Total	Supervisor				Patwari				
							Hy	L	NR	Total	Hy	L	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C		100											
		S		100											
2	Kollam	C													
		S													
3	Pathanamthitta	C													
		S													
4	Alappuzha	C		100											
		S													
5	Kottayam	C													
		S		100											
6	Idukki	C		100											
		S													
7	Ernakulam	C		100											
		S			100										
8	Thrissur	C													
		S		100											
9	Palakkad	C		100											
		S		100											
10	Malappuram	C		100											
		S		100											
11	Kozhikode	C													
		S													
12	Wayanad	C													
		S													
13	Kannur	C		77.78	22.22										
		S		100											
14	Kasaragod	C		100											
		S		100											
For District covered		C		96.4	3.6										
		S		98.73	1.27										
												C-Central Sample		S-State Sample	
HY-High Yielding Seed    L-Local variety seed    NR-Non reporting															

**Table-6(b)**  
**DISCREPANCIES IN RECORDING SEED VARIETY PARTICULARS OF PADDY**  
**DURING 2021-22 – WINTER**

Sl. No.	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
							Supervisor				Patwari				
			Hy & L	Hy	L	Total	Hy	L	NR	Total	Hy	L	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C		100											
		S		100											
2	Kollam	C		90.91	9.1										
		S		100											
3	Pathanamthitta	C		100											
		S													
4	Alappuzha	C		100											
		S		100											
5	Kottayam	C		100											
		S		100											
6	Idukki	C		50	50										
		S		100											
7	Ernakulam	C		100											
		S													
8	Thrissur	C		100											
		S		100											
9	Palakkad	C		98.53	1.47										
		S		98.72	1.28										
10	Malappuram	C		66.67	33.33										
		S		65.57	34.43										
11	Kozhikode	C		55.56	44.44										
		S		36.84	63.16										
12	Wayanad	C		92.59	7.41										
		S		89.29	10.71										
13	Kannur	C		68.75	31.25										
		S		76.09	23.91										
14	Kasaragod	C		54.55	45.45										
		S		8.33	91.67										
For District covered		C		86.55	13.45										
		S		82.75	17.25										
C-Central Sample      S-State Sample															
HY-High Yielding Seed      L-Local variety seed      NR-Non reporting															

**Table-6 (c)**  
**DISCREPANCIES IN RECORDING SEED VARIETY PARTICULARS OF PADDY**  
**DURING 2021-22 - SUMMER**

Sl. No	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
							Supervisor				Patwari				
			Hy & L	Hy	L	Total	Hy	L	NR	Total	Hy	L	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C													
		S		100											
2	Kollam	C													
		S													
3	Pathanamthitta	C													
		S		100											
4	Alappuzha	C		100											
		S		100											
5	Kottayam	C		61.54	38.46										
		S		100											
6	Idukki	C													
		S		100											
7	Ernakulam	C		100											
		S		100											
8	Thrissur	C		100											
		S		95.65	4.35										
9	Palakkad	C		93.33	6.67										
		S		100											
10	Malappuram	C		63.64	36.36										
		S		100											
11	Kozhikode	C		100											
		S		50	50										
12	Wayanad	C		100											
		S		100											
13	Kannur	C		100											
		S													
14	Kasaragod	C													
		S													
For District covered		C		90.48	9.52										
		S		98.85	1.15										
												C-Central Sample		S-State Sample	
			HY-High Yielding Seed			L-Local variety seed			NR-Non reporting						

**Table-6(d)**  
**DISCREPANCIES IN RECORDING SEED VARIETY PARTICULARS OF PADDY**  
**DURING 2021-22 - SUMMER DRY**

Sl. No.	District	Agency	Percentage of survey numbers in which particulars												
			Tallied				Not Tallied								
							Supervisor				Patwari				
			Hy &L	Hy	L	Total	Hy	L	NR	Total	Hy	L	NR	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C													
		S													
2	Kollam	C													
		S													
3	Pathanamthitta	C													
		S													
4	Alappuzha	C													
		S													
5	Kottayam	C													
		S													
6	Idukki	C													
		S													
7	Ernakulam	C													
		S													
8	Thrissur	C													
		S													
9	Palakkad	C		100											
		S													
10	Malappuram	C													
		S													
11	Kozhikode	C													
		S													
12	Wayanad	C													
		S													
13	Kannur	C													
		S													
14	Kasaragod	C													
		S													
For District covered		C		100											
		S													

C-Central Sample      S-State Sample

HY-High Yielding Seed      L-Local variety seed      NR-Non reporting

## **2.2 CHECK ON CROP CUTTING EXPERIMENTS**

### **1. Response in Sample check on Crop Cutting Experiments**

Table 7 reflects the percentage of crop cutting experiments during each season for each district for the year 2021-22. For Central and State Sample the response was 100% during autumn, winter and summer. Annual response of paddy Crop cutting for Central Sample and State Sample is 100%.

<b>Table-7</b>										
<b>RESPONSE IN SAMPLE CHECK ON CROP CUTTING EXPERIMENTS FOR PADDY DURING 2021-22</b>										
Sl.No.	District	Agency	AUTUMN		WINTER		SUMMER		ANNUAL	
			No of Expts Planned	% of Response	No of Expts Planned	% of Response	No of Expts Planned	% of Response	No of Expts Planned	% of Response
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	C	8	100	8	100	8	100	24	100
		S	8	100	8	100	8	100	24	100
2	Kollam	C	6	100	6	100	6	100	18	100
		S	6	100	6	100	6	100	18	100
3	Pathanamthitta	C	6	100	6	100	6	100	18	100
		S	6	100	6	100	6	100	18	100
4	Alappuzha	C	8	100	8	100	8	100	24	100
		S	8	100	8	100	8	100	24	100
5	Kottayam	C	6	100	6	100	6	100	18	100
		S	6	100	6	100	6	100	18	100
6	Idukki	C	4	100	4	100	4	100	12	100
		S	4	100	4	100	4	100	12	100
7	Ernakulam	C	10	100	10	100	10	100	30	100
		S	10	100	10	100	10	100	30	100
8	Thrissur	C	8	100	8	100	8	100	24	100
		S	8	100	8	100	8	100	24	100
9	Palakkad	C	10	100	10	100	10	100	30	100
		S	10	100	10	100	10	100	30	100
10	Malappuram	C	10	100	10	100	10	100	30	100
		S	10	100	10	100	10	100	30	100

Table 7 Continues

**Table-7**  
**RESPONSE IN SAMPLE CHECK ON CROP CUTTING EXPERIMENTS FOR PADDY**  
**DURING 2021-22**

Sl.No.	District	Agency	AUTUMN		WINTER		SUMMER		ANNUAL	
			No of Expts Planned	% of Response	No of Expts Planned	% of Response	No of Expts Planned	% of Response	No of Expts Planned	% of Response
11	Kozhikode	C	12	100	8	100	8	100	28	100
		S	12	100	8	100	8	100	28	100
12	Wayanad	C			4	100	4	100	8	100
		S			4	100	4	100	8	100
13	Kannur	C	8	100	8	100	6	100	24	100
		S	8	100	8	100	6	100	24	100
14	Kasaragod	C	4	100	4	100	6	100	12	100
		S	4	100	4	100	6	100	12	100
For District covered		C	100	100	100	100	100	100	300	100
		S	100	100	100	100	100	100	300	100

\*No Autumn Paddy in Wayanad district. Substituted from Kozhikode District.

## 2. Distribution of number of experiments

### 2.1 Distribution of number of experiments conducted according to important inputs

Table 8(a), 8(b) and 8(c) shows the details of paddy crop cutting experiments and Table 8(iv), 8(v), 8(vi), 8(vii), and 8(viii) shows the details of other crop cutting experiments, conducted according to the percentage of experiments, irrigated, sown with high yielding varieties of seeds and applied with fertilizer. More care may be given to attend the programme of ICS and procedure followed by the supervisory officer in time.

## 1) Paddy Crop Cutting Experiments

**Table-8(i)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**

**Paddy-Autumn**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	8	100	100	100
		S		8	100	100	100
		C	T	8	100	100	100
		S		8	100	100	100
2	Kollam	C	H	6	33.33	100	83.33
		S		6		100	66.67
		C	T	6	33.33	100	83.33
		S		6		100	66.67
3	Pathanamthitta	C	H	6	100	100	100
		S		6	66.67	100	100
		C	T	6	100	100	100
		S		6	66.67	100	100
4	Alappuzha	C	H	8	75	100	75
		S		8	50	100	75
		C	T	8	75	100	75
		S		8	50	100	75
5	Kottayam	C	H	6	100	100	83.33
		S		6	100	100	100
		C	T	6	100	100	83.33
		S		6	100	100	100
6	Idukki	C	H	4	100	75	100
		S		4	100	100	100
		C	T	4	100	75	100
		S		4	100	100	100
7	Ernakulam	C	H	10	80	90	70
		S		10	80	80	80
		C	T	10	80	90	70
		S		10	80	80	80
8	Thrissur	C	H	8	37.5	100	100
		S		8		100	62.5
		C	T	8	37.5	100	100
		S		8		100	62.5

Table-8(i) contd.....



**Table-8(i)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**

**Paddy-Autumn**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	10		100	80
		S		10	20	100	100
		C	T	10		100	80
		S		10	20	100	100
10	Malappuram	C	H	10		100	70
		S		10	20	100	90
		C	T	10		100	70
		S		10	20	100	90
11	Kozhikkode	C	H	12		66.67	75
		S		12		58.33	58.33
		C	T	12		66.67	75
		S		12		58.33	58.33
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	8		87.5	87.5
		S		8		75	50
		C	T	8		87.5	87.5
		S		8		75	50
14	Kasaragod	C	H	4		100	100
		S		4		50	75
		C	T	4		100	100
		S		4		50	75
For District covered		C	H	100	43	93	84
		S		100	38	89	80
		C	T	100	43	93	84
		S		100	38	89	80

\*No Paddy in Wayanad district.

[ H-Checked at Harvest, T- Total planned, I-Irrigated, HYV-High Yield Variety, F-Fertilizer ]

**Table-8(ii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**

**Paddy-Winter**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	8	100	100	100
		S		8	100	100	100
		C	T	8	100	100	100
		S		8	100	100	100
2	Kollam	C	H	6	33.33	33.33	33.33
		S		6	66.67	66.67	0
		C	T	6	33.33	33.33	33.33
		S		6	66.67	66.67	0
3	Pathanamthitta	C	H	6	100	100	100
		S		6	100	100	100
		C	T	6	100	100	100
		S		6	100	100	100
4	Alappuzha	C	H	8	75	75	100
		S		8	75	100	100
		C	T	8	75	75	100
		S		8	75	100	100
5	Kottayam	C	H	6	100	100	100
		S		6	100	100	83.33
		C	T	6	100	100	100
		S		6	100	100	83.33
6	Idukki	C	H	4	100	75	50
		S		4	100	100	100
		C	T	4	100	75	50
		S		4	100	100	100
7	Ernakulam	C	H	10	100	90	90
		S		10	100	90	90
		C	T	10	100	90	90
		S		10	100	90	90
8	Thrissur	C	H	8	100	100	100
		S		8	100	100	100
		C	T	8	100	100	100
		S		8	100	100	100

Table-8(ii) contd.....

**Table-8(ii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**

**Paddy-Winter**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	10	60	90	90
		S		10	100	90	80
		C	T	10	60	90	90
		S		10	100	90	80
10	Malappuram	C	H	10	60	80	90
		S		10	50	70	80
		C	T	10	60	80	90
		S		10	50	70	80
11	Kozhikkode	C	H	8	0	0	25
		S		8	0	0	37.5
		C	T	8	0	0	25
		S		8	0	0	37.5
12	Wayanad	C	H	4	100	50	50
		S		4	100	100	100
		C	T	4	100	50	50
		S		4	100	100	100
13	Kannur	C	H	8	75	75	87.5
		S		8	100	37.5	62.5
		C	T	8	75	75	87.5
		S		8	100	37.5	62.5
14	Kasaragod	C	H	4	100	25	75
		S		4	100	75	100
		C	T	4	100	25	75
		S		4	100	75	100
For District covered		C	H	100	76	74	81
		S		100	83	79	80
		C	T	100	76	74	81
		S		100	83	79	80

**Table-8(iii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**  
**Paddy-Summer**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	8	100	100	100
		S		8	100	87.5	87.5
		C	T	8	100	100	100
		S		8	100	87.5	87.5
2	Kollam	C	H	6	100	100	100
		S		6	100	100	0
		C	T	6	100	100	100
		S		6	100	100	0
3	Pathanamthitta	C	H	6	66.67	100	100
		S		6	100	100	100
		C	T	6	66.67	100	100
		S		6	100	100	100
4	Alappuzha	C	H	8	100	100	100
		S		8	100	100	100
		C	T	8	100	100	100
		S		8	100	100	100
5	Kottayam	C	H	6	100	83.33	83.33
		S		6	100	100	100
		C	T	6	100	83.33	83.33
		S		6	100	100	100
6	Idukki	C	H	4	100	75	100
		S		4	100	100	100
		C	T	4	100	75	100
		S		4	100	100	100
7	Ernakulam	C	H	10	100	90	90
		S		10	100	100	100
		C	T	10	100	90	90
		S		10	100	100	100
8	Thrissur	C	H	8	100	100	87.5
		S		8	100	100	75
		C	T	8	100	100	87.5
		S		8	100	100	75

Table 8(iii) contd....

Table-8(iii)

**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Paddy-Summer**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	10	100	90	70
		S		10	100	100	100
		C	T	10	100	90	70
		S		10	100	100	100
10	Malappuram	C	H	10	80	100	90
		S		10	100	100	90
		C	T	10	80	100	90
		S		10	100	100	90
11	Kozhikode	C	H	8	87.5	87.5	87.5
		S		8	62.5	62.5	100
		C	T	8	87.5	87.5	87.5
		S		8	62.5	62.5	100
12	Wayanad	C	H	4	100	100	50
		S		4	100	100	100
		C	T	4	100	100	50
		S		4	100	100	100
13	Kannur	C	H	6	100	100	100
		S		6	100	66.67	100
		C	T	6	100	100	100
		S		6	100	66.67	100
14	Kasaragod	C	H	6	100	83.33	100
		S		6	100	66.67	83.33
		C	T	6	100	83.33	100
		S		6	100	66.67	83.33
For District covered		C	H	100	95	94	90
		S		100	97	92	89
		C	T	100	95	94	90
		S		100	97	92	89

## 2) Other Crop Cutting Experiments

**Table-8(iv)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Tapioca**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	4	25		25
		S		4		25	
		C	T	4	25		25
		S		4		25	
2	Kollam	C	H	4	25	50	25
		S		4			
		C	T	4	25	50	25
		S		4			
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H				
		S					
		C	T				
		S					
5	Kottayam	C	H	4		50	25
		S		4		25	
		C	T	4		50	25
		S		4		25	
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	25	50	50
		S		4	25		
		C	T	4	25	50	50
		S		4	25		
8	Thrissur	C	H	4	50	50	
		S		4	100	50	50
		C	T	4	50	50	
		S		4	100	50	50

To be contd...

Table-8(iv)

**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Tapioca**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	4	50		25
		S		4	100	50	
		C	T	4	50		25
		S		4	100	50	
10	Malappuram	C	H	4	75	50	50
		S		4	50		25
		C	T	4	75	50	50
		S		4	50		25
11	Kozhikode	C	H	4		25	
		S		4		50	25
		C	T	4		25	
		S		4		50	25
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4	50		
		S		4	50		75
		C	T	4	50		
		S		4	50		75
14	Kasaragod	C	H	4	50		
		S		4			25
		C	T	4	50		
		S		4			25
For District covered		C	H	40	35	27.5	20
		S		40	32.5	15	25
		C	T	40	35	27.5	20
		S		40	32.5	15	25

**Table-8(v)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Pepper**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	4			
		S		4	25		
		C	T	4			
		S		4	25		
2	Kollam	C	H	4			
		S		4	25		
		C	T	4			
		S		4	25		
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H				
		S					
		C	T				
		S					
5	Kottayam	C	H	3		33.33	
		S		4	50		
		C	T	4		33.33	
		S		4	50		
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	50	75	
		S		4	75		
		C	T	4	50	75	
		S		4	75		
8	Thrissur	C	H	4	75		
		S		4	75	25	25
		C	T	4	75		
		S		4	75	25	25

To be contd....



**Table-8(v)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Pepper**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	4	50	25	25
		S		4	75	25	
		C	T	4	50	25	25
		S		4	75	25	
10	Malappuram	C	H	4		25	
		S		4	25		
		C	T	4		25	
		S		4	25		
11	Kozhikode	C	H	4	50	25	
		S		4			
		C	T	4	50	25	
		S		4			
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4		25	
		S		4			
		C	T	4		25	
		S		4			
14	Kasaragod	C	H	4	100		
		S		4	100	25	
		C	T	4	100		
		S		4	100	25	
For District covered		C	H	39	33.33	20.51	2.56
		S		40	37.5	15	2.5
		C	T	40	33.33	20.51	2.56
		S		40	37.5	15	2.5

**Table-8(vi)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**  
**Banana**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	4	100		
		S		4	100	25	100
		C	T	4	100		
		S		4	100	25	100
2	Kollam	C	H	4	50		25
		S		4	25		
		C	T	4	50		25
		S		4	25		
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H	4	75		
		S		4	75		100
		C	T	4	75		
		S		4	75		100
5	Kottayam	C	H	4			75
		S		4		25	50
		C	T	4			75
		S		4		25	50
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	100	25	100
		S		4	100	25	50
		C	T	4	100	25	100
		S		4	100	25	50
8	Thrissur	C	H	6	100	16.67	50
		S		6	100	16.67	100
		C	T	6	100	16.67	50
		S		6	100	16.67	100

Table-8(vi) contd...

**Table-8(vi)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Banana**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	6	100		100
		S		6	100	33.33	50
		C	T	6	100		100
		S		6	100	33.33	50
10	Malappuram	C	H	6	83.33	16.67	100
		S		6	66.67		50
		C	T	6	83.33	16.67	100
		S		6	66.67		50
11	Kozhikode	C	H	4	75	25	75
		S		4	50		50
		C	T	4	75	25	75
		S		4	50		50
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4	100	50	100
		S		4	75		100
		C	T	4	100	50	100
		S		4	75		100
14	Kasaragod	C	H	4	100		
		S		4	100	25	75
		C	T	4	100		
		S		4	100	25	75
For District covered		C	H	50	82	12	60
		S		50	74	14	66
		C	T	50	82	12	60
		S		50	74	14	66

**Table-8(vii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO**  
**IMPORTANT INPUTS DURING 2021-22**

**Coconut**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	4			
		S		4			
		C	T	4			
		S		4			
2	Kollam	C	H	4	50		
		S		4	25		
		C	T	4	50		
		S		4	25		
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H	4	25		
		S		4			
		C	T	4	25		
		S		4			
5	Kottayam	C	H	4			25
		S		4			
		C	T	4			25
		S		4			
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	50	25	
		S		4			
		C	T	4	50	25	
		S		4			
8	Thrissur	C	H	6	83.33		
		S		6	100		
		C	T	6	83.33		
		S		6	100		
Table-8(vii) contd....							

**Table-8(vii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Coconut**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	6	100		33.33
		S		6	83.33		
		C	T	6	100		33.33
		S		6	83.33		
10	Malappuram	C	H	6	16.67		50
		S		6	33.33		16.67
		C	T	6	16.67		50
		S		6	33.33		16.67
11	Kozhikode	C	H	4	25		
		S		4			
		C	T	4	25		
		S		4			
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4	100		
		S		4			
		C	T	4	100		
		S		4			
14	Kasaragod	C	H	4	100		100
		S		4	100		
		C	T	4	100		100
		S		4	100		
For District covered		C	H	50	52	2	20
		S		50	36		2
		C	T	50	52	2	20
		S		50	36		2

**Table-8(viii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Arecanut**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	C	H	4			
		S		4			
		C	T	4			
		S		4			
2	Kollam	C	H	4	50		
		S		4			
		C	T	4	50		
		S		4			
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H				
		S					
		C	T				
		S					
5	Kottayam	C	H	4			
		S		4			
		C	T	4			
		S		4			
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4		25	
		S		4			
		C	T	4		25	
		S		4			
8	Thrissur	C	H	4	25	100	
		S		4	100		
		C	T	4	25	100	
		S		4	100		

Table 8(viii) contd...

**Table-8(viii)**  
**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2021-22**

**Arecanut**

Sl. No.	District	Agency	H/T		Percentage of Experiments under various inputs for crops		
					I	HYV	F
1	2	3	4	5	6	7	8
9	Palakkad	C	H	4	50	50	
		S		4	100	25	25
		C	T	4	50	50	
		S		4	100	25	25
10	Malappuram	C	H	4			
		S		4	75		
		C	T	4			
		S		4	75		
11	Kozhikode	C	H	4		25	
		S		4			
		C	T	4		25	
		S		4			
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4			
		S		4	25		
		C	T	4			
		S		4	25		
14	Kasaragod	C	H	4	25	100	100
		S		4	50		25
		C	T	4	25	100	100
		S		4	50		25
For District covered		C	H	40	15	30	10
		S		40	35	2.5	5
		C	T	40	15	30	10
		S		40	35	2.5	5

**2.2) CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

The extent of participation at harvest stage is presented in the table 9(i), 9(ii), 9(iii) 9(iv), 9(v) and 9(vi) shows the details of paddy crop cutting experiments and Table 9(vii), 9(viii), 9(ix) 9(x), 9(xi), 9(xii), 9(xiii) 9(xiv), 9(xv), and 9(xvi) shows the details of other crop cutting experiments

**Table 9(i)**

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE: KERALA

YEAR:2021-22

SEASON:AUTUMN

CROP:PADDY

STATE SAMPLE

Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	8	8				
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	6	6				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	12				
12	Wayanad	4	*	*	*	*	*
13	Kannur	8	8				
14	Kasaragod	4	4				
<b>Total for all crops</b>		<b>100</b>	<b>100</b>				

\* There is no autumn paddy in Wayanad district and substituted to Kozhikode district.



Table 9(ii)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE: KERALA

YEAR:2021-22

SEASON:AUTUMN

CROP:**PADDY**

CENTRAL SAMPLE

Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	8	8				
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	6	6				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	12				
12	Wayanad	4	*				
13	Kannur	8	8				
14	Kasaragod	4	4				
<b>Total for all crops</b>		<b>100</b>	<b>100</b>				

\*There is no autumn paddy in Wayanad district and substituted to Kozhikode district.

<b>Table 9 (iii)</b> <b>CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED</b> STATE:KERALA YEAR:2021-22 SEASON: WINTER CROP: <b>PADDY</b> STATE SAMPLE							
Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	8	8				
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	6	6				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	8				
12	Wayanad	4	4				
13	Kannur	8	8				
14	Kasaragod	4	4				
<b>Total</b>		<b>100</b>	<b>100</b>				

Table 9 (iv)

CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED							
STATE:KERALA				YEAR:2021-22			
SEASON:WINTER		CROP: PADDY		CENTRAL SAMPLE			
Sl. No.	District	No. of Experiments					
		Planned	Checked at Harvest	At post-harvest	Lost	Rejected for Analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	8	8				
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	6	6				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	8				
12	Wayanad	4	4				
13	Kannur	8	8				
14	Kasaragod	4	4				
<b>Total</b>		<b>100</b>	<b>100</b>				

Table 9(v)							
CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED							
STATE:KERALA YEAR:2021-22							
SEASON : <b>SUMMER</b>		CROP: <b>PADDY</b>				STATE SAMPLE	
Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	8	8				
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	6	6				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	8				
12	Wayanad	4	4				
13	Kannur	6	6				
14	Kasaragod	6	6				
State Total		100	100				

Table 9 (vi)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE: KERALA

YEAR: 2021-22

SEASON : **SUMMER**

CROP: **PADDY**

CENTRAL SAMPLE

Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	8	8				
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	6	6				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	8				
12	Wayanad	4	4				
13	Kannur	6	6				
14	Kasaragod	6	6				
State Total		100	100				

Table 9(vii)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE:KERALA

YEAR: 2021-22

SEASON:ANNUAL

CROP: **BANANA**

STATE SAMPLE

Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha	4	4				
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	6	6				
9	Palakkad	6	6				
10	Malappuram	6	6				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		50	50				

Table 9 (viii)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: BANANA

CENTRAL SAMPLE

Sl. No	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha	4	4				
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	6	6				
9	Palakkad	6	6				
10	Malappuram	6	6				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		50	50				

Table 9 (ix)

CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED							
STATE:KERALA				YEAR: 2021-22			
SEASON:ANNUAL		CROP:TAPIOCA			STATE SAMPLE		
Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha	0	0				
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	4	4				
9	Palakkad	4	4				
10	Malappuram	4	4				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		40	40				



Table 9 (x)							
CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED							
STATE: KERALA YEAR: 2021-22							
SEASON: ANNUAL		CROP: TAPIOCA			CENTRAL SAMPLE		
Sl.No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha						
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	4	4				
9	Palakkad	4	4				
10	Malappuram	4	4				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		40	40				

Table 9 (xi)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE:KERALA

YEAR:2021-22

SEASON:PERENNIAL

CROP:COCONUT

STATE SAMPLE

Sl.No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha	4	4				
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	6	6				
9	Palakkad	6	6				
10	Malappuram	6	6				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		50	50				

Table 9 (xii)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE:KERALA

YEAR:2021-22

SEASON: PERENNIAL

CROP:COCONUT

CENTRAL SAMPLE

Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha	4	4				
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	6	6				
9	Palakkad	6	6				
10	Malappuram	6	6				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		50	50				

Table 9 (xiii)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE:KERALA

YEAR:2021-22

SEASON:PERENNIAL

CROP:PEPPER

STATE SAMPLE

Sl. No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha						
5	Kottayam	4	4				
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	4	4				
9	Palakkad	4	4				
10	Malappuram	4	4				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasargod	4	4				
State Total		40	40	0	0	0	0

Table 9(xiv)

**CROP-WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE:KERALA

YEAR:2021-22

SEASON: PERENNIAL

CROP: **PEPPER**

CENTRAL SAMPLE

Sl.No.	District	No. of Experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha						
5	Kottayam	4	3		1		
6	Idukki						
7	Ernakulam	4	4				
8	Thrissur	4	4				
9	Palakkad	4	4				
10	Malappuram	4	4				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		40	39	0	1	0	0

\* One CC lost in Kottayam district due to non-reporting of CC date by the cultivator.

**Table 9 (xv)**  
**CROPWISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE : KERALA

YEAR : 2021-22

SEASON: PERENNIAL

CROP: ARECANUT

STATE SAMPLE

Sl. No.	District	No. of experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha						
5	Kottayam	4	4				
6	Idukki						
7	Eranakulam	4	4				
8	Thrissur	4	4				
9	Palakkad	4	4				
10	Malappuram	4	4				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		40	40				

**Table 9 (xvi)**  
**CROPWISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED**

STATE : KERALA

YEAR :2021-22

SEASON: PERENNIAL

CROP: ARECANUT

CENTRAL SAMPLE

Sl. No.	District	No. of experiments					
		Planned	Checked at harvest	At post-harvest	Lost	Rejected for analysis	For which schedules are not received
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	4	4				
2	Kollam	4	4				
3	Pathanamthitta						
4	Alappuzha						
5	Kottayam	4	4				
6	Idukki						
7	Eranakulam	4	4				
8	Thrissur	4	4				
9	Palakkad	4	4				
10	Malappuram	4	4				
11	Kozhikode	4	4				
12	Wayanad						
13	Kannur	4	4				
14	Kasaragod	4	4				
State Total		40	40	0	0	0	0

### 3. Procedural Deviations and Discrepancies

The officer who attends Crop Cutting experiment selected for Sample Check may examine if there is any deviation from guidelines and procedure occurs. Incidences of deviation and departure observed during the Sample Check programme for each crop are:

E1 – Error in selection of survey/sub-survey numbers

E2 – Error in selection of field within survey/sub-survey numbers

- E3 - Error in reporting seed variety
- E4 - Error in reporting seed rate.
- E5 - Error in reporting irrigation particulars
- E6 - Error in reporting application of fertilizers
- E7 - Error in reporting application of manures
- E8 - Error in reporting application of pesticides
- E9 - Error in reporting measurement of field
- E10 - Error in checking random numbers
- E11 - Error in location of plots
- E12 - Error in plot dimensions
- E13 - Error in weighing of produce
- E14 - Inadequate arrangement for storing the produce for drying
- E15 - Error in reporting proportion of experimental crops in mixture/wrong reporting of constituents in mixture
- E16 - any one of the items missing

#### **4. Estimation on Average Yield Rates**

**4.1) Estimated yield rates of high yielding and other varieties of crops for irrigated and un-irrigated** categories for paddy during Autumn, Winter and Summer for State and Central samples and the whole year crops Banana, Tapioca, Coconut, Pepper and Arecanut for State and Central samples are given in the Tables 10(i), 10(ii), 10(iii), 10(iv), 10(v), 10(vi), 10(vii), 10(viii), 10(ix), 10(x), 10(xi), 10(xii), 10(xiii), 10(xiv), 10(xv) & 10(xvi) respectively.



Table 10(i)

ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES

STATE: KERALA

YEAR: 2021-22

SEASON: AUTUMN

CROP: PADDY

STATE SAMPLE

Sl.No.	District	No. of expts. Checked at harvest	HY varieties						Other varieties						Both HY & Others					
			Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	8	8	3612.56			8	3612.56							8	3612.56			8	3612.56
2	Kollam	6			6	3656.47	6	3656.47									6	3656.47	6	3656.47
3	Pathanamthitta	6	4	3657.55	2	3072.96	6	3462.69							4	3657.55	2	3072.96	6	3462.69
4	Alappuzha	8	4	4241.46	4	559.19	8	2400.32							4	4241.46	4	559.19	8	2400.32
5	Kottayam	6	6	3554.24			6	3554.24							6	3554.24			6	3554.24
6	Idukki	4	4	3263.58			4	3263.58							4	3263.58			4	3263.58
7	Ernakulam	10	8	3693.74			8	3693.74			2	4345.69	2	4345.69	8	3693.74	2	4345.69	10	3824.13
8	Thrissur	8			8	3174.92	8	3174.92									8	3174.92	8	3174.92
9	Palakkad	10	2	3330	8	3504.36	10	3469.49							2	3330	8	3504.36	10	3469.49
10	Malappuram	10	2	5167.97	8	3573.92	10	3892.73							2	5167.97	8	3573.92	10	3892.73
11	Kozhikode	12			7	1649.57	7	1649.57			5	451.95	5	451.95			12	1150.56	12	1150.56
12	Wayanad																			
13	Kannur	8			6	2152.39	6	2152.39			2	1927.94	2	1927.94			8	2096.28	8	2096.28
14	Kasaragod	4			2	1799.16	2	1799.16			2	3760	2	3760			4	2779.58	4	2779.58
State Total		100	38	3721.64	51	2753.07	89	3166.62	0	0	11	2029.73	11	2029.73	38	3721.64	62	2624.74	100	3041.56

**Table 10 (ii)**  
**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: AUTUMN

CROP: PADDY

CENTRAL SAMPLE

Sl.No.	District	No. of expts. Checked at harvest	HY varieties						Other varieties						Both HY & Others						
			Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total		
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1	Thiruvananthapuram	8	8	4641.95	0	0	8	4641.95							8	4641.95			8	4641.95	
2	Kollam	6	2	3592.27	4	3878.38	6	3783.01							2	3592.27	4	3878.38	6	3783.01	
3	Pathanamthitta	6	6	2297.08			6	2297.08							6	2297.08			6	2297.08	
4	Alappuzha	8	6	4570.13	2	2567.72	8	4069.52							6	4570.13	2	2567.72	8	4069.52	
5	Kottayam	6	6	3178.28			6	3178.28							6	3178.28			6	3178.28	
6	Idukki	4	3	2350.87			3	2350.87	1	2006.26				1	2006.26	4	2264.72			4	2264.72
7	Ernakulam	10	8	3029.09	1	3370.5	9	3067.02			1	3174.37	1	3174.37	8	3029.09	2	3272.43	10	3077.76	
8	Thrissur	8	3	4219.73	5	3518.08	8	3781.2							3	4219.73	5	3518.08	8	3781.2	
9	Palakkad	10			10	3364.04	10	3364.04									10	3364.04	10	3364.04	
10	Malappuram	10			10	4018.07	10	4018.07									10	4018.07	10	4018.07	
11	Kozhikode	12			8	2353.29	8	2353.29			4	313.96	4	313.96			12	1673.51	12	1673.51	
12	Wayanad																				
13	Kannur	8			7	4298.37	7	4298.37			1	3327.82	1	3327.82			8	4177.05	8	4177.05	
14	Kasaragod	4			4	4089	4	4089									4	4089	4	4089	
State Total		100	42	3536.61	51	3543.17	93	3540.21	1	2006.26	6	1293	7	1394.9	43	3501.02	57	3306.31	100	3390.04	

Table 10 (iii)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA																						YEAR: 2021-22						SEASON: WINTER						CROP: PADDY						STATE SAMPLE					
Sl No.	District	No. of Expts. Checked at Harvest	HY Varieties						Other Varieties						Both HY & Others																														
			Irrigated		Un-Irrigated		Total		Irrigated		Un-Irrigated		Total		Irrigated		Un-Irrigated		Total																										
			No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha																							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																									
1	Thiruvananthapuram	8	8	2609.47			8	2609.47							8	2609.47			8	2609.47																									
2	Kollam	6	4	3687.9			4	3687.9			2	3336.4	2	3336.4	4	3687.9	2	3336.4	6	3570.73																									
3	Pathanamthitta	6	6	4353.87			6	4353.87							6	4353.87			6	4353.87																									
4	Alappuzha	8	6	3998.22	2	1518.19	8	3378.21							6	3998.22	2	1518.19	8	3378.21																									
5	Kottayam	6	6	3340.18			6	3340.18							6	3340.18			6	3340.18																									
6	Idukki	4	4	3270.29			4	3270.29							4	3270.29			4	3270.29																									
7	Eranakulam	10	9	3433.56			9	3433.56	1	2551.17			1	2551.17	10	3345.32			10	3345.32																									
8	Thrissur	8	8	4338.47			8	4338.47							8	4338.47			8	4338.47																									
9	Palakkad	10	9	5249.91			9	5249.91	1	1550.4			1	1550.4	10	4879.96			10	4879.96																									
10	Malappuram	10	4	3547.57	3	3895.22	7	3696.56	1	1433.36	2	1948.24	3	1776.61	5	3124.72	5	3116.43	10	3120.58																									
11	Kozhikode	8									8	1615.41	8	1615.41			8	1615.41	8	1615.41																									
12	Wayanad	4	4	4041.07			4	4041.07							4	4041.07			4	4041.07																									
13	Kannur	8	3	3424.03			3	3424.03	5	1704.98			5	1704.98	8	2349.62			8	2349.62																									
14	Kasaragod	4	3	4187.04			3	4187.04	1	793.73			1	793.73	4	3338.71			4	3338.71																									
State Total		100	74	3850.12	5	2944.41	79	3792.8	9	1650.39	12	1957.71	21	1826	83	3611.6	17	2247.92	100	3379.77																									

Table 10 (iv)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**  
**STATE: KERALA**                      **YEAR: 2021-22**                      **SEASON: WINTER**                      **CROP: PADDY**                      **CENTRAL SAMPLE**

Sl No.	District	No. of Expts. Checked at Harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		Un-Irrigated		Total		Irrigated		Un-Irrigated		Total		Irrigated		Un-Irrigated		Total	
			No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha	No. of Expts	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	8	8	2510.76			8	2510.76							8	2510.76			8	2510.76
2	Kollam	6	2	4579			2	4579			4	755.26	4	755.26	2	4579	4	755.26	6	2029.84
3	Pathanamthitta	6	6	2807.82			6	2807.82							6	2807.82			6	2807.82
4	Alappuzha	8	6	3124.71			6	3124.71			2	85.12	2	85.12	6	3124.71	2	85.12	8	2364.81
5	Kottayam	6	6	4166.72			6	4166.72							6	4166.72			6	4166.72
6	Idukki	4	3	4461.54			3	4461.54	1	2248.44			1	2248.44	4	3908.26			4	3908.26
7	Ernakulam	10	9	3494.27			9	3494.27	1	3662.46			1	3662.46	10	3511.09			10	3511.09
8	Thrissur	8	8	3095.15			8	3095.15							8	3095.15			8	3095.15
9	Palakkad	10	5	6271.52	4	4211.35	9	5355.89	1	2318			1	2318	6	5612.6	4	4211.35	10	5052.1
10	Malappuram	10	6	4754.61	2	4754.61	8	4754.61	0	0	2	2704.52	2	2704.52	6	4754.61	4	3729.57	10	4344.59
11	Kozhikode	8									8	1551.51	8	1551.51			8	1551.51	8	1551.51
12	Wayanad	4	2	3592.27			2	3592.27	2	2816.22			2	2816.22	4	3204.25			4	3204.25
13	Kannur	8	6	4357.69			6	4357.69			2	1355.9	2	1355.9	6	4357.69	2	1355.9	8	3607.24
14	Kasaragod	4	1	4533.98			1	4533.98	3	3862.56			3	3862.56	4	4030.42			4	4030.42
	State Total	100	68	3782.11	6	4392.44	74	3831.6	8	3181.13	18	1318.01	26	1891.28	76	3718.85	24	2086.62	100	3327.12

Table 10(v)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**  
**STATE: KERALA**                      **YEAR: 2021-22**                      **SEASON: SUMMER**                      **CROP: PADDY**                      **STATE SAMPLE**

Sl. No.	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	8	7	3134.03			7	3134.03	1	3905.04	0	0	1	3905.04	8	3230.41			8	3230.41
2	Kollam	6	6	2848.99			6	2848.99							6	2848.99			6	2848.99
3	Pathanamthitta	6	6	1931.13			6	1931.13							6	1931.13			6	1931.13
4	Alappuzha	8	8	3407.53			8	3407.53							8	3407.53			8	3407.53
5	Kottayam	6	6	3806.88			6	3806.88							6	3806.88			6	3806.88
6	Idukki	4	4	5249.09			4	5249.09							4	5249.09			4	5249.09
7	Ernakulam	10	10	3532.64			10	3532.64							10	3532.64			10	3532.64
8	Thrissur	8	8	6278.54			8	6278.54							8	6278.54			8	6278.54
9	Palakkad	10	10	4902.17			10	4902.17							10	4902.17			10	4902.17
10	Malappuram	10	10	6462.32			10	6462.32							10	6462.32			10	6462.32
11	Kozhikode	8	4	3082.92	1	175.49	5	2501.44	1	3911.92	2	765.93	3	1814.59	5	3248.72	3	569.12	8	2243.87
12	Wayanad	4	4	3212.28			4	3212.28							4	3212.28			4	3212.28
13	Kannur	6	4	3117.8			4	3117.8	2	3596.47			2	3596.47	6	3277.36			6	3277.36
14	Kasaragod	6	4	3539.06			4	3539.06	2	3524.9			2	3524.9	6	3534.34			6	3534.34
	<b>State Total</b>	<b>100</b>	<b>91</b>	<b>4095.87</b>	<b>1</b>	<b>175.49</b>	<b>92</b>	<b>4053.26</b>	<b>6</b>	<b>3676.62</b>	<b>2</b>	<b>765.93</b>	<b>8</b>	<b>2948.95</b>	<b>97</b>	<b>4069.94</b>	<b>3</b>	<b>569.12</b>	<b>100</b>	<b>3964.92</b>

Table 10 (vi)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: **SUMMER**

CROP: **PADDY**

CENTRAL SAMPLE

Sl. No	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	8	8	2768.07			8	2768.07							8	2768.07			8	2768.07
2	Kollam	6	6	2353.71			6	2353.71							6	2353.71			6	2353.71
3	Pathanamthitta	6	4	1528.3	2	76.28	6	1044.29							4	1528.3	2	76.28	6	1044.29
4	Alappuzha	8	8	5508.06			8	5508.06							8	5508.06			8	5508.06
5	Kottayam	6	5	4980.59			5	4980.59	1	4060.26			1	4060.26	6	4827.2			6	4827.2
6	Idukki	4	3	4254.87			3	4254.87	1	1292.17			1	1292.17	4	3514.2			4	3514.2
7	Ernakulam	10	9	2612.82			9	2612.82	1	1893.14			1	1893.14	10	2540.85			10	2540.85
8	Thrissur	8	8	5272.47			8	5272.47							8	5272.47			8	5272.47
9	Palakkad	10	9	3974.4			9	3974.4	1	727.22			1	727.22	10	3649.68			10	3649.68
10	Malappuram	10	8	5423.89	2	3433.98	10	5025.91							8	5423.89	2	3433.98	10	5025.91
11	Kozhikode	8	7	3211.01			7	3211.01			1	2376.4	1	2376.4	7	3211.01	1	2376.4	8	3106.69
12	Wayanad	4	4	3923.46			4	3923.46							4	3923.46			4	3923.46
13	Kannur	6	6	4549.54			6	4549.54							6	4549.54			6	4549.54
14	Kasaragod	6	5	4411.12			5	4411.12	1	3504.13			1	3504.13	6	4259.96			6	4259.96
<b>State Total</b>		<b>100</b>	<b>90</b>	<b>3961.02</b>	<b>4</b>	<b>1755.13</b>	<b>94</b>	<b>3867.15</b>	<b>5</b>	<b>2295.38</b>	<b>1</b>	<b>2376.4</b>	<b>6</b>	<b>2308.89</b>	<b>95</b>	<b>3873.35</b>	<b>5</b>	<b>1879.38</b>	<b>100</b>	<b>3773.66</b>

Table 10 (vii)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: BANANA

STATE SAMPLE

Sl. No	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4	1	35566.7			1	35566.67	3	14489			3	14488.9	4	19758.3			4	19758.33
2	Kollam	4							1	16000	3	13244.4	4	13933.3	1	16000	3	13244.4	4	13933.33
3	Pathanamthitta																			
4	Alappuzha	4							3	15411	1	15333.3	4	15391.7	3	15411.1	1	15333.3	4	15391.67
5	Kottayam	4			1	22466.67	1	22466.67			3	18288.9	3	18288.9			4	19333.3	4	19333.33
6	Idukki																			
7	Ernakulam	4	1	44466.7			1	44466.67	3	19644			3	19644.4	4	25850			4	25850
8	Thrissur	6	1	29666.7			1	29666.67	5	19793			5	19793.3	6	21438.9			6	21438.89
9	Palakkad	6	2	31333.3			2	31333.33	4	18042			4	18041.7	6	22472.2			6	22472.22
10	Malappuram	6							4	19825	2	12716.7	6	17455.6	4	19825	2	12716.7	6	17455.56
11	Kozhikode	4							2	17467	2	18383.3	4	17925	2	17466.7	2	18383.3	4	17925
12	Wayanad	0																		
13	Kannur	4							3	18080	1	11866.7	4	16526.7	3	18080	1	11866.7	4	16526.67
14	Kasaragod	4	1	46666.7			1	46666.67	3	18400			3	18400	4	25466.7			4	25466.67
	<b>State Total</b>	<b>50</b>	<b>6</b>	<b>36505.6</b>	<b>1</b>	<b>22466.67</b>	<b>7</b>	<b>34500</b>	<b>31</b>	<b>18046</b>	<b>12</b>	<b>15333.3</b>	<b>43</b>	<b>17289.3</b>	<b>37</b>	<b>21039.8</b>	<b>13</b>	<b>15882.1</b>	<b>50</b>	<b>19698.8</b>

Table 10 (viii)

ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: BANANA

CENTRAL SAMPLE

Sl. No	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others						
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1	Thiruvananthapuram	4							4	13083.3				4	13083.3	4	13083.3			4	13083.33
2	Kollam	4							2	9466.67	2	11200	4	10333.3	2	9466.67	2	11200	4	10333.33	
3	Pathanamthitta																				
4	Alappuzha	4							3	14911.1	1	12333.3	4	14266.7	3	14911.1	1	12333.3	4	14266.67	
5	Kottayam	4									4	13933.3	4	13933.3			4	13933.3	4	13933.33	
6	Idukki																				
7	Ernakulam	4	1	27666.7			1	27666.67	3	15066.7			3	15066.7	4	18216.7			4	18216.67	
8	Thrissur	6	1	17986.7			1	17986.67	5	11733.3			5	11733.3	6	12775.6			6	12775.56	
9	Palakkad	6							6	17577.8			6	17577.8	6	17577.8			6	17577.78	
10	Malappuram	6	1	32466.7			1	32466.67	4	17708.3	1	20400	5	18246.7	5	20660	1	20400	6	20616.67	
11	Kozhikode	4	1	24000			1	24000	2	15316.7	1	12533.3	3	14388.9	3	18211.1	1	12533.3	4	16791.67	
12	Wayanad																				
13	Kannur	4	2	23283.3			2	23283.33	2	16783.3			2	16783.3	4	20033.3			4	20033.33	
14	Kasaragod	4							4	16550			4	16550	4	16550			4	16550	
	State Total	50	6	24781.1	0	0	6	24781.11	35	15044.8	9	13711.1	44	14772	41	16469.6	9	13711.1	50	15973.07	



Table 10 (ix)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: **TAPIOCA**

STATE SAMPLE

Sl. No	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4									4	43937.5	4	43937.5			4	43937.5	4	43937.5
2	Kollam	4									4	27562.5	4	27562.5			4	27562.5	4	27562.5
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4									4	30906.3	4	30906.3			4	30906.25	4	30906.25
6	Idukki																			
7	Ernakulam	4							1	34000	3	36416.7	4	35812.5	1	34000	3	36416.67	4	35812.5
8	Thrissur	4	2	50000			2	50000	2	52500			2	52500	4	51250			4	51250
9	Palakkad	4	2	70000			2	70000	2	70813			2	70812.5	4	70406.3			4	70406.25
10	Malappuram	4							2	40563	2	25687.5	4	33125	2	40562.5	2	25687.5	4	33125
11	Kozhikode	4			2	76250	2	76250			2	60625	2	60625			4	68437.5	4	68437.5
12	Wayanad																			
13	Kannur	4							2	69688	2	24750	4	47218.8	2	69687.5	2	24750	4	47218.75
14	Kasaragod	4									4	36681.3	4	36681.3			4	36681.25	4	36681.25
	State Total	40	4	60000	2	76250	6	65416.67	9	55681	25	35509	34	40848.5	13	57009.6	27	38526.85	40	44533.75

Table 10 (x)

ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP:TAPIOCA

CENTRAL SAMPLE

Sl. No	District	No.ofexpts.Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4							1	17750	3	16416.67	4	16750	1	17750	3	16416.67	4	16750
2	Kollam	4	1	66750	1	38250	2	52500			2	33750	2	33750	1	66750	3	35250	4	43125
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4			2	24812.5	2	24812.5			2	29375	2	29375			4	27093.75	4	27093.75
6	Idukki																			
7	Ernakulam	4			2	49625	2	49625	1	102250	1	8000	2	55125	1	102250	3	35750	4	52375
8	Thrissur	4	2	20125			2	20125			2	24250	2	24250	2	20125	2	24250	4	22187.5
9	Palakkad	4							2	29250	2	43125	4	36188	2	29250	2	43125	4	36187.5
10	Malappuram	4	2	53375			2	53375	1	22500	1	11000	2	16750	3	43083.3	1	11000	4	35062.5
11	Kozhikode	4			1	13000	1	13000			3	15541.67	3	15542			4	14906.25	4	14906.25
12	Wayanad																			
13	Kannur	4							2	64812.5	2	19312.5	4	42063	2	64812.5	2	19312.5	4	42062.5
14	Kasaragod	4							2	31562.5	2	22250	4	26906	2	31562.5	2	22250	4	26906.25
	State Total	40	5	42750	6	33354.17	11	37625	9	43750	20	22950	29	29405	14	43392.9	26	25350.96	40	31665.63

Table 10 (xi)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: COCONUT

STATE SAMPLE

Sl. No.	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4									4	8467.1	4	8467.1			4	8467.1	4	8467.1
2	Kollam	4							1	4956	3	5250	4	5176.5	1	4956	3	5250	4	5176.5
3	Pathanamthitta																			
4	Alappuzha	4									4	12264.8	4	12264.8			4	12264.8	4	12264.75
5	Kottayam	4									4	8057.1	4	8057.1			4	8057.1	4	8057.1
6	Idukki																			
7	Ernakulam	4									4	6938.8	4	6938.8			4	6938.8	4	6938.8
8	Thrissur	6							6	10685			6	10684.5	6	10684.5			6	10684.53
9	Palakkad	6							5	9414	1	3412.8	6	8413.5	5	9413.64	1	3412.8	6	8413.5
10	Malappuram	6							2	12041	4	12365.6	6	12257.3	2	12040.8	4	12365.6	6	12257.33
11	Kozhikode	4									4	11556.3	4	11556.3			4	11556.3	4	11556.25
12	Wayanad																			
13	Kannur	4									4	6972	4	6972			4	6972	4	6972
14	Kasaragod	4							4	12036			4	12036	4	12036			4	12036
<b>State Total</b>		<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>10464</b>	<b>32</b>	<b>8926.54</b>	<b>50</b>	<b>9480.12</b>	<b>18</b>	<b>10464.3</b>	<b>32</b>	<b>8926.54</b>	<b>50</b>	<b>9480.12</b>

Table 10 (xii)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: COCONUT

CENTRAL SAMPLE

Sl. No.	District	No. of expts. checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4									4	10498.8	4	10498.8			4	10498.8	4	10498.75
2	Kollam	4							2	4893	2	7350	4	6121.5	2	4893	2	7350	4	6121.5
3	Pathanamthitta	0																		
4	Alappuzha	4							1	10285.8	3	8184.4	4	8709.75	1	10285.8	3	8184.4	4	8709.75
5	Kottayam	4									4	6944.3	4	6944.3			4	6944.3	4	6944.3
6	Idukki																			
7	Eranakulam	4	1	10324.6			1	10324.6	1	5810.2	2	6980.6	3	6590.47	2	8067.4	2	6980.6	4	7524
8	Thrissur	6							5	8833.28	1	14914.4	6	9846.8	5	8833.28	1	14914.4	6	9846.8
9	Palakkad	6							6	8160.7			6	8160.7	6	8160.7			6	8160.7
10	Malappuram	6							1	4500.8	5	13669.4	6	12141.3	1	4500.8	5	13669.4	6	12141.33
11	Kozhikode	4							1	11610	3	10133.7	4	10502.8	1	11610	3	10133.7	4	10502.75
12	Wayanad																			
13	Kannur	4							4	8526			4	8526	4	8526			4	8526
14	Kasaragod	4							4	16411.8			4	16411.8	4	16411.8			4	16411.8
State Total		50	1	10324.6	0	0	1	10324.6	25	9394.98	24	9860.38	49	9622.93	26	9430.74	24	9860.38	50	9636.97

Table 10 (xiii)

**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA      YEAR: 2021-22      SEASON: PERENNIAL      CROP: PEPPER      STATE SAMPLE																				
Sl. No.	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4			1	517.68	1	517.68			3	346.1	3	346.1			4	388.99	4	388.99
2	Kollam	4							1	498	3	367.36	4	399.99	1	497.88	3	367.36	4	399.99
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4			2	373.96	2	373.96			2	487.62	2	487.62			4	430.79	4	430.79
6	Idukki																			
7	Ernakulam	4							3	321	1	194.31	4	289.27	3	320.92	1	194.31	4	289.27
8	Thrissur	4	1	530.15			1	530.15	2	604	1	1028.76	3	745.48	3	579.28	1	1028.76	4	691.65
9	Palakkad	4	1	1171.75			1	1171.75	2	308	1	1071.29	3	562.65	3	596.14	1	1071.29	4	714.93
10	Malappuram	4							1	677	3	105.83	4	248.58	1	676.8	3	105.83	4	248.58
11	Kozhikode	4									4	332.9	4	332.9			4	332.9	4	332.9
12	Wayanad																			
13	Kannur	4									4	230.98	4	230.98			4	230.98	4	230.98
14	Kasaragod	4	1	631.34			1	631.34	3	572			3	572.19	4	586.97			4	586.97
	<b>State Total</b>	<b>40</b>	<b>3</b>	<b>777.74</b>	<b>3</b>	<b>421.87</b>	<b>6</b>	<b>599.81</b>	<b>12</b>	<b>473</b>	<b>22</b>	<b>362.86</b>	<b>34</b>	<b>401.8</b>	<b>15</b>	<b>534.11</b>	<b>25</b>	<b>369.94</b>	<b>40</b>	<b>431.51</b>

Table 10 (xiv)

ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: PEPPER

CENTRAL SAMPLE

Sl. No.	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others					
			Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total		Irrigated		UN-Irrigated		Total	
			No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha	No. of expts.	Yield Rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4									4	119.7	4	119.7			4	119.7	4	119.7
2	Kollam	4									4	281.94	4	281.94			4	281.94	4	281.94
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	3			1	226.58	1	226.58		0	2	141.89	2	141.89			3	170.12	3	170.12
6	Idukki																			
7	Ernakulam	4	1	713.46	2	436.11	3	528.56	1	222.18			1	222.18	2	467.82	2	436.11	4	451.96
8	Thrissur	4							3	147.02	1	431.89	4	218.24	3	147.02	1	431.89	4	218.24
9	Palakkad	4	1	439.96			1	439.96	1	249.31	2	380.56	3	336.81	2	344.63	2	380.56	4	362.6
10	Malappuram	4			1	118.79	1	118.79			3	428.71	3	428.71			4	351.23	4	351.23
11	Kozhikode	4	1	955.44			1	955.44	1	943.71	2	501.18	3	648.69	2	949.57	2	501.18	4	725.38
12	Wayanad																			
13	Kannur	4			1	577.81	1	577.81			3	266.17	3	266.17			4	344.08	4	344.08
14	Kasaragod	4							4	837.02			4	837.02	4	837.02			4	837.02
	State Total	39	3	702.95	5	359.08	8	488.03	10	520.43	21	293.83	31	366.93	13	562.55	26	306.38	39	391.77

**Table 10 (xv)**  
**ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES**

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: ARECANUT

STATE SAMPLE

Sl. No.	District	No. of expts. Checked at	HY varieties						Other varieties						Both Hy & Others					
			Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total	
			No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4									4	848.38	4	848.38			4	848.38	4	848.38
2	Kollam	4									4	1365.04	4	1365.04			4	1365.04	4	1365.04
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4									4	1294.44	4	1294.44			4	1294.44	4	1294.44
6	Idukki																			
7	Eranakulam	4									4	923.39	4	923.39			4	923.39	4	923.39
8	Thrissur	4							4	1000			4	1000.09	4	1000.09			4	1000.09
9	Palakkad	4	1	3499.96			1	3499.96	3	1160			3	1159.74	4	1744.79			4	1744.79
10	Malappuram	4							3	917	1	904.17	4	914.07	3	917.37	1	904.17	4	914.07
11	Kozhikode	4									4	811.93	4	811.93			4	811.93	4	811.93
12	Wayanad																			
13	Kannur	4							1	1338	3	926.08	4	1028.94	1	1337.52	3	926.08	4	1028.94
14	Kasaragod	4							2	2748	2	2719.46	4	2733.72	2	2747.98	2	2719.46	4	2733.72
	State Total	40	1	3499.96	0	0	1	3499.96	13	1313	26	1157.46	39	1209.21	14	1468.94	26	1157.46	40	1266.48

Table 10 (xvi)

ESTIMATED YIELD RATES OF HIGH YIELDING AND OTHER VARIETIES OF CROPS FOR IRRIGATED AND UNIRRIGATED CATEGORIES  
 STATE: KERALA YEAR: 2021-22 SEASON: PERENNIAL CROP: ARECANUT CENTRAL SAMPLE

Sl.No.	District	No. of expts checked at harvest	HY varieties						Other varieties						Both Hy & Others					
			Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total		Irrigated		Un-irrigated		Total	
			No. of expts	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha	No. of expts.	Yield rate Kg/Ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Thiruvananthapuram	4									4	365.02	4	365.02			4	365.02	4	365.02
2	Kollam	4			2	736.9	2	736.9			2	851.94	2	851.94			4	794.42	4	794.42
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4									4	666.17	4	666.17			4	666.17	4	666.17
6	Idukki																			
7	Eranakulam	4							1	933.95	3	1312.19	4	1217.63	1	933.95	3	1312.19	4	1217.63
8	Thrissur	4	1	584.27			1	584.27	3	958.87			3	958.87	4	865.22			4	865.22
9	Palakkad	4			2	650.91	2	650.91	2	637.09			2	637.09	2	637.09	2	650.91	4	644
10	Malappuram	4									4	875.62	4	875.62			4	875.62	4	875.62
11	Kozhikode	4							1	948.75	3	1334.02	4	1237.7	1	948.75	3	1334.02	4	1237.7
12	Wayanad																			
13	Kannur	4									4	1618.27	4	1618.27			4	1618.27	4	1618.27
14	Kasaragod	4	1	3729.48			1	3729.48	3	2443.36			3	2443.36	4	2764.89			4	2764.89
	State Total	40	2	2156.88	4	693.91	6	1181.57	10	1336.35	24	989.29	34	1091.36	12	1473.11	28	947.09	40	1104.89



**4.2) Crop-wise rate of application of fertilizers and differential yield rates according to inputs** for paddy during Autumn, Winter and Summer for State and Central samples and for the whole year crops Banana, Tapioca, Coconut, Pepper and Arecanut for State and Central samples are given in the Tables 11(i), 11(ii), 11(iii), 11(iv), 11(v), 11(vi), 11(vii), 11(viii), 11(ix), 11(x), 11(xi), 11(xii), 11(xiii), 11(xiv), 11(xv) & 11(xvi) respectively.

**Table 11 (i) - CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**

STATE: KERALA		YEAR: 2021-22				SEASON: AUTUMN				CROP: PADDY				STATE SAMPLE	
Sl. No.	District	Expts. Checked at harvest stage		Expts. Treated with Fertilizers only		Experiments with Fertilizers								Expts. Not Treated with Fertilizers	
		No.	Yield Rate	No.	Yield Rate	No. of Experiments				Rate of Application				No.	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	8	3612.56	4	3632.83	8	7	7	8	3612.56	55.99	20.87	34.03		
2	Kollam	6	3656.47			4	4	4	4	3175.26	33.85	19.25	19.5	2	4618.9
3	Pathanamthitta	6	3462.69			6	6	6	6	3462.69	37.1	29.2	38.2		
4	Alappuzha	8	2400.32	4	4241.46	6	6	5	6	3187.75	73.93	40.26	50.8	2	38.04
5	Kottayam	6	3554.24	6	3554.24	6	6	6	6	3554.24	67.01	51.27	74.65		
6	Idukki	4	3263.58	4	3263.58	4	4	4	4	3263.58	45.23	24.18	19.82		
7	Ernakulam	10	3824.13	2	3161.66	8	8	7	8	3693.74	35.75	16.13	32.29	2	4345.69
8	Thrissur	8	3174.92	3	3348.8	5	5	5	5	3560.77	30.6	14.8	32.4	3	2531.84
9	Palakkad	10	3469.49	8	3183.85	10	8	9	10	3469.49	50.09	34.28	51.2		
10	Malappuram	10	3892.73	3	3874.41	9	6	2	9	3660.28	29.74	12.32	23.95	1	5984.76
11	Kozhikode	12	1150.56	1	639.2	6	6	3	7	1443.3	43.03	37.23	44	5	740.72
12	Wayanad														
13	Kannur	8	2096.28			4	3	2	4	2464.85	54.5	19.67	79	4	1727.7
14	Kasaragod	4	2779.58			3	3	3	3	2751.07	29.67	29.67	46	1	2865.12
	<b>State Total</b>	<b>100</b>	<b>3041.56</b>	<b>35</b>	<b>3428</b>	<b>79</b>	<b>72</b>	<b>63</b>	<b>80</b>	<b>3238.64</b>	<b>45.11</b>	<b>26.86</b>	<b>41.99</b>	<b>20</b>	<b>2253.25</b>

Table 11 (i)

## CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR:2021-22

SEASON:AUTUMN

CROP: PADDY

STATE SAMPLE

Sl. No.	District	Expts.Treated with Manure only		Expts. Treated with Manure		Expts. Not Treated with Manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or Both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram			4	3592.29	4	3632.83	4	3592.29			8	3612.56
2	Kollam	2	4618.9	6	3656.47			4	3175.26			6	3656.47
3	Pathanamthitta			6	3462.69			6	3462.69			6	2254.58
4	Alappuzha	2	38.04	4	559.19	4	4241.46	2	1080.34				2400.32
5	Kottayam					6	3554.24					6	3554.24
6	Idukki					4	3263.58					4	3263.58
7	Ernakulam			6	3871.11	4	3753.67	6	3871.11	2	4345.69	8	3693.74
8	Thrissur	2	3236.56	4	3557.64	4	2792.2	2	3878.72	1	1122.4	7	3468.14
9	Palakkad			2	4612.05	8	3183.85	2	4612.05			10	3469.49
10	Malappuram	1	5984.76	7	3900.58	3	3874.41	6	3553.22			10	3892.73
11	Kozhikode	5	740.72	11	1197.05	1	639.2	6	1577.32			12	1150.56
12	Wayanad												
13	Kannur	3	2059.06	7	2290.94	1	733.61	4	2464.85	1	733.61	7	2290.94
14	Kasaragod	1	2865.12	4	2779.58			3	2751.07			4	2779.58
State Total		16	2157.35	61	2846.37	39	3346.85	45	3091.36	4	2636.85	96	2982.92

Table 11 (ii)

**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**

STATE:KERALA

YEAR:2021-22

SEASON:AUTUMN

CROP: PADDY

CENTRAL SAMPLE

Sl. No.	District	Expts. Checked at harvest stage		Expts. Treated with Fertilizers only		Experiments with Fertilizers								Expts. Not Treated with Fertilizers	
		No.	Yield Rate	No.	Yield Rate	No. of Experiments				Rate of Application				No.	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	8	4641.95	1	4213.08	8	8	8	8	4641.95	92.25	28.73	44.5		
2	Kollam	6	3783.01	4	3603.49	5	4	4	5	3659.96	35.14	17.25	29.85	1	4398.24
3	Pathanamthitta	6	2297.08			6	6	6	6	2297.08	45.5	18.17	53.17		
4	Alappuzha	8	4069.52	5	4730.96	6	6	6	6	4570.13	76.33	30.5	68.5	2	2567.72
5	Kottayam	6	3178.28	4	3602.07	4	5	4	5	3510.49	33.5	30	38.75	1	1517.24
6	Idukki	4	2264.72	2	1712.82	4	4	3	4	2264.72	66.5	46	67.33		
7	Ernakulam	10	3077.76	2	3085.38	7	5	6	7	3114.18	67.71	25.6	48.5	3	2992.77
8	Thrissur	8	3781.2	2	4876	8	7	6	8	3781.2	30	14.43	34.5		
9	Palakkad	10	3364.04	5	4292	8	8	8	8	3523.79	65.63	29.63	60.25	2	2725.05
10	Malappuram	10	4018.07	4	4620.31	7	5	4	7	3793.04	56.14	19.4	52.5	3	4543.15
11	Kozhikode	12	1673.51	4	2367.86	9	8	8	9	2098.5	54.54	16.75	46.88	3	398.56
12	Wayanad														
13	Kannur	8	4177.05			7	5	4	7	4063.45	18.14	22.2	16.75	1	4972.23
14	Kasaragod	4	4089			4	4		4	4089	24.75	24.75			
State Total		100	3390.04	33	3801.55	83	75	67	84	3496.75	51.24	24.88	46.79	16	2829.79

**Table 11 (ii)**  
**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**  
**STATE:KERALA                      YEAR:2021-22                      SEASON:AUTUMN                      CROP: PADDY                      CENTRAL SAMPLE**

Sl. No.	District	Expts. Treated with Manure only		Expts. Treated with Manure		Expts. Not Treated with Manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or Both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram			7	4703.22	1	4213.08	7	4703.22			8	4641.95
2	Kollam	1	4398.24	2	4142.05	4	3603.49	1	3885.86			6	3783.01
3	Pathanamthitta			6	2297.08			6	2297.08			6	1796.59
4	Alappuzha	2	2567.72	3	2967.13	5	4730.96	1	3765.96				4069.52
5	Kottayam	1	1517.24	2	2330.7	4	3602.074	1	3144.16			6	3178.28
6	Idukki			2	2816.61	2	1712.82	2	2816.61			4	2264.72
7	Ernakulam	1	2433.44	6	3010.32	4	3178.91	5	3125.7	2	3272.43	8	3029.09
8	Thrissur			6	3416.27	2	4876	6	3416.27			8	3781.2
9	Palakkad			3	2243.43	7	3844.3	3	2243.43	2	2725.05	8	3523.79
10	Malappuram	3	4543.15	6	3616.58	4	4620.31	3	2690.01			10	4018.07
11	Kozhikode	2	573.4	7	1508.83	5	1904.06	5	1883.01	1	48.88	11	1821.20
12	Wayanad												
13	Kannur	1	4972.23	8	4177.05			7	4063.45			8	4177.05
14	Kasaragod			4	4089			4	4089			4	4089
<b>State Total</b>		<b>11</b>	<b>3021.17</b>	<b>62</b>	<b>3250.14</b>	<b>38</b>	<b>3618.29</b>	<b>51</b>	<b>3299.53</b>	<b>5</b>	<b>2408.77</b>	<b>95</b>	<b>3410.07</b>

Table 11 (iii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: WINTER

CROP: PADDY

STATE SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate	No.	Yield Rate	No. of Expts.				Rate of Application			No.	Yield Rate	
						N	P	K	Exclusive Total	Yield Rate	N	P			K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	8	2609.47	4	1535.52	8	8	8	8	2609.47	44.71	18.62	29.49		
2	Kollam	6	3570.73											6	3570.73
3	Pathanamthitta	6	4353.87	5	4346.38	6	6	6	6	4353.87	49.53	27	45.3		
4	Alappuzha	8	3378.22	7	3277.30	8	8	8	8	3378.22	66.49	37.63	8		
5	Kottayam	6	3340.18	4	4050.72	5	4	5	5	3622.17	85	60.25	99.2	1	1930.24
6	Idukki	4	3270.29	4	3270.29	4	4	4	4	3270.29	52.8	43.55	25.13		
7	Ernakulam	10	3345.32	5	1516.67	9	7	7	9	2832.99	23.78	18	15.71	1	2551.17
8	Thrissur	8	4338.47	5	4171.13	8	7	7	8	4338.47	60.13	29	63.57		
9	Palakkad	10	4879.96	7	5529.54	8	8	7	8	5516.65	126.52	89.89	66.54	2	2333.2
10	Malappuram	10	3120.58			8	5	2	8	3534.84	54.22	25.76	20.5	2	1463.54
11	Kozhikode	8	1615.41	1	81.49	2	2	1	3	1402.58	71.8	16.3	9	5	1743.10
12	Wayanad	4	4041.07	3	4036.71	4	2	4	4	4041.07	17.56	10.5	25.55		
13	Kannur	8	2349.62	1	5015.92	5	5	3	5	2531.98	46.36	10.5	39	3	2045.68
14	Kasaragod	4	3338.71			3	3	4	4	3338.71	20	20	23.75		
<b>State Total</b>		<b>100</b>	<b>3379.77</b>	<b>46</b>	<b>3575.05</b>	<b>78</b>	<b>69</b>	<b>66</b>	<b>80</b>	<b>3552.75</b>	<b>55.3</b>	<b>31.31</b>	<b>36.21</b>	<b>20</b>	<b>2417.59</b>

contd...

Table 11 (iii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: WINTER

CROP: PADDY

STATE SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram			4	3683.42	4	1535.52	4	3683.42			8	2609.47
2	Kollam	6	3570.73	6	3570.73							6	3570.73
3	Pathanamthitta			1	4391.33	5	4346.38	1	4391.33			6	2518.63
4	Alappuzha			1	4084.61	7	3277.30	1	4084.61			8	3378.22
5	Kottayam	1	1930.24	2	1919.10	4	4050.72	1	1907.97			6	3340.18
6	Idukki					4	3270.29					4	3270.29
7	Ernakulam	1	2551.17	5	4092.95	5	1516.67	4	4478.4			10	2804.81
8	Thrissur			3	4617.38	5	4171.13	3	4617.38			8	4338.47
9	Palakkad	1	1550.4	2	3488.4	8	5227.85	1	5426.4	1	3116	9	5075.96
10	Malappuram			8	3534.84	2	1463.54	8	3534.84	2	1463.54	8	3534.84
11	Kozhikode	4	2047.39	6	2052.63	2	303.73	2	2063.13	1	525.97	7	1771.04
12	Wayanad			1	4054.16	3	4036.71	1	4054.16			4	4041.07
13	Kannur	2	2338.7	6	2053.57	2	3237.78	4	1911	1	1459.64	7	2476.76
14	Kasaragod			4	3338.71			4	3338.71			4	3338.71
State Total		15	2688.21	49	3267.16	51	3381.98	34	3522.58	5	1605.74	95	3300.33

Table 11 (iv)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: WINTER

CROP: PADDY

CENTRAL SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate	No.	Yield Rate	No. of Expts.					Rate of Application			No.	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	8	2510.76	2	4451.18	8	6	7	8	2510.76	51.94	32.83	65		
2	Kollam	6	2029.84	1	4696.8	2	2	2	2	4579	32.2	12.5	27.5	4	755.26
3	Pathanamthitta	6	2807.82	2	3129.56	6	6	6	6	2807.82	59.26	38.4	53.17		
4	Alappuzha	8	2364.81	5	3059.60	8	8	3	8	2364.81	60.25	35.5	74		
5	Kottayam	6	4166.72	6	4166.72	6	6	6	6	4166.72	152.33	85.83	96.67		
6	Idukki	4	3908.26	1	4266.55	2	2	2	2	4374.40	56	38.5	21.5	2	3442.12
7	Ernakulam	10	3511.09	5	3658.03	9	9	6	9	3494.27	37.89	32.44	33.5	1	3662.46
8	Thrissur	8	3095.15	5	2934.17	8	8	6	8	3095.15	41.88	11.5	34.17		
9	Palakkad	10	5052.1			9	7	5	9	5355.89	73.44	34.29	49	1	2318
10	Malappuram	10	4344.59	1	5039.39	9	9	4	9	4610.22	35.22	20.11	24.5	1	1953.89
11	Kozhikode	8	1551.51			2	2		2	2576.13	35	35		6	1209.97
12	Wayanad	4	3204.24	1	3635.28	2	2	1	2	3668.94	60	26.5	67	2	2739.55
13	Kannur	8	3607.24	1	5652.92	7	4	4	7	4005.56	61.36	39.25	63.75	1	819
14	Kasaragod	4	4030.41	3	4074.72	3	3	2	3	4074.72	15.67	15.67	9	1	3897.50
	State Total	100	3327.12	33	3755.63	81	74	54	81	3671.81	55.17	32.74	47.6	19	1857.64

contd...

Table 11 (iv)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA		YEAR: 2021-22		SEASON: WINTER		CROP: PADDY		CENTRAL SAMPLE					
Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram			6	1863.95	2	4451.18	6	1863.95			8	2510.76
2	Kollam	3	554.81	4	1531.41	2	3026.7	1	4461.2	1	1356.6	5	2164.49
3	Pathanamthitta			4	2646.95	2	3129.56	4	2646.95			6	2807.82
4	Alappuzha			3	1206.83	5	3059.60	3	1206.83			8	2364.81
5	Kottayam					6	4166.72					6	4166.72
6	Idukki	2	3442.12	3	3788.84	1	4266.55	1	4482.26			4	3908.26
7	Ernakulam			4	3289.57	6	3658.77	4	3289.57	1	3662.46	9	3494.27
8	Thrissur			3	3363.46	5	2934.17	3	3363.46			8	3095.15
9	Palakkad	1	2318	10	5052.1			9	5355.89			10	5052.1
10	Malappuram			8	4556.58	2	3496.64	8	4556.58	1	1953.89	9	4610.22
11	Kozhikode	5	1264.55	7	1639.29	1	937.11	2	2576.13	1	937.11	7	1639.28
12	Wayanad	1	1929.84	2	2816.22	2	3592.27	1	3702.6	1	3549.26	3	3089.24
13	Kannur	1	819	7	3315	1	5652.92	6	3731			8	3607.24
14	Kasaragod	1	3897.50	1	3897.50	3	4074.72					4	4030.42
State Total		14	1702.55	62	3182.52	38	3563.03	48	3614.18	5	2291.87	95	3381.6



Table 11(v)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: SUMMER

CROP: PADDY

STATE SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate	No.	Yield Rate	No. of Expts.					Rate of Application			No.	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	8	3230.408	1	4015.56	7	7	7	7	3134.031	58.29	20.45	43.89	1	3905.04
2	Kollam	6	2848.992											6	2848.992
3	Pathanamthitta	6	1931.125	4	1773.67	6	6	6	6	1931.125	43.49	21	28.74		
4	Alappuzha	8	3407.531	7	2112.32	8	8	8	8	2563.546	68.36	45.33	49.58		
5	Kottayam	6	3806.88	4	3550.41	6	6	6	6	3806.88	94	66	89.83		
6	Idukki	4	5249.09	4	5249.09	4	3	3	4	5249.09	49.75	30	20.33		
7	Ernakulam	10	3532.636	4	3625.455	10	10	9	10	3532.636	27.9	16.8	23.22		
8	Thrissur	8	6278.54	6	6283.6	6	6	6	6	6283.6	47.33	20.83	51.5	2	6263.36
9	Palakkad	10	4902.168	7	4913.472	10	10	10	10	4902.168	82.6	41.86	58.94		
10	Malappuram	10	6462.315	5	6076.347	9	9	7	9	6322.644	164.81	58.27	30.85	1	7719.36
11	Kozhikode	8	2243.87	3	2246.003	8	7	5	8	2235.644	45.85	34.54	48.52		
12	Wayanad	4	3212.279			4		4	4	2800.761	35.54				
13	Kannur	6	3277.358	3	3768.259	6	4	2	6	3277.358	107.33	41.25	78		
14	Kasaragod	6	3534.336	2	3441.824	5	5		5	3689.152	20.8	20.8		1	2760.256
<b>State Total</b>		<b>100</b>	<b>3964.92</b>	<b>50</b>	<b>4060.01</b>	<b>89</b>	<b>81</b>	<b>73</b>	<b>89</b>	<b>3865.42</b>	<b>65.08</b>	<b>34.76</b>	<b>43.62</b>	<b>11</b>	<b>4000.48</b>

Table contd.

Table 11(v)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: SUMMER

CROP: PADDY

STATE SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	1	3905.04	7	3118.243	1	4015.56	6	2987.11			8	3230.408
2	Kollam	6	2848.992	6	2848.992							6	2848.992
3	Pathanamthitta			2	2246.036	4	1773.67	2	2246.036			6	1931.125
4	Alappuzha			1	5722.124	7	2112.32	1	5722.124			8	2563.546
5	Kottayam			2	4319.82	4	3550.41	2	4319.82			6	3806.88
6	Idukki					4	5249.09					4	5249.09
7	Ernakulam			6	3470.757	4	3625.455	6	3470.757			10	3532.636
8	Thrissur	2	6263.36	2	6263.36	6	6283.6					8	6278.54
9	Palakkad			1	4235.232	7	4913.472	1	4235.232			10	4902.168
10	Malappuram	1	7719.36	4	6919.044	5	6076.347	3	6652.272			10	6462.315
11	Kozhikode			4	2786.786	4	1700.954	4	2786.786			7	2555.022
12	Wayanad			4	3176.529			4	1503.072			4	3176.529
13	Kannur			3	2786.457	3	3768.259	3	2786.457			6	3277.358
14	Kasaragod	1	2760.256	4	3580.592	2	3441.824	3	3854.037			6	3534.336
State Total		11	4000.48	46	3686.37	51	3981.69	35	3396.4	0	0	99	3934.66

Table 11(vi)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: SUMMER

CROP: PADDY

CENTRAL SAMPLE

Sl.No	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers								Expts. Not treated with Fertilizers	
		No.	Yield Rate	No.	Yield Rate	No. of Expts.					Rate of Application			No	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	8	2768.066			8	7	8	8	2768.07	61	29.14	44.13		
2	Kollam	6	2353.713	2	5679.1	6	6	6	6	2353.71	49.83	18	30.67		
3	Pathanamthitta	6	1044.29	3	574.069	6	6	4	6	1044.29	80.5	31.33	54.75		
4	Alappuzha	8	5508.063	5	4767.81	8	8	7	8	5508.06	82.75	44	60.86		
5	Kottayam	6	4827.198			5	5	5	5	4980.59	76.2	39.6	57.2	1	4060.26
6	Idukki	4	3514.198	1	1292.17	4	4	2	4	3514.2	87.25	44	57.5		
7	Ernakulam	10	2540.851	5	2884.19	9	9	7	9	2612.82	40.89	22.33	23	1	1893.14
8	Thrissur	8	5272.474	5	6098.13	7	7	7	7	5684.5	78.71	37.71	53.57	1	2388.32
9	Palakkad	10	3649.6848	4	5491.86	7	7	6	7	5029.74	75.29	46.43	50.17	3	429.552
10	Malappuram	10	5025.909	4	5256.92	9	9	8	9	5191.65	53.44	27.56	29.5	1	3534.256
11	Kozhikode	8	3106.686	3	3998.45	7	6	4	7	3447.09	18.2	10.57	19.5	1	723.888
12	Wayanad	4	3923.46	1	4616.05	2	1	2	2	4448.43	15.84	11	14.2	2	3398.49
13	Kannur	6	4549.543			6	3	5	6	4549.54	45.33	24.33	40.8		
14	Kasaragod	6	4259.957	1	4508.54	6	5	4	6	4259.96	32.17	23.6	30.75		
State Total		100	3773.66	34	4330.54	90	83	75	90	3963.11	56.96	29.26	40.47	10	2068.55

Page contd.

Table 11(vi)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA		YEAR: 2021-22		SEASON: SUMMER		CROP: PADDY		CENTRAL SAMPLE					
Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram			8	2768.07			8	2768.07			8	2768.066
2	Kollam			4	691.02	2	5679.10	4	691.02			6	2353.713
3	Pathanamthitta			3	1514.51	3	574.07	3	1514.51			6	1044.29
4	Alappuzha			3	6741.82	5	4767.81	3	6741.82			8	5508.063
5	Kottayam	1	4060.26	6	4827.2			5	4980.59			6	4827.198
6	Idukki			3	4254.87	1	1292.17	3	4254.87			4	3514.198
7	Ernakulam	1	1893.14	5	2197.51	5	2884.19	4	2273.61			10	2540.851
8	Thrissur	1	2388.32	3	3896.38	5	6098.13	2	4650.42			8	5272.474
9	Palakkad			3	4413.58	7	3322.3	3	4413.58	3	429.55	7	5029.742
10	Malappuram	1	3534.256	6	4871.9	4	5256.92	5	5139.43			10	5025.909
11	Kozhikode			4	3033.57	4	3179.81	4	3033.57	1	723.89	7	3447.086
12	Wayanad	1	3614.004	2	3947.41	2	3899.51	1		1	3182.98	3	4170.288
13	Kannur			6	4549.54			6	4549.54			6	4549.543
14	Kasaragod			5	4210.24	1	4508.54	5	4210.24			6	4259.957
State Total		5	3098	61	3687.41	39	3908.56	56	3663.59	5	1039.1	95	3917.58

Table 11 (vii)

**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: BANANA

STATE SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate	No.	Yield Rate	No. of Expts.				Rate of Application			No.	Yield Rate	
						N	P	K	Exclusive Total	Yield Rate	N	P			K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	19758.33	1	16400	4	3	1	4	19758.33	258.21	154.84	133.43		
2	Kollam	4	13933.33											4	13933.33
3	Pathanamthitta														
4	Alappuzha	4	15391.67			4	4	1	4	15391.67	156.75	116.5	360		
5	Kottayam	4	19333.33	1	26933.3	2	2	1	2	23883.33	205	90	100	2	14783.33
6	Idukki														
7	Ernakulam	4	25850			2		2	2	24733.33	230		330	2	26966.67
8	Thrissur	6	21438.89			6	4	4	6	21438.89	115.67	74	180		
9	Palakkad	6	22472.22			4	3	2	3	18100	376	213.33	360	2	31333.33
10	Malappuram	6	17455.56			2	1	2	3	14988.89	235	240	309	3	19922.22
11	Kozhikode	4	17925			2	1	1	2	21400	162.5	164	164	2	14450
12	Wayanad														
13	Kannur	4	16526.67			4	4	3	5	13221.33	143	149	233.33		
14	Kasaragod	4	25466.67			3	3	2	3	18400	48.67	48.67	34.5	1	46666.67
State Total		50	19698.8	2	21666.7	33	25	19	34	18524.71	193.08	138.93	220.43	16	21077.08

Table contd...

Table 11 (vii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: BANANA

STATE SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram			3	20877.78	1	16400	3	20877.8			4	19758.3
2	Kollam	4	13933.33	4	13933.33							4	13933.3
3	Pathanamthitta												
4	Alappuzha			4	15391.67			4	15391.7			4	15391.7
5	Kottayam	2	14783.33	3	16800	1	26933.33	1	20833.3			4	19333.3
6	Idukki												
7	Ernakulam	2	26966.67	4	25850			2	24733.3			4	25850
8	Thrissur			6	21438.89			6	21438.9			6	21438.9
9	Palakkad	2	31333.33	6	22472.22			4	18041.7			6	22472.2
10	Malappuram	3	19922.22	6	17455.56			3	14988.9			6	17455.6
11	Kozhikode	2	14450	4	17925			2	21400			4	17925
12	Wayanad												
13	Kannur			4	16526.67			4	16526.7			4	16526.7
14	Kasaragod	1	46666.67	4	25466.67			3	18400			4	25466.7
State Total		16	21077.08	48	19616.81	2	21666.67	32	18886.7	0	0	50	19698.8

Table 11 (viii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: BANANA

CENTRAL SAMPLE

Sl. No	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No	Yield Rate	No.	Yield Rate	No. of Expts.				Rate of Application			No.	Yield Rate	
						N	P	K	Exclusive Total	Yield Rate	N	P			K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	13083.33											4	13083.33
2	Kollam	4	10333.33	1	10666.7	1	1	1	1	10666.67	96	96	144	3	10222.22
3	Pathanamthitta														
4	Alappuzha	4	14266.67											4	14266.67
5	Kottayam	4	13933.33			3	3	3	3	16222.22	265.33	265.33	230.33	1	7066.67
6	Idukki														
7	Eranakulam	4	18216.67			4	3	3	4	18216.67	181	126.33	179.33		
8	Thrissur	6	12775.56			3	1	1	3	13217.78	163.33	99	237	3	12333.33
9	Palakkad	6	17577.78	1	19733.3	6	4	6	6	17577.78	146.73	80.5	113.17		
10	Malappuram	6	20616.67			6	3	3	6	20616.67	162.83	222	157		
11	Kozhikode	4	16791.67			3	3	1	3	18211.11	54.33	54.33	120	1	12533.33
12	Wayanad														
13	Kannur	4	20033.33			4	4	4	4	20033.33	360	276.5	279.25		
14	Kasaragod	4	16550											4	16550
State Total		50	15973.07	2	15200	30	22	22	30	17859.56	178.69	152.5	182.51	20	13143.33

Table 11 (viii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS													
STATE: KERALA		YEAR: 2021-22		SEASON: ANNUAL		CROP: BANANA		CENTRAL SAMPLE					
Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	4	13083.33	4	13083.33							4	13083.33
2	Kollam	3	10222.22	3	10222.22	1	10666.67					4	10333.33
3	Pathanamthitta												
4	Alappuzha	4	14266.67	4	14266.67							4	14266.67
5	Kottayam	1	7066.667	4	13933.33			3	16222.2			4	13933.33
6	Idukki												
7	Ernakulam			4	18216.67			4	18216.7			4	18216.67
8	Thrissur	3	12333.33	6	12775.56			3	13217.8			6	12775.56
9	Palakkad			5	17146.67	1	19733.33	5	17146.7			6	17577.78
10	Malappuram			6	20616.67			6	20616.7			6	20616.67
11	Kozhikode	1	12533.33	4	16791.67			3	18211.1			4	16791.67
12	Wayanad												
13	Kannur			4	20033.33			4	20033.3			4	20033.33
14	Kasaragod	4	16550	4	16550							4	16550
State Total		20	13143.33	48	16005.28	2	15200	28	18049.5	0	0	50	15973.07



Table 11 (ix)

## CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: TAPIOCA

STATE SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers						Expts. Not treated with Fertilizers			
		No. of Expts.		Yield Rate		Rate of Application			Yield Rate		No.	Yield Rate			
		No.	Yield Rate	No.	Yield Rate	N	P	K	Exclusive Total	Yield Rate			N	P	K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	43937.5			1	1	1	1	40000	88.92	49.4	118.56	3	45250
2	Kollam	4	27562.5											4	27562.5
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	30906.25			1	1	1	1	39000	24	24	61	3	28208.33
6	Idukki														
7	Ernakulam	4	35812.5											4	35812.5
8	Thrissur	4	51250			2	1	1	2	40750	23	15	25	2	61750
9	Palakkad	4	70406.25											4	70406.25
10	Malappuram	4	33125			1	1		1	41375	92	92		3	30375
11	Kozhikode	4	68437.5			1	1		1	71000	88.92	88.92		3	67583.33
12	Wayanad														
13	Kannur	4	47218.75	1	28500	2	2	3	3	55958.33	75	75	90	1	21000
14	Kasaragod	4	36681.25			1	1		1	73750	50	50		3	24325
State Total		40	44533.75	1	28500	9	8	6	10	51450	63.12	56.33	73.64	30	42228.33

Table contd...

Table 11(ix)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP:TAPIOCA

STATE SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	3	45250	4	43937.5			1	40000			4	43937.5
2	Kollam	4	27562.5	4	27562.5							4	27562.5
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	3	28208.333	4	30906.25			1	39000			4	30906.25
6	Idukki												
7	Ernakulam	1	34000	1	34000	3	36416.667			3	36416.67	1	34000
8	Thrissur	2	61750	4	51250			2	40750			4	51250
9	Palakkad	3	73458.333	3	73458.333	1	61250			1	61250	3	73458.333
10	Malappuram	3	30375	4	33125			1	41375			4	33125
11	Kozhikode	3	67583.333	4	68437.5			1	71000			4	68437.5
12	Wayanad												
13	Kannur	1	21000	3	53458.333	1	28500	2	69687.5			4	47218.75
14	Kasaragod	2	26300	3	42116.667	1	20375	1	73750	1	20375	3	42116.667
State Total		25	43039	34	45940.44	6	36562.5	9	54000	5	38175	35	45442.14

Table 11 (x)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP: TAPIOCA

CENTRAL SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No. of Expts.		Rate of Application			No.		Yield Rate						
		No.	Yield Rate	No.	Yield Rate	N	P	K	Exclusive Total	Yield Rate	N	P	K	No.	Yield Rate
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	16750			1	1	1	1	17750	50	50	50	3	16416.67
2	Kollam	4	43125			1	1	1	1	38250	101	101	101	3	44750
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	27093.75			1	1	1	1	29125	30	30	60	3	26416.67
6	Idukki														
7	Ernakulam	4	52375			2	2		2	80125	43.5	43.5		2	24625
8	Thrissur	4	22187.5											4	22187.5
9	Palakkad	4	36187.5			1	1	1	1	47250	95	95	285	3	32500
10	Malappuram	4	35062.5			2	2	1	2	53375	59.3	59.5	89	2	16750
11	Kozhikode	4	14906.25											4	14906.25
12	Wayanad														
13	Kannur	4	42062.5											4	42062.5
14	Kasaragod	4	26906.25											4	26906.25
State Total		40	31665.63	0	0	8	8	5	8	49921.88	63.13	63.17	117	32	27101.56

Table contd...

Table 11 (x)

## CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: ANNUAL

CROP:TAPIOCA

CENTRAL SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	2	11000	3	13250	1	27250	1	17750	1	27250	3	13250
2	Kollam	3	44750	4	43125			1	38250			4	43125
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	2	33250	3	31875	1	12750	1	29125	1	12750	3	31875
6	Idukki												
7	Ernakulam	2	24625	4	52375			2	80125			4	52375
8	Thrissur	4	22187.5	4	22187.5							4	22187.5
9	Palakkad	2	38000	3	41083.33	1	21500	1	47250	1	21500	3	41083.33
10	Malappuram	2	16750	4	35062.5			2	53375			4	35062.5
11	Kozhikode	3	16375	3	16375	1	10500			1	10500	3	16375
12	Wayanad												
13	Kannur	3	28875	3	28875	1	81625			1	81625	3	28875
14	Kasaragod	4	26906.25	4	26906.25							4	26906.25
State Total		27	26430.56	35	31800	5	30725	8	49921.9	5	30725	35	31800

Table 11 (xi)

**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**

STATE: KERALA      YEAR: 2021-22      SEASON: PERENNIAL      CROP: COCONUT      STATE SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate (No/Hec)	No.	Yield Rate	No. of Expts.					Rate of Application			No.	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	8467.1											4	8467.1
2	Kollam	4	5176.5											4	5176.5
3	Pathanamthitta														
4	Alappuzha	4	12264.75											4	12264.75
5	Kottayam	4	8057.1											4	8057.1
6	Idukki														
7	Eranakulam	4	6938.8											4	6938.8
8	Thrissur	6	10684.5333											6	10684.533
9	Palakkad	6	8413.5											6	8413.5
10	Malappuram	6	12257.333			1	1	1	1	24081.6	23.2	17.6	5	5	9892.48
11	Kozhikode	4	11556.25											4	11556.25
12	Wayanad														
13	Kannur	4	6972											4	6972
14	Kasaragod	4	12036											4	12036
<b>State Total</b>		<b>50</b>	<b>9480.12</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>24081.6</b>	<b>23.2</b>	<b>17.6</b>	<b>5</b>	<b>49</b>	<b>9182.13</b>

Table contd...

Table 11 (xi)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: COCONUT

STATE SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram					4	8467.1			4	8467.1		
2	Kollam	4	5176.5	4	5176.5							4	5176.5
3	Pathanamthitta												
4	Alappuzha	3	13445.8	3	13445.8	1	8721.6			1	8721.6	3	13445.8
5	Kottayam	2	10357.6	2	10357.6	2	5756.6			2	5756.6	2	10357.6
6	Idukki												
7	Eranakulam					4	6938.8			4	6938.8		
8	Thrissur	6	10684.533	6	10684.533							6	10684.53
9	Palakkad	3	7204.8	3	7204.8	3	9622.2			3	9622.2	3	7204.8
10	Malappuram	5	9892.48	6	12257.333			1	24081.6			6	12257.33
11	Kozhikode					4	11556.25			4	11556.25		
12	Wayanad												
13	Kannur	2	6405	2	6405	2	7539			2	7539	2	6405
14	Kasaragod	3	12280.8	3	12280.8	1	11301.6			1	11301.6	3	12280.8
State Total		28	9521.25	29	10023.33	21	8729.98	1	24081.6	21	8729.98	29	10023.33

Table 11 (xii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA YEAR: 2021-22 SEASON: PERENNIAL CROP: COCONUT CENTRAL SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate (No/Hec)	No.	Yield Rate	No. of Expts.					Rate of Application		No.	Yield Rate	
						N	P	K	Exclusive Total	Yield Rate	N	P			K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	10498.75											4	10498.75
2	Kollam	4	6121.5											4	6121.5
3	Pathanamthitta														
4	Alappuzha	4	8709.75											4	8709.75
5	Kottayam	4	6944.3			1	1	1	1	14851.6	84	84	34	3	4308.53
6	Idukki														
7	Eranakulam	4	7524											4	7524
8	Thrissur	6	9846.8											6	9846.8
9	Palakkad	6	8160.7	2	8650.5	2		2	2	8650.5	15		74	4	7915.8
10	Malappuram	6	12141.33			3	3	3	3	14693.33	76	72.33	69.33	3	9589.33
11	Kozhikode	4	10502.75											4	10502.75
12	Wayanad														
13	Kannur	4	8526											4	8799
14	Kasaragod	4	16411.8			4	4	4	4	16411.8	48.25	48.25	48.25		
State Total		50	9636.97	2	8650.5	10	8	10	10	14187.98	55.81	68.19	56.4	40	8526.51

Unit:no./hec.

Table contd...

Table 11 (xii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA YEAR: 2021-22 SEASON: PERENNIAL CROP: COCONUT CENTRAL SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	1	14255.6	1	14255.6	3	9246.47			3	9246.47	1	14255.6
2	Kollam	3	6566	3	6566	1	4788			1	4788	3	6566
3	Pathanamthitta												
4	Alappuzha					4	8709.75			4	8709.75		
5	Kottayam			1	14851.6	3	4308.53	1	14851.6	3	4308.53	1	14851.6
6	Idukki												
7	Ernakulam	3	7928.07	3	7928.07	1	6311.8			1	6311.8	3	7928.07
8	Thrissur	6	9846.8	6	9846.8							6	9846.8
9	Palakkad	2	8934.9	2	8934.9	4	7773.6			2	6896.7	4	8792.7
10	Malappuram	2	8444.8	5	12193.92	1	11878.4	3	14693.3	1	11878.4	5	12193.92
11	Kozhikode	1	11051	1	11051	3	10320			3	10320	1	11051
12	Wayanad												
13	Kannur	3	9828	3	9828	1	5712			1	5712	3	9828
14	Kasargod			4	16411.8			4	16411.8			4	16411.8
State Total		21	9148.24	29	10920.41	21	7916.6	8	15572.4	19	7839.35	31	10773.96



Table 11 (xiii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA      YEAR: 2021-22      SEASON: PERENNIAL      CROP: PEPPER      STATE SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers							Expts. Not treated with Fertilizers		
		No.	Yield Rate	No.	Yield Rate	No. of Expts.				Rate of Application			No.	Yield Rate	
						N	P	K	Exclusive Total	Yield Rate	N	P			K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	388.99											4	388.99
2	Kollam	4	399.99											4	399.99
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	430.79											4	430.79
6	Idukki														
7	Ernakulam	4	289.27											4	289.27
8	Thrissur	4	691.65			1	1		1	654.80	25	12		3	703.93
9	Palakkad	4	714.93											4	714.93
10	Malappuram	4	248.58											4	248.58
11	Kozhikode	4	332.9											4	332.9
12	Wayanad														
13	Kannur	4	230.98											4	230.98
14	Kasaragod	4	586.98											4	586.98
State Total		40	431.51	0	0	1	1	0	1	654.8	25	12	0	39	425.78

Table contd...

Table 11 (xiii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: PEPPER

STATE SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. Not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram					4	388.99			4	388.99		
2	Kollam	4	399.99	4	399.99							4	399.99
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	3	415.51	3	415.51	1	476.62			1	476.62	3	415.51
6	Idukki												
7	Ernakulam					4	289.27			4	289.27		
8	Thrissur	2	541.51	3	579.28	1	1028.76	1	654.80	1	1028.76	3	579.28
9	Palakkad	1	1171.75	1	1171.75	3	562.66			3	562.66	1	1171.75
10	Malappuram	3	285.73	3	285.73	1	137.12			1	137.12	3	285.73
11	Kozhikode	2	284.14	2	284.14	2	381.66			2	381.66	2	284.14
12	Wayanad												
13	Kannur					4	230.98			4	230.98		
14	Kasaragod	2	809.15	2	809.15	2	364.79			2	364.79	2	809.15
State Total		17	479.12	18	488.88	22	384.56	1	654.8	22	384.56	18	488.88

Table 11 (xiv)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: PEPPER

CENTRAL SAMPLE

Sl. No.	District	Expts. Checked at Harvest stage		Expts. Treated with Fertilizers only		Expts. With Fertilizers					Expts. Not treated with Fertilizers				
		No.	Yield Rate	No.	Yield Rate	No. of Expts.					Rate of Application		No.	Yield Rate	
						N	P	K	Exclusive Total	Yield Rate	N	P			K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	119.71											4	119.71
2	Kollam	4	281.94											4	281.94
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	3	170.12											3	170.12
6	Idukki														
7	Ernakulam	4	451.96											4	451.96
8	Thrissur	4	218.24											4	218.24
9	Palakkad	4	362.6			1			1	439.96	15			3	336.81
10	Malappuram	4	351.23											4	351.23
11	Kozhikode	4	725.38											4	725.38
12	Wayanad														
13	Kannur	4	344.08											4	344.08
14	Kasaragod	4	837.02											4	837.02
State Total		39	391.77	0	0	1	0	0	1	439.96	15	0	0	38	390.5

Table contd...

Table 11 (xiv)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: PEPPER

CENTRAL SAMPLE

Sl. No.	District	Expts. Treated with manure only		Expts. Treated with manure		Expts. Not Treated with manure		Expts. Treated (both) with Fertilizers & Manure		Expts. not Treated with Fertilizers & Manure		Expts. Treated with Fertilizers or Manure or both	
		No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate	No	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	1	201.65	1	201.65	3	92.39			3	92.39	1	201.65
2	Kollam					4	281.94			4	281.94		
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	1	226.58	1	226.58	2	141.89			2	141.89	1	226.58
6	Idukki												
7	Eranakulam	1	713.46	1	713.46	3	364.79			3	364.79	1	713.46
8	Thrissur	2	119.34	2	119.34	2	317.14			2	317.14	2	119.34
9	Palakkad	2	390.83	3	407.20	1	228.78	1	439.96	1	228.77	3	407.20
10	Malappuram					4	351.23			4	351.23		
11	Kozhikode	2	949.57	2	949.57	2	501.18			2	501.18	2	949.57
12	Wayanad												
13	Kannur	4	344.08	4	344.08							4	344.08
14	Kasaragod	4	837.01	4	837.02							4	837.02
State Total		17	516.8	18	512.53	21	288.26	1	439.96	21	288.26	18	512.53

Table 11 (xv)

**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**  
 STATE: KERALA      YEAR: 2021-22      SEASON: PERENNIAL      CROP: ARECANUT      STATE SAMPLE

Sl. No.	District	Expts. Checked at harvest		Expts. Treated with Fertilizers only		Expts. With Fertilizers						Expts. Not treated with Fertilizers			
		No.	Yield rate	No.	Yield rate	No. of Experiments					Rate of Application			No.	Yield Rate
						N	P	K	Exclusive Total	Yield Rate	N	P	K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	848.38											4	848.38
2	Kollam	4	1365.04											4	1365.03
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	1294.44											4	1294.44
6	Idukki														
7	Eranakulam	4	923.39											4	923.39
8	Thrissur	4	1000.09											4	1000.09
9	Palakkad	4	1744.79				1	1	1	3499.96		12.5	9	3	1159.74
10	Malappuram	4	914.07											4	914.07
11	Kozhikode	4	811.93											4	811.93
12	Wayanad														
13	Kannur	4	1028.94											4	1028.94
14	Kasaragod	4	2733.72			1	1		1	2842.01	49	49		3	2697.62
State Total		40	1266.48	0	0	1	2	1	2	3170.99	49	49	0	38	1166.24

**Table 11 (xv)**  
**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**

**STATE: KERALA      YEAR: 2021-22      SEASON: PERENNIAL      CROP: ARECANUT      STATE SAMPLE**

Sl. No.	District	Expts. treated with manure only		Expts. treated with manure		Expts. not treated with manure		Expts. treated (both) with fertilizer & manure		Expts. not treated with fertilizer & manure		Expts. treated with fertilizer or manure or both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram					4	848.378			4	848.378		
2	Kollam					4	1365.039			4	1365.039		
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam					4	1294.436			4	1294.436		
6	Idukki												
7	Eranakulam					4	923.39			4	923.39		
8	Thrissur	3	946.182	3	946.182	1	1161.833			1	1161.833	3	946.182
9	Palakkad	2	1327.173	3	2326.393	1	824.875	1	6999.9166	1	3200.423	3	2051.435
10	Malappuram	3	917.372	3	917.372	1	918.1492			1	459.075	3	917.372
11	Kozhikode					4	811.928			4	811.928		
12	Wayanad												
13	Kannur	2	695.064	2	695.064	2	1362.811			2	1362.811	2	695.064
14	Kasaragod	3	2697.622	4	2733.72			1	2842.012			4	2733.72
<b>State Total</b>		<b>13</b>	<b>1363.69</b>	<b>15</b>	<b>1659.66</b>	<b>25</b>	<b>1064.13</b>	<b>2</b>	<b>9841.9286</b>	<b>25</b>	<b>1140.79</b>	<b>15</b>	<b>1604.67</b>

**Table 11 (xvi)**  
**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS**

STATE: KERALA      YEAR: 2021-22      SEASON: PERENNIAL      CROP: ARECANUT      CENTRAL SAMPLE

Sl. No.	District	Expts. Checked at harvest		Expts. treated with fertilizer only		Expts. with fertilizers					Expts. not treated with fertilizers				
		No.	Yield rate	No.	Yield rate	No. of Expts.			Rate of application		No.	Yield rate			
						N	P	K	Exclusive Total	Yield rate			N	P	K
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	4	365.02											4	365.02
2	Kollam	4	794.42											4	794.42
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	666.17											4	666.17
6	Idukki														
7	Eranakulam	4	1217.63											4	1217.63
8	Thrissur	4	865.22											4	865.22
9	Palakkad	4	644											4	644
10	Malappuram	4	875.62											4	875.62
11	Kozhikode	4	1237.70											4	1237.70
12	Wayanad														
13	Kannur	4	1618.28											4	1618.28
14	Kasaragod	4	2764.89			4	4	4	4	2764.89	82	82	82		
State Total		40	1104.9	0	0	4	4	4	4	2764.89	82	82	82	36	920.45

Table 11 (xvi)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE: KERALA

YEAR: 2021-22

SEASON: PERENNIAL

CROP: ARECANUT

CENTRAL SAMPLE

Sl. No.	District	Expts. treated with manure only		Expts. treated with manure		Expts. not treated with manure		Expts. treated (both) with fertilizer & manure		Expts. not treated with fertilizer & manure		Expts. treated with fertilizer or manure or both	
		No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate	No.	Yield Rate
1	2	17	18	19	20	21	22	23	24	25	26	27	28
1	Thiruvananthapuram	1	133.12	1	133.12	3	442.33			3	442.33	1	133.12
2	Kollam	3	743.36	3	743.36	1	947.61			1	947.61	3	743.36
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	1	1099.32	1	1099.32	3	521.79			3	521.79	1	1099.32
6	Idukki												
7	Eranakulam	2	1129.41	2	1129.41	2	1305.85			2	1305.85	2	1129.41
8	Thrissur	4	865.22	4	865.22							4	865.22
9	Palakkad	2	637.09	2	637.09	2	650.91			2	650.91	2	637.09
10	Malappuram	2	1025.34	2	1025.34	2	725.89			2	725.89	2	1025.34
11	Kozhikode					4	1237.70			4	1237.70		
12	Wayanad												
13	Kannur					4	1618.28			4	1618.28		
14	Kasaragod			4	2764.89			4	2764.89			4	2764.89
State Total		15	833.81	19	1240.35	21	982.34	4	2764.89	21	982.34	19	1240.35



## 5. Supply and use of Crop Cutting Equipment

The information on supply and use of crop cutting equipment such as Tapes, Pegs, Balance and Weights collected during the Sample Check survey 2021-22 is presented in Tables 16(i) & 16 (ii). In most districts standard equipment which supplied were used but in some district the use of non-standard equipment are noticed. Use of non-standard equipment should be avoided.

Table 12 (i)																	
State wise Position of Supply and Use of Equipments																	
State: Kerala																	
Year: 2021-22																	
Crop	Agency	Item of Equipment	No of experiments supervised (Harvest and Post harvest) for which equipment was														
			Supplied						Not Supplied						Information about supply not available	Total of columns 8,13 & 14	
			And Used	But used locally procured one		But not used though required	But not required to be used	Total	Used locally procured one		And also not used though required	As not required	Total				
				Standard	Non-Standard				Standard	Non-Standard							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Paddy (Autumn)	S	Tape	100					100								100	
		Balance	94	6				100								100	
		Weight															
		Pegs	97	2	1			100								100	
	C	Tape	94	3	1		1	99	1					1		100	
		Balance	93				1	94	6					6		100	
		Weight	6					6	0							6	
		Pegs	44	16				60	22	18				40		100	

Table 12 (i)

State wise Position of Supply and Use of Equipments

State: Kerala

Year: 2021-22

Crop	Agency	Item of Equipment	No of experiments supervised (Harvest and Post harvest) for which equipment was												Information about supply not available	Total of columns 8,13 & 14
			Supplied						Not Supplied							
			And Used	But used locally procured one		But not used though required	But not required to be used	Total	Used locally procured one		And also not used though required	As not required	Total			
				Standard	Non-Standard				Standard	Non-Standard						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Paddy (Winter)	s	Tape	100					100								100
		Balance	93	7				100								100
		Weight	1	6				7								7
		Pegs	98	2				100								100
	c	Tape	91	8	1			100								100
		Balance	89	9			2	100								100
		Weight	6					6					6	6		12
		Pegs	48	17	3	1		69	13	18				31		100
Paddy (Summer)	s	Tape	100					100								100
		Balance	97	3				100								100
		Weight	0	3				3								3
		Pegs	99	1				100								100
	c	Tape	89	7	1			97	3					3		100
		Balance	87	10			2	99	1					1		100
		Weight	2				6	8					4	4		12
		Pegs	36	19	1		1	57	13	30				43		100

Table 12 (ii)

## State wise Position of Supply and Use of Equipments

State: Kerala

Year: 2021-22

Crop	Agency	Item of Equipment	No of experiments supervised (Harvest and Postharvest) for which equipment was												Information about supply not available	Total of columns 8,13 & 14
			Supplied						Not Supplied							
			And used	But used locally procured one		But not used though required	But not required to be used	Total	Used locally procured one		And also not used though required	As not required	Total			
				Standard	Non-Standard				Standard	Non-Standard						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Tapioca	s	Tape	40					40							40	
		Balance	24	2				26							26	
		Weight	14					14							14	
		Pegs	37			3		40							40	
	c	Tape	37	1				38	1	1				2	40	
		Balance	34	3				37	3					3	40	
		Weight	7			3		10							10	
		Pegs	11	3		8		22	4	7		7		18	40	
Banana	s	Tape													0	
		Balance	48	2				50							50	
		Weight	1	1				2							2	
		Pegs													0	
	c	Tape					9	9							9	
		Balance	42	2				44	6					6	50	
		Weight		2		4		6	1			3		4	10	
		Pegs				9		9							9	

Table 12 (iii)

State wise Position of Supply and Use of Equipments

State: Kerala

Year: 2021-22

Crop	Agency	Item of Equipment	No of experiments supervised (Harvest and Postharvest) for which equipment was												
			Supplied						Not Supplied					Information about supply not available	Total of columns 8,13 & 14
			And used	But used locally procured one		But not used though required	But not required to be used	Total	Used locally procured one		And also not used though required	As not required	Total		
				Standard	Non-Standard				Standard	Non-Standard					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coconut	s	Tape													0
		Balance													0
		Weight													0
		Pegs													0
	c	Tape						8	8						8
		Balance						8	8						8
		Weight						8	8						8
		Pegs						8	8						8
Pepper	s	Tape													0
		Balance	38	2					40						40
		Weight		2					2						2
		Pegs													0
	c	Tape						6	6						6
		Balance	37	1					38	1				1	39
		Weight	7						7						7
		Pegs						6	6						6
Arecanut	s	Tape													0
		Balance	38	2					40						40
		Weight													0
		Pegs													0
	c	Tape						8	8				2	2	10
		Balance	36	2					38	2				2	40
		Weight	8						8				2	2	10
		Pegs						8	8				2	2	10

## **6. Comparison of ICS and GCES yield Estimates**

The district yield rates of rice under ICS and GCES during the year 2021-22 for Central and State samples are given in Table 13(i). Trend of yield rate for rice under ICS and GCES during Autumn, Winter and Summer from 2017-18 to 2021-22 are given in Chart 8, 9, 10 respectively {Table 13(iii)}. District wise yield rate of rice under GCES and ICS are given in Chart 11, 12 and 13 respectively. Season wise yield rate under GCES and ICS for rice is given in Chart 14. A graphical representation of yield rates of Tapioca, Banana, Coconut, Pepper and Arecanut are given in Chart 15 to 19. A graphical representation of crop wise yield rates of important crops during 2021-22 is given in Chart-20.

**Table 13 (i)**

**Comparison of Yield Rates (Kg/Ha) of Rice Under GCES and ICS**

**State: Kerala**

**Year:2021-22**

Sl. No.	District	Autumn			Winter			Summer		
		GCES	ICS		GCES	ICS		GCES	ICS	
			State Sample	Central Sample		State Sample	Central Sample		State Sample	Central Sample
1	Thiruvananthapuram	2616	2373.45	3049.76	2130	1714.42	1649.57	2480	2122.38	1818.62
2	Kollam	2294	2402.30	2485.44	2279	2345.97	1333.60	2263	1871.79	1546.39
3	Pathanamthitta	1973	2274.99	1509.18	2256	2860.49	1844.74	2439	1268.75	686.10
4	Alappuzha	2030	1577.01	2673.67	2421	2219.48	1553.68	2664	2238.75	3618.80
5	Kottayam	2965	2335.14	2088.13	2794	2194.50	2737.54	2715	2501.12	3171.47
6	Idukki	1745	2144.17	1487.92	1861	2148.58	2567.73	3047	3448.65	2308.83
7	Ernakulam	1698	2512.45	2022.09	2341	2197.88	2306.79	2472	2320.94	1669.34
8	Thrissur	1931	2085.92	2484.25	2741	2850.37	2033.51	3651	4125.00	3464.01
9	Palakkad	2707	2279.45	2210.17	3560	3206.13	3319.23	3112	3220.73	2397.84
10	Malappuram	2104	2557.52	2639.87	2790	2050.22	2854.40	4186	4245.74	3302.02
11	Kozhikode	931	755.92	1099.50	1106	1061.32	1019.34	2158	1474.22	2041.10
12	Wayanad				2819	2654.98	2105.19	2584	2110.47	2577.71
13	Kannur	2216	1377.26	2744.32	2194	1543.70	2369.96	2323	2153.23	2989.05
14	Kasargod	2054	1826.18	2686.47	2105	2193.53	2647.99	2304	2322.06	2798.79
<b>State Total</b>		<b>2542</b>	<b>1998.30</b>	<b>2227.26</b>	<b>3066</b>	<b>2220.51</b>	<b>2185.92</b>	<b>2902</b>	<b>2604.95</b>	<b>2479.29</b>

Table 13 (ii)

## Comparison of Yield Rates (Kg/Ha) of Important Crops Under GCES and ICS

State: Kerala

Year:2021-22

Sl. No.	District	Tapioca(Kg/Ha)			Banana(Kg/Ha)		
		GCES	ICS		GCES	ICS	
			State Sample	Central Sample		State Sample	Central Sample
1	Thiruvananthapuram	34611	43937.5	16750	7456	19758.33	13083.33
2	Kollam	43374	27562.5	43125	6962	13933.33	10333.33
3	Pathanamthitta	48840			7688		
4	Alappuzha	42773			6905	15391.67	14266.67
5	Kottayam	49978	30906.25	27093.75	9976	19333.33	13933.33
6	Idukki	55105			10731		
7	Eranakulam	53141	35812.5	52375	9428	25850	18216.67
8	Thrissur	53622	51250	22187.5	10047	21438.89	12775.56
9	Palakkad	43468	70406.25	36187.5	9842	22472.22	17577.78
10	Malappuram	46354	33125	35062.5	9033	17455.56	20616.67
11	Kozhikode	43930	68437.5	14906.25	11621	17925	16791.67
12	Wayanad	42652			9493		
13	Kannur	45010	47218.75	42062.5	10033	16526.67	20033.33
14	Kasaragod	43375	36681.25	26906.25	10863	25466.67	16550
State Total		<b>45027</b>	<b>44533.75</b>	<b>31665.63</b>	<b>9409</b>	<b>19698.8</b>	<b>15973.07</b>

Table 13 (iii)

Comparison of Yield Rates of Important Crops Under GCES and ICS

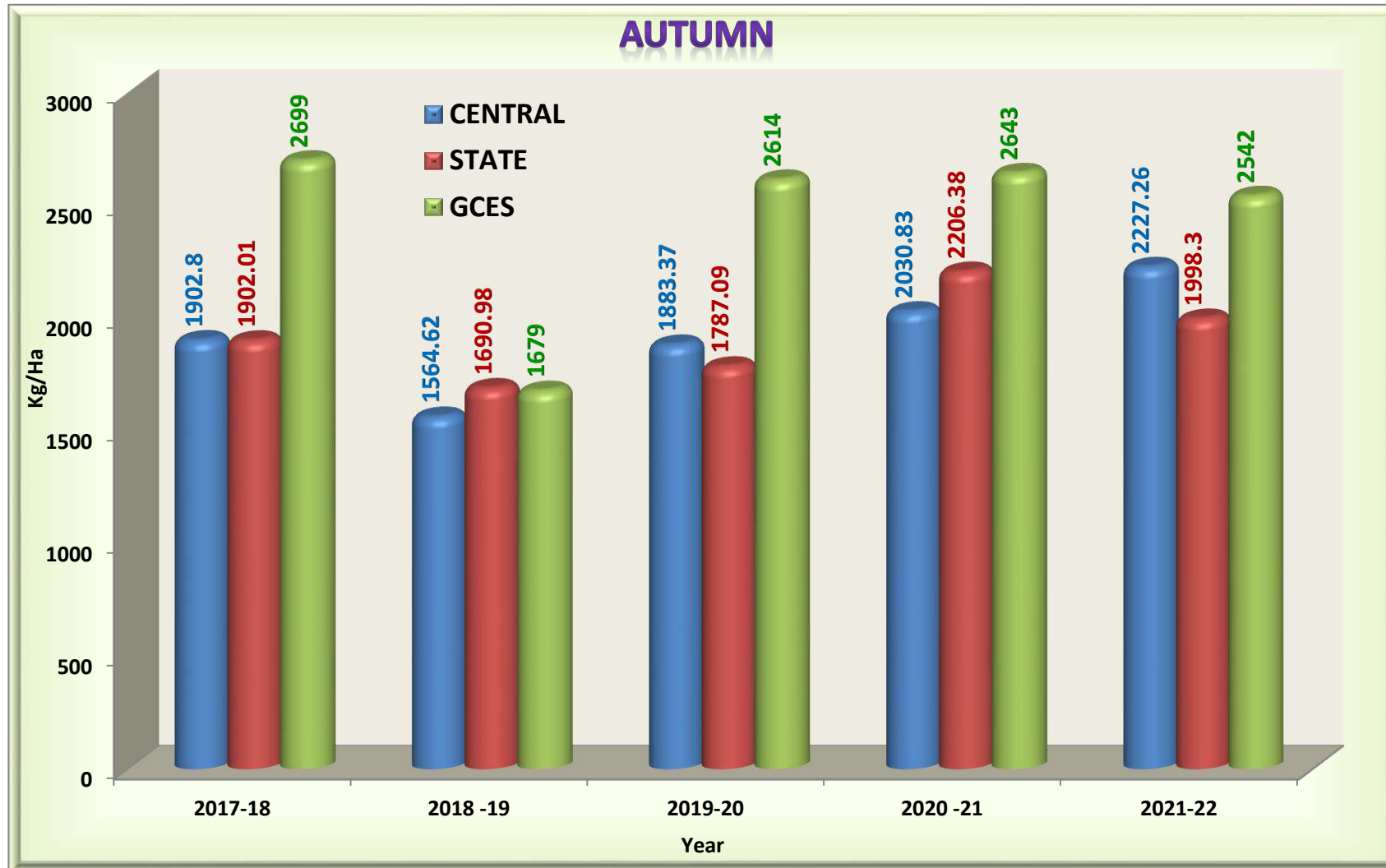
State: Kerala

Year:2021-22

Sl. No.	District	Coconut ( No./Ha)			Pepper (Kg/Ha)			Arecanut (Kg/Ha)		
		GCES	ICS		GCES	ICS		GCES	ICS	
			State Sample	Central Sample		State Sample	Central Sample		State Sample	Central Sample
1	Thiruvananthapuram	7053	8467.1	10498.75	293	388.99	119.7	368	848.38	365.02
2	Kollam	6248	5176.5	6121.5	253	399.99	281.94	660	1365.04	794.42
3	Pathanamthitta	5386			321			697		
4	Alappuzha	6051	12264.75	8709.75	167			289		
5	Kottayam	5021	8057.1	6944.3	307	430.79	170.12	722	1294.44	666.17
6	Idukki	3454			502			1000		
7	Eranakulam	4862	6938.8	7524	218	289.27	451.96	743	923.39	1217.63
8	Thrissur	6777	10684.53	9846.8	268	691.65	218.24	727	1000.09	865.22
9	Palakkad	8260	8413.5	8160.7	430	714.93	326.6	700	1744.79	644
10	Malappuram	9437	12257.33	12141.33	252	248.58	351.23	962	914.07	875.62
11	Kozhikode	8135	11556.25	10502.75	222	332.9	725.38	814	811.93	1237.7
12	Wayanad	6859			397			361		
13	Kannur	6076	6972	8526	332	230.98	344.08	945	1028.94	1618.27
14	Kasaragod	8908	12036	16411.8	525	586.97	837.02	2508	2733.72	2764.89
<b>State Total</b>		<b>7231</b>	<b>9480.12</b>	<b>9636.97</b>	<b>426</b>	<b>431.51</b>	<b>391.77</b>	<b>1101</b>	<b>1266.48</b>	<b>1104.89</b>



**CHART-8**  
**TREND OF YIELD RATES OF RICE UNDER ICS & GCES 2017-18 TO 2021-22**



**CHART-9**  
**TREND OF YIELD RATES OF RICE UNDER ICS & GCES 2017-18 TO 2021-22**

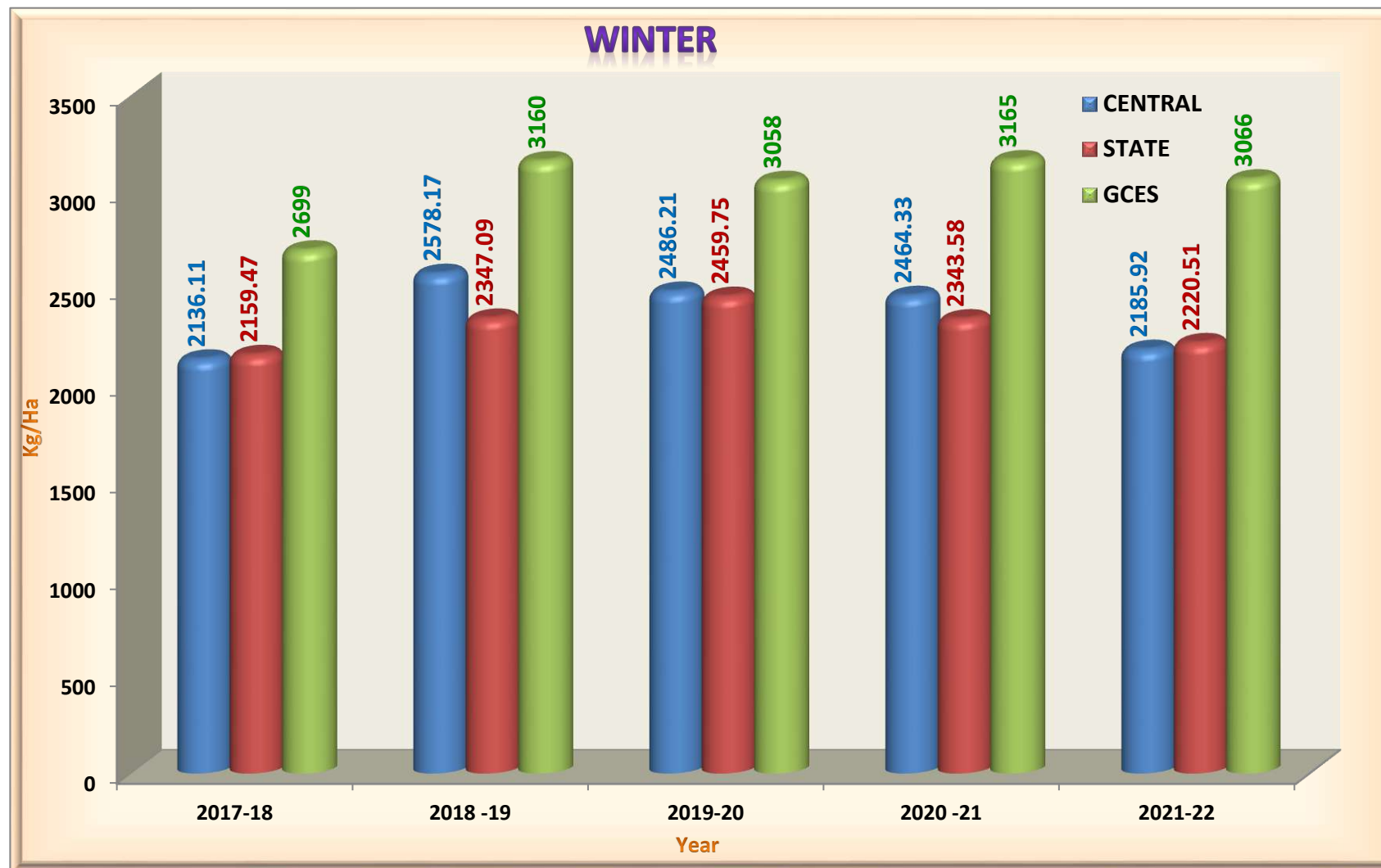


CHART-10  
TREND OF YIELD RATES OF RICE UNDER ICS & GCES 2017-18 TO 2021-22

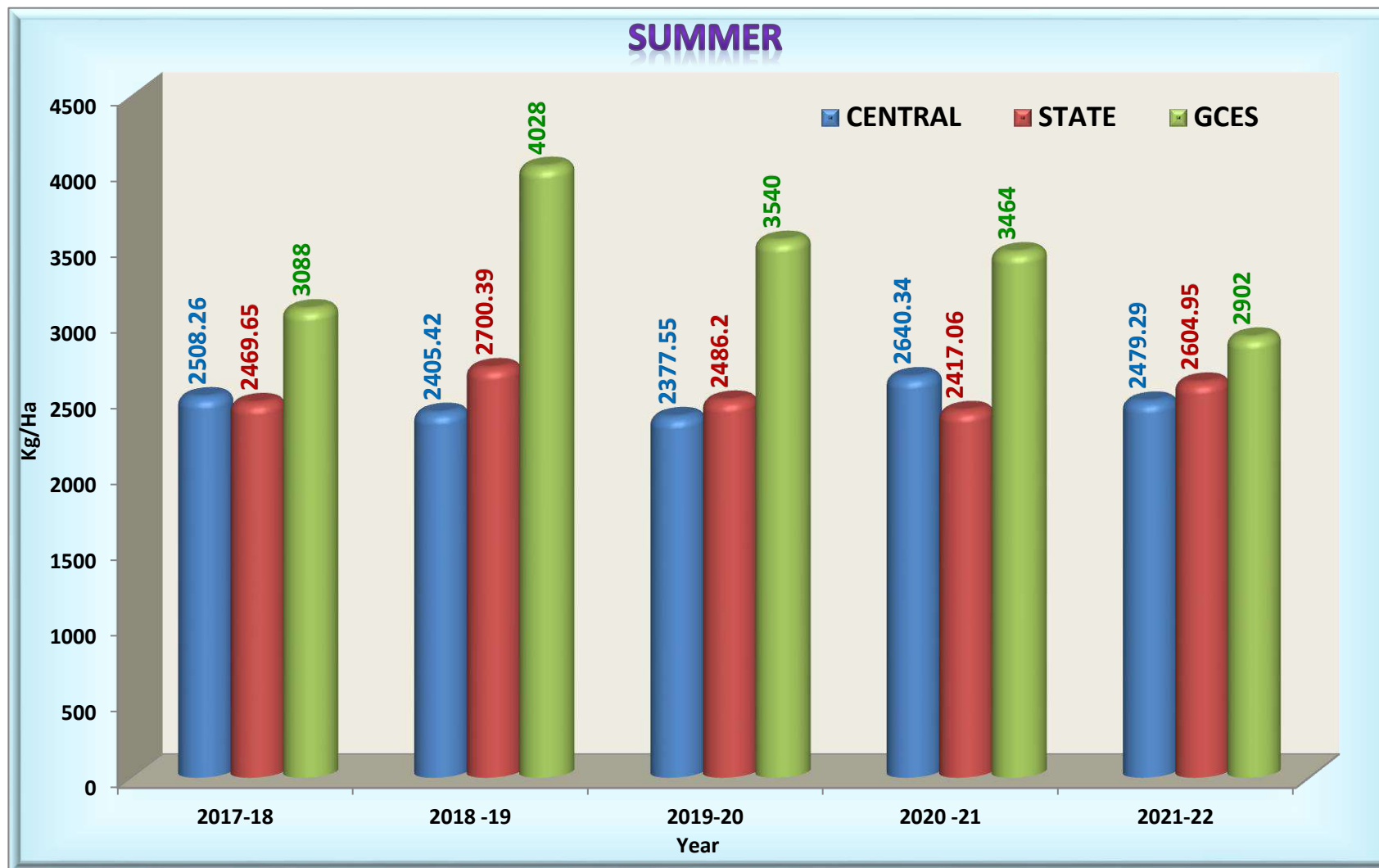


CHART-11  
**DISRTICTWISE YIELD RATES OF RICE– ICS & GCES 2021-22**

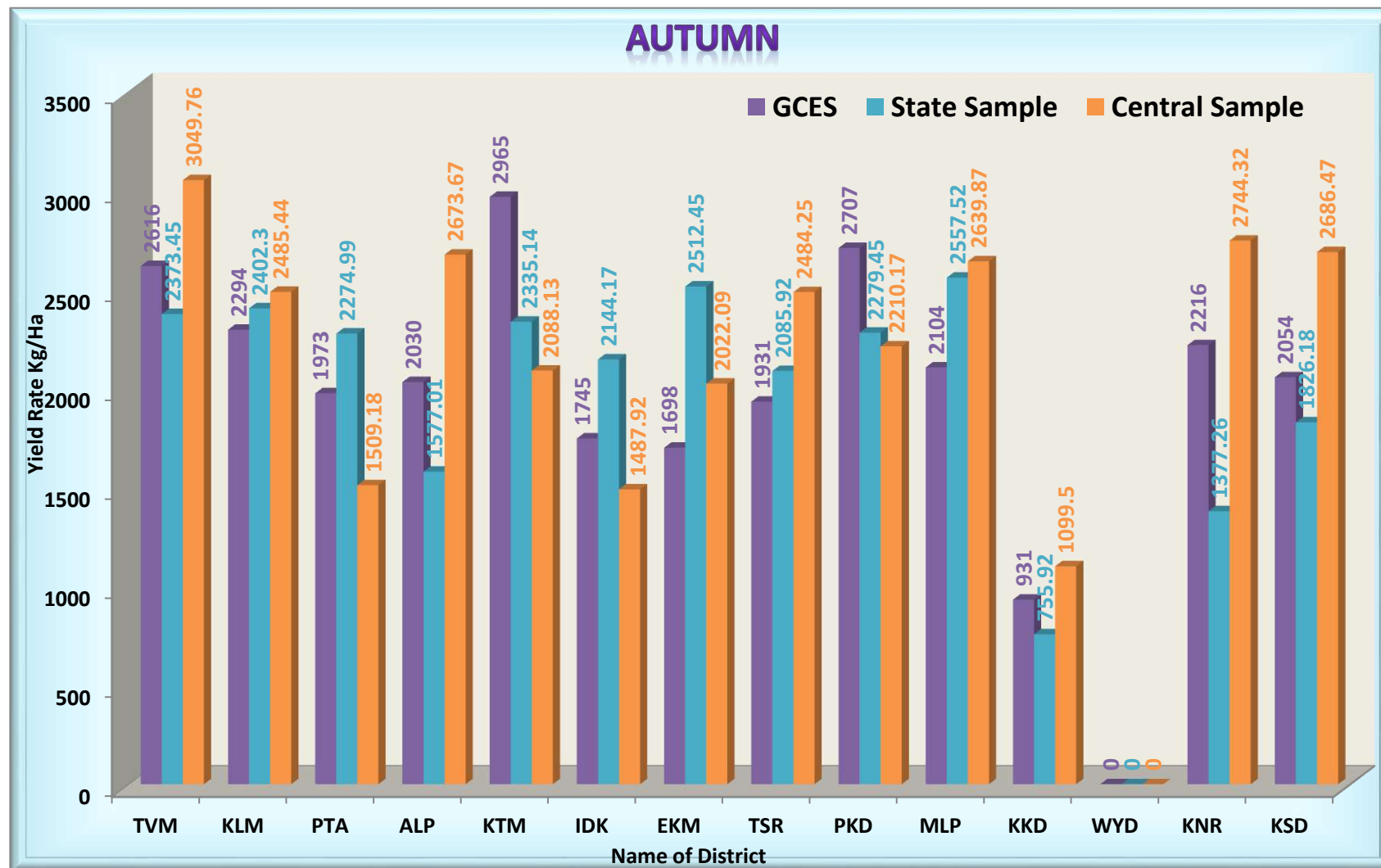


CHART-12  
**DISRTICTWISE YIELD RATES OF RICE– ICS & GCES 2021-22**

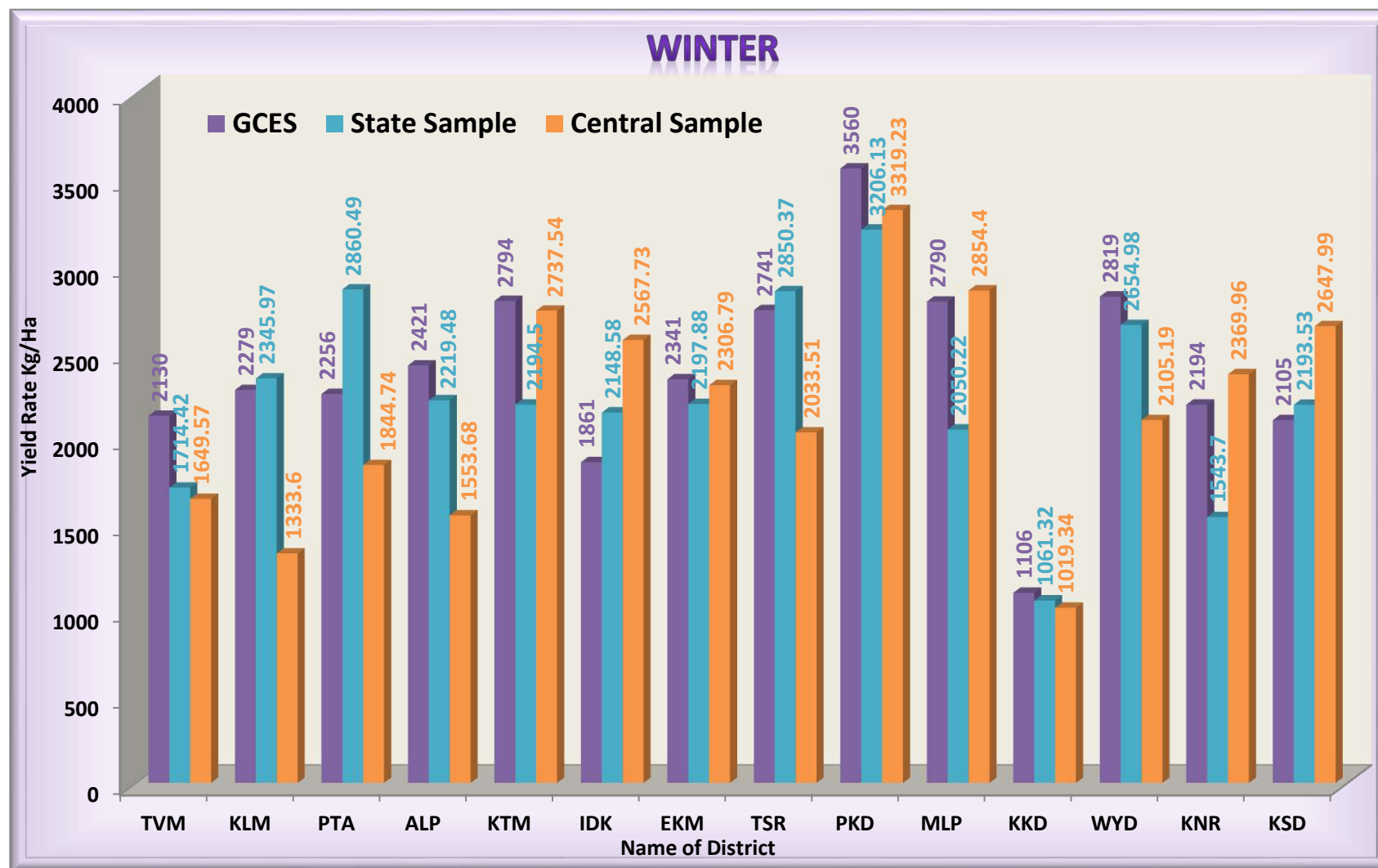
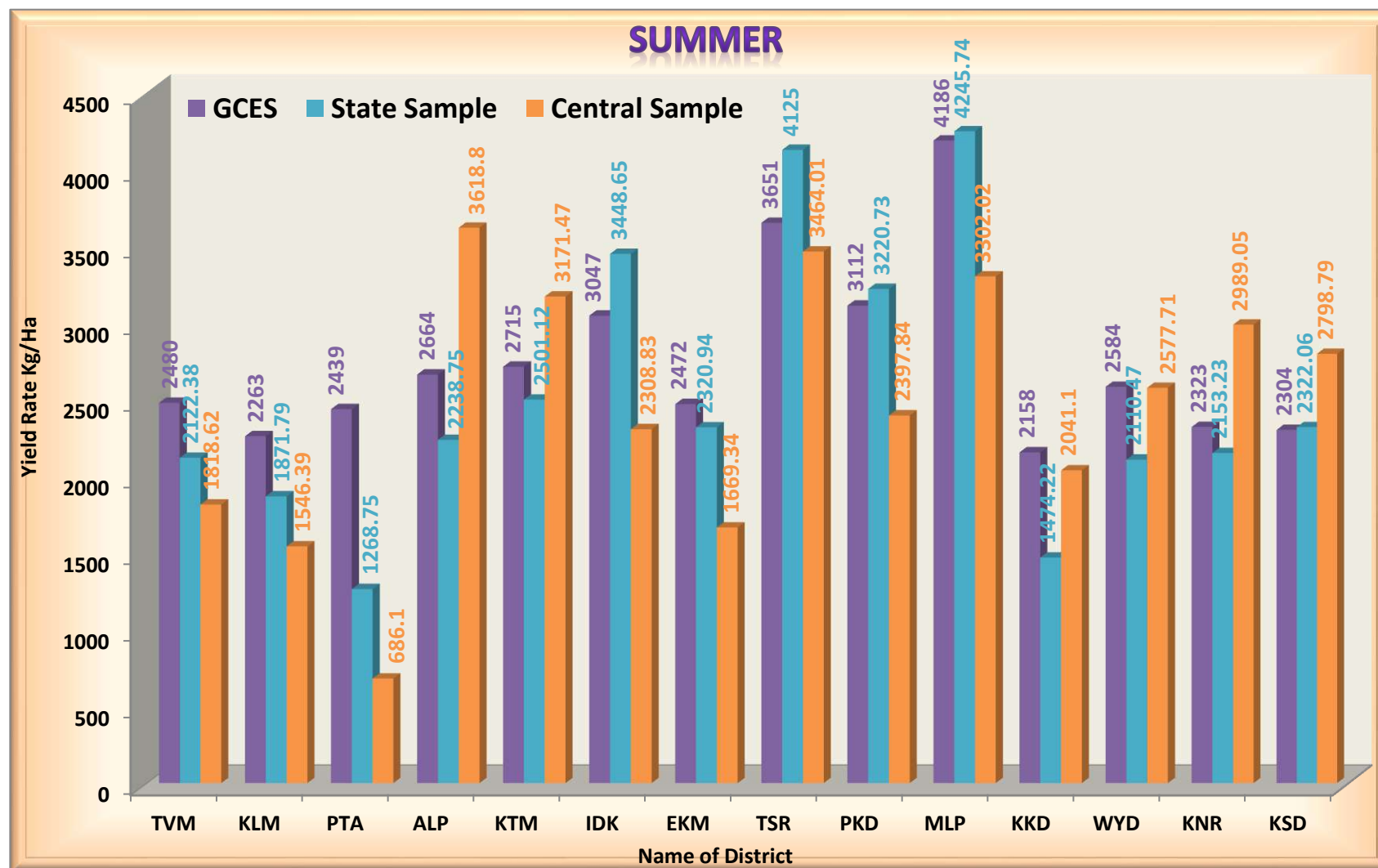


CHART-13  
**DISRTICTWISE YIELD RATES OF RICE— ICS & GCES 2021-22**



**CHART-14**  
**SEASONWISE YIELD RATE OF RICE UNDER GCES & ICS 2021-22**

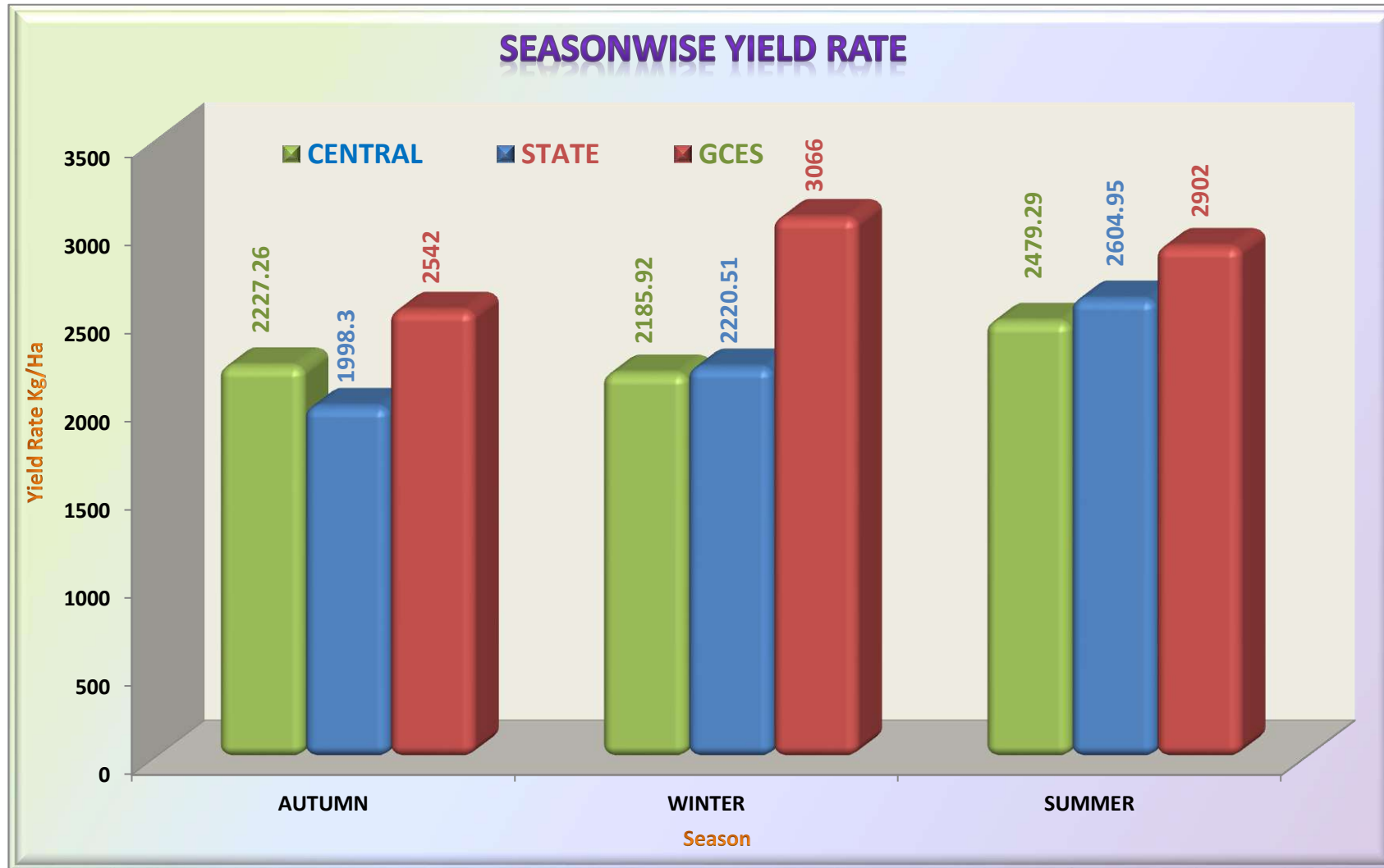


CHART-15

DISTRICTWISE YIELD RATE OF TAPIOCA UNDER GCES & ICS 2021-22

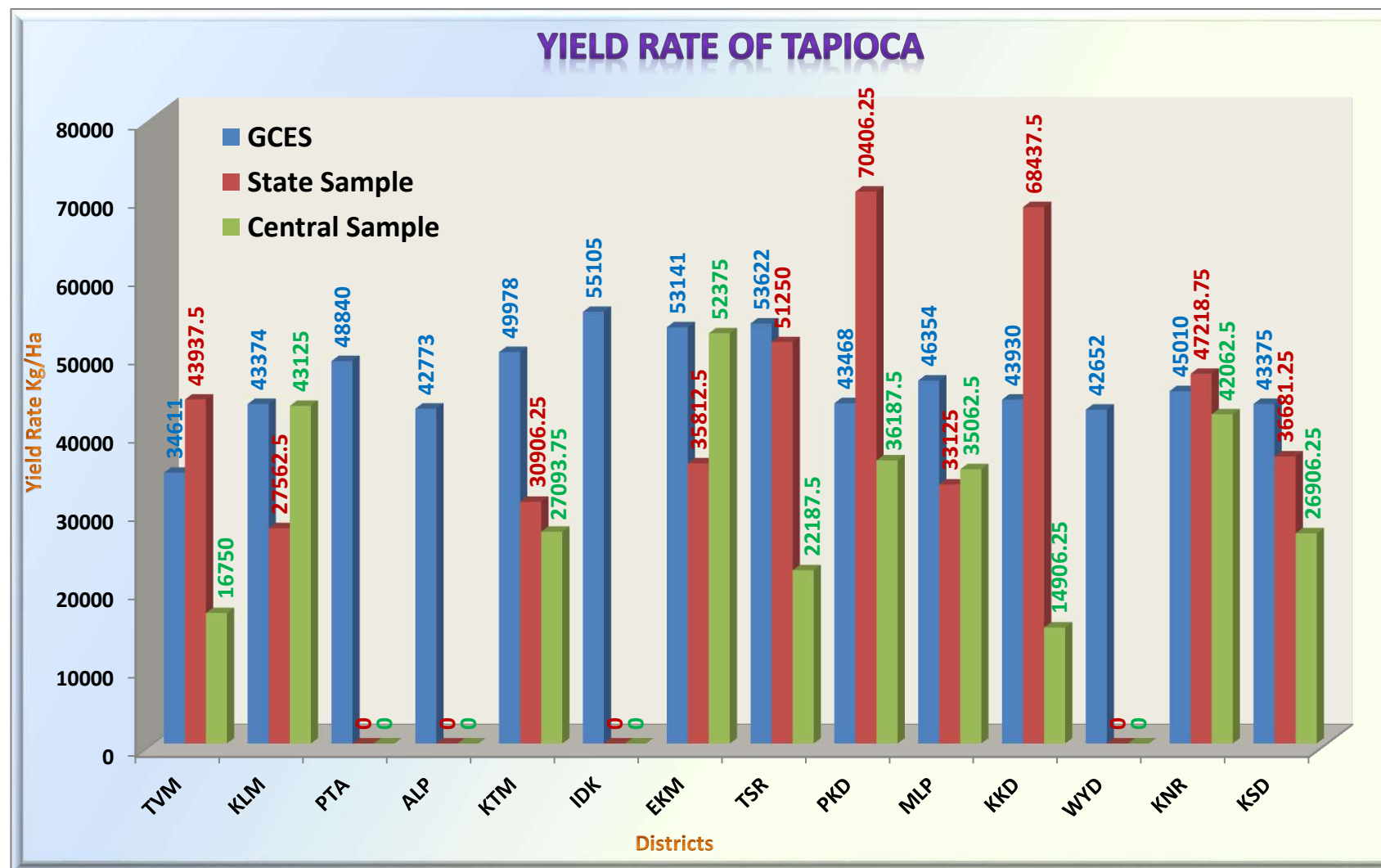




CHART-16

DISTRICTWISE YIELD RATE OF BANANA UNDER GCES & ICS 2021-22

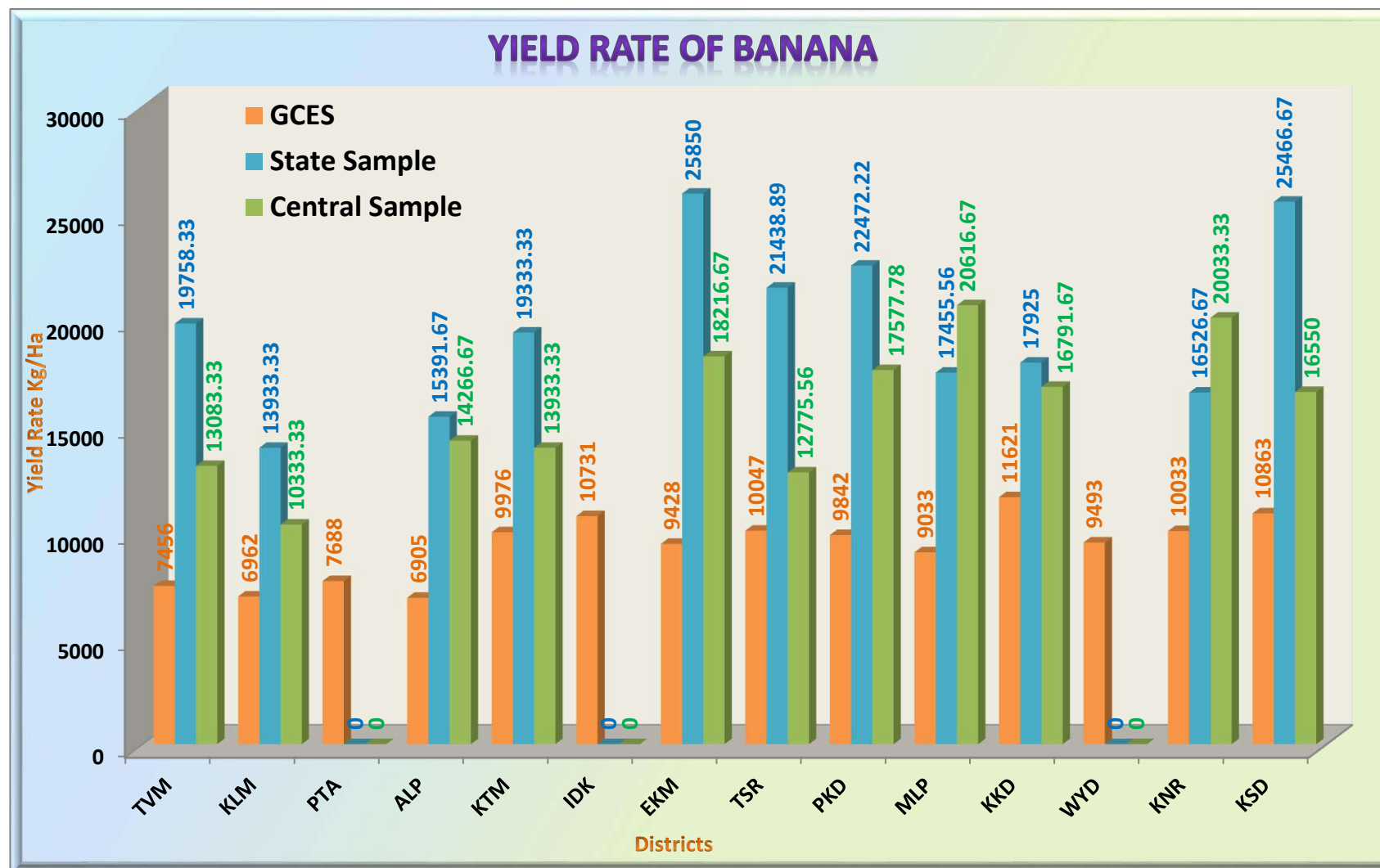
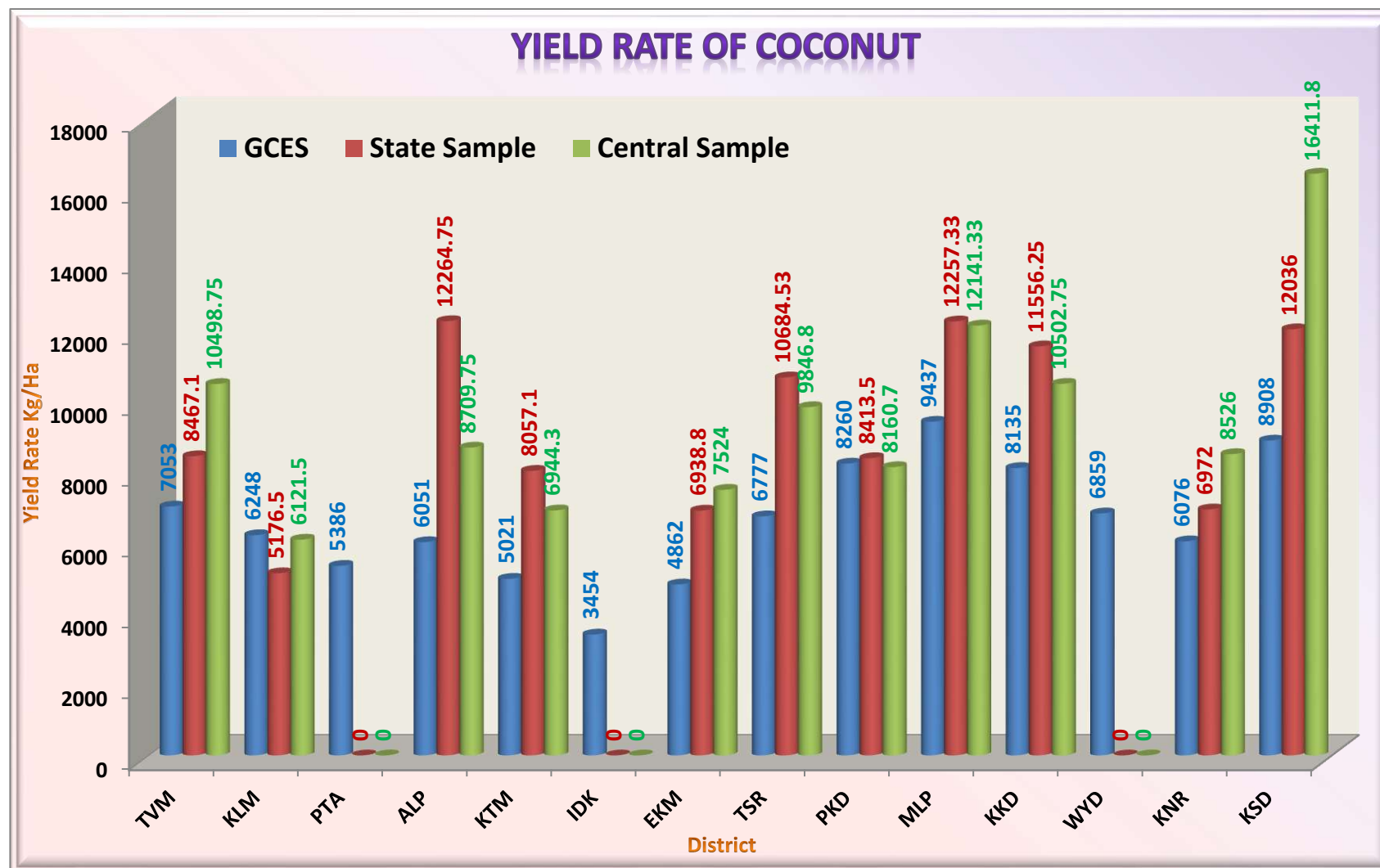


CHART-17

DISTRICTWISE YIELD RATE OF COCONUT UNDER GCES & ICS 2021-22



**CHART-18**  
**DISTRICTWISE YIELD RATE OF PEPPER UNDER GCES & ICS 2021-22**

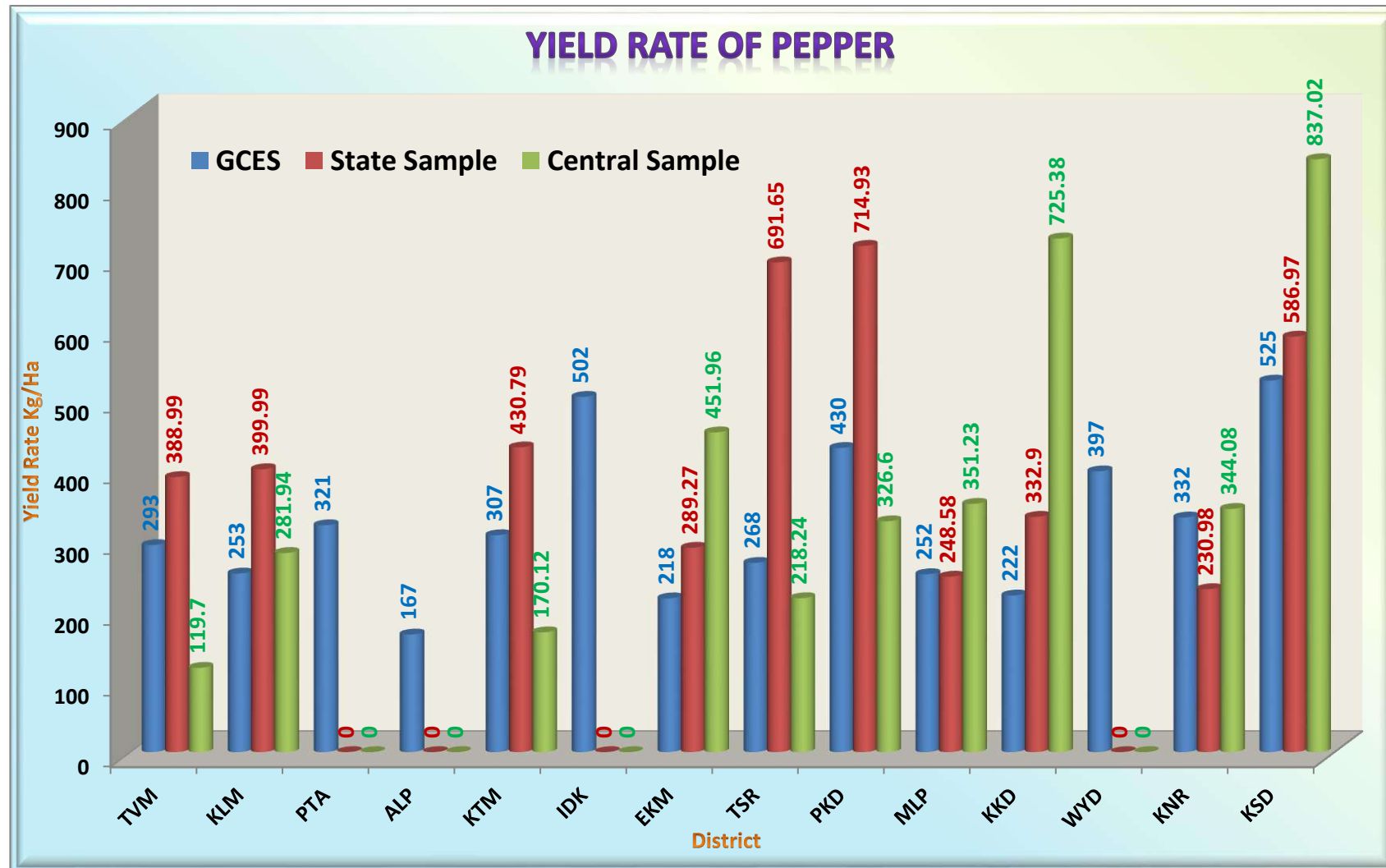


CHART-19

DISTRICTWISE YIELD RATE OF ARECANUT UNDER GCES & ICS 2021-22

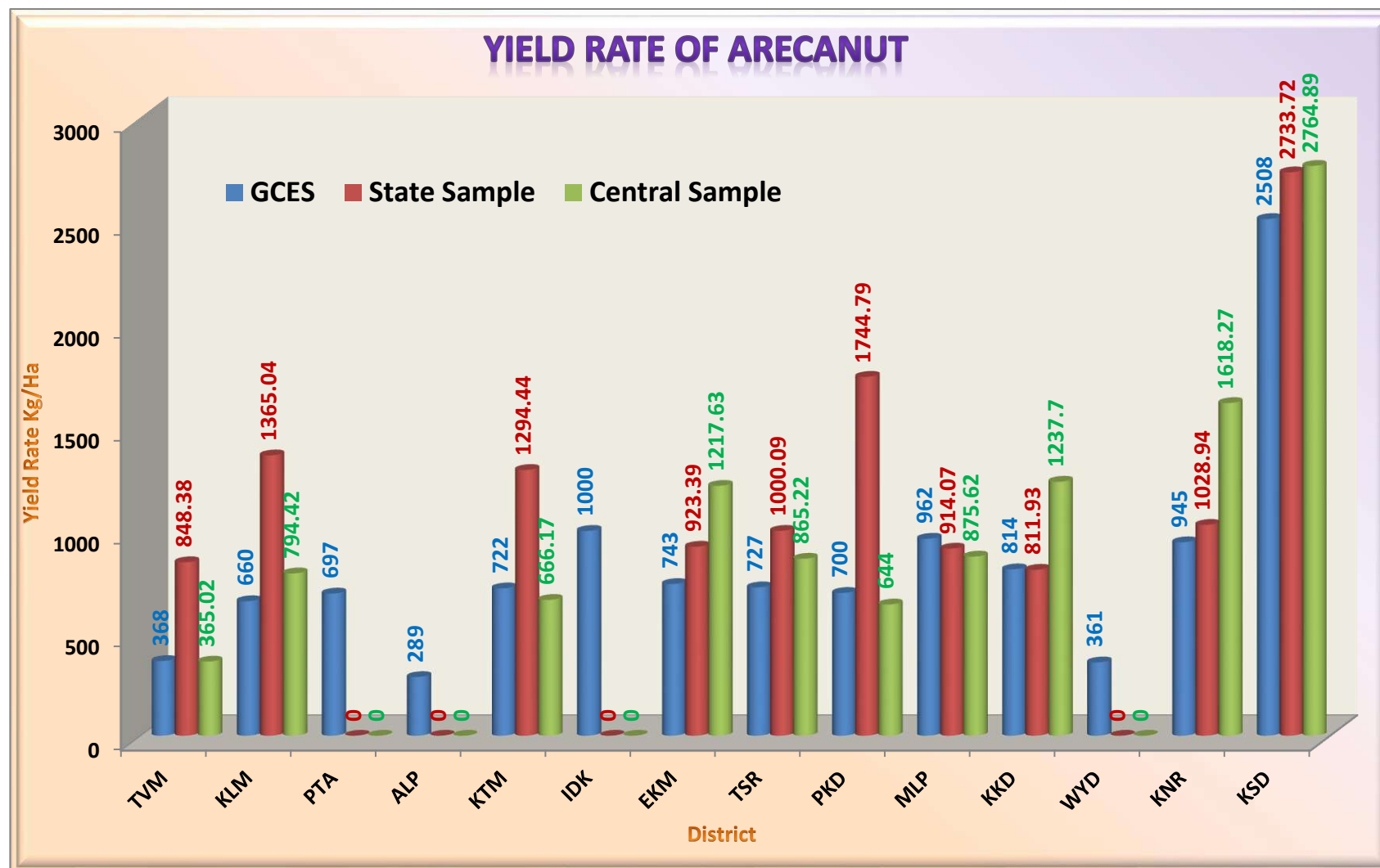


CHART-20

**CROPWISE YIELD RATE OF IMPORTANT CROPS UNDER GCES & ICS 2021-22**

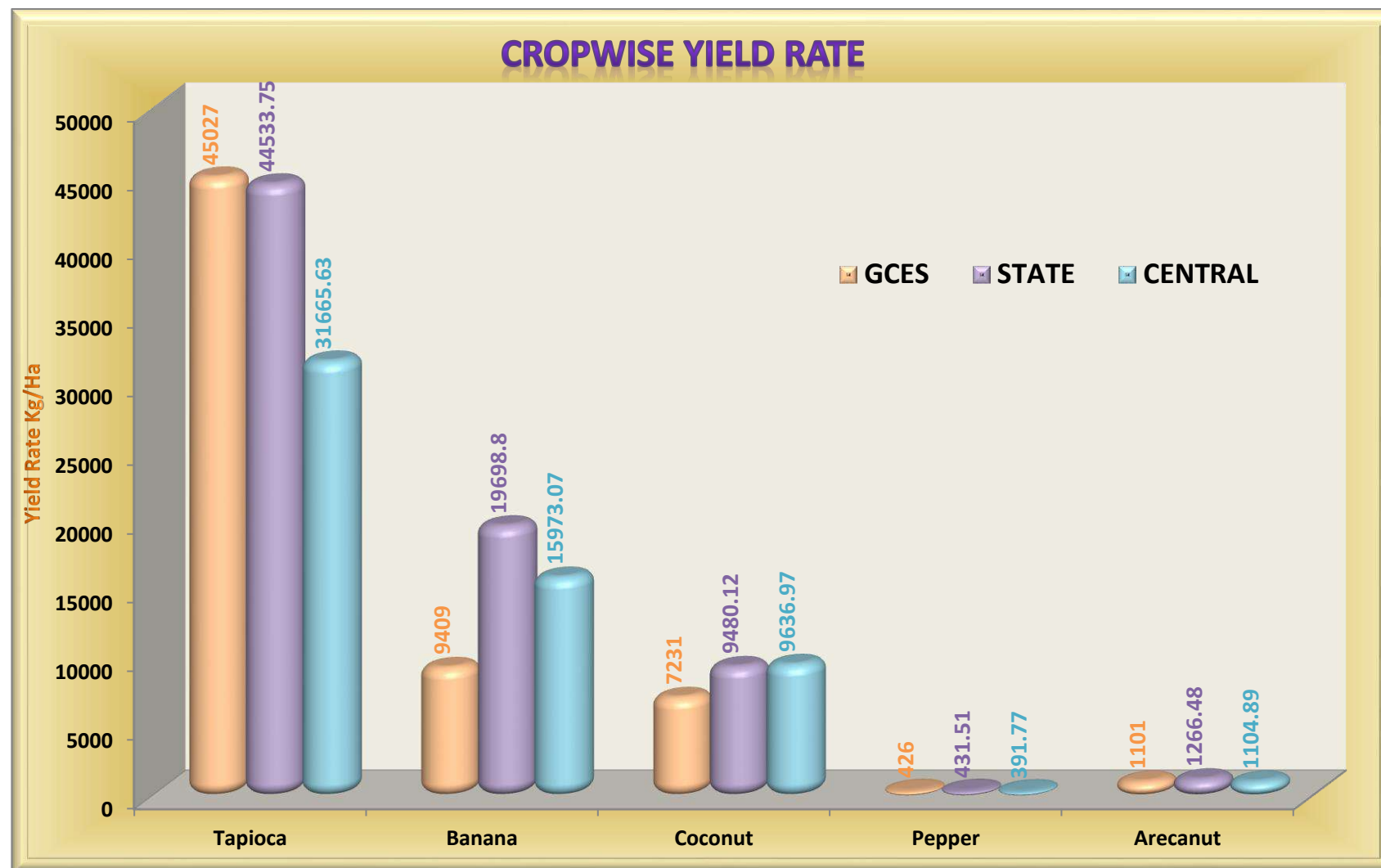


Table 14

TREND OF YIELD RATES (Kg/Ha) OF RICE UNDER GCES &amp; ICS 2017-18 to 2021-22

YEAR	AUTUMN			WINTER			SUMMER		
	CENTRAL	STATE	GCES	CENTRAL	STATE	GCES	CENTRAL	STATE	GCES
2017-18	1902.8	1902.01	2699	2136.11	2159.47	2699	2508.26	2469.65	3088
2018 -19	1564.62	1690.98	1679	2578.17	2347.09	3160	2405.42	2700.39	4028
2019-20	1883.37	1787.09	2614	2486.21	2459.75	3058	2377.55	2486.2	3540
2020 -21	2030.83	2206.38	2643	2464.33	2343.58	3165	2640.34	2417.06	3464
2021-22	2227.26	1998.30	2542	2185.92	2220.51	3066	2479.29	2604.95	2902

**List of Abbreviations used**

Sl.No	Abbreviation	Expanded form
1	C	Central Sample
2	S	State Sample
3	ICS	Improvement of Crop Statistics
4	GCES	General Crop Estimation Survey
5	HY	High Yielding
6	L	Local variety
7	I	Irrigated
8	UI	Un-irrigated
9	H	Harvested
10	T	Total planned
11	Kg	Kilogram
12	Ha	Hectare
13	N	Nitrogen
14	P	Phosphorous
15	K	Potassium
16	NR	Non-Reporting
17	Expts	Experiments
18	F	Fertilizer
19	HYV	High Yielding Variety